

AN APPROACH TO SPATIAL PLANNING IN SOUTHERN AFRICA  
WITH PARTICULAR REFERENCE TO TRANSKEI'S NORTH-EAST REGION

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ABSTRACTAn approach to spatial planning in Southern Africa with particular reference to Transkei's north-east region.

The aim of this research was to investigate how spatial planning could contribute to development in the peripheral regions of Southern Africa. It was undertaken at a time when conventional regional planning was under attack from several quarters and the very relevance of planning at regional scale was being questioned. This state of flux in regional planning doctrine and practice presented an opportune setting to establish a method embracing the most relevant components of the debate.

The proposed approach to spatial planning took into account the main parameters determining the context within which both planning and development can occur in Southern Africa's peripheral regions. It was tested in a typical environment - that of north-eastern Transkei. The proposed methodology places particular emphasis on the integrative role of planning (sectoral and spatial) at regional scale and on the means of implementation. It was used to draw up a Spatial Development Plan for the region and to set the implementation process in motion. The impact of both the plan and the process were monitored and evaluated after two years.

With some refinements, the methodology proved to be an effective means of planning for development and initiating a sequence of actions geared towards development in the region. The conclusions were that spatial planning has a role to play in increasing the productive capacities and improving the living conditions of people in peripheral regions. However, this role is constrained both by the structural dimensions of underdevelopment in these areas (which spatial planning alone cannot resolve), and by the extent of which planners are

(ii)

able to remain involved in the implementation of their plans as part of a continuous development process. It is apparent that more attention needs to be paid to consultation, communication and community liaison than to the technical side of planning. Thus planners need not only to return to the fields of procedural and substantive theory to bolster their doctrine; but they also need to adopt the approach of McGee's "dirty boots brigade".

PREFACE

This research was set in motion during the mid and late 1970s by several interwoven fields of interest. In the first place, the author was interested in Transkei as a peripheral region in South Africa (prior to its designation as an "independent" state in 1976) and concerned about what could be achieved for the region and its people. The second was the nature of regional planning as it was being practised in South Africa in the 1960s and 1970s. On the one hand, it concentrated to a large degree on a single sector (usually industry or commercial agriculture), while on the other hand, it was being used by government as a means of re-inforcing its separate development policies. In both instances the effect was detrimental to the peripheral regions and the well-being of their residents. The third was an interest in spatial planning as a distinctive field of planning and one that needed to be recognised as such.

The opportunity to pursue these interests arose with the author's appointment to the Department of Town and Regional Planning at the University of Natal, Durban in 1977. Here, seminars and student projects provided the occasion to explore new avenues in spatial planning. A further opportunity came in 1978 when Transkei's economic advisor appointed a team of consultants from the University (Professors G G Maasdorp, J Nattrass and D L J Robins; and the author) to assist in the preparation of Transkei's development strategy (1980-2000).(1) The author was involved in the work of this group during 1978-79.(2) In 1980 he was a member of the planning team set up to prepare the spatial and physical basis for Transkei's first five-year development plan.(3) Subsequently he has been (and is currently) engaged by the government of Transkei as a consultant on a variety of regional and local projects.(4) This has afforded him the chance to develop the ideas set out in this thesis.

Unless otherwise indicated by quotations and footnote references, this thesis is the original work of the author and has not been submitted for a degree in any other university.

Notes and references

1. Transkei (1978) The Development Strategy 1980 - 2000. Government White Paper, Umtata. Hereafter referred to as the Development Strategy.
2. The author was involved in drawing the maps for the Development Strategy 1980 - 2000 and in the preparation of the following reports.
  - a) Robins D L J and P S Robinson (1978) "National Economic Plan: a strategic approach" Report to Transkei's Technical Planning Committee, Umtata.
  - b) Robinson P S (1978) "Spatial implications of a development strategy for Transkei 1980 - 2000." Report to Transkei's Technical Planning Committee, Umtata.
3. Hawkins Associates (1980) "The Physical and Spatial basis for Transkei's first five year development plan".
4. Between 1981 and 1983, as a Partner in the firm Osmond Lange Inc., he was responsible for the following reports:
  - a) Osmond Lange Inc. (1982) "Statistical base for planning service centres in Transkei's North-East region." Report to Transkei's National Planning Committee, Umtata.
  - b) Osmond Lange Inc. (1983a) "Statistical base for planning service centres in Transkei's North-West region." Report to Transkei's National Planning Committee, Umtata.
  - c) Osmond Lange Inc. (1983b) "Statistical base for planning service centres in Transkei's South-East region." Report to Transkei's National Planning Committee, Umtata.
  - d) Osmond Lange Inc. (in association with Ninham Shand Inc.) (1983c) "East Pondoland's 'industrial development point.'" Project motivation to RSA's Department of Foreign Affairs on behalf of the Government of Transkei.
  - e) Osmond Lange Inc. (1983d) "North East region of Transkei: Spatial Development Plan 1983 - 2003". Report to Transkei's National Planning Committee, Umtata. Hereafter referred to as the NE region Spatial Development Plan.
  - f) Osmond Lange Inc. (1983e) "North East region of Transkei : Regional Development Plan (1983 - 2003)." Report to Transkei's National Planning Committee, Umtata. Hereafter referred to as the NE Region Policy Proposals.

In the course of preparing these reports the author undertook study trips to Botswana, Malawi and Zimbabwe on behalf of Transkei. Since 1983, as Partner in the firm Vandeverre, Apsey, Robinson Inc., the author has been responsible for the following reports:

- g) Vandeverre, Apsey, Robinson and Associates Inc. (1985a) "A Plan to upgrade Mtumbane, Port St Johns". Report to Department of Local Government and Land Tenure, Umtata.

- h) Vandeverre, Apsey, Robinson and Associates Inc. (1985b) "Planning proposals for Qumbu's Market Square." Report to Department of Local Government and Land Tenure, Umtata.
- i) Vandeverre, Apsey, Robinson and Associates Inc. (1985c) "North-West Region of Transkei: Spatial Development Plan 1985 - 2005. Phase I Document." Report to Transkei's National Planning Committee, Umtata.

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Mr R Clark, an Economic Advisor to Transkei in 1978-79 and 1982-83, and Mr R G Barry of the National Planning Committee were instrumental in initiating the succession of planning studies which provided the case material for this thesis. Both have been a source of stimulation and encouragement. Over the years I have also been greatly helped by Mr M N Ndibongo and Mr S Matshoba of the National Planning Committee; Mr M B Soldati of the Department of Commerce, Industry and Tourism; Dr C E Cook of TATU, Mr J Ellis Jones of Tracor; Mr M K C Jackson of Transido; and Professor W H Thomas, then of the Department of Economics at the University of Transkei.

Government officials based in Umtata as well as in the north-east region's outlying areas; members of the rural and small town communities who provided personal information for the surveys; as well as the rural traders and customers who participated in the commercial surveys, willingly contributed information and provided valuable insights.

Throughout the period of the study, I have been able to draw on the research, advice and comments of my former colleagues at the University of Natal, notably Mr P J Derman, Mr S E G Horton, Dr M O Sutcliffe, Professors D L J Robins, G G Maasdorp and J Nattrass, in addition to students of both the Universities of Natal and Transkei. Since going into practice in 1982, my partners and colleagues at work have given advice and unfailing co-operation.

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P.S.R.

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PART I - THEORETICAL FRAMEWORK

CHAPTER ONE

INTRODUCTION

Evolution of regional planning

Prior to the 1950s regional planning involved the purposeful development of a region's natural resources. In general these were river basins and the focus of that development was water and land. Urban-industrial development tended to be regarded as an adjunct to the economic growth of that region rather than an integral part of it.(1) Since the mid-1950s the concept of regional planning as a co-ordinating framework for developing activities at a sub-national scale started to become accepted. A revival of interest in location economics and spatial systems followed Isard's path breaking-work(2) in which he suggested that the ordering of economic activities and human settlements in physical space might become the central focus of a new discipline of regional planning.(3) The theoretical basis for this discipline embraced the concepts of location, spatial organisation and regional growth.(4)

By the mid-1970s these theoretical foundations had been strengthened and influenced both by policy analysis and the evaluation of actual experiences of regional planning in a variety of situations. At that stage the main foci of attention for regional planners in developed countries were depressed areas; regional adjustments to locational shifts in major economic activities together with the environmental impact of expanding urban regions. Meanwhile, their colleagues in the developing world became pre-occupied with questions of regional co-ordination of investment programmes, decentralization of decision-making, alleviation of regional imbalances and the integration of national space.(5)

From his standpoint in 1975, Friedmann identified five issues for attention in the decade ahead. These were as follows:

- the effect of unbalanced power relationships on regional growth and development;
- spatial effects of accelerated urbanization in developing countries;
- the dynamic relationship between agricultural production and population growth;
- the structure and evolution of urban fields in post-industrial society and their impact on the natural environment; and
- evaluation of regional planning practice and the effectiveness of implementation procedures.(6)

The evolution of regional planning during the 1975-85 decade has, indeed, been dominated by these issues. At the start of this period there appeared to be a growing consensus about theory and doctrine and regional planning was an almost universally accepted discipline.<sup>(7)</sup> Yet ironically it has become a period of critical re-assessment which struck at the very roots of this consensus. The failure of regional planning to reduce and eventually eliminate major income inequalities among regions during the preceding decades, added weight to the critics' arguments. At the theoretical level, the broad field of development studies (of which regional planning is a part) was itself experiencing fundamental changes, the impact of which has shaken regional planning to the core. As a result the very future of regional planning along with its social relevance are being questioned by some of the discipline's leading practitioners.<sup>(8)</sup>

In order to establish a context for our study within the discipline, we shall try to synthesise the main problems relating to regional planning with particular emphasis on those aspects most relevant to its practice in Southern Africa.

#### Problems relating to planning at a regional scale

The performance of regional development strategies in South Africa was addressed in a recent study by Dewar, Todes and Watson<sup>(9)</sup>. Their point of departure was that internationally accepted objectives for any development project or programme relate to the improvement in levels of welfare and quality of life of the majority (and particularly the poorest sections of that population); to increasing the control people have over circumstances influencing their lives; and to initiating positive processes of upliftment.<sup>(10)</sup>

In terms of these objectives they conclude that regional development strategies have met with little success in South Africa. "Poverty, unemployment and inequality have assumed massive proportions, particularly in the peripheral rural regions of the country .... Further, these peripheral regions remain deeply and negatively dependent upon the economic core regions within White South Africa."<sup>(11)</sup>

Could planning at the regional scale have alleviated these conditions? We shall start by identifying the main problems facing regional planning in contemporary Southern Africa. Three categories of problems may be distinguished relating to theory, context and area of emphasis. These will be discussed in turn as a basis for reviewing proposals about the future directions that need to be followed if regional planning is to retain its role as a relevant and effective discipline.

### Theoretical problems

In a forceful critique of regional planning internationally, Dunham argues that "theorists have to adopt a more critical view of society, to look at the nature of the economic systems they are working with and to focus attention more precisely on the needs of the poor."<sup>(12)</sup> Not only had regional planners failed to draw on relevant theory in these areas, but some of the currently accepted theories were "loaded with misconceptions."<sup>(13)</sup>

This point may be illustrated by three examples. The first relates to the assumption that over time regional differences will converge and that regional planning programmes should, therefore, strive after regional economic convergence across national space over time.<sup>(14)</sup> The validity of this is questioned on grounds of empirical evidence showing that, in many countries, convergence has been the exception rather than the rule.<sup>(15)</sup> In South Africa, where both economic growth and redistribution are important, it has been argued that the problem is one of strengthening the weakest regions, rather than weakening the strongest.<sup>(16)</sup>

A second example of a theoretical misconception in accepted regional planning doctrine is that regions, demarcated for planning purposes according to a variety of criteria but usually determined by administrative factors, can be treated as closed, discrete economies.<sup>(17)</sup> The interdependence of regions is particularly marked in Southern Africa. Our third example is specific to South Africa and relates to the role of the homelands. Dewar et al point out that "from the perspective of regional planning and development logic, it is both unrealistic and distorting to view the homelands as emergent nations"<sup>(18)</sup>. On the one hand, it is impossible to develop these regions beyond the "capacity imposed by their natural resource base and their relative locational

advantage", while on the other, to adopt the emergent nation perspective "encourages a myopic view both of the causes of underdevelopment and of potential approaches to intervention." (19) For these reasons the homelands should rather be regarded as marginal or peripheral regions of national space.

#### Contextual problems

The effectiveness of planning at regional level depends upon the interests and political commitment of politicians and administrators at national level. The planners themselves cannot hope to change regional structures irrespective of whether they operate at national or regional scale. (20) This is valid universally but is particularly pertinent in the Southern Africa context where many regional development plans are formulated out of context and fail to take into account either the history of the region or its role in the wider South African political economy. Consequently, these plans often tackle the wrong issues, namely those which are not amenable to the machinery for planning intervention. Such plans are destined to be ineffective.

Similar misconceptions surround the nature of underdevelopment in peripheral regions - a situation that cannot be reversed or solved immediately no matter what approach is adopted. (21) Many of the root causes of underdevelopment are structural and can only be resolved in the long term and by political changes at a national rather than a regional scale. Dewar et al propose that regional planning and development should rather be viewed as "stimulating processes over time" and they go on to warn regional planners against "short term actions seeking rapid solutions" (22) which often have the effect of entrenching structural barriers thereby reducing the prospects of long-term advances.

In similar vein, the emerging consensus among regional planners in the late 1960s and 1970s created the impression (quite incorrectly) that rational planning and its increasingly sophisticated techniques could solve problems of underdevelopment in Third World countries. There is, however, neither a "universal panacea to the problem of regional underdevelopment" nor are there generalised models which have relatively universal applicability. (23) The identification of feasible strategies for the development of regions will, therefore, be substantially influenced by analysis of the specific context.

### Fields of emphasis

Boisier contends that the "style and methodology reflected in conventional approaches to regional planning is geared more to the formulation of policies at national level than to what one can actually do in a region itself." (24) Plans tend to concentrate on inter-regional planning with little attention to the task of planning a particular region. A related problem, encountered frequently in South Africa, is that regional plans are generally seen as physical in their main objective, with the result that emphasis lies on the development of a region's natural resources with little attention to the people living there. In other words, plans aim at "place" prosperity rather than "people" welfare. For the same reason, regional plans tend to concentrate on productive potential of a region but neglect the consumption needs of its residents.

### Future directions

Drawing together the strands of this discussion about the problems of planning at the regional scale, the over-riding questions are whether regional planners can come to grips with local reality and whether they can implement the plans they propose. (25) Herein lies the crux of the challenge for regional planning and its practitioners. If regional planning is to survive, Dunham argues, it will have to be for reasons of its social relevance, particularly at the local level. (26)

According to Dunham, "we need new approaches and a new set of tools if regional planning is to be relevant to societies concerned about poverty and the distribution of income and wealth." (27) More attention will have to be paid to the manner in which activities are organised, to the groups involved in them and to who owns what, as well as to the nature of the agreements and understandings that bind people together, and to the broader social context in which they are placed. (28) From the plan formulation side, new approaches will need to achieve a more successful integration at the regional level, coupled with "top down" and "bottom up" initiatives operating in parallel. (29) And from the implementation side, more complex combinations of projects and programmes will be needed to meet the specific requirements of the region in question.

### Aims and hypothesis

Since 1970, a substantial amount of research has been undertaken on spatial development in Southern Africa,<sup>(30)</sup> much of which has been drawn together in three recently published documents by Fair (1982 and 1985a) and by Dewar, Todes and Watson (1985). For the most part this research has been of an evaluatory nature, drawing on both the progression of mainstream international thinking about spatial development since the mid 1960s, and on the lessons to be learned from spatial planning in countries with comparable problems. The ideas emanating from this body of research now need to be applied and tested in practice.

The present research, which started in the late 1970s, is an attempt to respond to the problems identified in the previous section and to apply the findings of recent research on spatial development in Southern Africa. The study focusses on the intra-regional scale and addresses the question of what can be achieved within a region of Transkei, itself a marginal or peripheral area in the wider context of Southern Africa. The thesis aims to formulate an approach to the planning of regions that will be both effective and socially relevant.

Our hypothesis is that this can be achieved by paying appropriate attention to the contextual, methodological and implementation aspects of planning. These will be discussed in turn.

#### Context for development and planning in South Africa

- a) Planning cannot tackle all the problems faced by a region in South Africa, for many of them are structurally resistant to it. Therefore, in order to be effective, plans should address those issues which are considered amenable to planning manipulation. By implication different categories of problems require different types of plan.
- b) Plans for regional development in South Africa need to be given a firmer theoretical base and should be more closely related to the social, political, administrative, economic and geographic context of that region. This will enable planners to focus their attention on issues that

are amenable to planning, and thereby ensure that plans are more likely to be socially relevant and to stand a better chance of being implemented successfully at local level. Conversely, the lack of a sound theoretical base and historical perspective means that plans will be of little or no value.

#### Methodological aspects

- a) Planning in South Africa is an activity that should be seen in its developmental context, namely, as a set of deliberate actions aimed at achieving "development" in one or more sectors and in particular areas.
- b) Planning is not an entirely objective or value-free activity. It takes on values in response to the environment in which the planning is to take place. At the same time its objectivity is limited both by this environment and by the bounds set in the terms of reference that initiated planning action.
- c) Clearer definition and understanding are needed with regard to the terms "development planning", "regional planning", "spatial" and "sectoral planning". In the first place, this will lead to greater precision in what is expected from different types of plan, and in the second, it will help to ensure that development plans for particular regions will take into account the distinct but interrelated sectoral and spatial aspects.
- d) The adoption of a strategic approach to planning at regional scale will facilitate the formulation of more relevant and implementable development plans.
- e) Analysis of the spatial dimensions of intra-regional problems is fundamental for development planning. However, this requires a substantially different data base to that usually established for regional plans in South Africa.

#### Implementation aspects

- a) Planners need to play a more active role in the implementation and monitoring of their plans than has generally been the case in South Africa.

- b) The plan itself needs to be feasible in its targets (given the resources and productive structure of a region); consistent in the sense that its various elements should be compatible and designed to move in harmony with each other; and optimal in that there should be no alternative ways to raise the value of the targets.<sup>(31)</sup> These characteristics require that plans comprise a complex and integrated set of policies, projects and programmes for a wide range of sectors.
- c) Plans need to take cognisance of the region's capabilities in regard to administration and implementation. This may require substantial gearing of the implementation programme and the inclusion of training components so that the plan can be implemented.<sup>(32)</sup>
- d) Policy proposals need to be translated into specific, implementable projects and programmes.<sup>(33)</sup> Furthermore these projects need to be co-ordinated into a phased schedule for implementation to obviate possible conflicts between various elements of the plan and to indicate clearly to persons and organisations involved in implementation how their particular project contributes to the overall development goals of the region.
- e) As a major proportion of the budget of areas like Transkei is absorbed by recurrent expenditure, separate funding is needed for capital development projects. Accordingly regional plans need to take account of the requirements of these funding agencies.

The validity of these hypotheses will be examined, firstly, by exploring the major theoretical and contextual issues relating to planning in peripheral regions in South Africa (Chapters 2, 3 and 4); secondly, by developing an approach to planning designed to meet the needs of such regions (Chapter 5); and thirdly, by demonstrating how the proposed approach was applied in the planning of north-eastern Transkei (Chapters 6 to 12). Finally, the approach and the plan itself will be evaluated in Chapter 13.

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21. Dewar et al (1985) op cit p. 29.
22. Ibid.
23. Ibid p. 30.
24. S Boisier, quoted in Dunham (1978) op cit p. 6.
25. Ibid.
26. Dunham (1978) op cit p. 3.
27. Ibid pp. 18-19.
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CHAPTER TWO

THEORETICAL CONTEXT

The theoretical context for this research is based on a conceptualization of the main dimensions of regional planning. This will be discussed briefly as a background to setting out our understanding of development and the ideological standpoint (or paradigm) from which this research was approached. Within these broad parameters we shall review the current state of thinking on regional planning doctrine before tracing the major shifts of emphasis in the practice of development planning (of which regional planning is a sub-set) concentrating, in particular, on development strategies.

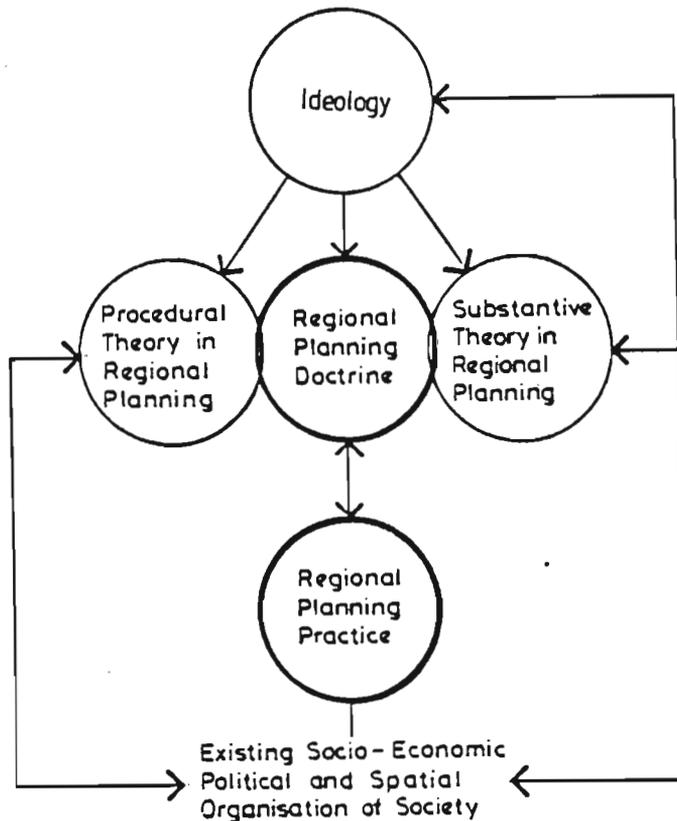
Conceptual framework

Friedmann and Weaver offer a useful framework embracing five interrelated dimensions of regional planning.(1) The practice of regional planning, which may take a number of forms, always has two platforms: a specific method of procedure and a definite concept of development. Procedural method draws upon theories from a range of academic subjects including sociology, political science, economics, organisational theory, information and general systems theory. The concept of development is derived from ideological assumptions, while regional planning doctrine means the "stock in trade of professional planners, the sum and substance of what they know and perpetrate upon the world."(2)

Planning doctrine draws on a range of theories in the social and environmental sciences which may be termed substantive theories in regional planning.(3) These include the work of geographers, economists, regional scientists, anthropologists, sociologists and political scientists. Both doctrine and theory are based on "certain ideological assumptions that change the contents of regional planning and determine its outcome."(4) The relations between these five dimensions of regional planning together with the underlying reality of socio-economic, political and spatial organisation is illustrated in Figure 2.1

The principal concern of this research is the interaction of regional planning doctrine and practice. Doctrine is systematized to a far greater degree than practice and it is doctrine that combines the normative, procedural, substantive and practical dimensions of regional planning.(5) As such it illuminates the practice of regional planning and will itself, in turn, be influenced by the lessons derived from practice.

Figure 2.1      Dimensions of regional planning



Source: Friedmann and Weaver (1979) Fig. 1.1

Theoretical perspective

The last three decades have witnessed substantial changes in thinking about development and strategies for its achievement. Development planners of the mid-1980s approach their work with far less confidence than did their predecessors of the mid-1950s; their caution induced by the lessons of thirty years during which development planning world-wide has seen more failures than successes.(6) Over the same period development theorists have traversed a full circle to reach an impasse where both reformists and radicals are calling for micro empirical studies in order to refuel their theories.(7)

The meaning of "development"

The term "development" has been the subject of a great many articles during the last two or three decades. In this section we shall trace the more significant changes in interpretation and attempt to identify a number of definitive characteristics of the term with particular reference to the Southern African context. This will create a framework for understanding the shifts in development paradigms and the parallel emergence of successive national and regional development strategies. At the same time it will establish some criteria against which the application of specific development strategies (in the second part of the thesis) can be evaluated.

During the 1950s and early-1960s, which may be regarded as the heyday of the modernization (or diffusionist) paradigm and the period during which growth-oriented development strategies were most widely adopted, the term economic development was synonymous with that of economic growth, the latter being concerned with increasing the economy's productive capacity and output.(8)

By the late-1960s an important change had come about in the distinction firstly between economic growth and development; and secondly, in a more general sense, between the terms growth and development. As John Friedmann explained it, growth "refers to an expansion of the system in one or more dimensions without a change in its structure", while development means "unfolding of the creative possibilities inherent in society."(9) These distinctions were of fundamental importance but left planners without a sufficiently tangible definition of the term "development".

Dudley Seers filled this gap in his seminal paper (1972) in which he addressed the question : What are we trying to measure? He said that development meant "creating the conditions for the realization of human personality" and that its evaluation needed to take account of three inter-related criteria: whether there had been a reduction in poverty, unemployment and inequality.(10)

Myrdal added to this view explaining that "development must be understood as the movement upward of the entire social system where there is circular causation between conditions and changes with cumulative effect." Reforms he argued, "must be directed toward moving the system upward as much and as rapidly as possible by inducing changes planned with this in mind."(11)

Since the mid-1960s, A Gunder Frank had been arguing that the developed, rich countries exploit and thereby "underdevelop" the poor countries; and that the international system was biased against the latter's development efforts. This he termed "the development of underdevelopment".(12) For Streeten, who carried the debate further into the international arena, the interesting question was not whether "the developing countries benefit or lose from their co-existence with developed countries," but how they can "... pursue selective policies that permit them to derive benefits from the positive forces, without simultaneously exposing themselves to the harm of detrimental forces?"(13) About the same time Seers, expressed the view that "development now implies, inter alia, reducing cultural dependence on one or more of the great powers .... and adopting a selective approach to external influences of all types".(14)

Geographer David Smith drew attention to the human scale of development, stating that if human beings are the object of our curiosity then improvement in the quality of their lives is of paramount importance.(15) And Fair noted that the term development "is being used more and more in a positive sense to refer to the promotion of the well being of individuals or of societies either as an immediate objective or as a longer-term prospect."(16)

As the focus of our case study will be at a regional rather than an international scale, it is appropriate to relate any definition of development to that context. The development problem at regional scale extends to the reduction of poverty, unemployment and inequality not only between regions but also within them.(17) In this context, inequality has two dimensions: firstly the structural aspects of inequality which concern differences between the sectors of the economy, and between poor and rich groups or classes of people;"(18) and secondly, the spatial aspects of inequality which are concerned with "who gets what, where, and how?"(19)

The spectrum of characteristics of "development" outlined above was brought into focus at a conference on "Development issues in Transkei" (1981). In summing up the papers and discussions, the editors of the conference papers(20) formulated a statement about the term "development" which is particularly relevant for the subject of our case study, namely Transkei. "Development", they noted, referred to "two distinct concepts, namely, the process of providing for the satisfaction of people's basic needs and of providing for human development."(21) It thus means being freed from basic material wants such as the next meal, adequate shelter and clothing, water for washing and drinking;(22) while at the same time suggesting that people in general should have command over the provision and distribution of goods and services, and that the choices available to them should increase over time.(23)

This definition has several important features. In the first place, development is seen as a continuous process; secondly, it is oriented towards people and their needs - the development of land or resources being a secondary, derived demand, arising from the activities of individual persons and communities; thirdly, it aims to provide intangible as well as material items; fourthly, it is not limited to the actual provision of goods and services, but seeks to extend the degree to which people are able to control the provision of their basic needs and the options in their day-to-day activities.

In contrast, the term "underdevelopment" refers to the reverse process in which people's command over the provision of basic services and consumption goods decreases and their options are narrowed. Depending upon one's theoretical standpoint, this process of underdevelopment occurs and persists for substantially different reasons. Modernization (or diffusionist) theorists, for example, believe that communities are underdeveloped because they "cannot take advantage of existing opportunities for self-advancement because of social values and attitudes that derive either from their cultural heritage or from their persistent poverty."(24) Conversely, dependency theorists argue that communities remain underdeveloped and "persistently poor because too few opportunities exist for them to improve their lot and that avenues for self-advancement are historically linked to the advancement of the more privileged sector of society at the expense of the underprivileged, i.e. the cause of poverty is structural rather than cultural."(25)

These widely divergent perspectives of the nature and cause of underdevelopment derive from substantially different theoretical perspectives, or paradigms. In order to clarify the ideological viewpoint from which this research is undertaken, we need to review current position.

Browett has summed up the relative shifts in thinking about development paradigms as follows. The last three decades have witnessed a number of profound changes in approaches to the analysis of the processes resulting in patterns of inequal development within and between nations. In the 1950s, the "demise of neo-classical economic theory was accompanied by the rise of modernisation theory and what has been termed the diffusionist paradigm."(26) From the mid-1960s onwards, "these approaches were challenged and then eclipsed by new and more radical perspectives - those within the dependency paradigm - which sought to establish necessary and causative inter-relationships not only between underdevelopment and dependency (underdevelopment is a process induced and constantly reinforced by dependency) but also between underdevelopment and development (they are opposite sides of the same coin)."(27)

These perspectives have, in turn, come under recent attack both from the right, seeking to reformulate and refurbish the diffusionist paradigm in the light of the critiques against it, and from the left, which regards the dependency paradigm as an inadequate basis for the analysis of world capitalism. As a

result, Browett reports "the dependency paradigm approaches, although not yet dead, appear to be under a mounting threat of being transcended, to be replaced on centre stage either by Reformist or Marxist approaches."(28) Ideologically, we have approached this research from a reformist perspective.

### The reformist approach

The reformist approach emerged from criticisms of the theoretical premises of the diffusionist and later the dependency paradigms,(29) and more particularly, from the failure of either to provide a basis for effective development strategies. Browett observes that "diffusionist and dependency perspectives were castigated for abstract theorising, for the relegation of people to a subordinate or insignificant status, and for their lack of attention to, or their inability to resolve contemporary 'real world' problems."(30) In response to these criticisms, and to the recognition that solutions to the problems of poverty are not to be found exclusively within the confines of the poor areas themselves because poverty and exploitation are inherent and necessary features of the international economic system, the views of reformist development planners and theorists gathered support.

The reformist approach embraces seven main elements. First is an emphasis on micro-empirical studies. In keeping with McGee's belief that "dirty boots begets wisdom"(31), reformists sought to rebuild theory from the ground up. Secondly, the reformists called for a number of changes in development strategies for underdeveloped countries. Among these the most significant were "redistribution with growth"(32); export-oriented industrial strategies to take advantage of the developing countries' capacity for labour-intensive industries; and support for a "new international economic order" which would favour poor countries in their external trade.

Thirdly, reformists avoided taking sides in the clash between capitalist and socialist approaches to development, but adopted instead a reconciliatory stance coupled with policy initiatives that do not fundamentally change the existing order. This involves the pursuit of what Streeten has called "a judicious selection of outward and inward-looking strategies" aimed at deriving "benefits of the positive forces without simultaneously exposing themselves to the harm of detrimental forces."(33)

A fourth component of the reformists' platform was their view of self-reliance. As Fair explains, this "relates not only to generating a spirit of self-help among workers and peasants within the capitalist framework but also relates to some national bourgeoisie or capitalist class working towards greater economic independence for itself and the nation against competition from international capitalists, including the multinational corporations." (34)

Fifthly, the reformists favour pragmatic strategies characterised by "logical, rigorous, ameliorative, incrementalist prescriptions for the ills (symptoms rather than causes) of the dependent and underdeveloped nations of the world." (35) Emphasis was extended to include the non-material needs of communities, "worst first" approaches, the satisfaction of basic needs and rural development. In this way development comes to mean "a way of gaining control over one's destiny through growing confidence, self-help and co-operation", (36) in other words, a commitment to reducing dependence without changing the system."

Sixthly, recognising that in many countries most of the poor were rurally based and that previous policies had discriminated against rural areas, (37) reformists saw the need to tackle this problem simultaneously at three levels. These are at the local level where the rural poor live, the national society and at the level of the international economic system. Santa Cruz argues that problems of poverty, food supply and rural development cannot be solved unless the inter-relationship between these three levels are recognised and embodied in national and international, development policies. It is only in this way that "the rural sector can be seen as a full partner in development rather than an object of obligation on 'us' to help 'them'." (38)

Finally, reformists are not wedded to a single model or strategy. Instead the reformist approach, with insights gained from radical criticisms of diffusionist theory, draws from a range of strategies to find solutions applicable for specific national, regional and local conditions. Inherent in this view is the parallel pursuit of long-term strategies for adjustments or changes at the international and national scales, alongside shorter-term tactics to ameliorate or improve living conditions at the regional and local scales. Browett argues that this represents "a retreat (diversion of attention) from a position of having to continuously confront directly the most

brutal consequences of capitalism and a movement towards realms where it is felt that 'something' can be done to improve the standards of material well being of impoverished people."<sup>(39)</sup> This dual, long and short-term approach, coupled with a concern about improving living conditions of the present generation of poor people, is perhaps the most significant distinguishing feature of the reformist approach.

Fair has drawn attention to the more important lessons which the "reformist pragmatists" have learned from the experience of development efforts in the 1950s to 1970s and from critiques of modernization strategies by radical theorists. These are:

- "that one cannot indiscriminantly apply Western development strategy to Third World countries;
- that it is invalid to expect that the capital modern sector of the economy can absorb more than a small proportion of the work force of Third World countries; instead considerable support must be given to encouraging the informal sector (the bazaar economy) as a source of employment in Third World countries;
- that far greater emphasis has to be placed on the needs of rural society, where in so many countries the bulk of the population lives, and upon the needs of traditional agriculture;
- that planning for development cannot be solely from the top down but has also to be from the bottom up, otherwise people do not accept the plans and do not understand them;
- that one cannot impose alien value systems on Third World countries."<sup>(40)</sup>

On account of the fairly recent currency of the reformist approach and implementation of corresponding strategies in a range of developing countries with markedly different development problems, it is not yet possible to make a definitive statement about the spatial applications of the reformist approach; nor does the eclectic nature of reformist strategies encourage any particular set of spatial patterns.<sup>(41)</sup> We may, however, identify certain types of spatial strategy generally associated with reformist thinking. These include:

- a) Encouragement of urbanization and urban development in an integrated hierarchy of cities and towns of differing size and function ranging from metropolitan areas to rural service centres. Richardson has identified ten such prototype strategies which will be discussed below.(42)
- b) Recognition that the essentially negative interpretation of large cities and primacy which had some support in the 1950s and 1960s, have been criticised on both theoretical and empirical grounds.(43) Alonso, for example, states that "there is no basis for the belief that primacy or over-urbanization per se is detrimental to the efficiency goal of economic development. There are good grounds for believing in increasing returns to urban size."(44)
- c) Encouragement of an integrated approach to rural development as advocated, for example, by Lele, Rondinelli and Ruddle and by Weitz.(45)
- d) Richardson's view that "urban and rural development are interdependent and complementary and that balance in the sense of attention to both sectors will raise overall levels of living more quickly than with development strategies biased in favour of one sector or the other."(46)
- e) The need for flexible approaches to settlement planning with particular emphasis on the questions of access, periodicity and delivery systems.(47)
- f) Building on the strengths or more positive aspects of the space economy, while at the same time, seeking to lessen the constraints resulting from its more negative aspects.(47)

The case study in this thesis will show how certain of these spatial strategies have been applied in the context of Transkei's north-east region.

The reformist approach has been criticised, mainly from a dependency perspective, on the grounds that it ignores institutional and external forces as well as class structure and processes of change. As a result critics argue it is seldom made clear how structural changes are to be achieved.(49) Reformists are also faced with the dilemma of integration or separation. Critics point out that integration will result in "destruction of indigenous society and the imposition of Euro-centre value systems" while separation will lead to "the denial of access to most of the 'benefits of Western civilization' and the permanent ossification, through imposition from above, of structures of inequity."(50) In response reformists would argue, firstly, that their approach does not neglect structural change but does not regard it as a precondition for shorter term, ameliorative action. Secondly, the extremes of

either integration or separation are impracticable, but a mix of the two, evolving over time as determined by the specific context, would be more effective.

Reformists have also been taken to task on the grounds that their stance tends to legitimate the existing distribution of power in society. This is correct up to a point, but it is important to recognise that actual planning practice usually involves an initiative on the part of the state and is "unable to go beyond the structural conditions that give rise to it." (51) This is the inherent contradiction of radical planning and it limits radical planners to "unmasking the ideological biases and contradictions of existing practice", (52) for they cannot engage in planning without themselves becoming associated with the authority system.

To conclude, the current state of the debate recognises the need to move away from "abstract theorising to more empirically based, lower-order theory", making it is clear that neither "utopian socialist dreams nor technical competence will, by themselves be sufficient." (53) Far more realistic is the twin-pronged approach of the reformists, with a variety of context-specific, implementable tactics, designed to improve productivity and living conditions in the short term, in parallel with longer-term, macro-level strategies aimed at selective structural changes.

Having thus established the ideological parameters for our research, we focus attention on regional planning doctrine.

### Regional planning doctrine and practice

#### Territory and Function

Friedmann and Weaver have identified two major forces of social integration - territorial and functional - that underpin dominant doctrines in regional planning. The territorial force "derives from common bonds of social order forged by history within a given place", whereas functional ties "are based on mutual self interest." (54) Given that inequalities are ubiquitous, "a functional order is always hierarchial, accumulating power at the top... (while) ... territorial relationships ... though they will also be characterised by inequalities of power, are tempered by mutual rights and obligations which the members of a territorial group claim from each other." (55)

As applied in the context of national or regional development, functional planning (which is assumed to have universal validity) is essentially spatial in nature and finds expression as a network of nodes and linkages extending beyond regional or national boundaries. Functional planning concentrates on the location of economic activities, with decisions being determined exogenously, either by firms optimising their location or by the state pursuing its own interests.(56)

Territorial planning (be it at the scale of cities, regions or nations) is an endogenous activity which seeks historical continuities, and strives for a general improvement in the quality of life for all the people of an area together with the full development of their productive potential. Its method is multi-level, holistic and complex.(57)

Thus functional and territorial planning are interwoven and complementary, yet they co-exist in a typically conflicting relationship. Reviewing the evolution of regional planning doctrines over half of a century, Friedmann and Weaver remark that functional and territorial emphasis appear to alternate. They identify four epochs in the evolution regional planning doctrine since 1925.(58)

Between 1925 and 1935 territorial integration held sway in the form of utopian planning and cultural regionalism. The 1935 to 1950 period saw functional integration emerge as the principal influence with regional planning concentrating on river basin development. This dominance continued through to 1975, with the emphasis on spatial development in newly industrializing countries (growth centres) and lagging regions in highly industrialized countries.(59) This was also the period during which regional planning became a recognised field of study.(60) In 1964 Friedmann and Alonso published their seminal volume entitled Regional development and planning: a reader(61) which brought together the intellectual foundations of the new discipline; namely, spatial organisation, urbanization, and regional growth theory. When the second edition, Regional Policy: Readings in theory and application,(62) was published in 1975, it revealed a certain shift in emphasis, concentrating on concepts of space and development, the role of cities in national development, issues in regional policy and case studies of regional planning.

Since 1975, as subsequent discussion will elaborate, territorial integration is re-emerging. This is taking a variety of forms ranging from selective regional closure and agropolitan development<sup>(63)</sup> to more context specific approaches with emphasis on delivery systems.<sup>(64)</sup> However, we should not lose sight of the fundamental role which both functional and territorial components play in the practice of regional planning, and while one may seem to predominate over the other for a period, in no sense does this imply an abandonment of either.

We now shift our attention to consider two intertwined strands of planning doctrine whose application has had a substantial impact on the practice of regional planning in both industrialized and developing countries, namely, polarized development and growth centres.

### Polarized development

During the late 1950s and early 1960s the spatial dimension of unequal development attracted increasing attention. This was reflected in the writings of, inter alia, Myrdal (1957), Hirschman (1958), Isard (1960) Boudeville (1961) Perroux (1964), Paelenick (1965) and Williamson (1965).<sup>(65)</sup> Their work, on what had become known as polarized development, led to certain conclusions for the practice of regional planning. These were "an emphasis on the growth of large cities, the pursuit of unequal development as a matter of policy, a view of regional planning that regarded it primarily as a way of influencing the location of manufacturing, and a belief that 'growth impulses' would eventually spread from major centres of innovation to the remainder of the economy."<sup>(66)</sup>

The main thrust of policies emanating from this early concept of polarized development had an urban-industrial focus.

Regional planning practice was given a major impulse in 1966 with the publication of John Friedmann's work in Venezuela,<sup>(67)</sup> demonstrating the application of his core-periphery model (see Figure 2.2), development regions and associated spatial processes (see Figure 2.3). These ideas were taken a step further in his paper: "A general theory of polarized development"<sup>(68)</sup> Based on the view that spatial systems are "territorially organised systems of social relation"<sup>(69)</sup> the "general theory" embraced Dahrendorf's conflict model of social change in which the main variable is the "pattern of authority - dependency relationships that characterize any organised social system."<sup>(70)</sup> Friedmann also broadened the scope of his earlier core-periphery model to include not only the diffusion of "economic activity and its associated pattern of urban settlement, but also of socio-cultural and political modernization from core to peripheral

areas."(71) Another feature of the "general theory" is that the concept of "growth" is explicitly distinguished from that of "development"(72) as discussed earlier in this chapter.

In essence the "general theory" model views the core as the "driving force from which innovations diffuse outwards to affect economic activity and settlement patterns as well as socio-cultural and political structures in the periphery."(73) Fair has summarized the spatial trends envisaged by Friedmann as countries move from the earlier (transitional) to the later stages (industrial and post-industrial), in terms of political, socio-cultural, economic and physical dimensions.(74)

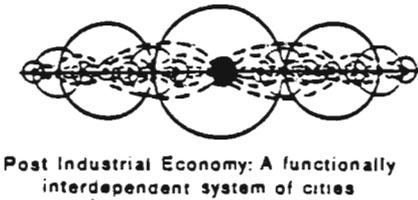
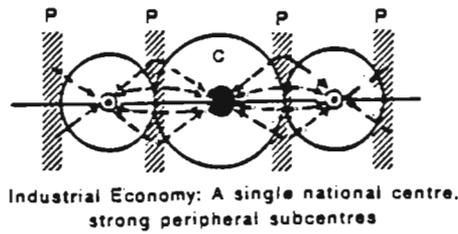
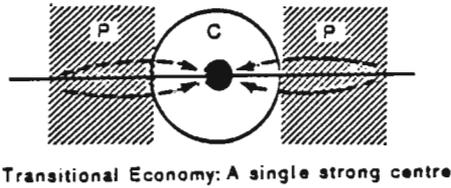
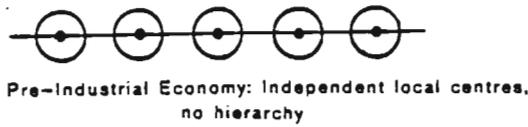
Politically, the spatial structure will evolve from a highly centralized to a polycentric system of decision-making. This means that the core-elites who control political power will decentralize some or all of this power to counter-elites in the periphery. The socio-cultural evolution of spatial structure will proceed from "relatively isolated, 'islands of innovation' to a continuously modernized surface, i.e. spreading out from the centre there develops 'a shared frame of socio-cultural expectations' and the increasing interaction of social and cultural groups as the country becomes modernized."(75) Economically, the spatial structure will shift from a highly concentrated to a more deconcentrated pattern; and physically, the spatial structure will evolve from "primacy in urban settlements to a log-normal position in the hierarchy of cities."(76)

In this way inequalities between core and periphery are expected to reduce over time, with the core emerging as the driving force for achieving spatial integration of the national territory. The process envisages a progressive reduction of physical, economic, social and political inequalities between core and periphery to ensure the future stability, growth and development of the system.(77)

#### Growth centres

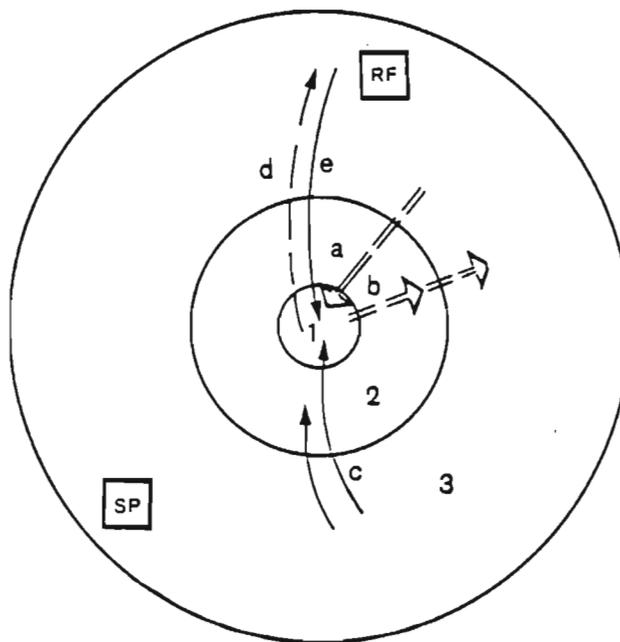
The preceding theories were given operational form as growth centres which became the counterpart to the theory of polarized development. Initiated as non-spatial 'growth poles' in 1950,(78) the concept was transformed so that by the 1960s it was "no longer just an economic space that was being polarized but the entire space economy."(79) Rodwin explained the growth centre

**Figure 2.2 Core-periphery model**



(Source : Friedmann 1966 : 36)

**Figure 2.3 Development regions and spatial processes**



- | Regions                 | Major Processes                            |
|-------------------------|--|
| 1=Core                  | a=Polarization of investment (backwash)    |
| 2=Upward Transitional   | b=Diffusion of investment (spread effects) |
| 3=Downward Transitional | c=Centripetal flow of labour               |
| RF=Resource Frontier    | d=Reaching out of core for inputs          |
| SP=Special Problem      | e=Flow of inputs to core                   |

(Source : Fair (1982) p.12 )

doctrine as one of "concentrated decentralization.(80) The main idea was that "urban-industrial growth could be diffused to the backward regions of a developing country by concentrating infrastructure and directly productive investments at selected points (or sub-regions) which had potential for economic expansion."(81) Growth centres which were easy to conceptualize and to communicate, had an intuitive appeal to planners and policy makers alike. This goes a long way towards explaining their dominance in regional planning doctrine and practice from the 1960s through to the 1980s.

Growth centres and their use as policy instruments in regional planning have been criticised on theoretical, ideological and practical grounds. It is argued that the spatial dimension, which postulates vertical and horizontal diffusion of economic growth, rested on assumptions that could not be sustained in practice, thus rendering it of little value as a tool for regional development.(82) The growth centre doctrine has also come under attack from dependency theorists, focussing mainly on its application in South America (and Chile in particular), claiming that it resulted in a process of artificial dualism, reinforcing the dominance of the powerful core (at international or national scales) to the increasing detriment of the weak periphery.(83)

From a practical viewpoint, there have always been misconceptions about terminology, with "growth centres" being used to describe centres ranging from major urban-industrial complexes to small rural central places. Nor was it always clear whether the term was being used descriptively (in relation to centres undergoing a major growth phase) or to designate an intended future role. The attainment of "self-sustaining growth" was another source of confusion: what were appropriate indicators and what did "self-sustaining" imply? Finally there was confusion about the ways in which growth centres were to be activated.(84)

To date, the most comprehensive and balanced accounts of growth centre doctrine and its value in the practice of regional planning are those of Moseley(85) in relation to industrialized countries and Appalraju and Safier(86) in developing countries. Moseley's conclusions about the future of growth centres as a policy instrument were largely pessimistic, although he kept the doctrine alive by advocating an intermediate-size city strategy for Great Britain and by suggesting further research.

Appalraju and Safier identified six classes of growth centre strategies that had been initiated in less developed countries (LDC's). The first three were associated either with the provision of infrastructure, or with the development of a major industrial or regional centre. These all had a common emphasis on the direct use of large-scale investments to "generate changes through accelerated economic growth and the resultant technological and organisational spin-offs."(87) Next they identified "rural" and "service" centres which, while they led to concentrated dispersal of public sector activities, experienced difficulty in inducing the complementary mobilization of local resources, skills and initiative.(88) Finally, there were metropolitan growth centres (in the sense of a twin city) whose purpose would be to modify an existing monocentric concentration of population and activity.(89)

Commenting on the use of growth centres as part of national urban policies aimed at consolidation or re-organisation of national space, Appalraju and Safier went on to distinguish three types of strategy: those based on a hierarchy of service centres (e.g., Kenya); on regional centres (e.g., Tanzania); and those based on industrial centres (e.g., Iran).(90) Their conclusions were that it was too early to judge whether these systems of growth centres would, in time, achieve all (or any) of the objectives relating to national urban systems and related spatial re-organisation. However, while reflecting Moseley's caution, they made a strong case for monitoring the effects of systems of growth centres in LDCs.(91)

To sum up our discussion of the major influences on regional planning doctrine and practice over the last three decades, we conclude that the concept of polarized development proved to be somewhat unwieldy, resulting in a plethora of theoretical discussions that became increasingly vague. Although some empirical research was undertaken, an "incisive critical perspective was still needed."(92) Friedmann's core-periphery model, his typology of development regions and their corresponding spatial processes have proved more useful as analytical constructs than as prescriptive tools for regional planning. This is well illustrated in the South African context by the work of Fair, Browett and Schmidt.(93)

Growth centres, despite the criticisms, have been widely implemented for a variety of different reasons and in contexts that have little in common with each other. What emerges from the reviews of growth centre strategies in both developed and less developed countries, is that growth centres cannot be evaluated realistically in the short term. Patterns of spatial organisation at national and regional level are influenced by parameters that change very slowly.<sup>(94)</sup> If the role of growth centre strategies is to re-organise national space and to modify national urban or settlement systems, their impact should, therefore, be assessed over long periods (decades rather than years). So too should growth centre strategies be evaluated in terms of the spatial/settlement/urban system whose trends they were designed to influence.

In many ways the growth centre debate brought into focus the inherent conflicts (and corresponding need for trade-offs) between function and territory, between growth and equity, between urban and rural issues of national and regional development. Accordingly, we now turn our attention to the post-1975 epoch and to the recent attempts to reformulate both doctrine and practice.

### Rethinking national and regional development

The 1970s marked a period of rethinking the premises upon which national and regional development planning had operated for several decades. A spate of books and articles sought to identify the parameters of a "new approach" and new priorities.<sup>(95)</sup> The initial effect was a swing towards strategies concentrating largely on employment creation, poverty reduction, basic needs, social and spatial equity. By the mid-1980s, however, this trend had given way to a more eclectic approach and evidence of a return to neo-classical economic policies, tempered by the redistributionary influences of the 1970s.

#### The "new" approach

Literature about the new approach to societal development focussed attention on the LDCs. The range of views, which were in a sense drawn together and reflected in the publications and activities of the World Bank, called for integrated rural development; a change in the function of major urban areas to include the support of rural hinterlands; the use of appropriate technologies; a substantial increase of investment in social development; and a concentration on the strengths rather than the weaknesses inherent in a region. The thinking

behind this new approach is well illustrated by Friedmann who argues that successful development in countries whose inhabitants are mainly poor and live in rural areas, required a major re-ordering of priorities in the allocation of investment, and an explicit spatial framework for the formulation and execution of policies and programmes.(96)

The essence of this approach is most clearly seen by showing how it differs from strategies which, in the past, have been adopted in developing countries. As Friedmann describes it, a democratic strategy for national development requires four main changes in emphasis. These are, firstly, from a process of economic growth which benefits primarily the rich and powerful, to one in which the fruits of increased prosperity are shared more equally among the population; secondly, from central command planning to a wider distribution of effective power, decision-making and popular control over the formulation and implementation of development plans; thirdly, from an economic dualism, artificially grafted onto a traditional society and frequently controlled (directly or indirectly) by foreign economic and political interests, to a self-generating type of development which builds on existing knowledge and seeks to transform traditional structures from within; and fourthly, from a strategy which assigns priority to urban-industrial growth, to one in which widespread improvements in agricultural production are seen as a necessary pre-condition for further developments in the urban industrial sector.(97) These principles can in turn be applied to specific policies for national and regional development as shown in Table 2.1.

Brookfield's identification of the main elements of this "new" approach differed in emphasis, though not in overall direction. He pinpointed the major issues that emerged between 1973 and 1978 as: a new international economic order; a shift against urban bias; a new interest in rural development and intermediate technology; and a concern for regional inequalities.(98)

Having established the main thrust of the "new approach", we now turn to a more detailed examination of specific development strategies in order to trace the changes in emphasis that occurred in practice.

Table 2.1 The "new approach" to national regional development: shifts in emphasis

<u>POLICY AREAS</u>	<u>FROM</u>	<u>TO</u>
1. <u>Investment priorities</u>	Major emphasis on urban-industrial investment.	An approach which seeks to achieve a better balance between the interests of urban and rural populations.
2. <u>Spatial planning</u>	National planning for individual sectors.	Planning which incorporates an explicit spatial dimension in the allocation of investment and the design of action programs.
3. <u>Growth centres</u>	An emphasis which promotes and sustains economic growth at only one or a few major urban centres.	A policy that will strengthen the economies of intermediate towns and rural service centres through a concerted effort at raising the productivity and incomes of rural populations.
4. <u>Target population in rural development</u>	Policies which favour large-scale commercial farming.	Those that are primarily directed at small farmers, artisans, industrial, and service workers who, in the aggregate make up the majority of the rural population.
5. <u>Markets</u>	Policies which favour production for export in the primary sectors of the economy.	Those which give substantially greater emphasis to production for domestic use.
6. <u>Technology</u>	Introduction of standard western technologies in agricultural production and manufacturing.	The development of technologies that are economically appropriate to the conditions of the country.
7. <u>Irrigation and settlement</u>	Large-scale resettlement, colonization, and irrigation schemes.	Small-scale irrigation and improved practices in land management.
8. <u>Health</u>	Provision of costly medical facilities and of professional staff experienced in the practice of clinical medicine.	Greater emphasis on environmental sanitation, preventive medicine the eradication of endemic diseases, and family planning, especially in rural areas.
9. <u>Education</u>	Education oriented predominantly to urban professional careers.	Programmes that will prepare youngsters as well as adults for productive work in rural and urban areas.
10. <u>Transport</u>	Priorities for the construction and operation of international, inter-urban, and urban transport facilities.	Priority for the development of rural transport networks with the objective of improving year-round farm to market access and of achieving closer linkages among lower-order towns and villages.
11. <u>Price and fiscal policies</u>	Policies which result in an inter-sectoral and inter-regional transfer of economic surplus for the principal benefit of city populations and international corporations.	Policies that seek to generate a surplus within localities primarily for reinvestment in these same localities and for the benefit of local population.
12. <u>Planning and implementation</u>	Processes in which planning is separated from implementing actions and in which the needs of local populations are determined by a central authority.	Processes that join the competence of central planning with effective practice at the local level.

Source: Based on Friedmann (1974) pp.6 - 8.

### A classification of development strategies

On the basis of differences and similarities in objectives and policy emphases, it is possible to distinguish seven categories of development strategies.(99) These will be outlined briefly in order to trace the progressive shift in emphasis from a pre-occupation with economic growth, through basic needs and back towards growth coupled with progressive redistribution.

(i) Growth-oriented strategies. The main objective of this kind of strategy, which was used extensively during the 1950s and 1960s, was "to increase the rate of output within an economy over a period mainly by increasing the rate of capital formation ... It is assumed that rapid growth of GNP suffices to bring about higher standards of living through its beneficial influence on other economic and social parameters."(100) Empirical evidence of countries where significant growth rates have actually resulted in the "decrease in the share of income accruing to the poorest groups "proves the fallacy of the argument that improvements in the living standards of a developing country's population will follow automatically from high rates of GNP growth."(101) The anticipated benefits of the "trickle down" process were overrated and the actual impact was that modern sector gains were being "withheld from the traditional sector which provides a livelihood for the majority of the population."(102)

Growth-oriented strategies made little contribution to development and failed to cope with the problems of unemployment and poverty in developing countries with exceptions later in East and South East Asia which will be discussed below. The important lesson from this failure was the need, in addition to rapid expansion of GNP, for broad-based development objectives and policies that take into account the range of socio-political and institutional factors which both determine and are determined by the process of economic and social development.(103)

(ii) The employment-oriented approach. In this type of strategy, development is taken to include, along with economic growth, improvement in the living conditions of individuals, while the promotion of employment is seen as the means whereby the benefits of economic growth are spread more evenly. This implies modifying the growth objective to maximize the rate of labour absorption as well as output. Simultaneously there is the need to re-allocate resources in favour of disadvantaged groups and sectors.(104) This requires restructuring domestic demand and production towards a higher level of relatively labour-intensive output by reducing the relative cost of labour and

increasing that of capital.(105) This has proved difficult to achieve. As Lisk explains, the likely effects of this type of strategy are "first, a tendency towards capital-intensive production in the modern sector with the threat to the employment objective that this implies, second, a short-fall in production relative to higher effective demand over time, leading to price inflation or balance of payments problems; and third, perpetuation of an unbalanced, dualistic pattern of development in a situation crying out for integration of the traditional and modern sectors."(106)

(iii) Anti-poverty approach. This is based on the realization that attempts to effect redistribution of income through improved access to productive employment, excluded the main poverty groups in most LDCs. Accordingly, poverty-oriented strategies aim at increasing per capita incomes of the groups of people who suffer most from deficiencies in their living standards.(107) This minimum-income objective assumes that a country has enough adequately paid jobs to employ all the poor; yet, this is certainly not the case as far as the poorest and most disadvantaged countries are concerned.(108) In most LDCs poverty cannot be eliminated without, inter alia, an acceleration of economic growth.

(iv) The basic needs approach. The realization that development involves much more than economic growth, increasing employment and raising per capita income levels of target groups, culminated in a shift of attention to strategies aimed at the reduction of poverty, unemployment and inequality.(109) According to this approach "one of the explicit goals of development planning should be the satisfaction of an absolute level of basic needs."(110) The strategy, initiated by planners at the International Labour Organisation, is aimed at "increasing the production and supply of goods and services that fulfil an individual's basic human needs both in the present and over time."(111) Growth is envisaged through increased output of basic goods and services; while the rapid generation of employment is anticipated through the use of technology requiring little capital per worker; finally the combined increases in output and employment levels should enable each worker to meet his and his family's consumption requirements."(112)

The term "basic needs" refers to minimum requirements that are essential for decent human existence and include items of private consumption such as adequate nutritional intake, shelter and clothing together with access to community services like clean drinking water, sanitation, public transport, health and education facilities. Implicit in the basic needs concept is

participation in local decision-making along with the right to hold a productive job and other means of attaining basic needs.(113) In an operational sense, 'basic needs' can be summarised as minimum requirements of an individual or household for the following items : shelter, nutrition, clothing, water and sanitation, health, education, transport and participation in decision-making.(114)

A strategy for "basic needs" type development in any community depends, in the first place, upon establishing the extent to which these basic commodities and services are available. Next, the existing levels have to be related to resources available within the community. Thereafter, a set of targets can be drawn up to represent "the minimum acceptable level of access to specific basic goods and services that will be considered to be tolerable by a stated target date."(115) Finally, policy can be drawn up "to implement the production and delivery of these goods and services to the people for whom they are intended within the planning period."(116)

A certain amount of confusion surrounds the concept of a basic needs development strategy. Ul Haq explains that to some development planners, the concept of providing for the basic needs of the poorest represents a futile attempt to redistribute incomes and provide welfare services for the poor, without stimulating corresponding increases in their productivity to pay for them.(117) Meanwhile, to others, basic needs identifies the ultimate objective of economic development which should shape national planning for investment, production and consumption. Depending on one's ideological standpoint, a basic needs strategy is seen alternatively as a form of socialism as practised in China and Cuba, or as a "capitalist conspiracy to deny industrialization and modernization to the developing countries"(118) thereby exacerbating their dependency. To others still, a basic needs strategy offers a pragmatic response to the urgent problem of absolute poverty. It is thus becoming a strategy that means whatever one wants it to mean. This unfortunate tendency, along with the widespread enthusiasm with which it has (and currently is) being adopted by planners and policy makers, is reminiscent of the response to growth centres in the late 1960s. Whether its application will be more successful remains to be seen.

Sandbrook has identified two main approaches to basic needs.(119) : a more conservative approach characterised, for example by the World Bank, and a more radical approach. "In the more conservative approach, basic needs is an addition to existing policy, whereas more radical groups view it as a means of

providing structural change in Third World countries."(120) As Sandbrook observes, the distinction depends on the "depth of change" envisaged. A conservative anti-poverty programme would propose peripheral reforms within the existing national and international economic orders, whereas a radical one would prescribe a mutually reinforcing set of policies entailing structural change at national and international levels."(121) The conservative approach is consistent with the reformist paradigm, discussed earlier, while, the more radical approach, with its emphasis on structural changes in the allocation and mobilization of productive resources and an initial redistribution of assets, accords more closely to the views of dependency theorists.

(v) Agropolitan development strategies. The shifts in emphasis which Friedmann called for (see Table 2.1 above) have been extended into a strategy for accelerated rural development or, as it is better known, "agropolitan development." This may be viewed as an extension of the more radical interpretation of basic needs, coupled with the concepts of territorial closure and development from below.(122)

Friedmann explains that its primary objective is no longer economic growth but social development with focus on specific human needs. Priority attention should be given to rural development and planning for this needs to be decentralized, participatory and closely tied to the particulars of local settings. Planning will, therefore, need to be transactive in style and be based on qualitative judgements as much as on quantitative techniques.(123)

The setting in which the agropolitan concept has been discussed is that of "densely populated, agrarian societies characterised by low profiles of social development, high rates of population increase, incipient urban-based industrialization, high external dependency and rising indices of inequality."(124) This is typically an East or South East Asian context, although it has been applied with some modification to parts of Africa.(125)

The agropolitan concept stems jointly from the basic needs approach and from the notion of territorial closure in terms of which each spatial unit is treated as a single, integrated, self-governing entity. It embodies a certain size/density function, the availability of services at various scales, the existence of substantial non-farm employment and sufficient autonomy as well as economic resources for a district to undertake its own development endogenously.(126)

As defined in general terms by Friedmann, agropolitan districts are rural areas with an effective population density of at least 200 persons/square km., containing a town of 10 000 to 25 000. District boundaries are defined by a commuting radius of 5 to 10 km or an hour's travel time by bicycle, leading to an overall service population of between 50 000 and 150 000, of whom the majority would initially be engaged in farming. The actual definition of each agropolitan district would, in practice, take account of the existing patterns of social, and economic behaviour, tribal, religious and language boundaries, complementary ecological factors, population densities and the location of traditional market towns.(127)

Among the major criticisms of the agropolitan model are that the separation of "functional" and "territorial" forces is artificial;(128) the anti-export argument cannot be sustained in either theoretical or practical terms; the model does not take into account the existence of classes or conflicting class interests; territorial closure is seldom feasible in practice; and perhaps most important, "by effectively isolating the poorest regions of the world from external transfers and by expecting regions which are over-populated vis-a-vis resources to seek self sufficiency, one may argue, is a sure recipe for disaster and will trap peripheral regions forever in rural poverty."(129)

In a recent article Friedmann discounted these criticisms as misconceptions; and he responded by generalizing the concept of territorially based development in the hope of providing what he called a more complete rationale for what he called "a decentered system of societal guidance."(130) He proceeded to emphasise the present crisis in regional planning doctrine, pointing out that ideas valid twenty years before were no longer useful. "Within the rich traditions of regionalism," he remarked, "we must initiate a search for new approaches that are consistent with the actually prevailing socio-economic and political conditions."(131)

This debate will no doubt continue as evidence of the implementation of agropolitan strategies becomes available. At this stage, its potential appears to be limited to countries with socialist or marxist governments but even so the chances of success are slim.

(vi) A new generation of growth strategies. In recent years the response of more conservative policy makers to the economic problems in both First and Third World countries has been a tendency to return to the basic principles of

neo-classical economics, which as Lal argues, apply with equal validity in both developed and developing environments;(132) and a re-emphasis of economic growth as the prime mover in a development strategy.(133) These trends are to be observed in two rather different arenas.

The first relates to the rapid growth of certain newly industrializing countries such as Singapore, Hong Kong, Taiwan and South Korea based on policies of export-oriented industrialization. Their so called "accelerated growth strategy" seeks "rapid labour intensive industrialization for export markets on the basis of comparative advantage (which in these cases means very cheap labour) ... pursued in conjunction with greater reliance on free market mechanisms, the elimination of protective national tariffs and increased integration into the international economy."(134) Its apparent success has induced the World Bank to advocate it as a prototype for development in Sub-Saharan Africa.(135) The extent to which these strategies will be viable in different contexts is questionable and it may be argued that the success in growth terms achieved in Singapore, South Korea, Hong Kong and Taiwan is the result of their specific historical, locational and political circumstances, rather than of the strategy itself.(136) It is still too early to evaluate this approach comprehensively but its critical test as a development strategy will hinge upon its ability to achieve the long-elusive trickle-down effect in both societal and spatial terms.

The second, more recent, growth-oriented initiative emerges from the debate about the current relevance of development economics as a basis for policy. Lal argues with some conviction that supplanting the price mechanism by government intervention does not necessarily promote development. He questions the assumptions upon which development economics and its policies are based, and makes a strong case for a return to basic (neo-classical) principles.(137) Streeten's response is that far from failing, it is the very success of policies based on development economics that has created new problems.(138)

A swing back towards strategies that accord high priority to economic growth but tempered by the lessons gained from redistributionary strategies of the 1970s thus appears to be gaining momentum among national economic planners. Its effect will no doubt be felt at regional scale as well.

(vii) An eclectic approach. Writing in 1981, Seers pointed out that "we may have to face the very real possibility that human reality is so constructed that no model can be devised for its analysis (especially a dynamic one) which is both realistic and simple enough to provide a universal ideology that could be applied with safety in any nation at all, especially if we allow, as we surely must, for demographic and geographical factors as well as a range of economic and cultural."(139) More recently, Dewar et al have taken this line of thinking a step further in identifying an "eclectic approach" to settlement policy. It represents, a mixture embracing both the old growth or 'top down' models of development with the more recent redistributive, and 'bottom up' development models. From a policy perspective, it embraces a mix of national priorities with those of particular districts and local community needs; and it advocates a variety of policy forms, appropriate to a particular context.(140)

The main elements of this eclectic approach are, firstly, that neither "top down" nor "bottom up" strategies are adequate on their own, but that both are necessary in different situations.(141) This co-incides with Weitz's view of regional planning involving a "cross-function" or merger of two planning activities - the vertical and the horizontal - at the regional level.(142) Secondly, Dewar et al argue that problems need to be tackled at a number of different levels by appropriate policies and that a strong emphasis is needed on sectoral as well as spatial policies.(143) Thirdly, the eclectic approach emphasises the importance of context in determining strategy. "Context" in this sense is technically defined to include "the size and shape of a country, its topography and climate, the form and level of economic development, and the level of urbanization, political structure and cultural heritage."(144)

By way of example, Dewar et al quote Richardson's typology of national urban development strategies, any one of which may be deemed the most appropriate in different contexts. The eclectic approach thus frees development planners from standardised policy packages and, in effect, forces them to make choices that are context specific. In selecting a settlement strategy, one would thus consider the relative merits of such prototype strategies as : laissez-faire, polycentric development of primate city region, leapfrog decentralization within core regions, counter-magnets, small service centres and rural development, regional metropolis and sub-system development, growth centres, development axes, provincial capitals and secondary cities.(145) None of these constitute a comprehensive national development strategy on their own and the choice among them (including hybrid strategies) would be influenced largely by country specific conditions.

It may be argued that regional planners have always enjoyed independence in their choice of concepts and strategies, and that this eclectic approach is, therefore, no more than a re-iteration of the status quo. However, evidence of regional planning in practice certainly does reflect a heavy reliance on rather few concepts (some of which, such as optimum city size, have long been superseded) and a very limited range of fairly uniform policies (such as attempts to use growth centres to attract industry to locations offering no natural advantages to industrialists) which are often applied without discrimination in widely different situations. One major attribute of the eclectic approach is that it stops planners in their tracks and forces them to reconsider the premises upon which their doctrine is based before advancing into practice.

As such it involves a temporary retreat from the mainstream of planning practice to a position from which the conventional wisdom of current regional planning doctrine and its associated strategies can be re-assessed. In this way the needs of a particular context can be addressed and solutions can be worked out embracing elements from the full spectrum of planning doctrine and range of strategies.

Taking a slightly different line, but still within the overall ambit of an eclectic approach, Ligthelm has recently attempted to formulate an appropriate development strategy for Southern Africa, drawing on elements of many of the strategies discussed above.<sup>(146)</sup> He suggests an approach that includes economic growth but redirects it towards the real needs of the poor;<sup>(147)</sup> and that pays particular attention to the links between distribution and growth.<sup>(148)</sup> His approach is multi-dimensional, embracing endogenous, self reliant development with emphasis on the human factor and a bottom-up orientation. The key elements of this strategy include employment creation via production programmes; small-holder farmer schemes; integrated rural development; small business development; the use of appropriate technologies; emphasis on the production of capital goods; and public works programmes.<sup>(149)</sup>

In many ways this is similar to the conservative basic needs strategy discussed above, adapted to the Southern African context in a general sense rather than to specific regions within it. As such it represents one of the first attempts to set out an overall development strategy for South Africa embracing many of the lessons that emerge from the rethinking of the last decade. One notable defect, however, is the apparent neglect of spatial or territorial aspects.

## Conclusions

In this chapter we adopted a conceptual model (Figure 2.1) as the framework around which to establish the theoretical context for our research. After clarifying our concept of development and ideological standpoint within a reformist paradigm, the discussion turned successively to the main doctrines that have influenced planning practice over the last three decades, and to the rethinking that has characterised national and regional development since the mid 1970s. Finally we reviewed the major development strategies noting the shifts in emphasis over the period and the potential value in adopting an eclectic approach for planning in the peripheral regions of Southern Africa. We now turn our attention to methodology in spatial development planning.

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CHAPTER THREE      DEVELOPMENT PLANNING IN THIRD WORLD COUNTRIES

Planning has been defined in many ways but there is widespread agreement that it is, in essence, "an organised, conscious and continual attempt to select the best available alternatives to achieve specific goals."<sup>(1)</sup> Clearly then, planning involves the economising of scarce resources. The outcome of planning, namely a plan is, in the broadest sense, "an ordered sequence of operations designed to lead to the achievement of either a single goal or to a balance between several goals."<sup>(2)</sup>

In contrast to economic planning, which is primarily anti-cyclical and geared mainly to economic growth within the prevailing social and economic framework and the limits prescribed by the need to maintain economic stability,<sup>(3)</sup> development planning seeks change as well as growth. The term "change" refers here to the altering of those institutional frameworks considered to be obstacles to an acceleration in the rate of economic and social progress.<sup>(4)</sup>

These definitions represented the mainstream views of development planners during the 1960s. However, as Rondinelli points out, "since the mid 1960s nearly all the assumptions underlying national economic planning in developing countries have been questioned, including the desirability of growth and the need for planning itself."<sup>(5)</sup> This chapter examines the main characteristics of national economic development plans of the 1960s and early 1970s as a basis for evaluating their performance and for identifying proposed new directions. We then explore the scope and rationale of regional/spatial planning before establishing a basis for evaluating spatial development plans.

National economic development planning

A national economic development plan is basically a set of political decisions outlining a government's main objectives in the economic and social spheres. Ideally, the plan should be "a systematic and integrated programme of action, covering a definite period of time, approved or sponsored by the state to bring about a rational utilization of resources to achieve certain national targets, using direct and indirect means, with or without substantial state ownership of resources."<sup>(6)</sup>

The main characteristics of such a plan are feasibility, consistency and optimality. A plan is feasible if its targets can be achieved with the given resources and production structure. It is consistent if the activities of each sector are planned in such a way that no bottlenecks or excesses are likely to arise; i.e., if the various elements of the plan are compatible and designed to move in harmony with each other. Finally, the plan will be optimal if there are no alternative ways to raise the value of the targets.<sup>(7)</sup>

Typically the formulation of such a plan involved six phases.<sup>(8)</sup> The first describes the existing situation, emphasizing the inter-and intra-regional structure, interpreting trends and assessing constraints or opportunities. The second phase involves determination of the required levels of activity for each economic sector in every region and the amount of capital investment needed to sustain these levels of activity. During the third phase, policies are identified to ensure that the action of the various economic agents resulted in the desired levels of economic activity within the required time limit. This involves formulating detailed policies for the main sectors of the economy, for social and administrative services, and identifying roles for private enterprise as well as foreign investors. The fourth stage requires the setting of sectoral programmes and targets indicating what was to be achieved by each sector within each region and how this is to be done.

The fifth step involves the preparation of a (usually five-year) development plan document and its implementation. The document comprises a plan of action, consistent with the longer-term direction in which the economy is to develop, whose purpose is to translate the previous phases into action. The intended effect of implementing this plan is to integrate the economic with the physical aspects of development. Although the plan is implemented in space, more often than not, it lacks an explicit spatial component. The final phase, namely, evaluation and control, aims to review periodically the extent to which the plan had been fulfilled so that necessary modifications can be made in good time. In effect this means checking how far the originally established targets, have been achieved.

In general terms this was the approach adopted by development planners in Third World countries during the 1960s and early 1970s; and national plans drawn up in this way were often regarded by international agencies as preconditions for aid. Plans of this type have, however, been severely criticised by, inter alia, Caiden and Wildavsky who, on the evidence of national planning and government budgeting in some eighty countries, conclude that "planning as

presently constituted cannot work in the environment in which it is supposed to function."(9) They point out that national plans have seldom influenced government budgets or the selection of development projects. Furthermore, "developing countries lack the data, expertise, administrative capacity, interest or political will to formulate sophisticated macro-economic models or to co-ordinate activities in pursuit of planned goals.... Nor do most countries have adequate organisational structures or sufficient central authority to enforce plan priorities among budget makers, ministry administrators, project managers or even the foreign assistance agencies that insisted on the plan in the first place."(10)

Caiden and Wildavsky suggest instead a revision of priorities in national development planning. Their solution is firstly "to merge planning and budgeting within a single ministry of finance, to disaggregate planning by sector, and to focus it more directly on problems of resource allocation, project selection and program management."(11) Secondly, in view of the limited administrative capacity available in most countries, they demand that planning and budgeting systems be kept simple. Thirdly, they would de-emphasize planning as a process undertaken by a distinct profession, and instead would attempt to enhance the ability of a wide variety of decision-makers to plan. Fourthly, they would abandon the national plan as a document on the grounds that it is costly to produce and of little value to decision-makers.(12)

The conventional approach to development planning was also criticized by Seers who, in the course of defining development as a reduction in poverty, unemployment and inequality in 1972, commented on the need for development indicators as targets for planning. In the place of national income statistics, he said, we require "targets for poverty, employment and income distribution, specifying some of the dimensions of the structure of society at which we are aiming."(13) This involves a profound difference in approach. As Seers explains: "formerly the basic technique consisted in extrapolating past trends and choosing investment patterns that would produce an acceptable increase in national income in a five year period .... subject to certain constraints. Now we must try to envisage what might be a satisfactory pattern at some time in the future, in terms not only of production and employment structure, but of the patterns of income distribution, consumer demand and jobs, and then work backwards to see if there is a plausible path for getting there."(14)

Since the mid 1970s development planners in Third World countries and the international aid agencies have responded, in some degree, to the problems, identified by Caiden and Wildavsky. But the national plan document still remains an important component of development planning in many countries and projects enjoying the support of powerful interest groups continue to receive priority in the face of national development objectives. The change in direction advocated by Seers has had a wider impact and many of the development plans to appear in the last decade reflect some attention to normative goal formulation and associated target setting in keeping with the requirements of strategies influenced by the reformist approach.

Against this background we can now attempt to establish a contemporary rationale for developing planning that will apply specifically to countries and regions in Southern Africa. In countries with mixed economics, (as is the case of most countries in Southern Africa) the relationship between the community and its government is a delicate and intimate one; for government not only regulates certain aspects of behaviour in a community but is also, itself, a provider of services. At the same time, government's use of resources, powers and information has a substantial influence on opportunities for growth in the private sector.

Government exercises two degrees of economic choice: the first concerns the level at which it will intervene in the market system; and the second, its own internal priorities for allocation among departments. Thus the choices open to government in the investment of its resources inevitably influence the feasibility of private investments. Furthermore, by virtue of its investment decision-making powers, government has the opportunity to encourage or discourage the development of certain functions in particular settlements. Investment policy can thus be used to influence the size and function of settlements in such a way as to help realise certain national and regional goals. (15)

The mechanism whereby these goals and decisions are given effect is development planning and this activity can legitimately occur at a range of scales from national to local community levels.

The rationale for development planning stems from three related questions:

- a) What do the people of a country or region need (bearing in mind that people's individual and collective needs vary from place to place)?
- b) What resources (physical and human) are available to satisfy these needs (again, the distribution of resources is not spatially homogeneous)?
- c) How can the available resources be transformed to meet the needs at the places where they occur?

The primary concerns of development planning will, therefore, be as follows:

- people: where they live and how they satisfy their day-to-day needs;
- their activities: economics, social, cultural, religious, political and governmental;
- the land: its natural resources, man-made improvements and other infrastructure;
- the manner in which land and resources are owned, managed or used together with the techniques relating to these uses.

Clearly these facets are all inter-related; none are isolated or independent of the others. Consequently development planning must take all into account. This is illustrated in Figure 3.1, which gives some idea of the typical range of interwoven decision areas involved in development planning at national, regional or local levels.

As the focus of this thesis (and the case study) is the intra-regional scale, discussion will now turn to the subject of regional/spatial planning which, is a sub-set of development planning.

### Regional/spatial planning

#### International perspective

The terms "urban and regional" or "spatial" planning are often used synonymously. Accordingly it is useful to start by identifying each in relation to "general" planning. Hall describes planning as general activity undertaken by people in a wide variety of situations from the home, to the office, to national government. It is an activity that involves "making an orderly sequence of actions that will lead to the achievement of a stated goal or goals." (16)

Figure 3.1 Decision areas for a national development plan

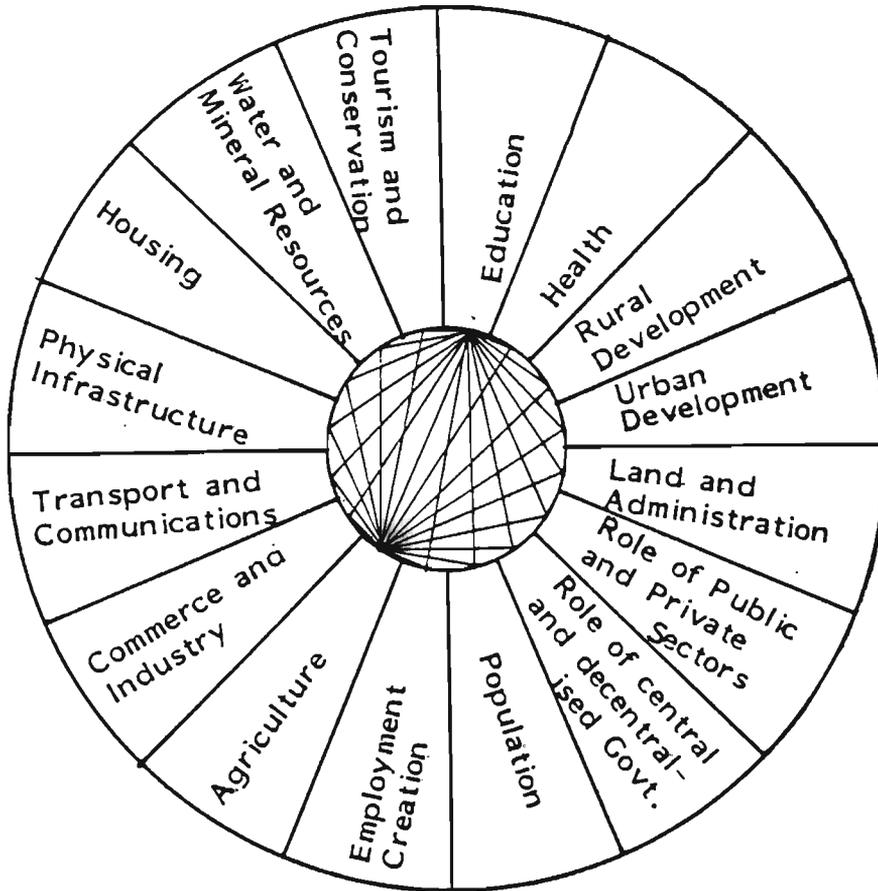
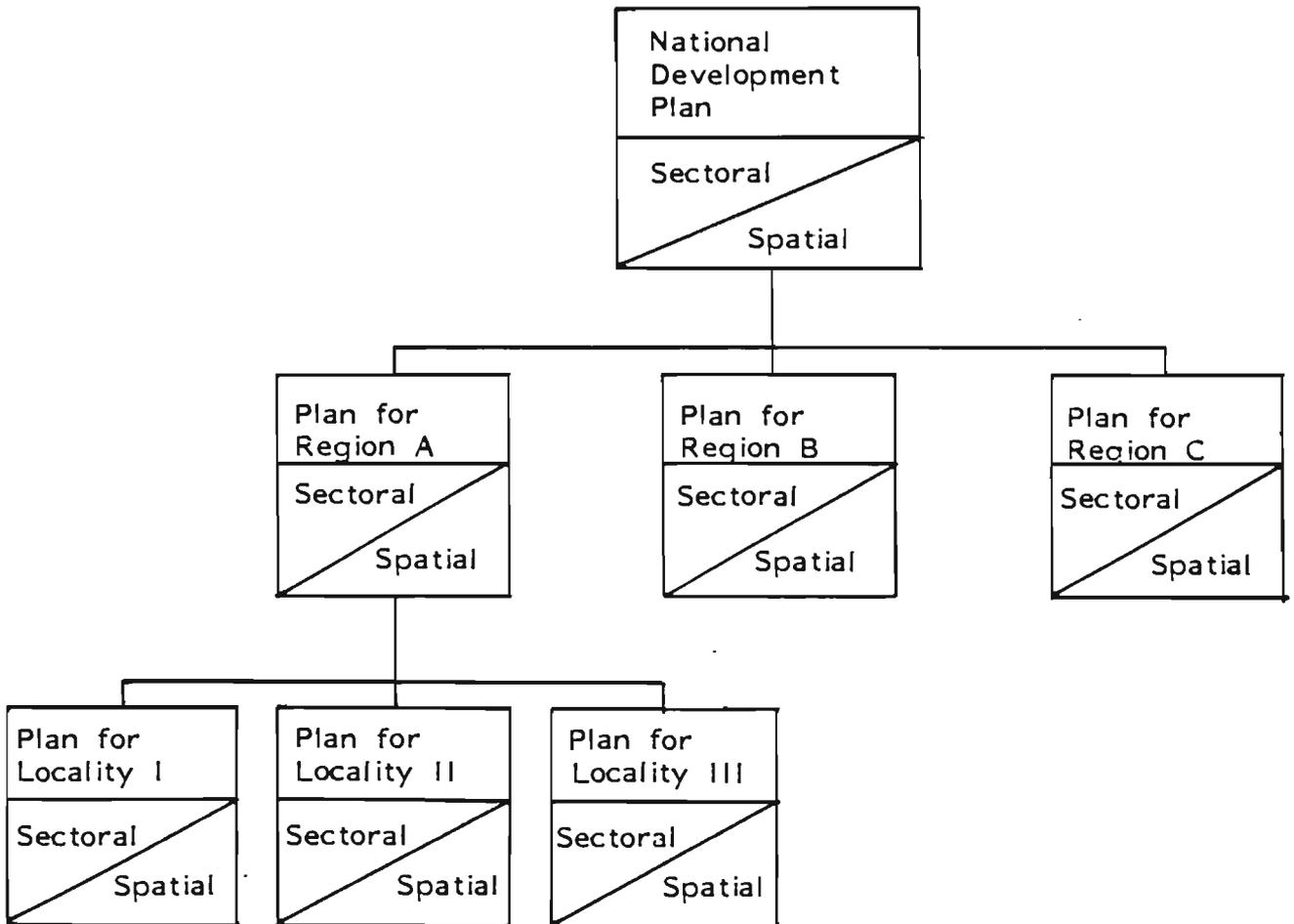


Figure 3.2 Relationship between plans at national, regional and local scales



The terms "urban and regional" or "physical" and "spatial" all refer to a more precise form of planning that has "a spatial, or geographical component, in which the general objective is to provide for a spatial structure of activities (or land uses) which in some way is better than the pattern existing without planning".(17) All are concerned with the geographic distribution and interaction of human activities; and all are directed towards creating a physical environment in which human needs can progressively be satisfied. While Hall regards "spatial planning" as the neutral and more precise term", (18) the European Conference of Ministers responsible for regional planning, in its recently adopted Torremolinos Charter (1983), uses the term "regional/spatial" planning.(19) This charter provides a useful synthesis of current international views about the concept and objectives of regional/spatial planning as the following quotations illustrate.

"The concept of regional/spatial gives geographical expression to the economic, social, cultural and ecological policies of society."

"It is at the same time a scientific discipline, an administrative technique and a policy developed as an interdisciplinary and comprehensive approach to regional development and the physical organisation of space according to an overall strategy."

"Man and his well-being as well as his interaction with the environment are the central concern of regional/spatial planning, its aims being to provide each individual with an environment and quality of life conducive to the development of his personality in surroundings planned on a human scale."

"Regional/spatial planning should be democratic, comprehensive, functional and oriented towards the longer term.

Democratic : it should be conducted in such a way as to ensure the participation of the people concerned and their political representatives;

Comprehensive : it should ensure the co-ordination of the various sectoral policies and integrate them in an overall approach;

Functional : it needs to take account of the existence of regional consciousness based on common values, culture and interests sometimes crossing administrative and territorial boundaries, while taking account of the institutional arrangements of the different countries;

Long-term oriented : it should analyse and take into consideration the long-term trends and developments of economic, social, cultural, ecological and environmental phenomena and interventions."

"Regional/spatial planning must take into consideration the existence of a multitude of individual and institutional decision-makers which influence the organisation of space, the uncertainty of all forecasting studies, the market pressures, the special features of administrative systems and the differing socio-economic and environmental conditions."(20)

Regional/spatial planning thus seeks to achieve the following fundamental objectives simultaneously: balanced socio-economic development of regions; improvement in the quality of life; responsible management of natural resources in order to protect the environment; and the rational use of land.(21)

The actual planning of regions can take place at either of two levels or scales of activity.(22) Firstly, there is the national/regional scale at which national investments are allocated to regional level by the central government. These resources are then channelled into the most productive areas of each region and co-ordinated regionally. This is the more common type of regional planning to which Boisier and Dunham refer (see Chapter 1 above). Secondly, the regional/local level of planning is concerned with spatial and physical problems of land use and design in order to maximise social objectives. This level, which also involves an element of investment allocation, is mainly concerned with the planning of a particular region.

Planning at a regional level operates as a merger of two planning functions - the vertical and the horizontal. The vertical function involves co-ordination of local level (micro) needs and aims with those expressed at a national (macro) level. As Weitz explains it, the task of the regional planner at this intermediate level is to blend the micro and macro-planning, relying on his knowledge of the overall plan and through his familiarity with details of the region. The horizontal function embraces a wide range of activities: "inter-sectoral co-ordination, the expression of the principles of development in terms of physical plans suitable to the specific conditions of a region, and the translation of a general development plan into concrete, implementable projects." (23)

Regional/spatial planning cannot be characterised as being exclusively economic or social or physical or administrative; it cuts through and may embrace all these forms of planning. According to Alden and Morgen, the characteristics which give regional/spatial planning identity and form do not derive from the specific problems it tackles but from its structural characteristics, namely that it is sub-national in the power it deploys; that it is supra-urban; that it deals with spatially extensive issues which may require a considerable degree of abstraction and generalization.(24)

Glasson has distinguished several forms of planning, all of which fall within the ambit of regional/spatial planning. These are:

- Regional planning, relating to the planning of an area's physical structure and land uses, as distinct from economic planning which is concerned with an area's economic structure and overall prosperity.
- Allocative planning, involving co-ordinatory resolution of conflicts and ensuring that the system continues to function, as distinct from innovative planning which is concerned with improving the system as a whole, introducing new aims and attempting to mould change on a large scale.
- Indicative planning, which is advisory, merely laying down guidelines, as opposed to imperative (or command) planning which involves specific directives.(25)

Regional/spatial planning, Glasson observes, usually involves both physical and economic planning. Some regional plans may be purely allocative but most include some innovative elements. Regional planning is invariably multi-objective but the method of implementation will vary greatly depending on the political environment in which the region is situated.(26)

### Southern African context

Whereas this international perspective provides a useful, broad frame of reference, for the purposes of this thesis it is necessary to define regional/spatial planning more specifically in relation to Southern Africa where the context is that of a developing (or Third World) country and the scale at which we shall focus attention is the regional/local or intra-regional level. The term "spatial planning", akin to that of regional/spatial planning discussed above, will now be used in a specific way to refer to the geographic framework for other facets of development planning. It is concerned with the question "where" and it stems from the fact that human activities are carried out at, and between, particular places, and that people's needs vary from place to place as do the resources for satisfying those needs. This view requires that, development plans be appropriate to the geographic distribution of people, needs and resources, and also to the type and level of economic activities in specific areas. (27)

Planning the overall development of a region calls for the rational location of investment; and this in turn requires an understanding of the settlement pattern and its geographic organisation. Spatial planning provides the the physical and geographic dimension to development planning by setting the criteria of location for sectoral planners.(28) If a centre or a district is studied in isolation, a strong case can often be made for investment there. What is needed instead, is an appraisal of the entire settlement system to establish the role of each centre or district within a national-regional context.(29) This is the field of spatial planning.

The scope of spatial planning at intra-regional scale encompasses the following:

- the distribution of population, facilities and settlement of different size and function;
- the historical processes that have given rise to the existing spatial patterns;
- the type and range of services and opportunities available to residents of various settlements;
- equitable access of the population to basic community services such as clean water for domestic use, health, education and public transport;
- equitable satisfaction of basic consumption needs like food, clothing and shelter;
- physical access of the population to productive resources and opportunities;

- communications networks appropriate to the needs and potentials of individual settlements and regions;
- the allocation of resources to specific places in order to generate development there;
- and, finally, by considering the needs of areas as a whole, together with the physical relationship between settlements, spatial planning seeks to avoid over-investment through the duplication of services.

To sum up, spatial planning seeks to provide a basis for planning the development of a country (or region) by organising the location and interaction of activities and investments in support of areas with potential or those displaying different levels of socio-economic welfare; by clustering activities into nodes; and by channelling them through networks of communication.(30)

The term "regional planning" will refer to the preparation of a development plan (incorporating sectoral and spatial aspects) for a particular region in a country. Under ideal circumstances regional plans will follow a clear statement of policies for sectors and regions, possibly in the form of a National Development Plan, of which regional plans are a sub-set. The object of a regional plan is to transform national policies into policies directly applicable to that region.

To sum up, spatial planning takes place at various scales, in tandem with sectoral planning (see Figure 3.2.) and, in much the same way that the functional concerns alter with changes of scale, so too will spatial emphasis alter. The size of the country or region is not, in itself, the main issue here. What is important is that spatial planning needs to occur alongside, and be integrated with, sectoral planning at national, regional and local levels. Planning at the regional scale calls for a merger of spatial with sectoral aspects and for a linking of "top down" with "bottom up" processes and initiatives.(31) Rather than debating the size and configuration of planning regions, attention should focus on two issues:

- Where should the "top" come down to and how far must the "bottom" reach up?
- What aerial units are suitable for implementing different components of a development plan and who will be responsible for implementation there?

Justification for spatial planning in developing countries

Before proceeding to a discussion about the criteria for effective spatial development plans, it is necessary to address the question: Is spatial planning a necessity or a luxury for developing countries/regions in Southern Africa ?

In developed countries, regional/spatial issues began to emerge as an important field of investigation and planning in the 1930s with the establishment of the Tennessee Valley Authority in the USA<sup>(32)</sup> and the Barlow Commission in the U.K.<sup>(33)</sup> Regional planning was motivated primarily by two related problems. Firstly, there was a concern that some regions were suffering from slow rates of economic growth, resulting in acute economic hardship. Secondly, there was a fear that continued growth of metropolitan cities would absorb scarce agricultural land and create insoluble environmental, social and economic problems.<sup>(34)</sup> These concerns manifested themselves in a variety of dispersal policies in Western Europe and the USA during the 1950s and 1960s. Peter Hall observes that the particular contribution of regional planning during this period, was that it "united the national/regional problem with another problem, the physical growth of the great conurbations, and presented them as two faces of the same problem."<sup>(35)</sup>

In the developing countries of the Third World, by contrast, regional/spatial problems appeared less clear cut and regional planning emerged more slowly. Gilbert explains that the reasons for this were, firstly, that in LDCs regional problems seemed less important than the encouragement of rapid industrial and agricultural development.<sup>(36)</sup> This approach corresponds with the prevailing viewpoints of the diffusionist paradigm and growth-oriented development strategies discussed above in Chapter 2. A second reason for the relative neglect of spatial and regional planning was that the problem of fast growing cities was less critical than in developed countries. By 1960, for example LDCs had only six cities with populations greater than three million and none in excess of five million.<sup>(37)</sup> In the third place, the organisation of planning in developing countries usually reflected a "top down" approach in which the machinery for national planning preceded that for regional or urban planning. Furthermore, national planning tended to be dominated by economists who, generally speaking, had only recently become interested in urban and regional problems. As a result there was often an implicit suspicion or hostility to the inclusion of spatial elements.<sup>(38)</sup>

However, there has been a progressive realization that regional development and spatial planning are appropriate fields of concern for LDCs for the following main reasons. Firstly, each component of any economic, social or political development has an inherent spatial (or geographical) dimension in the sense of either location, size, sphere of influence, linkages, induced demand for other space using activities (such as housing, transport routes services), or any combination of these.(39) As Isard remarked, we do not live in a "wonderland of no dimensions", nor can our analysis assume a static spaceless world(40). For this reason explicit attention needs to be given to the spatial implications of development strategies, projects or programmes, irrespective of whether they are of a physical or functional nature, and whether the context is that of a First or Third World country.

Secondly, problems of a spatial nature (such as access to health care services, or time spent by women in rural households collecting water and firewood, or inter-regional bias in the distribution of funds for classroom building) tend to go unnoticed in the absence of spatial analysis. Thirdly, the development and integration of marginal social groups often goes by default without some form of regional policy. Fourthly, the space economy of a country or region comprises "surfaces" or areas of relative welfare and potential; "nodes" or concentrations of people and activities; and "networks" of movement and communication.(41) Unless these elements of the space economy are organised in a rational and positive way, the otherwise spontaneous distribution of industry, urban centres and transport links, at an early stage in a country's development, may result in the emergence of unwanted patterns of development. This is not to argue for a totally controlled and planned situation but rather for the close integration of spatial planning principles with the needs of economic and social activities.

A fifth argument in support of spatial planning in developing countries relates to the inter-disciplinary nature of planning at regional scale. On the one hand, it can tackle problems that run across sectors (which are often the confines of individual departmental responsibility or span both cities and regions; while on the other, it can embrace and tackle problems not normally resolved by the traditional forms of planning which operate at either a national (economic) or a local (physical) scale. At the same time spatial/regional planning can focus on a wide but specific range of planning problems such as the exploitation of a fertile coastal strip; or improving access to, and distribution of, market centres; or social and political insecurity in a particular area.(42)

Sixthly, the early efforts at national planning by most developing countries, particularly in Africa, showed that the spatial distribution of investments created as many problems and required as much direction as sectoral allocation.(43) As a result most recent national development plans of African countries reflect a stated commitment to policies of balanced spatial development which means "achieving a balance between the development of rural areas, where the vast majority of their people live, and urban areas, particularly the major cities, to which rural people are moving in large numbers."(44)

Finally, it should be clearly understood that a recognition of the need for regional development and spatial planning does not necessarily imply the adoption of decentralization, or growth centre, or new town type of policies. What it does imply is the explicit analysis and consideration of the spatial implications of development problems and the integration of spatial dimensions into development strategies, programmes and projects.

To sum up, the issue is not whether spatial/regional planning is a necessity or otherwise at any particular stage in a country's development, but rather that all aspects of "development" have spatial connotations and that all countries experience problems with spatial dimensions. The fact that in the past many of the spatial policies applied in LDCs (often transferred with little adaption from developed countries) have encouraged decentralization at a time when a country's overall development might have been better served by a mix of policies including the encouragement of economic growth in those cities with the largest concentration of people, does not invalidate regional or spatial planning as such. The policies and their implementation may, in retrospect, appear to have been unsuitable, but the need for spatial analysis and planning remains.

### Characteristics of effective spatial plans

Spatial planning has been defined above as a sub-set of development planning that may be undertaken at either national, regional or local scales. Consequently, the characteristics of an effective spatial plan should accord closely with those of a national or regional development plan. In this section we shall first identify the most significant criticisms of regional and spatial plans before proceeding to establish a set of criteria for evaluating spatial plans.

#### Typical weaknesses in regional/spatial plans

Regional/spatial plans have been criticised on account of their theoretical premises, methodology, strategy and their implementability. The most relevant of these arguments are summarized below.

Critics assert that spatial theory has been misused in regional planning. They quote the tendency for planners to separate space from social interaction and to assume, incorrectly, that spatial policies can resolve all the problems encountered in a region, including those of a structural nature.(45)

Regional plans in developing countries have also been criticised for a number of reasons relating to approach and methodology. Firstly, there is a temptation to overplan in the sense of producing too many plans in too sophisticated a form, often without adequate political and public consultation.(46) Secondly, Gilbert points to a "general intellectual failing to define accurately the problems which planners should resolve and to state clearly the kinds of techniques they require."(47) A third problem refers to the value of transfer. Not only are methods and models often transferred with little thought or adaption to the peculiar needs of a new context, but it is also assumed, incorrectly, that the techniques and results of spatial planning in developed countries have been completely successful.(48) Fourthly, in spite of the shifts in emphasis regarding development paradigms and strategies, there remain, among practising planners, invalid assumptions regarding the nature of development and planning. Typical examples are the belief in one universal, unilineal development process along which all countries will one day pass; and the view that spatial strategy is identical to a decentralization policy.(49) Fifthly, many regional planners shy away from the difficulties of regional delineation and with administrative regions, without consideration of regional dynamics to which administrative boundaries pay scant attention.(50)

Another difficulty facing spatial planning is over optimism and the establishment of unrealistic goals.<sup>(51)</sup> One way this problem manifests itself is in detailed descriptions of what could be grown, or mined or produced in certain areas without any structural response as to the feasibility of such decisions or the relationship between such decisions and development. Another facet of over-optimism is the neglect of the organisational and administrative machinery needed to implement a plan. This is a common defect in many spatial plans. So too is the tendency to ignore the need for regional plans to have political support at community as well as at regional and national levels. Other problems, which Gilbert calls "pseudo planning", occur when planning and plans occupy a type of ceremonial role in the state machinery and where the object of planning is more bureaucratic prestige or diversion of popular attention away from specific problems, rather than practical achievement.<sup>(52)</sup>

Regional plans are frequently weak in regard to strategy, or implementation, or both. Some plans attempt theoretically to understand the conditions underpinning development without actually proposing any strategies; some plans recommend, for the most part, further studies; while others make recommendations that are sufficiently vague to be generally acceptable but not firm enough to result in any action. In many cases, spatial policies are basically conservative, in the sense that they do not seek to change the underlying social and economic processes.<sup>(53)</sup> By definition, development planning seeks change as well as growth.<sup>(54)</sup> Regional policies have also been used to promote certain ideologies which suit the interests of the state<sup>(55)</sup> - South Africa being a pertinent example. More will be said about this in the following chapter.

#### Criteria for evaluating spatial development plans

Against this background of problems relating to regional development and spatial planning, we can now establish some criteria in terms of which spatial plans may be evaluated. These criteria are distinct from the assessment of the impact of spatial planning which can only be assessed in terms of the objectives contained in the plan and measures of "development" in the particular context.

In that spatial planning may be regarded as a sub-set of development planning, the same general criteria for evaluation apply. Accordingly, we may take as a starting point Seers' view that development plans require targets for reducing poverty, unemployment and inequality. Although the main thrust of policies related to these issues will be sectoral, the spatial plan should indicate where the relevant projects and programmes will take place and should establish indicators to measure progress in different parts of the region. Next, an effective "plan" will be one that indicates what is to be done; who is responsible for doing it; when each task should be completed; the expected cost and how it is to be financed.(56)

Turning from the national to the regional scale, Weitz requires that planning operate as a merger or cross function.(57) Dunham has called for planning to be socially relevant particularly at the local level(58) i.e., to increase the opportunities for members of a community to improve their life styles. Meanwhile, Gore argues that "the validity of any regional development theory and the success of any regional planning strategy depends on the assumptions about the development process that inform it .... (and) .... the way in which 'space' is related to development."(59)

In the more specific case of a developing region in Southern Africa, the main purpose of a spatial plan has been described as the charting of "an investment strategy that will build upon the opportunities offered by the more positive aspects of the district's spatial organisation, while seeking to lessen the constraints to social and economic development resulting from its more negative aspects."(60) Such a spatial plan should provide a settlement strategy for the region; it should identify some of the critical problems and issues, particularly those of a spatial character, and bring these issues to the attention of district authorities; it should propose plans of action to tackle these issues; it should specify how different departments should allocate their funds spatially; and finally, it should integrate planning at the national (or macro) level with planning initiated at the local (or micro) level. At the end of the day, however, the role of spatial planning will be defined by its practical contribution to specific development issues in context.(61)

If spatial planning is to be an effective component of a country's development planning effort, it should also bear scrutiny in terms of the following questions:

- Does it summarise and assess the space economy in its historical context?
- Does it relate basic needs to resources?
- Does it provide a synthesis of the problems to be solved?
- Does it set locational criteria for sectoral planners?
- Does it identify a spatial framework (in terms of surfaces, nodes and channels) that will enable the overall development plan to organise the space economy in such a way as to facilitate rather than impede development ?

In conclusion it is worth re-emphasising that the problems confronting development planners do not occur in a "static spaceless world"(62) nor are they comprehensible in terms of economic or social analysis alone. The spatial dimension is fundamental if planning is seeking to achieve a better integration of the space economy on a basis of "interdependence and reciprocity rather than dependence and exploitation".(63)

Notes and References

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30. Board C, Davies R J and T J D Fair (1970) "The structure of the South African space economy : an integrated approach." Regional Studies Vol. 4 pp. 367 - 392.
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32. The Tennessee Valley Authority was established in 1933 to make general plans for the entire river basin and to realize a wide range of public purposes in the valley, including flood control navigation, generation of electric power, proper use of marginal lands, reforestation in addition to promoting the economic and social well-being of the people. The TVA was to become a model for comprehensive river basin development. See Friedmann and Weaver (1979) op cit pp. 73 - 79.
33. The Barlow Commission was set up in 1935 to investigate the location of industry in the U.K. Its terms of reference were to inquire into the causes of the geographical distribution of industry and population; possible future changes in the causatory factors, the advantages and disadvantages of concentration of industry into the largest population centres; and to propose remedies. See Hall (1974) op cit pp. 90 - 98.
34. Gilbert A (ed) (1976) Development Planning and Spatial Structure, p. 2.
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38. Ibid pp. 3 - 4.
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CHAPTER FOUR      CONTEXT FOR SPATIAL PLANNING IN SOUTHERN AFRICA

The South African space economy is characterised by marked inequalities; but whereas this may be fairly typical of either developing or rapidly industrializing countries, the patterns have been exaggerated to a significant degree by the nature and intensity of policy measures adopted by successive South African governments, particularly since 1948. In order to establish a framework for analysing the South African space economy and for understanding the effect of a range of interlocking policies on regional development, it will be useful to look at the spatial patterns, trends and policies of other African countries.

Although it may be argued that South Africa is far more economically developed than the African countries for which relevant information is available, far greater differences exist, in both context and development issues, between South Africa and countries at about the same stage of economic development in Latin America (e.g., Brazil, Mexico), the Middle East (e.g., Turkey) or Asia (e.g., South Korea).(1) Furthermore, the validity of comparing demographic, urbanization and development trends with countries particularly in East and Central Africa is affirmed by Fair who reports that "trends in black urbanization in S.A. have many similarities with those in Sub-Saharan Africa. The major differences are rather in the degree than in the kind of trends manifested in both areas."(2)

In this chapter we shall examine, firstly, the spatial trends and policy responses in a number of African countries. Against this background, we shall identify the main policy measures that affect access to land, urbanization and location of industry in South Africa in order to understand how the space economy evolved to its present state. For it is these policies in particular that determine the context for regional development and spatial planning.

Spatial development in sub-Saharan African countries

Recent comparative studies of spatial development in a number of sub-Saharan countries, make it possible to identify some typical spatial objectives, together with a range of spatial problems and policy responses.(3) These will be discussed in turn.

### Spatial objectives

Over the last twenty years or so, the national development plans of most African governments reveal stated commitments to policies of balanced spatial development. This means, according to Fair, "achieving a balance between the development of rural areas, where the vast majority of their people live, and urban areas, particularly the major cities, to which rural people have been moving in large numbers."<sup>(4)</sup> And while the rural and urban inequalities are in themselves serious, and are largely responsible for urban drift, more fundamental structural inequalities persist between different groups of people. The latter type of inequality, which occurs in both rural and urban areas, may be of more local significance than rural-urban differences in general.<sup>(5)</sup> Certainly many development theorists would argue that the processes underlying social inequality are even more important than those underpinning spatial inequality.<sup>(6)</sup> What is clear is that social and spatial imbalances are closely interwoven and neither should be overlooked.

Four main socio-economic groups of people may be identified in African societies:

- the poor farmers and subsistence producers;
- the urban poor many of whom are unemployed or derive an income from informal sector activities;
- the more prosperous "progressive" farmers; and
- the urban elite comprising employees in full-time jobs in the modern wage sector.<sup>(7)</sup>

In most sub-Saharan African countries the first group accounts for the vast majority of people, while the last, which seldom includes more than ten per cent of the labour force,<sup>(8)</sup> nonetheless encompasses a very wide range of incomes.

The generally stated goals of balanced development include "the reduction of rural poverty and rural-urban drift, the correction of urban bias in policy making, the reduction of urban poverty and squalid living conditions and, as the major goal of national development 'the movement upward of the entire social system'. "<sup>(9)</sup>

### Spatial development problems

The most common causes of uneven spatial development in African countries fall under four categories, namely, economic, ecological, social and political.

Economic reasons are probably the major determinant of rural-urban migration. People move to towns and cities not only for higher incomes and better jobs but, more importantly, because of expected wage differentials and the increased chance of securing a wage job. Other economic reasons include landlessness and the need for cash on the part of rural dwellers.(10) Radical explanation attributes urban drift at a macro scale, to the 'impoverishment of the countryside' resulting from Africa's integration into the world capitalist system and the adhesive terms of trade suffered by developing countries in world commodity markets."(11) However, there is urban drift in all countries including those which espouse marxism.

Ecological reasons for migration to urban centres include drought, floods, stock and crop diseases, deteriorating land capacities, high population growth rates and excessive pressure on the use of land. Social reasons include the changing attitudes of young people (in parallel with increased education) to urban in preference to rural life. At the same time a "deteriorating attitude of helplessness on the part of many rural people regarding the future viability of the rural economy" is another "push" factor in the migration equation. Finally, there are political reasons; and as writers such as Lele(13) and Lipton(14) have pointed out, in spite of the rhetoric, governments have tended to neglect rural areas along with rural and agricultural development. Not only have objectives been urban biased, but administration has tended to be over-centralized, urban oriented and there has been little political will to develop rural areas.(15)

Among the development problems facing countries in sub-Saharan Africa, the following have particular spatial connotations. In the first place most African governments inherited, at independence, a country whose space economy was marked by a strongly established core-periphery structure that has proved difficult to change. This structure is usually reflected in both spatial/physical as well as in economic terms, with productive activities, wage jobs, infrastructure and facilities concentrated in the main towns or corridors of economic development.

Secondly, and closely related to the core-periphery structure, is the existence of a dual economy, with a highly developed modern sector and an underdeveloped traditional and informal sector. Modern sector economic activities tend to be well developed and offer far higher wages than can be earned in the rural areas

(either in wage jobs there or from smallholder farming). This wage disparity, coupled with the fact that there are relatively better chances of obtaining a job in the town where these activities are located, is a major cause of rural-urban migration. Yet, the modern sector is unable to provide sufficient wage jobs to meet the needs of the rapidly growing urban labour force (its members swollen by in-migration to cities). This results in the emergence of a large and growing informal sector. In the rural areas the prevailing economy operates around the subsistence level. Thus the outcome is an overlapping pattern of a sophisticated modern sector (in towns and, as far as estate or commercial farming is concerned, in rural areas) with its associated informal sector activities; and an unsophisticated traditional sector in the form of subsistence level farming in rural areas. The main actors in this are the businessmen and landowners (in the modern sector) with the urban poor and peasant farmers (in both modern and traditional sectors).

A third type of problem common to most sub-Saharan countries is the inability of their national economies to generate sufficient output or jobs to meet the needs of their fast growing populations for services (e.g., health care, education) or facilities (e.g., physical infrastructure, housing). This lack of economic capacity means that there are insufficient resources to embark on balanced urbanization or industrial location policies. This results, again, in the concentration of investment and opportunities in the largest urban centres which are, in turn, re-inforced as attractors to rural migrants. Within these cities a shortage of economic resources (both of capital and skilled manpower) manifests itself in the form of sprawling squatter settlements and a growing informal sector. Sandbrook observes that on the one hand, "capitalist industrialization is unable to absorb more than a fraction of the labour force generated by massive rural urban migration" while, on the other, "out migration from backward regions tends to perpetuate their backwardness."(16)

Fourthly, most sub-Saharan African countries find themselves in dependency relationships of one kind or another. Countries such as Lesotho, Mocambique and Malawi are, or have been, dependant on neighbouring countries (mainly South Africa) for a source of wage jobs; while others are landlocked (Zimbabwe, Zambia, Malawi, Lesotho, Botswana, Swaziland) and depend on transport routes and systems in adjoining countries for imports and exports. The economies of smaller countries surrounding South Africa are dominated by the latter's more dominant economy; this particularly so in the case of Botswana, Lesotho and

Swaziland.(17) To some degree or other, all sub-Saharan countries depend on international agencies (such as the IMF, World Bank, ILO, USAID to name but a few) for project finance and other types of aid. Finally, these countries all depend on the international economic system and the terms of trade this imposes. This has been cited as a reason for Tanzania's lack of success in implementing its Ujaama settlement programme(18); it is a factor influencing current policies in Mocambique and Zimbabwe; and it also has a direct impact on countries whose economies depend heavily on the export of agricultural products (e.g., Malawi, Zimbabwe, Kenya) or minerals (e.g., Botswana and Zambia). As Streeten pointed out, there is not much choice in the matter of dependency; the issue is rather to try to select the way in which one is dependent.(19)

A fifth type of problem is the neglect of rural areas and of food production by smallholder farmers. This is evident in countries such as Malawi, Mocambique and Zambia where post-independence government policies have favoured estates or commercial farming for export at the expense of indigenous smallholders.(20) This has implications for spatial planning because it represents a choice in the way land is used in relation to the needs of different groups.

Next there is the problem of access to land - an issue which takes a number of forms. Some countries face an overall shortage of arable land in relation to the subsistence needs of the rural population (e.g., in Kenya and Lesotho).(21) In others, increasing population growth results in continual sub-division of arable land until the size of holdings is too small to enable a farmer to earn an income comparable to the lowest urban wage or even to eke out a bare subsistence, given available resources. The resulting landlessness is yet another factor encouraging the urban drift. It should be recognised, however, that landlessness has a temporal dimension as well, in the sense that a young man may be without access to arable land for the first twenty or so years of his working life until such time as his father dies or hands over the family lands. In another respect, the particular land tenure arrangements confer rights to individuals and groups; and at the same time exert a powerful influence on the way in which land can be used. Tenure arrangements vary widely both within and between countries but in all cases it acts as a basic constraint for spatial planning.

Finally, most sub-Saharan countries are administratively centralized with most decisions being made in the capital and then passed down to regional and local levels. Although some countries such as Botswana have made concerted efforts to decentralize administration and decision making, the centralized pattern usually dominates. Another aspect to be taken into account is the imbalance of political power which access both on a territorial basis; and between traditional leaders (usually with a strongly tribal base) and the new elites with their characteristic urban - business base.

#### Policies aimed at balanced spatial development

To sum up, we have outlined a wide range of interwoven problems all of which have spatial implications. We now turn to a review of the types of policies that have been adopted in sub-Saharan countries in response to these problems. Most were directed towards stemming the tide of urbanization and encouraging rural development. Dewar, Todes and Watson have identified two broad groups of policies, distinguishing those that are mainly coercive from those that focus on incentives.(22) Coercive measures include destruction of the peasantry, influx controls and making the provision of housing conditional upon employment. Incentive measures, which were more typical in the post independence era, include agricultural development (though mainly geared towards increasing foreign exchange earnings), discouragement of the growth of the largest cities and urban dispersal measures either by way of industrial decentralization, or establishing "growth centres", or both. These attempts at urban containment generally "flew in the face of prevailing economic forces" and most have been only partially implemented.(24)

Dewar et al observe that while both types of policy measures (coercive and incentive) "have often been used in combination, the emphasis of policy has primarily reflected the nature and alignment of local class forces." (25) In general however, neither category of policy measure proved effective. Deflective urban measures and industrial decentralization aimed at reducing growth of the largest centres on the one hand and rural measures aimed at slowing down migration have had little impact as the "continued rapid growth of the largest cities attests."(26) Instead, urban absorption or "accommodationist policies accepting the inevitability of city growth are being resorted to by encouraging the informal sector and by promoting low-cost,

self-help, upgraded and site-and-service housing schemes. While purporting to give priority to rural areas, governments have generally tended to favour schemes and assistance which reaches the more progressive and better off farmers, leaving the poorer masses little affected and domestic food production either stagnant or little enhanced."(27)

To conclude this overview of spatial development in sub-Saharan Africa it is pertinent to draw upon several of Fair's conclusions regarding the problem of spatial imbalances.(28) In the first place, the problem needs to be tackled in both rural and urban areas simultaneously. Secondly, because spatial imbalances have many dimensions, solutions require a "whole package of programmes" which themselves need to be implemented "together in sufficient strength, with sufficient co-ordination and with sufficient skill and determination."(29) Thirdly, instead of trying to reverse rural-urban migration, the starting point should be to "effectively manipulate the phenomenon so as to turn it into a vehicle of national development and personal betterment."(30) Finally, it is important to recognise that development planning is, by nature, a slow moving process, which "operates amid many constraints and can at best only nudge - and certainly not catapult - the powerful and pervasive forces already at work within a country and in the wider international economic order."(31)

### Spatial planning in South Africa

In this section we need to take a more detailed look at spatial planning in the Republic of South Africa (RSA). Its space economy exhibits a core-periphery structure with little evidence of fundamental changes in the parameters of its spatial system. As a result, the present pattern is expected to continue well into the future.(32) Rather than re-examining this well-researched theme, we shall focus attention here on the interacting strands of spatial policy that have been employed in South Africa since about 1910. The most significant of these fall into three categories: access to land, urbanization and industrial location. Then in the following section, on the basis of a review of recent trends in the space economy from alternative theoretical perspectives(33), we shall be in a position to identify the nature and form of macro or national/regional level constraints that create the context for spatial planning at the intra-regional scale.

### Access to land

From a spatial planning perspective, the main parameters influencing access to, and ownership of, land in South Africa may be traced through legislation and changes of policy in four periods: 1910-1947, 1948-1960; 1961-1978; and 1978-1985.

(i) Land legislation 1910-1947. During this period the 1913 Native Land Act and the 1936 Native Trust and Land Act established policy directions that were later to become one of the most far reaching and inequitable systems of spatial planning yet encountered. The 1913 Act scheduled some nine million hectares of land throughout South Africa as "Native Reserves" and made provision for more land to be "released" for this purpose in the future.<sup>(34)</sup> Africans would no longer be permitted to acquire land outside the scheduled areas whose demarcation was based on existing reserves and locations established during the colonial period prior to 1910. In total, the 1913 Act allocated no more than seven percent of the country's land area to Africans, although at that time they accounted for some 67 percent of the population. The intent of this Act was "to preserve a limited rural subsistence base for Africans outside of the urban-industrial centres." This rural base would then "subsidise the migrant labour system without being able to support an economically independent black peasantry."<sup>(35)</sup>

The 1936 Act established a body to be known as the South African Native Trust (SANT) whose title later changed successively to the South African Bantu, and later Development, Trust (SADT). Ownership of all land in the "Native Reserves" was vested in the Trust, which was to be administered "for the settlement, support, benefit and material and moral welfare of the natives of the Union."<sup>(36)</sup> In addition, the 1936 Act defined the geographical extent of the reserves and created a new category of reserve land, namely "released land." This referred to areas demarcated for African occupation, either through the Trust, or through individual or group purchase.<sup>(37)</sup>

Between 1913 and 1936 a series of recommendations had been made regarding land to be added to the scheduled reserves. Most of this comprised land already held by Africans under freehold title. The 1936 Act not only regularized the position of new land purchased by Africans in the recommended areas, but also gave formal recognition to other land, already owned or occupied by Africans

which was to be included in the reserves. The quota of land for African occupation finally demarcated under the 1936 Act (approximately 13 percent of South Africa) was to remain a rigid and final allocation of land beyond which successive governments would not venture until 1979.(38)

During this 1910-1948 period, the role of the African reserves as reservoirs of cheap labour was being developed along with changes in traditional tribal structures designed to extend white control over blacks. The 1913 Act, in signalling a major change in the history of African access to land in general, and to freehold land in particular,(39) also laid down the principle of territorial segregation. Another outcome of the 1913 Act was the creation of two categories of African freehold land : those within the reserves whose prospects for secure tenure was reasonably certain until the advent of consolidation manoeuvring in the 1970s; and those excluded, which became known as "black spots". The eradication of these "black spots" by means of removals and resettlement of landowners and tenants emerged as a dominant feature in the implementation of land policy through to the early 1980s.

In retrospect the 1936 Act has become one of the most significant pieces of legislation in the country's post-Union history, for it "touched on the lives of all African people, giving added shape and content to the reserve policy and establishing new controls over Africans living on white owned land."(40) It also heralded an era of almost 50 years during which individual tenure was legislatively discouraged by the authorities who regarded it as destructive to the tribal system of local government upon which the reserve policy together with its apartheid and separate development successors was based.

(ii) Translation of land policy 1948-1960. In 1948 the National party came to power, a position it has progressively entrenched through to the 1980s. The new government immediately set about shaping the reserves into administrative units to house and control the vast majority of the country's labour force.(41) Its main legislative instruments were the 1951 Bantu Authorities Act and its 1959 counterpart, the Bantu Self Government Act, which together introduced a new system under which local government of Africans was to be based on traditional chiefdoms. The reserves were divided into a number of homelands,(42) based on linguistic, cultural and historical criteria, in each of which the inhabitants were to have a measure of self-government. This took the form of a three-tiered administrative structure established around a "chiefdom - based tribal authority ... with further groupings into regional and territorial authorities."(43)

Meanwhile, in 1955, the Tomlinson Commission report on the "Socio-Economic Development of the Bantu areas" analysed the amount of land allocated to the reserves, and, drawing attention to the problem posed by black spots, recommended consolidating the "bantus areas" into seven blocks including the adjoining British protectorates of Bechuanaland, Basutoland and Swaziland. In these areas Tomlinson envisaged the African residents themselves increasingly exercising administrative functions.<sup>(44)</sup> His proposals went far beyond anything the government was prepared to accept at that stage, although by the early 1960s government spokesmen had accepted the possibility that the newly created "bantustans" might achieve independence at some future date; and agreed that the government would consolidate the bantus areas as far as possible; but denied giving any serious consideration to major land adjustments.<sup>(45)</sup>

(iii) Consolidation plans 1961-1978. By the late 1960s, consolidation had emerged as a major political issue following the establishment of self-government in Transkei during 1963, and of enhanced territorial authorities in the Ciskei, Bophuthatswana, Qwa Qwa, Gazankulu, Lebowa and Venda.<sup>(46)</sup> Revised consolidation proposals for all homelands, which were published in March 1975, have become the basis for subsequent negotiations about their configuration. In trying to implement the 1975 proposals, government came up against a number of serious obstacles of a physical, economic and political nature. By 1978, the logistics of trying to reduce the extremely fragmented pieces of homelands, coupled with the prohibitive costs (which were estimated at acquiring some two million hectares of land and resettling about one million people, at a cost of R 6 000 million)<sup>(47)</sup> and intense opposition to consolidation among a wide range of political groups, forced the government to re-assess its plans.

(iv) Shifts in emphasis 1979 - 1985. Early in 1979 the Van der Walt Commission was appointed to determine, firstly, how the consolidation process could be accelerated and, secondly, to reconsider whether the existing proposals could achieve the desired "freedom" of all the peoples of South Africa.<sup>(48)</sup> This marked a "tentative shift away from the former rigid adherence to the 1936 quota"<sup>(49)</sup>; it reflected the ascendancy of so-called reformists within the National Party; and it introduced a brief era during which the possible creation of an economic constellation of states occupied the political stage. The latter envisaged some economic association of the RSA with Transkei, Bophuthatswana, Venda, Ciskei<sup>(50)</sup> and friendly neighbouring states.

By the early 1980s, growing opposition to consolidation coupled with increasing concern among pragmatists within the ruling party at the economic consequences, is forcing government to modify its position still further. In 1981, for example, Van der Walt acknowledged that geographical consolidation was no longer possible.(51) The final outcome remains to be seen but indications are that government is still determined to achieve some form of consolidation based on the 1975 proposals.(52) To sum up, legislation regarding access to land has had (and will continue to exert) a very significant influence on the settlement pattern and spatial form of South Africa.

Before moving to a discussion of urbanization processes, it is pertinent to comment briefly on rural land tenure and allocation at micro scale. The prevailing tenure system in tribal areas entitles almost every mature married man access to one residential site, including a garden lot; some arable land and access to communal grazing land. This land cannot be sub-divided, consolidated or sold; nor can it be used as security for loans or debts. Use of the land is assured to the individual for his life, providing he pays his taxes, makes beneficial use of the land and obeys the laws. Inheritance is de facto and prescribed by tradition. An individual is entitled to sell his crops or stock and to receive compensation for any improvements (house, fruit trees etc) should he be re-located. Traditionally the land belongs to the past, present and future members of the tribe (on whose behalf it is held by the SADT) and is administered via the chief or headman.(53)

### Urbanization

There are two facets of urbanization: the one involves physical concentration of people and activities in towns and cities, while the other relates to the social and psychological aspects of becoming urbanized.(54) These are the outcome of several interwoven processes. Firstly, there is the decision-making and control process which influences the rate and pattern of urbanization. Certain aspects of this were discussed in the previous sections of this chapter and others will be dealt with here. Secondly, the flow of capital and investment generate urban growth and determine the varying rates and patterns of urban development. The industrial location aspect of this process will be discussed in the next sub-section. Thirdly, the diffusion of modernization results in the different social character of cities and their inhabitants. Fourthly, the process of migration gives rise to varying rates of growth and to different settlement patterns within and between cities.(55)

In South Africa, these processes have occurred in a variety of ways, at different times, to produce three main periods of urbanization. Up to 1870, towns were the centres of decision-making and the bases from which the whites imposed their power over the indigenous population of most of South Africa. From 1870 to the present, as a result of the mineral discoveries and the subsequent growth of industry and commerce, the cities and towns emerged as the foci of economic wealth. At the same time they generated a substantial degree of inequality between rich and poor people and between well-off and deprived regions.

The third period, upon which our discussion will focus, commenced after World War II, when "decision-making and control by those in power made towns and cities into vehicles for the suppression and containment of the black population by denying them access to power in these urban areas on the one hand and restricting their flow to them, on the other."<sup>(56)</sup> The mechanisms whereby this was accomplished emerge from a review of the legislation and policies, dominated in the main by the Urban Areas Act (1945), which enforced influx control, and the Group Areas Act (1950).

The principal measures were urban relocation, influx control and removals in terms of legislation designed to eradicate or to control informal settlements. All these were used to restrict and control access to the towns and cities by Africans in such a way as to exclude those deemed 'unproductive' (namely the wives and families of workers, the aged and the unemployed), and to tie African people to one of the homelands.<sup>(57)</sup> In addition, the Group Areas Act (1950) was used against Coloured and Indian people, as well as Africans living in urban areas outside proclaimed townships, to force them to move into segregated townships or out of the prescribed area altogether.<sup>(58)</sup>

The policy of urban relocation, which was implemented systematically from the late 1960s, involved the deproclamation of African townships in prescribed urban areas, and the removal of their residents to newly established townships in nearby homelands - the criteria being that where there was a homeland within 80 kms of a town, any African township there should be relocated across the boundary. Government's reasoning was to ensure that "the Bantu are only temporarily resident in the European areas of the Republic for as long as they offer their labour there."<sup>(59)</sup>

Relocation through the operation of influx control (implemented in terms of the 1945 Urban Areas Act) has been described as "a process which increasingly functions to keep people out of the urban industrial production areas, rather than to allocate labour between production areas."<sup>(60)</sup> Undoubtedly influx control has become the "single most important instrument in the control of ...the African working class population."<sup>(61)</sup> Two effects of influx control warrant discussion here. The first prevents rural dwellers from entering urban areas through the operation of the labour bureaux system and the pass laws; while the second expels people from within the urban areas if they are regarded as being there illegally, or as legal residents they are considered "idle and undesirable" in terms of the Act.<sup>(62)</sup>

The chances of a person ever being legally recruited for an urban job from within a homeland have become progressively fewer, particularly during the last five years. In this respect the effect of influx control has been to prevent the vast majority (numbering hundreds of thousands) of redundant farm workers and evicted residents of black spots from migrating to the urban-industrial centres where the country's jobs and wealth are concentrated.<sup>(63)</sup>

In South Africa informal settlements are characterised by a complex web of attributes which include a lack of official authorisation, informal housing structures, high population densities and the absence of such basic services as water, sewerage and electricity.<sup>(64)</sup> These informal settlements have developed on the fringe of urban-industrial centres because of the availability, or more frequently, the possibility of finding a job. Their origins stem from conditions in both urban and rural areas. Some residents are relatively recent arrivals from the rural hinterland, but a large proportion of the population of informal settlements consists of people who have spent most or all of their lives in the urban area and have no firm ties with rural communities.<sup>(65)</sup>

Informal settlements are thus a product of, and a source of major pressure upon, the system of influx control. The State's response has been to either clear and eradicate them entirely, or to reduce their populations to controllable numbers.<sup>(66)</sup> Yet while this bulldozer response has been carried out with the support of a barrage of laws<sup>(67)</sup> the state has not been particularly successful in its attempts to remove informal settlements. Representing, as they do, a meeting point between the urban-industrial centres of power and the rural periphery,<sup>(68)</sup> they form an integral part of both the physical and social facets of the urbanization process in South Africa.

The Group Areas Act (1950), which enforces "a system of ethnic residential segregation in urban areas and supports the rigid race classification system refined by the apartheid policy", has had a "devastating effect on South African cities and towns."<sup>(69)</sup> The implementation of this Act has resulted in the removal of almost 120 000 families (most of them black) from their homes and long-standing communities in urban areas, to bleak relocation sites on the outskirts of cities. In these townships transport costs are generally high and residents are further burdened with social problems like crime, unemployment and alienation.<sup>(70)</sup> On a countrywide scale, the Group Areas Act has affected the Coloured and Indian people most severely, because African occupation of urban land was already extensively controlled in terms of the Urban Areas Act (1945). Black traders have been particularly disadvantaged by the Act, not only in their removal to inferior sites but also by not being offered "good-will" compensation.<sup>(71)</sup> The Riekert Commission (1979) resulted in amended legislation for open trading areas, but by 1983 only 17 such areas had been proclaimed.

In addition to this formidable array of laws and regulations for the removal of blacks from urban areas, relocation has also been carried out to facilitate a variety of infrastructural developments including industrial and township development, agricultural and rural development projects, conservation and forestry, as well as the construction of dams and roads. Then there have also been removals for strategic reasons, such as making way for an intended missile range and the establishment of a strip of open land along the Mocambican and Swazi borders.<sup>(72)</sup> There are several reasons for associating these two categories of removals with those forced removals already discussed. Firstly, most of the people affected have been black; secondly, and as a result, they have had no direct access to (or influence over) the people who make and apply the decisions regarding the location of projects; and thirdly, they generally derive no benefit from the schemes developed on the land upon which they previously lived.<sup>(73)</sup>

To sum up the urban side of this discussion, one can argue with justification that all removals in South Africa have been related in one way or another to "control over and exploitation of the country's wealth and resources."<sup>(74)</sup> Turning to the rural end of urbanization, the most significant spatial policy revolves around betterment planning. Although this approach to rural land use is usually attributed to the Tomlinson Commission (1955) it was first introduced in 1939 as a response to government realization that the reserves were in urgent need of rehabilitation.<sup>(75)</sup> The continued subsistence base of the migrant labour system was being threatened by the increasing deterioration and productivity of land in the reserves.

Betterment planning provided for the imposition of controls on stock ownership and the demarcation of arable and grazing land. In practice its implementation involved massive relocation of people within the reserves from their existing scattered homesteads into consolidated residential areas. In 1944 betterment planning became compulsory on all land purchased by the SADT in terms of the 1936 Act; and the following year its scope was broadened to allow for the creation of "rural villages" in which residents would have no access to arable or grazing land.<sup>(76)</sup> These rural villages, which were intended for housing the families of Africans employed in industry, became the forerunners of the "closer settlements" of the 1960s and 1970s. Peasant farmers were generally hostile to betterment planning<sup>(77)</sup> and by 1954 it had only been implemented in a few areas.

The Tomlinson report introduced a new phase in the history of betterment planning, giving the approach a more coherent form and rational base. The three principles upon which the new approach rested were, firstly, a division between the farming and non-farming population of the reserves, secondly, the need to create "a class of contented, full-time Bantu farmers",<sup>(78)</sup> and thirdly, the corresponding requirement to provide them with a farming unit of economic size. Thus the form of betterment planning put forward by Tomlinson involved the relocation of the entire reserve population. About half (the future farmers) were to be moved within the reserves to allow for the planning and division of the land into arable, grazing and residential areas; while the other half would be removed to closer settlements where they would have no arable land and would have to depend entirely on migrant labour or local wage employment for their survival.<sup>(79)</sup>

Tomlinson's betterment planning recommendations were not adopted in full (some of the notable aspects rejected being the proposed replacement of tribal tenure by individual ownership, and the recommendation that white industrial enterprises be allowed to establish themselves in the reserves) and the projected implementation budget was cut to one-third. Nonetheless, the report has become a reference point for land use planning in the homelands and remains the model for the implementation of betterment planning in the 1980s.

The results of more than three decades of betterment planning are almost entirely negative. It has led to the establishment of a class of people (whose numbers increase annually) living in closer settlements without access either to arable land or to local employment, and without assured access even to migrant labour.<sup>(80)</sup> Within the planned betterment villages themselves, the

provision of basic physical infrastructure and facilities often lags many years behind relocation, the average size of allocated farming plots is on the decrease, landlessness is increasing, and the fixed amount of land set aside for these villages prevents their expansion to accommodate either natural population growth or to absorb additional people being forced back into the reserves. This grave situation is compounded by the now widely acknowledged view that betterment planning has not resulted in any marked increase in productivity or improved land use practices.(81)

This wide-ranging review of the policies and measures that have influenced and constrained urbanization (in both its forms) in South Africa has also touched on several fundamental aspects of spatial planning, namely, the allocation of land and the right to its use, mobility in both the physical and opportunity senses, and access to land, jobs and basic services. These measures, and particularly their vigorous implementation since 1948 in pursuit of the apartheid ideology, have indeed had a devastating impact, retarding and distorting the urbanization process in South Africa. As Fair and Davies observed, the policy of apartheid or separate development as practised by the present government aims to prevent blacks (collectively Africans, Asians and Coloureds) from gaining access to positions of power and authority in the white areas. At the same time the policy has attempted to transform the African peripheral regions (the former Reserves) into politically viable national systems.(82)

### Industrial location

During the last thirty years industrial location policy in South Africa has been strongly influenced, if not dominated, by the question of decentralization. Government has steadily pursued decentralization in support of its apartheid and separate development policies in spite of a growing body of evidence and informed opinion pointing out the negative impacts, vast costs and, indeed, the futility of such policies.(83) In this section we shall trace the main stages in the build up to the present policy, noting the links between measures relating to land, urbanization and industrial location.

The basic premise for government's industrial location policy is that decentralization is necessary to increase the proportion of the African population which can be resident in the homelands.(84) In 1956, rejecting Tomlinson's proposals that Whites invest in the homelands, government opted instead for investment in border areas close to the homelands. In this way, it

was argued, White and Black investors would not compete. About the same time, the Viljoen Commission (1958) strengthened the rationale for industrial decentralization arguing the case of high economic and, more particularly, social costs of industrial concentration.<sup>(85)</sup> But most significantly, government felt threatened by the prospect of large concentrations of Africans in the cities.

In 1959 the Bantu Investment Corporation (later the Corporation for Economic Development) was set up to promote industrial development in the border areas, while in the following year, a Permanent Committee for the location of Industry (later the Board for the Decentralisation of Industry) was established to administer the border areas policy. Its first task was to select "industrial development points" and to assess applications for government assistance to firms locating there. At this stage government envisaged that the effects of its urbanization and industrialization policies would reverse the flow of migration to cities by the late 1960s.<sup>(86)</sup>

With the Promotion of Bantu Self Government Act (1958), the concept of reserves was changed to one of homelands, and statements by Prime Ministers Verwoerd in 1961 and Vorster in 1970 indicated that the homelands would be given independence. This necessitated the creation of institutions through which development could be promoted in each homeland.<sup>(87)</sup> Two Acts, the Bantu Homelands Development Corporation (1965) and the Promotion of the Economic Development of the Bantu (1968), paved the way for the establishment of homeland development corporations.

The Physical Planning Act (1967), which restricted industrial growth in the "controlled" urban areas, namely, the PWV region, Cape Town and Port Elizabeth-Uitenhage, was the next major step in the policy to decentralize industry. In terms of this Act, ministerial approval was required for the establishment or extension of a factory in controlled areas, the term "extension" referring to any increase in the number of African employees. Restrictions under the Act were lifted in 1971 in regard to locality-bound industries, and the controlled area was limited to the PWV. However, by 1968 it had become clear that the border area development was not spreading into the homelands. At this point, in a radical departure from its previous stance, government agreed to encourage decentralization into the homelands.<sup>(88)</sup>

In 1975 government produced a National Physical Development Plan(NPDP). The over-riding physical development problems to be addressed by this plan were those of excessive population concentration in the larger cities and the depopulation (presumably by Whites) of the rural areas.(89) The plan therefore sought to achieve a more evenly distributed settlement pattern. The strategy embraced a two part (functional and spatial) programme. Government would promote the national growth rate and provide the necessary social and economic infrastructure needed in order to attract private sector investment to those regions it wished to stimulate. At the same time the country was divided into a number of regions and a hierarchy of growth points. These were: 4 metropolitan areas, 3 planned metropolitan areas, 8 growth poles (and development axes), 19 principal towns and 9 growth points. Most significantly the homelands were omitted from the spatial/regional framework and had few growth points located in them.(90) The impact of the NPDP on industrial decentralization was, therefore, to create a large number of competing sites and to dilute the decentralization effort to the homelands.(91)

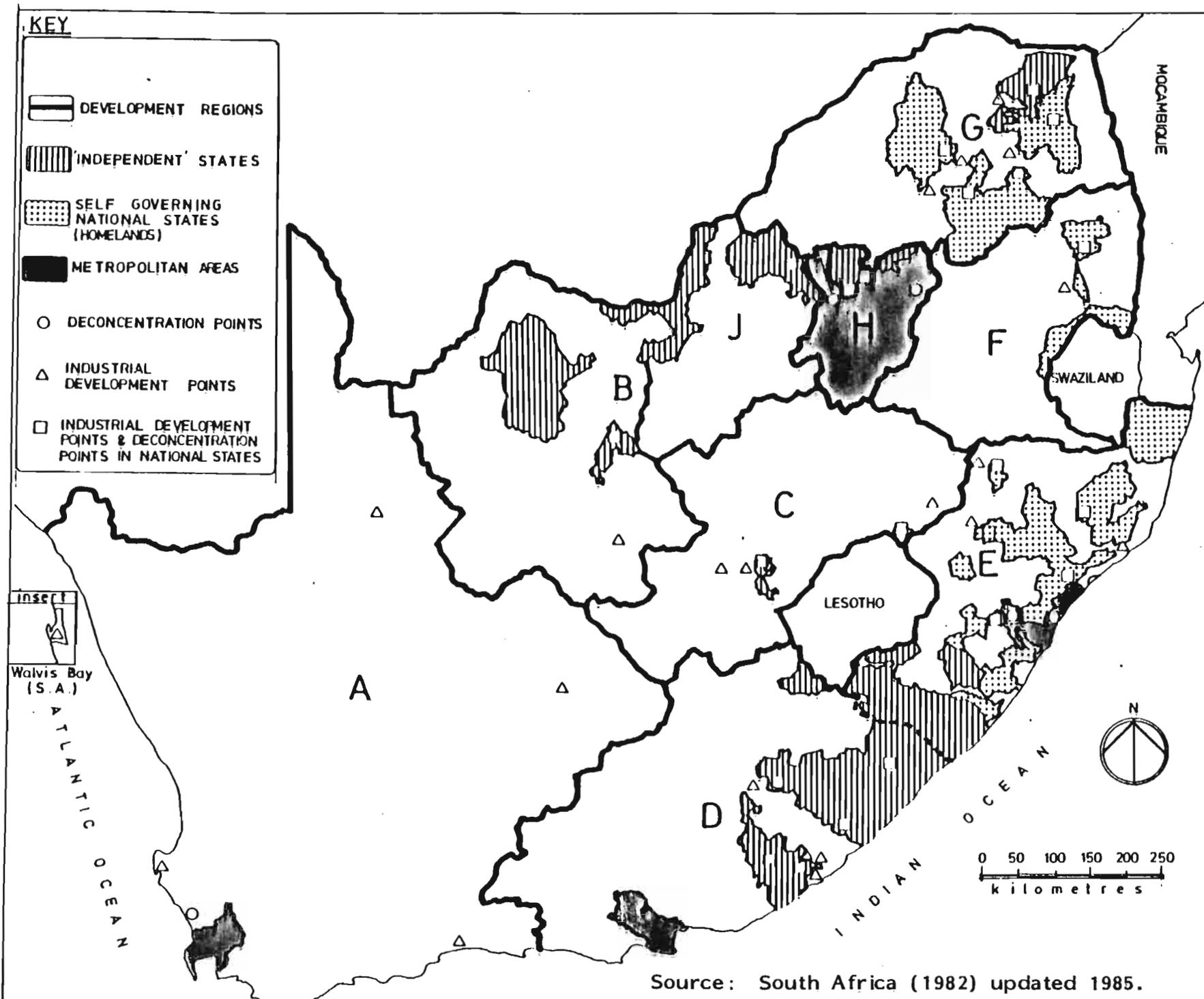
The Riekert Commission (1979) ushered in two further shifts in policy, the first accepting the need to lift restrictions on the creation of job opportunities, and the second acknowledging the existence of a common economic system in South Africa. The homelands economies were no longer to be seen as independent.(92)

In 1982 a new regional development strategy was formally introduced in a White Paper. Recognising that efforts to achieve a more equal distribution of industry had not met with particular success, a new approach to development was required: one that required close co-operation between all the States (i.e. RSA and the TBVC countries). Accordingly a "coherent regional development strategy aimed at the exploitation of the full development potential of each region"(93) was to be initiated and the former industrial decentralization measures revised.

The White Paper designated nine regions on the basis of unemployment, per capita incomes and development potential. Incentives for industrial decentralization were weighted to the regions of greatest need with the Eastern Cape receiving highest priority. The regions, whose boundaries overlap those of the homelands, are shown in Figure 4.1. Within these regions, five types of urban centres had been identified : 4 metropolitan areas, 11 deconcentration points, 49 industrial development points; other industrial points and ad hoc

Figure 4.1

Regions for development planning in South Africa



Source: South Africa (1982) updated 1985.

cases. The significantly increased incentives and broader approach to economic development suggest that government is now attempting to use industrial decentralization and concomitant economic development to further its constellation of states initiative and to counter social unrest.(94)

In a recent evaluation Maasdorp explained that the main reasons for the failure of government's decentralization policy were, firstly that "many of the designated growth points were unable to compete with the pull of the few metropolitan regions, both for economic and social reasons."(95) Secondly, decentralization was being attempted at too many scattered locations. Thirdly, the border industries policy was devised as a mechanism for developing the homelands; yet regional growth theory indicates that "the traditional tools for developing a lagging region are either the encouragement of investment in, or the permanent migration of people from, the region, or some combination of the two."(96) The border industry policy achieved neither, with the homeland townships established to serve border industries becoming dormitories with the result that the "labour export function of the homelands was perpetuated."(97) Fourthly, growth points in the homelands were not selected in terms of their capacity for development resulting in a poor resource base, few linkages and high leakages. Finally, the industrial estates themselves were generally too small to attract any significant range of complementary business activities. Maasdorp regards the new policy as an improvement in that it displays "greater realism" yet he remains sceptical about its ability to achieve the goal of co-ordinated development in all the regions identified. Some are clearly more attractive than others and this will affect their growth and hence migration to these regions in preference to others.(98) In any event the potential effect of the new policy will be weakened by its attempts to stimulate development in too many centres.

#### Recent trends in the South African space economy

Having examined how spatial planning measures have been employed in South Africa over the last seventy-five years, we now turn to an evaluation of major trends in the space economy in order to obtain a clear picture of the inequalities in the system and the relative extent to which the polarization and diffusion processes are influencing it in the directions of either greater equality or inequality.(99) Our analytical framework will proceed from the modernization (or diffusionist) viewpoint to the dependency perspective. Finally, in keeping with the ideological orientation discussed previously, the evaluation will be drawn together from a reformist point of view.

### Modernization perspective

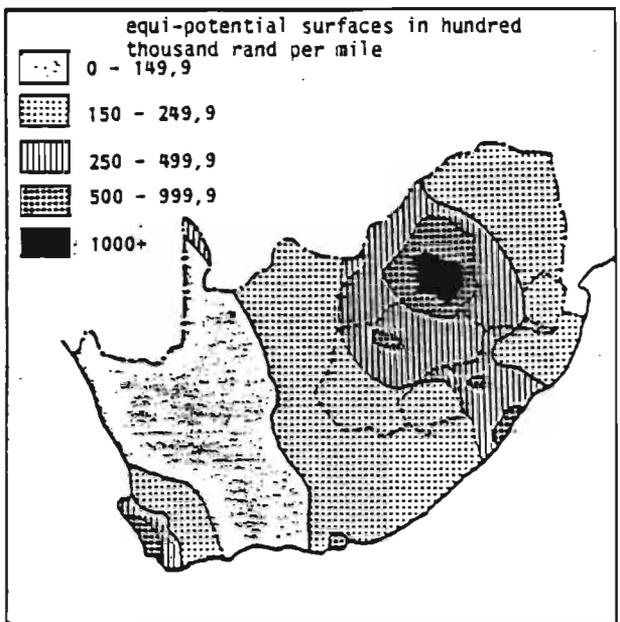
The structure of the South African spatial system comprises three main elements: the urban core, comprising the major metropolitan areas; the inner periphery comprising the rest of South Africa in White, Coloured and African ownership; and the outer periphery comprising the African homelands and black national states (Transkei, Bophuthatswana, Venda and Ciskei).(100) This is illustrated diagrammatically in Figure 4.2. Viewed in cross-section "this centre-periphery structure is tent-like, falling away from a peak of high economic activity in the core area to the lower surfaces of the inner and outer periphery."(101) On the basis of gross geographic product changes since 1955, we can observe a high degree of polarization and inequality between regions and peoples. By 1975 regional differences had increased and the 'tent' had become more unbalanced. On account of this disparity in regional wealth, there has been a steady migration of African workers (temporary and permanent) from the homelands to job opportunities in White South Africa. A second migratory trend, resulting from the polarization process, has been the movement of whites from rural areas and small towns (i.e., the outer periphery) to the metropolitan core.(102)

In analysing government's attempts to reduce the rate of polarization in the spatial structure, Fair has identified three distinct strategies. The first, urban containment, was used mainly in the 1950s in a "deliberate attempt to slow down the growth of the main metropolitan areas, and the PWV region in particular, by severely curtailing the flow of Black labour to their factories and by restricting the supply of water to factories over a certain size in the PWV region."(103) The second was one of diffusion or decentralization as embodied in the NPDP and discussed above. A third strategy, aimed at offsetting the process of polarization, was again a diffusionist strategy aimed at diverting some private investment together with some public investment from the more wealthy core to the homelands.

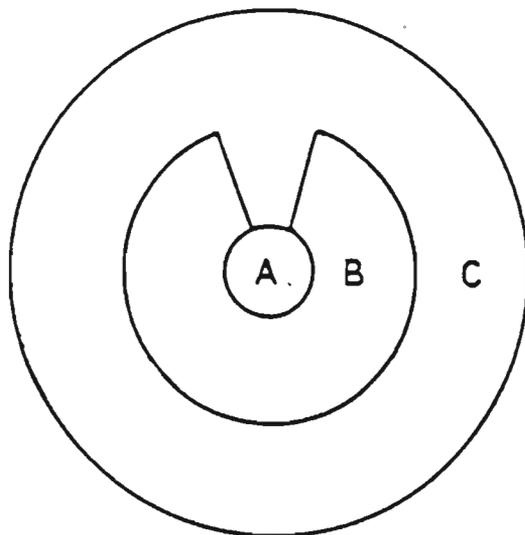
Thus in spite of government policies to achieve a more evenly distributed national settlement pattern, "the dominant process remains one of polarization of economic activity and the core area continues to grow more rapidly than the space economy as a whole. While the economic growth rate of the homelands is seen to be encouraging (11,3 percent per year), the volume of activity is so

Figure 4.2 Core-periphery model as applied in South Africa  
 (Source: Fair (1982) Figures 5.2, 5.9, 5.10 and 5.11)

a) Core-periphery structure, Gross Geographic Product Potential 1960



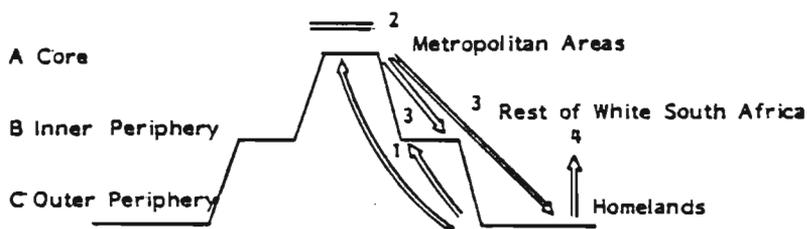
b) Space economy structure



Gross Geography Product

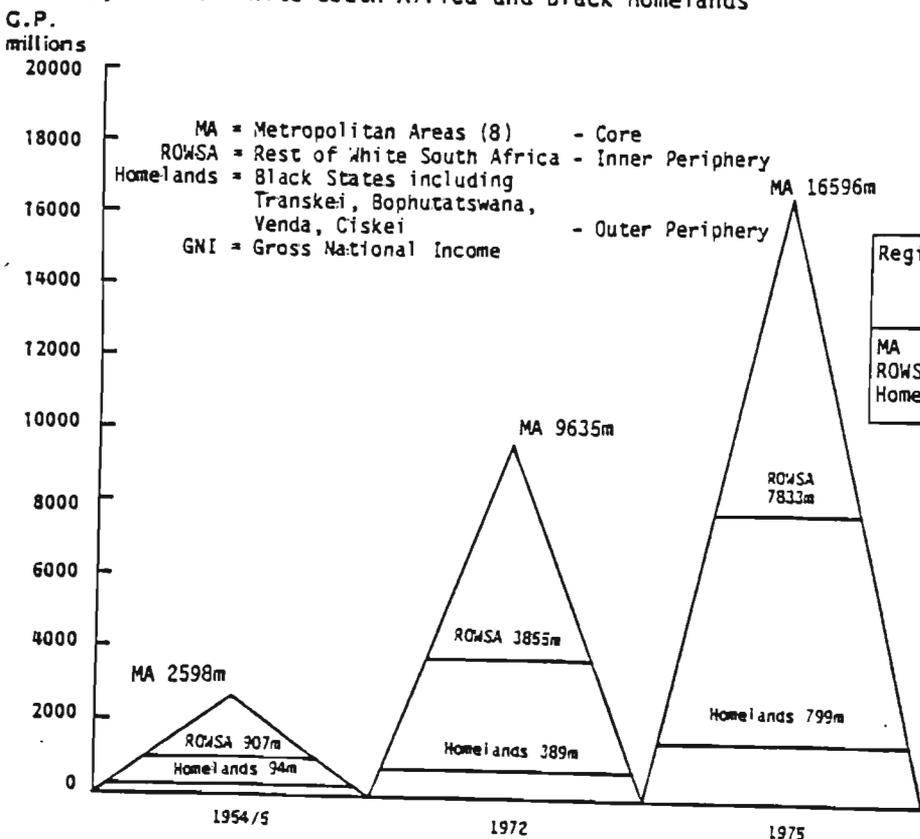
	1955	1975
A = Core	62	66
B = Inner periphery	35	31
C = Outer periphery	3	3
<b>South Africa</b>	<b>100%</b>	<b>100%</b>

c) Space economy - Trends and Strategy



1. Migration to towns
2. Urban containment
3. Decentralization
4. Endogenous self-reliance

Gross Geographic Product 1954-55, 1972, 1975 for Metropolitan Areas, Rest of White South Africa and Black Homelands



Region	Relative increase % per year	Absolute increase Rands M	G.G.P. per capita 1970	GNI per capita 1970
MA	10,4	14 291	R1164	-
ROWSA	9,4	6 521	R387	-
Homelands	11,3	705	R42	R150

low relative to the total that an economic dispersion of important proportions cannot be assumed."(104) But some decentralizing in the distribution of the black population has been achieved by regulating their flow into cities through policies of influx control and resettlement in homelands either near the borders of cities or in more distant dormitory towns.(105)

#### Dependency viewpoint

Dependency theorists, on the other hand, regard the developed core areas (including the cities, mines and farms) as parasitic, "draining off the manpower, youth, courage ability and initiative of the outer peripheral areas which are left to stagnate."(106) In this way the peripheral zones become reduced not only to a state of dependency on the developed core, but also "to a condition of underdevelopment by undermining their human resource base and thus their economic viability."(107)

Regional planners and theorists operating within this paradigm(108) have interpreted regional development policies in South Africa in terms of responses to a series of crises. Sutcliffe, for example argues that betterment planning, the Tomlinson Commission, and bantustan policy "were responses to both economic and political crises faced by early Nationalist governments."(109) The political crises arose from Black migration to urban areas which were regarded as the permanent domain of Whites; meanwhile the economic crises arose from the need for large pools of Black labour to work in the mines and urban industries.

The new forms of regional planning introduced during the mid-1960s and continuing to the late-1970s (e.g., the border industries, Physical Planning Act, industrial decentralization programmes and constellation of states) were also induced by political and economic crises. "The economic crisis was partly generated by the very weak competitive basis of the South African manufacturing sector on the world market"(110) and this, in turn, required a political dispensation which would create the conditions necessary for continued capitalist accumulation in South Africa."(111) One can observe strong links between regional planning policies and changing social conditions in South Africa over the last three decades or so. However, in the final analysis of dependency theorists, regional planning is merely a response to a continuing crisis. As such its scope is limited and it is destined to be ineffective as an agent for change in the political economy of South Africa.(112)

## Reformist evaluation

In contrast the reformists, whose strategy embraces a combination of basic needs provision with economic growth redistribution(113), feel that government's recent regional development initiatives have gone neither far enough nor extended across a sufficiently broad front to combat existing imbalances and negative trends in the South African space economy.

Reformists will argue, firstly, that "much greater effort on the part of government and private enterprise is needed if a redistribution of wealth to poorer regions is to be achieved."(114) However, upgrading of the homelands will require "a massive transfer of resources from the developed areas into these less favoured regions."(115) Secondly, reformists point out that decentralization of industry alone will not cater for the needs of peripheral and long-neglected regions "since the majority of people living in the homelands are rural dwellers, a major emphasis must be placed upon agriculture, rural development, and the basic needs of rural people."(116) In parallel with the need for more effective decentralized and rural development is a positive strategy to accelerate Black urbanization. Reformists see a permanent "migration of Blacks to the urban areas as an inevitable and necessary condition for their development."(117) The greatest employment and income earning opportunities occur in the core areas, which have been the foci of an increasing flow of migrants over the last two decades, notwithstanding government attempts to stem (or even reverse) it.(118) A complementary facet of the reformist approach is a greater recognition of "human, social and cultural values in development"(119) coupled with encouragement of people to help themselves.

The reformist school of thought embraces a wide spectrum. As Fair explains, "the present government views reformism as change within the existing political framework of separate development" while others, also termed reformists "advocate a common society in South Africa based upon a federal, confederal or a single political unit."(120) The latter approach has much to commend it as it would "remove the political need to establish viable Black nation states; and the problems that are presently posed to such states by the dependency relationship between the centre economy and the peripheral Black states would become largely irrelevant."(121) And while it would not remedy the poverty

and regional underdevelopment, this approach would create a political and economic environment within which these problems would be tackled realistically. A change in government policy on the movement of Africans would do a great deal to alleviate poverty by allowing people to leave the poorer areas altogether) as would the removal of Group Area restrictions and the fixed limits on the macro allocation of land for ownership on a racial basis.(122)

During the 1980s and particularly throughout 1985, the extent of the divide between reformists on the right (viz. the RSA government) and the left fluctuated widely. The retention (albeit with less rigid implementation) of measures such as influx control, group areas, ethnically based limitations on access to land and the absence of a positive urbanization policy, combine to create an uncertain politico-economic environment. This makes the tasks of planning at intra-regional scale more difficult, though by no means irrelevant, or destined to failure as some dependency theorists would argue. The fluid macro environment for development and planning require that plans at intra-regional scale focus far more precisely than before on those areas in which they can introduce change; that they be flexible yet robust enough to cope with a wide range of alternative futures at the national/regional level; but that they contain sufficient tangible components to meet short-term needs and potentials at local scale.

### Conclusions

South Africa has a substantially stronger and better developed economy than any of the other Sub-Saharan countries discussed in this chapter. Yet it faces many of the same spatial problems encountered in those countries, for example a core-periphery structure, the existence of a dual economy, neglect of rural areas, inequitable access to land and an increasing wave of rural-urban migration (notwithstanding government policy measures).

The policy responses adopted in South Africa have been mainly of the coercive category and have attempted to run counter to powerful forces such as urbanization and economic agglomeration. The rationale for the spatial policies employed in South Africa has been, and remains, rooted in the political ideology of a government which has controlled the country for 8 years. Measures such as influx control, racially segregated land ownership and use, have gone beyond merely containing the flow of blacks to cities.

Implicitly and explicitly, these policies also aimed at inhibiting urbanization as a modernizing process. In this way, the political process has been imposed upon the more organic processes of capital flows, migration and modernization with dramatic effects for South African cities.(123) The resultant spatial form and physical character of South Africa's urban system will remain long after the demise of the policies that moulded them.

Turning to the intra-regional scale, we can identify parameters which define the potentials and constraints for spatial planning. Here we are attempting to establish the nature and dimensions of what we may call the "opportunity space" for spatial planning at intra-regional level in contemporary South Africa. This is not limited to physical space but extends to distinguishing the range of issues that are either within or beyond, the scope of spatial planning; and to the type of policy measures that are feasible in that arena.

On the evidence of this chapter in particular, there are five main considerations to take into account.(124) Firstly, strategies need to be consistent with dominant national aspirations and here it should be pointed out that in South Africa aspirations are currently in a state of flux with the government (during 1985) playing very much a reactive role.(125) Secondly, policies need to take account of the current stage of economic development through which both the core and periphery are moving. Related to this is a third consideration that development options in both core and periphery are closely linked in a system of interdependence. In the fourth place, political leaders at intra-regional or homeland level will in reality, be unable to exercise the degree of economic independence they may wish and will have to adhere to the RSA's policies on account of their economic dependence on White South Africa.(126) The recent deregulation initiatives taken by Ciskei suggest that the "opportunity space" in this respect is not as limited as one might imagine. Fifthly, the peripheral regions cannot depend on development initiatives from outside; instead development will have to be induced largely from within. However, economic development within or on the borders of those peripheral regions will always be inadequate to absorb the growing number of people entering the labour force every year.

In the final analysis, urbanization emerges as the central process about which spatial planning revolves. It is, therefore, pertinent to conclude this chapter by considering the potential role of cities and the prospects for urbanization in South Africa. From the modernization and reformist points of

view, cities are regarded as "generative" and as the prime movers in developmental change. Radical thinkers, on the other hand, view cities as catalysts of change in a parasitic sense, as centres of international capitalism generating wealth for core elites and contributing to the poverty and underdevelopment of peripheral populations who are "in the city but not of the city." In South Africa, Fair argues, cities have at times been generative (for the more privileged); for others they have clearly been parasitic. The crucial question in the current political and economic climate is whether the urbanization process in South Africa is becoming more generative for all its people? If South African cities are to become generative, all people will need to be allowed physical access to cities and to economic opportunity in them; and secondly, a social and political climate will need to be created in which all urban dwellers can become "urban" men and women in the full sense of the word.(127)

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CHAPTER FIVE      RESPONSE : A PROPOSED APPROACH TO SPATIAL PLANNING FOR A DEVELOPING REGION IN SOUTHERN AFRICA

In the previous chapters we noted the shifts in development paradigms over the last three decades and observed a parallel evolution of development strategies and, indeed, changes or refinements in the meaning of the term "development" during the same period (Chapter 2). Discussion then turned to the subject of development planning as the mechanism whereby these theoretical perspectives are translated into reality (Chapter 3). The focus of investigation then moved from an international/Third World scale to the specific context of Southern Africa and we identified the main tenets of spatial planning since the early 1950s (Chapter 4).

This chapter is a response to the needs and problems encountered in the course of the preceding discussions. Situated within the reformist paradigm, it sets out a proposed approach to spatial planning designed to meet the following broad objectives :

- to improve the "development" of persons and communities in the sense of increasing their opportunities, extending their control over resources, improving access to facilities, increasing self sufficiency and generally reducing levels of poverty, unemployment, inequality and dependency;
- to implement spatial and physical aspects of a development strategy oriented towards basic needs and redistribution with growth, supplemented as appropriate by elements of other development strategies;
- to achieve social as well as spatial equity;
- to integrate spatial and sectoral planning;
- to cater for the particular circumstances affecting regions in contemporary Southern Africa;
- to set targets in terms of which an evaluation can be undertaken to assess the extent to which development has been achieved; and
- to be capable of implementation given the prevailing level of skills, resources and administrative capacity.

Within these parameters, the proposed approach will be set out as a generalised model (1), whose operational characteristics are, firstly, that it be widely applicable in the Southern African context; and secondly, that it have sufficient flexibility to cope with the exigencies of different regions. The

model is based on a strategic approach to planning, the rationale and methodology of which is described below. Thereafter it is described in the form of a flow diagram; with each phase being fully motivated and discussed in subsequent sections of this chapter.

### Strategic planning process

During the last decade or so, strategic planning has increasingly been embraced by progressive public authorities in Western Europe and North America as a response to rapid changes of the environments in which they operate. In contrast to short-term, quick-fix, or fire fighting responses to a variety of crises, strategic planning provides "both long-term direction and a short-term operational framework."<sup>(2)</sup> The particular attraction of strategic planning for public sector decision-makers lies in its assistance to "help local leaders determine where the community ought to be going, identify the resources it needs to get there and develop the long and short term action plans required to accomplish its objectives."<sup>(3)</sup>

As explained by international consultants Arthur Anderson and Co., "strategic planning differs from traditional planning in that it provides for a well-conceived, systematic approach for managing limited resources and addressing issues critical to a community's long term health and economic vitality. Specifically, the strategic planning process plays a role in:

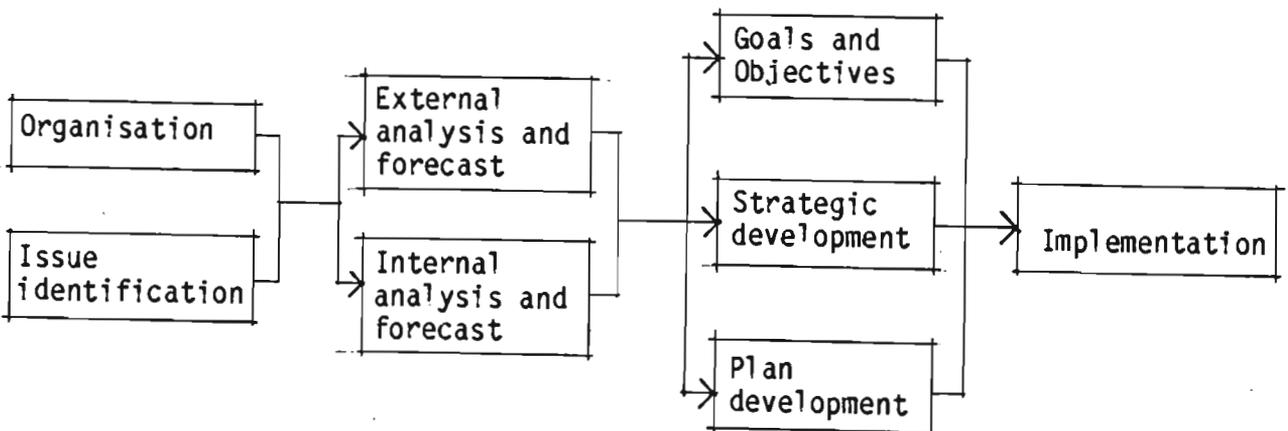
- providing an integrated picture of the community's current position and future prospects;
- identifying trends and directions that shape the community and helping to establish a new sense of direction;
- positioning the community to seize opportunities and to act, rather than merely react to change;
- allocating limited resources to the most pressing issues;
- identifying those actions, policies and investments that will have the greatest impact on the future status of the community;
- ensuring that activities have a longer-term focus and direction regardless of changing leadership and erupting crises;
- providing a mechanism for public/private sector co-operation."<sup>(4)</sup>

The strategic planning process itself incorporates eight steps as outlined in Figure 5.1, These are :

- a) Proper organisation which includes setting up a manageable steering committee, developing a project budget and timetable as well as involving key decision-makers and monitoring progress.
- b) Identification of the main issues (sometimes called environmental scan), which involves a comprehensive review of the situation in the light of past trends, current conditions and future possibilities; and results in selection of the issues of greatest importance for the community's future.
- c) External analysis and forecasting which pinpoints the main opportunities and threats posed by the wider environment. These need to be prioritized according to the likelihood that the event will actually occur and the impact it could have on the community.
- d) Internal analysis and assessment identifies the community's strengths and weaknesses. These too need to be prioritized according to the probability of change for each strength or weakness together with the potential impact of change over the planning period.
- e) Setting attainable goals and measurable objectives in the light of the preceding analysis.
- f) Strategy development identifies the specific actions by means of which the goals and objectives may be achieved.
- g) Plan development involves working out the plan in detail, documenting and disseminating it: a realistic plan will generate involvement.
- h) Implementation is via action-oriented planning.

This approach may be taken to represent the conventional wisdom in regard to strategic planning as adapted to the contemporary public sector needs in a modern, developed, mixed economy. We now turn to an adaption of this approach to the planning needs of a peripheral region in South Africa.

Figure 5.1 Strategic planning process



Source: Arthur Andersen & Co. (1984) p 3.

### Strategic approach to development planning

The use of a strategic approach to planning at both urban and rural scales in developed countries has been described in mainstream planning journals<sup>(5)</sup>. The application discussed here examines the use of a strategic approach to development planning in a small country, or region in Southern Africa. In this section we shall look, firstly, at the reasons for adopting a strategic approach and secondly, explain how it can be applied in practice and incorporated into the planning process.

#### Reasons for a strategic approach

Decisions of a strategic nature are long-term, large-scale and have a profound effect. Consequently strategic planning involves few but highly significant decisions. Strategic decisions arise from wide-ranging consideration of the main alternative choices of action available, the objectives towards which those alternatives are directed, and the desirability of those objectives. Such alternative courses of action can only be broadly specified and, in order to achieve an overview, their consequences can only be expressed at a low level of detail.<sup>(6)</sup>

In a mixed market economy as exists in South Africa<sup>(7)</sup> the relationship between the community and its government is a delicate one; in which government not only regulates certain aspects of behaviour in a community but is also, itself, a provider of services. At the same time, government's use of resources, powers and information has a substantial influence on opportunities for growth in the private sector.<sup>(8)</sup>

Government exercises two degrees of economic choice: the first concerns the level at which it will intervene in the market system; the second its own internal priorities for allocation among departments. Thus the choices open to government in the investment of its own resources inevitably influence the feasibility of private investments. Furthermore, by virtue of its investment decision-making powers, government has the opportunity to encourage or discourage the development of certain functions in particular settlements. Public investment policy can also be used to influence the size and function of settlements in such a way as to help realize certain national and regional goals.<sup>(9)</sup>

Application of a strategic approach (See Figure 5.2)

In practice, a strategic approach to development planning rests on three platforms. These are

- a) A reliable statistical base and analysis of the current state of development of the country (or region) together with estimates of future trends and priorities;
- b) A statement of the basic needs and the problems which are perceived by a government and its people;
- c) An assessment of the achievements to date of various government departments (and para-statal agencies) in relation to the goals of those departments;

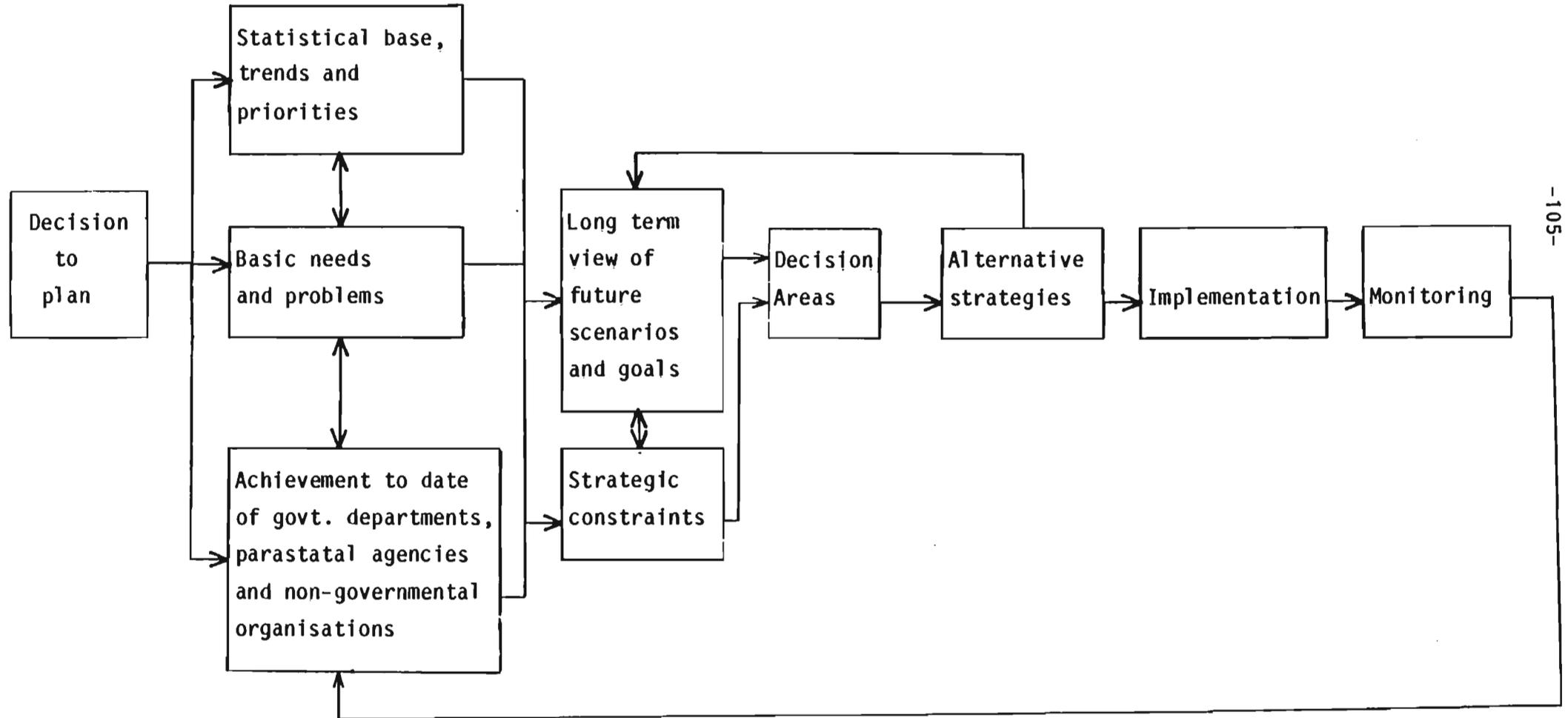
This information can be synthesised to identify the nature and magnitude of constraints in terms of manpower, finance, land and material.

The next stage in the strategic planning process is to look ahead and to explore the type of future desired for the region. In order to formulate the requisite strategic policies, certain questions need to be answered.

- What aspirations does the government have for the standard of living of its people in 2005? (i.e., about 20 years hence);
- What overall objectives, transcending current departmental areas of concern, can be recognised ?
- With what resources and agencies can these objectives be translated into strategic programmes for achieving the objectives ?
- What realistic choices are available to the region given its socio-cultural, political and economic relationships with neighbouring regions, countries and the outside world ?
- What are the critical factors to be considered in evaluating a choice of strategies in order to define a preferred strategy ?
- What are the respective functions of public and private investment in implementing the preferred strategy ?
- What future monitoring actions should government take in order to check that its preferred strategy is being adhered to ?

The culmination of this stage will be an explicit statement giving a long-term view of future options. At this point a strategic choice needs to be made as to the desired future, the broad parameters of which will be stated in the form of goals. For a peripheral region in Southern Africa, a typical set of goals might be the following:

Figure 5.2 Strategic choice in practice



- that basic needs should be satisfied at household level;
- that work should be available in the region to those people of working age who seek it there in preference to migrating to the metropolitan centres;
- that personal incomes should afford an acceptable minimum standard of living;
- that people should be able to reach the maximum personal development of which they are capable;
- that good health standards should be achieved.

In devising strategies to meet these goals some practical constraints must be taken into account. In the first place, strategies should relate to the range of credible forecasts of future population and investments. Secondly, the potential for changes in the economy depend, in part at least, on the country's natural resources and its manpower. For example, a country or region which lacks mineral resources of significant value, whose labour force is engaged largely in subsistence agriculture, and has 90 percent its population living in dispersed rural areas, would hardly be in a position to sustain an urban-industrialized economy. In this situation the most feasible developments are likely to depend on the expansion of the rural economy coupled with the processing and marketing of its products. A third constraint is the capacity of the land to support the present and anticipated future population. Related to this are alternative employment opportunities such as migrant jobs in the more developed metropolitan centres.

Fourthly, the prevailing social, economic and political structures can act as limitations on particular strategies. Typical issues of this type include land tenure, respective roles of men and women, attitudes to family planning, effect of tribal practices; religious beliefs, and the degree of common purpose between government and the population as a whole. Fifthly, the level and range of skills possessed by the population can be both an opportunity and a constraint. It can indicate positive attributes of the country's manpower, but at the same, absence of skills at various levels can limit the implementation of otherwise realistic strategies.

The outcome of this stage of analysis is a set of decision areas for which strategies will need to be worked out. In the case of a peripheral region in Southern Africa, the critical strategic decisions facing the government are

often those of how to feed its growing population; how its ever increasing labour force is to be employed; and where development is to be encouraged or discouraged. Translated into spatial terms, the main purpose of strategic planning is "to chart an investment strategy that will build upon the opportunities offered by the more positive aspects of a district's spatial organisation, while seeking to lessen the constraints to social and economic development resulting from its more negative aspects."<sup>(10)</sup> Once the preferred strategy has been adopted by the decision-making authority, implementation and monitoring can proceed as indicated in Figure 5.2.

### Methodology and Techniques

The fundamental premise of a strategic approach is that, on the basis of a structured interpretation of the present situation, an organisation (or government) can take a long-term view to identify a range of possible futures. The organisation can then make certain strategic choices as to the type of future it desires and the kind of future it wishes to avoid. With this view setting a long-term overall direction, the organisation is in a position to work out feasible strategies to advance from its existing situation towards the desired future state.

Based on the view that planning is a process of "decision-making under uncertainty"<sup>(11)</sup>, the strategic planning process is a management tool to assist decision-makers in coping with varying degrees of uncertainty. Figure 5.2 depicted a simplified sequence of operations in the strategic planning process as applied to a developing country or a peripheral region in Southern Africa. An elaboration of this is shown in Figure 5.3 on page 111 and details of specific techniques involved are described in the following sections. At this point, however, it is appropriate to draw attention to the most important characteristics of the techniques and methodologies used in strategic planning.

In the first place, strategic planning requires explicit statements of the existing situation, goals, constraints, and strategies. Inherent in the strategic approach is Stewart's dictum that "a policy unstated is a policy unknown and a policy unknown is a policy unchanged."<sup>(12)</sup> Secondly, the strategic approach involves moving from a fairly certain view of what will occur (or is possible) in the short term (with relatively few options), to a far less certain future with correspondingly more options. Thirdly, the process requires the exploration of a wide-ranging view of long-term options -

to determine the full spectrum of what might conceivably be possible. This process of divergent search in contrast to merely projecting past trends, is a characteristic feature of the strategic planning process.

Fourthly, strategic planning involves formulation of future scenarios. This is usually carried out via a three-phase sequence of explicitly stated assumptions (based on the best information currently available), through a chain of logical deductions (again stated formally to enable the planner to retrace his steps in the light of updated information, improved assumptions or changes in overall direction), to a statement of the expected implications of a particular policy or end state. One of the key devices in strategic planning is the question : "What if .... ?" The process therefore needs to be sufficiently lucid to permit a rerun of any scenario on the basis of changed assumptions. See Appendix I.(13)

Fifthly, the process requires the selection of sets of compatible policies relating to the decision-areas identified in Figure 5.2. The compatibility of policies is an important consideration for a policy that may appear perfectly logical and feasible from the limited perspective of one decision area may well be in conflict with an equally suitable policy in another decision area. A characteristic of the strategic approach is to identify and expose these conflicts as a basis for selecting an optimum mix from a series of compatible and mutually reinforcing sets of policies. Sixthly, a strategic planning process depends upon the identification of measurable targets within each decision area whereby progress towards objectives can be assessed. This implies a regular process of monitoring and evaluation of both progress and direction.

#### Proposed approach to spatial planning

We now turn to a detailed expansion of this process - one that has been designed specifically to meet the requirements of a developing region in Southern Africa together with the overall objectives set out at the beginning of this chapter. This approach, which will be referred to as "the model", is described schematically in Figure 5.3. It incorporates five phases : I - Context for development and planning, II - Framework for strategic analysis, III - Strategic choices, IV - Plan formulation and evaluation, V - Implementation and monitoring. Each phase will now be discussed with emphasis on application in practice.

Although there are few specific techniques appropriate to this stage, planners need to follow the principles of contemporary historical research and of structured interviewing. The basic premise of the former is the search for objectivity in explaining the "structural changes which shaped the modern world."<sup>(16)</sup> This involves distinguishing the actors and their motives from the events; and assessing critically the validity of various sources.

The Second requires a standardised format for structured interviews that will enable the planner to pose the same (or equivalent) questions to different respondents and thereby have a sound basis for interpreting their comments. In certain cases the delphi technique may be appropriate. This involves setting up a panel of selected, informed persons. They are given a set of questions or issues and requested to respond in writing within a set time. The planner (or co-ordinator) collates the responses into a range of views and circulates them to the panel, requesting them to revise or confirm their original views in response to knowing the opinions of the other panel members. This process is repeated several times until a consensus (or a stable range) emerges.<sup>(17)</sup>

#### Phase II Framework for strategic analysis

A strategic approach to development planning requires a statistical base that is substantially different from that established for a conventional approach in which information is assembled under the following typical headings: physical characteristics; human resources; infrastructures; economic activities; and administration.<sup>(18)</sup> Such a data base, whether set out in a great deal of detail<sup>(19)</sup> or summarized at aggregate level,<sup>(20)</sup> is not adequate for a strategic approach for a number of reasons.

Firstly, the region is usually viewed from a national or inter-regional perspective resulting in data being collated for the region as a whole (or possibly disaggregated by fairly large units within it). The effect of this is to overlook intra-regional differences or linkages. Secondly, data are usually recorded and analysed in discrete sectors without explicit attention at the inter-relationship between sub-sectors, sectors or spatial units. Once again the effect is to arrive at over-simplistic conclusions or to miss important issues that only come to light in a merger of both sectoral and spatial information. Thirdly, this approach to a data base tends to build in implicit assumptions about the nature of the problems to be solved and the type of

Phase I Context for development and planning

If, as explained earlier in this chapter, our purpose is development,(14) then its achievement should take precedence over planning which is a mechanism whereby improved levels of development can be effected. Planning is needed if development is to occur; planning is thus a means, but never an end in itself.

The fundamental reason for starting with a contextual analysis is that development does not occur in a vacuum, nor do purely de novo situations exist in reality. Accordingly, one of the first steps is to gain a full understanding of the historical context in which development and planning can occur in a particular region. This involves an historical analysis which may require an examination of the distant as well as the recent past to pinpoint factors that have moulded the opportunities for development and planning. Such analysis needs to view the region concerned from both external and internal perspectives for past events and policies may be viewed differently by persons in their alternative roles as consumers or producers within the region, as opposed to those outside the region possibly operating at multi-regional, national or international levels of decision-making.

In establishing the context for development and planning it is also necessary to be aware of different intra-regional groups and interests. The impact of external influences will vary for different social groups and localities within the region. For example, externally decided trade licensing policies may benefit organised traders in the region but impose additional costs on consumers at the individual household level; or it may affect urban residents differently to households in less accessible rural villages.(15)

In practical terms Phase I of the model will involve assembling and studying a comprehensive list of documents relating to issues that affect the region either specifically or indirectly. This stage will also involve planners in discussions with persons in public and private sector representing a wide range of interest groups both within and beyond the region. It will also involve assessing the type of plans or other documentation that will be needed as a vehicle via which development can be achieved in the region.

Although there are few specific techniques appropriate to this stage, planners need to follow the principles of contemporary historical research and of structured interviewing. The basic premise of the former is the search for objectivity in explaining the "structural changes which shaped the modern world."<sup>(16)</sup> This involves distinguishing the actors and their motives from the events; and assessing critically the validity of various sources.

The Second requires a standardised format for structured interviews that will enable the planner to pose the same (or equivalent) questions to different respondents and thereby have a sound basis for interpreting their comments. In certain cases the delphi technique may be appropriate. This involves setting up a panel of selected, informed persons. They are given a set of questions or issues and requested to respond in writing within a set time. The planner (or co-ordinator) collates the responses into a range of views and circulates them to the panel, requesting them to revise or confirm their original views in response to knowing the opinions of the other panel members. This process is repeated several times until a consensus (or a stable range) emerges.<sup>(17)</sup>

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solutions that will be appropriate. Thus, for example the problems identified in a region are often viewed mainly from the national and inter-regional perspective : "what is region A's contribution to the national economy?", rather than how can the national economy contribute to development in region A?" It is assumed (not always correctly) that because the existing implementation agencies are organised on an independent sectoral basis, that problem identification and strategies need to adopt the same format. Finally, the adherence to a rigid format for data collation tends to reflect the availability of data rather than the specific needs of each region. The strategic approach calls for a statistical base that differs from the conventional one in substance rather than in detail.

Working within a strategic framework, and guided by preliminary analysis of the context for development and planning, a more sensitive and appropriate statistical base can be developed by distinguishing three main categories of information:

- salient statistical indicators, trends and projections for the region and localities within it;
- basic needs, problems and priorities of households
- achievements to data of government departments, parastatal and non-governmental organisations.

This information can, after analysis, be synthesised to focus attention on constraints and opportunities for development in the region (see Figure 5.3).

At the outset we need to understand the way in which regions are defined and the implications of this for planning. Although the definition of a region for planning purposes is usually determined by the areas falling under authority of the public organisation that will be responsible for implementation of the plan, this does not mean that the problems or issues of, and in, the region will conform to that boundary. Certain issues will extend and be influenced by factors beyond the defined region; while others will be of a far more localised nature within different areas; and yet others will not have specific locational or spatial attributes (for example households without a member in migrant work). For this reason the basic spatial unit adopted for a regional plan should be small enough to interpret patterns and phenomena at micro and intra-regional scale, while at the same time be capable of aggregation to larger units (such as tribal authority areas or magisterial districts) for which more generalised data are published. The prescribed region should,

therefore, be regarded as a snapshot within a wider landscape, indicating the area upon which attention is currently being focussed; but not suggesting that the characteristics or activities of that region are limited to the area within its boundaries, or that the explanation of the existing situation is determined solely by factors within that region. Furthermore, policies and projects implemented within a region will often have impacts beyond the region's borders. It should be stressed that the regions used for planning are by no means discrete or closed, but are part of a wider context in functional, spatial and temporal dimensions. As Klaassen remarked, planning regions should match the scope and nature of the problem to be solved.(21)

The next step in establishing a framework for strategic planning is to assess what data will be required to gain an understanding of the region, its internal dynamics and its relationship to the world beyond; and then to compare what data are needed with the data available. On this basis the planner can identify what additional data are to be collected. It is important to realize that this is not a one-off, but a continuous process, for as one's perception of a region sharpens, the need for different and additional information will emerge.

The three main sources of statistical information for regional scale planning are the population census, the income and expenditure survey, and the census of business, manufacturing and employment. The regional planner will usually need access to data from these official surveys in a more disaggregated form than that usually published. Depending on how current these surveys are, it may also be necessary to undertake separate sample surveys in the region to update data more than about five years old.

A fourth vital source of base data is the 1:50 000 series of topo-cadastral maps. Provided they are of recent vintage these maps contain a wealth of information suitable for both micro- and macro-scale analysis. In addition, regional planners need a recent set of aerial photographs (at a scale of around 1:30 000) covering the study area. Although much of the information will have been transferred to the latest topographical sheets, the aerial photographs enable the planner to examine particular features or problems in greater detail. For example, aerial photographs enable the planner to plot the distribution of small rural villages and (by enlarging the photographs in

certain cases) facilitate a count of homesteads in particular villages. Coupled with data from sample household surveys (which will be discussed below), hut counts and occupancy rates<sup>(22)</sup> give planners a means of evaluating census results in a small spatial unit such as an enumerator sub-district. Another use of aerial photographs is to plot and measure the length of access or tertiary roads linking rural villages to the classified (usually government maintained) road network.

Information about the size and location of facilities such as hospitals, clinics, schools, dams and shops are usually available from departmental records. However, field experience has shown that these data are often neither accurate nor reliable enough to give a good picture at the micro-scale. If one takes a hypothetical case of a region comprising ten districts, each with 50 administrative areas (the basic spatial unit) one may well find that the inaccuracies in data about schools, shops and clinics may average out at district level. However, it is our contention here that regional planning requires accurate and comparable information at the micro-level as well, for it is at this scale that many physical projects will be implemented, and the impact of policies most keenly felt. In addition, many social and spatial problems (such as distance of homesteads from clean water or firewood, or cost of travel to shops or clinics) are encountered at this scale.

Physical data (climate, geology and soils, vegetation, hydrology, and topography) are usually available from records in government departments, farmers records or scientific surveys conducted by research institutions. Such data often cover wider areas than the study area, making it necessary to interpret the data for the particular needs of the region concerned. What is needed from the physical data-base for regional planning, is an integrated picture of the region's physical conditions, translated to address the needs and potentials of that region. This can be achieved in an agro-ecological classification <sup>(23)</sup>, the patterns of which can be superimposed in map form on the distribution of other facilities or activities.

One of the most critical gaps in regional data is that of how, and to what extent, households meet their basic needs and what they perceive as priorities for improvements. Currently published and aggregate data do not even approach this requirement which can be met by sample surveys of households. The statistical indicators required for an assessment of basic needs together with the methodology for collecting these data will be discussed below.

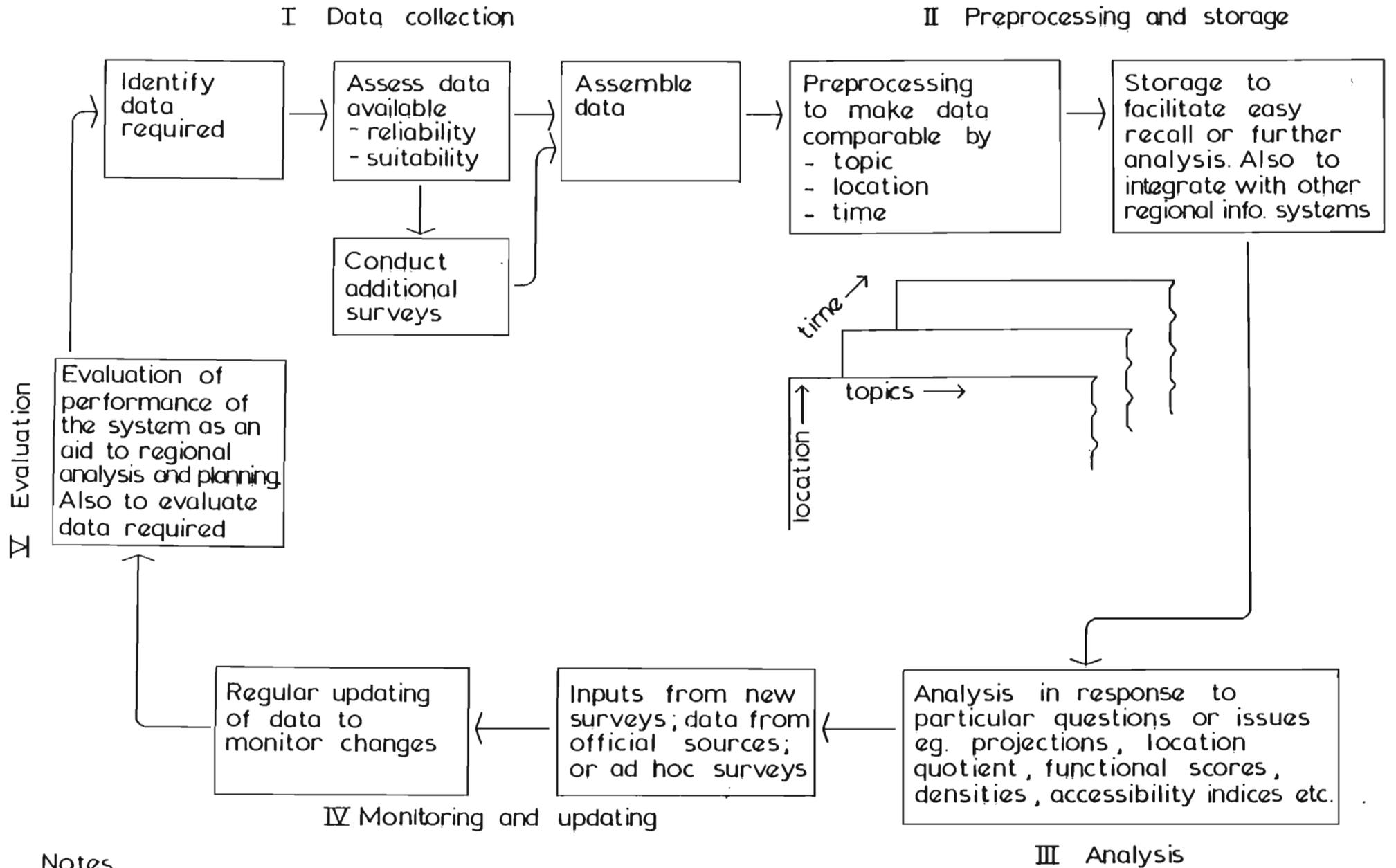
Another common gap is information about the achievements and future intentions of government departments/agencies. Whereas historical information is usually available, public authorities in South Africa (particularly at regional scale) frequently have difficulty in stating their objectives. It is rare to find an official at this level who has a conception about the contribution of his department to the overall development effort, and it is even more unusual to find someone whose thinking ventures more than five years ahead. Consequently the regional planner will probably need to engage in lengthy (and often slow-moving) consultations in order to gain an understanding of the achievements to date of public authorities in relation to their longer terms goals.

Having assessed the availability and usefulness of published or official data and having identified where and in what respects these data sources need to be supplemented by additional, specific surveys, the next step is to set up an information system for the region. The distinction between the assembly of a body of data (which is usually referred to as the data base) and an information system is fundamental.(24)

The concept of this information system, which is described in Figure 5.4, is one of identifying the data required and then assembling these in such a way as to make them comparable by sector, location and time. The data need to be stored in such a way that they can be retrieved in any combination and in suitable form for further analysis or manipulation. The system needs to be updated from time to time and to be capable of absorbing data from surveys covering both a wider area than the region being studied (e.g., a population census) and data from ad hoc surveys (e.g., attitudes of rural women to water collection. Finally, the system must facilitate the presentation of data in both tabular and map form.

Once the relevant data have been collected, they need to be pre-processed and stored so that specific items can be combined in a variety of ways in response to whatever questions may be posed. The main objective of such a system is flexibility, for in this way the data can serve the needs of the planner in trying to understand the dynamics of a particular region, rather than the all too frequently encountered situation of the planner becoming a slave to the limitation of available data. Our contention is that the oft-quoted excuse of data not available is inadmissible; instead the regional planner can and should collect the data needed to solve the specific problems of a particular region

FIGURE 5.4 An information system for regional planning.



Notes  
Based on Cripps (1969)

and organise them into an appropriate information system, thereby equipping himself with the means to understand the region and to monitor the impact of future projects or policies. This information system must necessarily operate in an iterative way for as new problems or issues emerge, additional data may need to be added and further analysis undertaken.

The logic of setting up such an information system extends beyond the region under study and suggests the need for integration with the information systems of adjoining regions. It may be argued that this integration already exists in South Africa at population census level and in the publication of data by magisterial district. However, the basic premises of our argument here are that, firstly, magisterial districts are too large for intra-regional analysis; secondly, that presently published data do not cover a sufficiently wide range of topics necessary for regional planning; thirdly, such data do not appear frequently or early enough for regional planning; and fourthly, data from published and official sources are usually geared to national or inter-regional economic or physical analysis thus making them, in many cases, unsuited to integration on a regional and sub-regional basis.

It will be apparent from the preceding discussions in this chapter that a rigidly standardised approach to setting up a data base is not appropriate to regional planning. It is nonetheless possible to identify the typical data that will be needed for a regional plan in contemporary South Africa. This has been summarized in Table 5.1.

In assembling these data the regional planner is likely to draw upon a wide range of survey, checklist and interview techniques currently used by social scientists (25). It is pertinent to comment on four particular surveys which, while breaking no new ground as far as survey techniques are concerned, have not hitherto been applied in combination for establishing a statistical base for regional planning in South Africa. These are (i) micro-scale survey of population distribution and facilities for a region as a whole; (ii) sample survey of rural and small town households to determine how and to what extent basic needs are met; (iii) survey of rural traders and their customers; and (iv) survey of the condition of secondary and tertiary roads. Each will be discussed briefly with details of the survey instruments (checklists, tabulations, criteria and questionnaires) included in the Appendices.

Table 5.1 Typical data required for a strategic approach to regional planning

Topic	Data required	Source
Physical terrain	Geological history Physiographic processes and effects Climatic patterns Soils characteristics Vegetation Water resources Outstanding features Agro-ecological classification of above	R, A/M R, A/M R, A/M R, A/M R, A/M R, A/M R, A/M, L An
Population, labour force and employment	Language, cultural, religions, tribal traditions Demographic (size, growth rate, distribution, density, structure and notable characteristics) Labour force (size, structure, growth rate, occupations, skills) Employment (number of wage jobs, growth rate, sectors, occupations, location, migrant jobs, concentrations) Un- and under employment (size, structure, location) Informal sector	R, L C, H  C, H  C, H, L, R  H, L, R
Income and expenditure	Income (sources, frequency, distribution, rate of change in relation to cpi, notable characteristics) Expenditure patterns Indicators of wealth	C, H  C, H C, H
Settlement	Urban patterns Rural patterns Migration (within and between rural and urban areas) Land tenure Settlement hierarchy and access to resources	) A/M, C, ) L, R, ) An ) An
Physical infrastructure	Water )Distribution network, Electricity )movement patterns, Transport (road, rail, air, water) )service delivery Posts and telecommunications )systems, spatial and )temporal variations  Serviced land and housing Construction capacities	D, A/M, L
Economic activities	Agriculture ( land use and tenure, traditional farming, commercial farming - estate and small holders, production, distribution and marketing, support services, co-operatives, livestock, crops, forestry, conservation)  Mining and quarrying Industry (type, scale, linkages, incentives, informal) Commerce (Wholesale, retail, urban, rural, informal, regulations), Tourism and recreation (coastal, inland, public-private, infrastructural needs, linkages)	L, R   L, R C, R, L  C, R, L
Public services	Health (hospitals, clinics, range of services, access to population, training) Education and training (schools, classrooms, pupils, teachers, facilities, curriculum, teacher training, technical and vocational, tertiary, literacy) Community services and non-governmental organisations (women, youth, men) Administration (structures for decision-making departments, agencies, objectives, planning, budgets implementation capacity, regulations and standards, (de)-centralization, achievements) Finance (public-private institutions, project funding and cycle)	R, L, H  R, L  R, L  R, L  R, L
Basic Needs	Rural and urban households (see Appendix 1 for further details)	H, Ar

Note 1. Sources of data: A/M = Aerial photos and maps An = Analysis C = Population Census, Income and Expenditure survey, Business/manufacturing census R = Reports from govt. departments, agencies and other organisations H = Household survey - see Appendix I L = Locality field surveys

(i) Distribution of population and facilities. Departmental information records the location of facilities such as shops, schools, hospitals and clinics according to a basic spatial unit (the census enumerator's sub district) but not according to its precise location within that spatial unit; nor are the data available from one department related to (or always comparable with) those from another. For example, although the departments of Commerce, Education and Health may record the existence of a shop with a general dealer's licence, a junior secondary school and a mobile clinic stop, respectively, in a particular spatial unit, none are able to state where these facilities are situated in relation to each other or to the local settlement pattern. In addition, a number of pilot surveys in Transkei revealed significant discrepancies between departmental lists and the actual situation - this was particularly so in the case of rural shops.(26)

The methodology involves five stages. Firstly, the distribution of population throughout the region needs to be tabulated by the basic spatial unit, and within it the major settlements identified from aerial photographs. Secondly, official and departmental records are to be researched to identify the location of facilities such as shops, schools, hospitals, clinics, boreholes and pension pay points according to the basic spatial unit. For each such unit a card is drawn up showing what facilities one would expect to find there together with the resident population. The third stage involves field-checking each spatial unit to confirm the existence of the anticipated facilities and to obtain further details of its operation. The latter is important in order to assess the delivery of particular services. For example, rural shops vary widely in size and range of commodities making it necessary for the regional planner to know, not merely that the shop is located at a particular place, but also what licences it carries and the typical range of goods available on its shelves. This information can be elicited fairly quickly at each shop using a simple checklist. In the same way it is necessary to know the number of classes, classrooms, pupils and teachers at each school, as well as the frequency and type of services available from mobile clinics. In other words, we are seeking a quantity-quality match at micro level. In addition to checking and extending the data base, the field work stage also requires plotting the location of each facility on a map (the 1:50 000 series is usually suitable for this purpose).

The fourth stage involves formal storage and documentation of the data. Given the prevailing levels of skills and administrative systems at regional level in South Africa, the primary output of this data collection exercise should be the

presentation of these data in tables and on maps. In this form they can be used by officials and individuals throughout the region. An example of the tabulated and mapped output is included as part of the case study (see Appendix VII). Depending on the degree of organisation of the planning agency and its access to computing skills and equipment, the data base can also be computerised. The methodology has been designed specifically so that it can be operated initially at a manual level but can be transferred to more sophisticated systems at any stage. Under either system, once the first survey of this kind has been completed, updating is a relatively simple (and less costly) task provided it is carried out at regular intervals. Thus, for example, once the spatial distribution and functional characteristics of the region's rural shops has been established, checked and recorded, annual changes in licences, or demolitions, or new shops can be recorded in the base data files. In this way a fine-grained web of data about the distribution of essential facilities and population can be set up for the entire region.

(ii) Basic needs of small town and rural households. Information and statistical indicators about basic needs at household level are not obtainable from official data sources in South Africa at present because they are not regularly collected by the established systems.<sup>(27)</sup> Therefore, in order to gain an understanding of how households (the basic unit of consumption and production in a region) meet their basic need requirements, it becomes necessary to undertake sample surveys at household level.

The method of sampling will vary with context, but two principles should be followed. In the first place, since the overall perspective is regional-scale development, as opposed to the development of any specific, single community, the sample should relate to the settlement characteristics of the region. Accordingly, in a region with a number of very small towns and where the vast majority of the people are settled in rural villages, the sample might be structured to include surveys in two of the towns and some eight villages in different parts of the region. The second principle is that at each locality a minimum of 30 surveys should be conducted in order to provide adequate statistical data to establish confidence limits.<sup>(28)</sup>

The alternative approach of using a much larger sample in one locality is based, to a certain extent, on the participant observer method used by social anthropologists. The large-sample, single-locality approach is well suited to

studies whose overall objective is the development of that locality; but not to regional-scale studies where it is important to understand the differences between localities.(29)

Once a series of household surveys have been completed and the results preprocessed, in the first instance, into simple tables showing a frequency distribution for each phenomena, the data can be stored in the information system using either manual or computer methods before in-depth analysis is undertaken. Here again we can observe the value of an integrated information system (as described above and in Figure 5.4) for as data from each successive survey are added, it becomes a more effective tool for regional planning. It also lends itself to including surveys from other sources provided the format and quality of data are comparable to that of the main system. This points to a further role of the information system, namely that of holding (and making available to researchers) copies of questionnaires and checklists used in various surveys. In this way, researchers can, wherever possible in terms of their own objectives, ensure that the results of their investigations can be absorbed into the regional information system.

The design of questionnaires for household surveys to determine basic needs is described in detail in Appendix II, together with some observations about the conduct of such surveys.(30) The results of a series of these surveys will be discussed below in the context of the case study.

(iii) Survey of rural shops and their customers. As shops are the most widely distributed facility in South Africa's rural areas and, in many cases, constitute a rural household's most important point of contact with the outside world, it is necessary for the regional planner to know something of their operation and about the relationship between these shops and their customers. The methodology involves conducting a questionnaire survey (with a separate questionnaire for shopkeepers and customers) at a fairly large number of shops across the region. Typically the objectives of this survey might be to gain an understanding of the range and quality of shopping facilities in rural areas; to identify the characteristic shopping patterns of rural consumers; to obtain an insight of the cycles relating to both supply and demand of various commodities; and to assess the delivery of the rural trading function from both traders and customers points of view. Examples of the questionnaires used in such surveys are included in Appendix III, while the results obtained are discussed below in the case study. Once again the pre-processed results of these surveys can be included in an integrated information system as data on each shop and its customers will have a unique topic, place and time reference.

(iv) Condition of secondary and tertiary roads. For purposes of this discussion, the term tertiary will be used to describe those roads whose maintenance falls outside the responsibility of the Works Department in the region; such roads typically become the responsibility of tribal authorities or local communities which operate with seriously curtailed resources. Secondary roads to refer to the gravel and dirt roads in the classified (i.e., officially maintained) road network. Both classes of road are vitally important for regional development and planning, for it is the network of secondary roads that link the small towns to each other, to the primary (bitumen surfaced) network, and to places of significance beyond the region; while the tertiary network provides the principal means of access between rural villages and the classified network (beyond which buses seldom venture on normal routes) as well as to the small towns.

Data on the secondary road network are readily available but there are seldom any records about the condition of the roads (apart from stretches where maintenance has recently been carried out). Data on the tertiary road network are usually unobtainable from official sources and have to be gleaned from air photographs, while information on the condition of these roads can only be obtained from regular users of a particular stretch.

In order to increase the regional planner's understanding of access in rural areas, a checklist was devised to classify the condition of secondary and tertiary rural roads. This methodology can be carried out by a trained observer in the course of conducting the other rural surveys described above, and as previously discussed the results can be incorporated into the regional information system. A typical road classification table is included as Appendix IV while comments of the results of such a survey are discussed in the case study.

To sum up, we have described the type of information required for a strategic approach to regional scale planning and outlined the methodologies that are appropriate for assembling, storing and analysing these data with a view to identifying the main constraints upon and opportunities for development of the region in question. We now turn to the third stage in the planning process in which strategic choices are brought into focus.

### Phase III Strategic Choice

This phase of the planning process involves three stages (see Figure 5.3) the first two of which are interactive and should take place simultaneously. These involve interpreting the statistical base information to identify constraints on development in the region as well as potential opportunities; and taking a series of long-range views of the region's future as well as exploring the implications of these scenarios. On the basis of the understanding and perspectives derived from these two stages, the regional planner should be in a position to select a set of decision areas upon which attention will be focussed in the next (plan formulation and evaluation) phase of the planning process.

In an era when the universal call is for increased participation and consultation in the planning process, one of the greatest dilemmas facing planners is when and how to involve the future implementors and users in a meaningful way. The strategic choice phase of the planning process described here is a particularly sensitive one in that choices or decisions made here have a major influence on subsequent phases. As such it is an appropriate phase for consultation, and the methods outlined below offer a means of achieving it in a manner that will, not only, strengthen the planning process and make it more effective, but also provide a significant and satisfying input from decision-makers.

One of the main features of strategic planning is the coupling of an organisation's long-term directions (or goals) with a short-term operating framework.<sup>(31)</sup> Among the methods used for this, brainstorming offers a useful means of concentrating the efforts of either a small or large group on a specific issue; and, provided the sessions are well organised, can generate either a wide range of ideas and solutions or assist in isolating the most significant components of a problem. As such, its principal value for our purposes is at the stage of identifying constraints and opportunities. Sometimes referred to as the "three p's" - problems, possibilities and priorities, this represents a synthesis of the information obtained in Phases I and II. A series of carefully structured sessions involving, first, the planning team and later, other selected groups of informed persons involved in the planning process (such as a steering committee or members of a regional planning agency), will prove an effective method not only of crystallizing the constraints and opportunities, but can also become part of an on-going consultation process involving key decision-makers in responding to the scenarios and their implications, as well as in the choice of decision-areas.

The technique of scenario writing, which is more finely tuned than that of brainstorming, is eminently suited to long-range planning. It has been used in urban and regional planning in a number of different contexts over the last ten or fifteen years,(32) though it has not, as far as can be ascertained from the literature, been applied to any large degree for regional planning in Third World situations.(33)

Application of scenario writing to development planning involves the identification of a few highly significant variables which, in combination, are expected to be the main determinants in shaping the long-term future of the region in question. These variables are then adjusted in a variety of ways to throw up different configurations of the long-term future. The object of this exercise is to identify the widest range of possible futures as opposed to any single one considered most likely to occur. Generation of this array of alternative futures is essentially a mind-broadening process, the intention of which is to alert planners and decision-makers to possibilities they may otherwise not have considered. As Vickers explains "one result is to make familiar, at least as possibilities, new situations to be endured, new values to be realized and new actions to be sustained. This is a first and necessary step in freeing the mind to make two adjustments inherent in all policy making - to distinguish the limits of the practicable and to choose within that field how best to spend without wholly exhausting the precious fund, however small, of human initiative."(34)

Having drawn up a set of scenarios, the next stage is to explore the implications (functional and spatial) of each scenario for a number of components of relevance to the plan. In due course and after some refinement, these become the decision fields or areas upon which the plan will focus its attention. The methodology is described in more detail in Appendix I and the outcome of one such exercise in chapter 6 below.

The purpose of scenario writing is not an attempt to predict what will happen in 20 years' time, but to identify the spectrum of alternative futures as a basis for choosing what type of future is sought for the region, and for deciding the type of future to be averted. In this way scenario writing gives planners and decision-makers both positive and negative directions: positive in the sense of a direction to follow, to support and reinforce by means of policies, programmes and projects; and negative in the sense of futures to work away from using the same mechanisms.

The main elements of the selected scenario (or more than one if that is appropriate depending on the specific context) are used to select the decision areas referred to in Figure 5.3 and (below) in Figure 5.5. During the next phase, attention will focus on these policy fields.

#### Phase IV Plan formulation and evaluation

Plan formulation and evaluation need to be seen as a unified part of the planning process. Although for purposes of explaining a systematic approach to planning, several introductory texts discuss plan formulation (or generation) and evaluation under separate headings, the underlying concept in all these texts is that of an iterative and tightly interwoven process of plan formulation and evaluation. (35)

As outlined in Figure 5.3, this phase of the planning process commences with a filtering exercise whose purpose is to distinguish those issues that can be successfully tackled by a spatial development plan (SDP) from those whose resolution lie either beyond the region in question or which require mechanisms for change that are beyond the scope of spatial planning. The reason for making this distinction at a relatively early stage is to concentrate effort in the most effective areas and to channel proposals to the appropriate decision-makers. For example, one of the major problems facing rural areas in South Africa is that of population pressure on the land - a situation caused in large degree by the South African government's policy of influx control to cities. Whereas the impact of this policy will be felt in most regions throughout South Africa, the solution does not lie at regional level; but requires policy changes at national level. Our contention here is that the planning process should identify this restraint on urbanization as a problem affecting the specific region in a number of ways and to refer it through the relevant channels to the level of decision-making at which the necessary changes can be made. No amount of debate or resolutions on the part of regional scale decision-makers will affect this particular policy. What might well be achieved within the region is some ameliorative action to relieve the adverse conditions of overpopulated rural areas whose population densities are likely to remain high long after any future changes in policy at national level (in this case regarding influx control to cities) occur.

As shown in Figure 5.3, issues that are essentially policy-oriented or which require action at supra-regional levels follow one route, while intra-regional and spatial issues follow another. However, this is not to imply that these issues are divorced - far from it; they are interrelated but call for decisions and actions from substantially different decision-making forums. Since the overall focus of our attention is a spatial development and planning, subsequent sections of this chapter will tend to emphasise the spatial aspects of regional development, commenting where appropriate on necessary policy changes.

Having identified the problems and issues for attention in the spatial development plan, the next step is to draw up a set of goals and objectives and then to formulate and evaluate a spatial plan. An integrated methodology designed for this purpose is shown diagrammatically in Figure 5.5 and described in more detail in Appendix V. Suffice to emphasise here that an integral part of any spatial plan involves more than outlining the proposed spatial structure of the region but requires more detailed translation of these principles into firm programmes and projects for implementation. This will be discussed in more detail under implementation.

One of the most suitable techniques for an integrated approach to plan formulation and evaluation is known as analysis of inter-connected decision areas (AIDA). Entirely consistent with the underlying principles of a strategic approach to planning, it facilitates the exploration of various sequences of policy options, examining continuously compatibility both within and between decision areas. It has been used in urban and regional planners in both the United Kingdom and the Netherlands (36), and although it has not been applied to any degree in less developed contexts, it offers a useful and flexible method of testing the impact of policy decisions across a range of sectors and scales, thereby serving the requirements that regional plans represent the outcome of merger of both vertical and horizontal elements. The AIDA technique is outlined in simplified form in Appendix VI.

A three-tier system of evaluation is proposed, the underlying principle being that plan evaluation at regional scale should operate in a multi-dimensional way. It has been argued earlier that the criteria for a development plan include :

- targets whereby progress can be measured in regard to unemployment, poverty and inequality;
- internal consistency, feasibility and optimality
- clear statements about what is to be done within a specified period of time, how it is to be done, who is to do it, how much it will cost, and how it is to be financed.<sup>(37)</sup>

These refer to the characteristics of the plan as a whole, but it is equally necessary to set up criteria for evaluating the contents or substance of the plan. The method proposed here is one of screening the proposals, projects and programmes through a multi-faceted net in order to assess the extent to which they meet different needs of the region. For example, certain aspects of the plan should respond to extra-regional objectives; others to the overall implications of certain scenarios; others to differing needs expressed at regional, locality and household scales; others to specific problems or opportunities; and others to administrative and implementation capacity. Table 5.2 indicates how this can be tackled in practice while in Chapter 12 its adopted application will be demonstrated in the case study.

The more commonly recommended plan evaluation techniques such as planning balance sheet or goals achievement matrix are based on sound principles, yet testing of them in a teaching studio (which often allows more experimentation than the outside professional environment) showed them to be highly sensitive to weighting (or relating to monetary values) of various factors, while the weighting process itself was fraught with difficult assumptions. In addition, the assigning of numbers or scores to alternative plans had the effect of endorsing one alternative in its entirety at the expense of the others, which may have included many positive attributes which were missing in the winning alternative; while at the same time, when the final scores were clustered over a fairly small range, it became difficult to interpret the differences. It is acknowledged that adaptations of the two techniques in question have been made to cope with contextual exigencies. However, in a practical situation, reliance on highly quantitative techniques for the purposes of overall plan evaluation tends to transfer responsibility from the planner to the technique rather than retaining a more healthy situation in which the technique remains the planner's tool and the planner's judgement, coupled with his detailed knowledge and understanding of the situation, remain the basis for recommendations.

Table 5.2 Criteria for assessing components of a spatial plan

CRITERIA	REMARKS
1. Spatial balance	According to the spatial framework and performance standards set out in SDP
2. Social balance	Identify which socio-economic groups will benefit or suffer disbenefits
3. Scale of impact	Regional, or towns, or rural (local)
4. Ecological balance	Improvement of ecology and existing land use
5. Nature of project	Productive or self-sustaining (encourage projects with greatest generative potential) Social services or people (expose benefits to widest number of people) Infrastructure (in support of specific "productive" or "social" projects) Administration (encourage projects that improve implementation capacity)
6. Development goals	Development Strategy (20 years); Development Priorities (5 years); Departmental Plans Regional priorities
7. Viability	Technical viability Organisational capacity Viable in terms of either social, economic or financial criteria (depending on the project)
8. Complementarity	Extent to which the project complements other projects.

A factor to be borne in mind for the particular context with which we are concerned here (namely, the regional scale in the peripheral areas of South Africa), is that decision-makers and even members of technical steering committees are generally far less experienced in planning matters and techniques than the planners (be they departmental officials or consultants). And under these circumstances they rely very heavily on the planner's recommendations (far more so than, for example, in the case of a planning report to a large metropolitan authority). It is, therefore, an important responsibility of the planner to avoid blinding the client (or committee) with technical or quantitative results that take on the appearance of incontrovertible truths. Even though the planner himself may be aware of the assumptions upon which such findings are based, the reservations or implications will often not be understood by his client. It is for these reasons that a more open, consultation-directed system of evaluation is proposed for assessing the substance of a spatial development plan.

At a third level, evaluation of individual projects call for more quantitative and cost-related assessments. The technical and financial feasibility of specific projects require evaluation in terms of financial and economic (cost-benefit) analysis.

#### Phase V Implementation and monitoring

Although most diagrams of the planning process show explicit phases of implementation and monitoring, these are often neglected in practice. It is our contention that the reason is partly that planners have tended to treat the implementation of their plans as the responsibility of some administrative department or agency within their organisation; and this tendency has become entrenched in South Africa by the division of work in this regard by public sector authorities responsible for planning and implementation.<sup>(38)</sup> The outcome, for a wide variety of reasons, is that planners are seldom actively involved in the implementation of the plans they have drawn up. This situation applies with even greater validity at regional scale where implementation takes place over a long period.

A second factor is contextual: needs of a regional planning or development authority in one of the peripheral areas of South Africa are greater than, and different to, those of longer established and more sophisticated urban

authorities. In general the regional authority lacks the staff to carry out many of the functions usually undertaken departmentally. Accordingly the consultant planner is called upon to carry out work which, over the last few decades in South Africa, has been regarded as the sole domain of the public authority itself. It is our contention that this is a satisfactory situation for it enables the planner to remain involved with the implementation of the plans (itself a valuable learning experience) and it provides an opportunity for him to train departmental staff along the way.

Monitoring of plans is seldom undertaken at the regional scale, partly due to lack of administrative capacity or the limited role of the planning agency. However, individual projects are increasingly being monitored and evaluated by financial institutions under whose aegis they fall (39). One of the main reasons for monitoring both the overall plan and projects within it, relate to the nature of the plan, which is merely a means or a vehicle through which development is to be achieved in the region. As such it represents proposals that were considered optimum at the time of its preparation. However, its validity will alter differentially with time in response to changes in the extra-regional developmental environment, unexpected changes in the region itself; and experience gained from implementation of earlier phases of the plan. For these reasons a regional scale, spatial development plan needs to be monitored on a continuous basis in order both to assess the effects of various changes and to respond to those changes by adjusting components within the plan. This may result in projects being advanced or delayed in the implementation schedule, or switching the agency responsible for implementation. Clearly there is a need for the planner to remain involved in this stage of the planning process.

At some point the plan as a whole will need to be updated. It would be unreasonable to stipulate a fixed time period but instead one can look to several guidelines as indicators of when major updating is required in contrast to continuous adjustments. Once the statistical base becomes outdated a major revision is necessary; but updating is also called for once key projects or programmes have been implemented and their impact can be assessed. Substantial changes in the organisation of planning or in the supra-regional developmental context (such as a change of major development financing institution or a change of government to one with substantially different goals) also necessitate revision of the plan as a whole.

In practice the implementation and monitoring processes should follow one another and display an iterative relationship as shown in Figure 5.3. Implementation itself requires a number of steps. In the first place, the overall plan proposals need to be translated into tangible and implementable projects, programmes, or decisions to be taken. These need to be worked out in sufficient detail to either enter the project cycle (which will be discussed below) or to be carried out by specified public or private organisations.

In the second place, the decisions, projects and programmes need to be arranged into a detailed schedule for implementation indicating when each component is to start and be completed as well as the agency responsible. This is a vital step in retaining cohesion of the plan and showing both inter-departmental (horizontal) and intra-regional (horizontal and vertical) linkages. An example of this is shown in Chapters 10 and 11 in regard to the case study. Thirdly, it is necessary to set out guidelines for implementation to indicate to the particular agency responsible for carrying out part of the plan how that aspect fits in to other components and to indicate the way in which it should be implemented in order to achieve objectives that run beyond that element of the plan. For example, the guidelines for implementing an urban upgrading project may incorporate the on-job training of supervisors in excess of the number required for that particular project in order to meet the wider demand for trained staff to handle similar projects in other urban areas at a later stage. Further examples are discussed in the case study (Chapter 10).

Fourthly, the implementation stage calls for the setting up of criteria in terms of which overall priorities may be determined. It may be stated, quite correctly, that all projects in the plan are high priorities for one department/agency/sector or another. However, the realities of implementation demand further choices among these to determine which should be undertaken first or, in situations of lack of administrative capacity or shortages of finance, which projects will be most beneficial in terms of overall objectives. An example of how this can be done is shown in Chapter 11.

Fifthly, all projects and programmes require financing, which makes the requirements of financial institutions an important consideration in plan implementation. Certain aspects of the plan will be financed through departmental budgets and these projects need to be prepared in such a manner as

to facilitate their progress through the system. Other projects require funding by outside organisations such as the Development Bank of Southern Africa (DBSA), each of which has its own project cycle. The DBSA project cycle, which has been moulded on that of the World Bank, provides a typical example of the requirements of the process by which financial aid for projects can be obtained (see Appendix VI).

In practice a systematic approach to monitoring requires an organisational structure closely linked to the main planning agency with a network of contacts throughout the administration and to all levels of implementation. Its activities need to be viewed as a full-time function; and its methodology will vary between monitoring progress in terms of targets or statistical indicators and undertaking ad hoc evaluations of specific projects or programmes. In addition the monitoring agency needs to remain in close contact with on-going planning and development decision-making at all levels in the region in order to assess each plan in its wider context.

### Conclusions

In many ways the planner needs to emulate an artist. He requires technical mastery of a battery of techniques ranging from interviewing rural households, to setting up complex information systems, to assisting in negotiations with financial institutions, coupled with an appreciation not only of how and when to use them (and in whatever combination are appropriate) but more particularly, of how to interpret the situation at regional, local and household levels. The regional planner depends on empathy with his subject - on having a sensitivity as to how it will respond to one or other stimulus. At the same time he bears a heavy responsibility for his decisions, once committed to a plan (in the same way as the artist's impressions to his canvas), tend to become immutable (despite the call for monitoring and updating of plans) and will have an impact on people's lives and opportunities reaching beyond the generation of either planner or first time users (recipients) of the resultant development (or lack thereof).

Notes and References

1. The term "model" is used as a representation of our understanding of the corresponding real world situation, which, in this case, is a process or system of planning. Models are idealized in the sense that they are less complicated than reality and, therefore, easier to use for research purposes. The simplicity of models (compared with the actual situation) lies in the fact that only the relevant properties of the real world are represented. See Rief B (1973) Models in Urban and Regional Planning, pp. 49 - 60.
2. Arthur Anderson & Co. (1985) Guide to public sector strategic planning.
3. Ibid.
4. Ibid.
5. See for example, Bather N J, Williams C M and Sutton A (1976) "Strategic Choice in Practice" Reading University Geographical Papers No. 50; Dekker F et al (1978) "A Multi-level application of strategic choice at sub-regional level" Town Planning Review Vol. 49(2) pp. 149 - 162 Hicking A (1978) "AIDA and levels of choice in Structure Plans" Town Planning Review Vol. 49 (4) pp. 459-475.
6. Robins D J L and Robinson P S (1981) op cit.
7. Van der Ross R E and W H Thomas (1985) "Marketing private enterprise. Towards a 'social market' economy." Economic Monitor, Indicator South Africa, Vol. 3 No. 1 pp. 13 - 16.
8. Robins and Robinson (1981) op cit p. 94.
9. Ibid.
10. Botswana, (1978) op cit p. 46, quoted above pp. 62 - 63.
11. Friend J K and Jessop N (1969) Local government and Strategic Choice, pp. 101 - 114.
12. Stewart J D (1973) "Management - local - environment - urban - government. A few words considered." Inaugural lecture, University of Birmingham.
13. The application of scenario writing for spatial planning is discussed in more detail below, pp. 126 - 7 and in Appendix I.
14. See above pp. 12 - 14 and 102.
15. In Transkei, for example, a regulation dating back many decades prohibits the establishment of a general dealer's shop within 8 kms (5 miles) of another in rural areas.
16. Barraclough G (1964) An introduction to Contemporary History, p. 16; also Carr E H (1961) What is History?

17. Chadwick G (1971) A systems view of planning, pp. 183 - 184; also Viljoen F J (1982) "Economic development within Southern Africa - a delphi study." Development Studies Southern Africa Vol. 4 No. 4 pp. 403-423; and Vol. 5 No. 1 pp. 28 - 66.
18. See, for example Boisier S (1968) op cit, pp. 223 - 290; Auerbach D, Von Boguslawski M, Kaufmann R and Seelinger U (1980) Regional Plans of Developing Countries. An annotated bibliography. Thorrington-Smith, Rosenberg and McCrystal (1978) "Towards a plan for KwaZulu"; Claassen P E and Page D (1978) "Ontwikkeling van Kavango" Instituut vir Beplanningsnavorsing, Universiteit van Stellenbosch, Page D (1981) Die Teorie en Toepassing van Streeksbeplanning; Makhateni Planning Committee (1985) "An overview of the development potential of Tongaland".
19. Thorrington-Smith et al (1978) op cit.
20. Makhateni Planning Committee (1985) op cit.
21. Klaassen and Paelinck (1974) op cit pp. 13 - 18.
22. Generally speaking, the only reliable sources of data on occupancy rates are field reports, often based on anthropological research or specifically designed household surveys. An unusual source of occupancy rates came to light in a recent study in KwaZulu, where a locally based health inspector had compiled records of the location of each homestead, the number of huts it contained and the number of inhabitants for two entire districts (Ingwavuma and Ubombo) as part of a malaria control exercise.
23. This technique, an adaption of sieve mapping, has been developed and used to good effect in a number of regional studies in Zimbabwe and South Africa by P Hawkins. See, for example, Hawkins Associates (1980) op cit, Chapter 7.
24. This is discussed at some length in Cripps E L (1969) "A management system for Planning" Journal of the Town Planning Institute Vol. 55, No. 5 pp. 187 - 195; Lee C (1971) "Data banks for planning" Planning Outlook Vol. 10 pp. 24 - 35; and Department of the Environment (1972) General Information Systems for Planning.
25. For example, Moser and Kalton (1971) Survey methods in social investigation; also Hoinville G, Jowell R and Associates (1977) Social Research Practice.
26. Pilot surveys were conducted in Transkei during preparation of the Hawkins Associates (1980) report; as part of a student project in the Department of Town and Regional Planning, University of Natal, Durban in 1981; and early in 1982 as part of the north-east region study. See Osmond Lange Inc. (1982) op cit.
27. Du Toit P J D (1981) "Planning regional development : a framework for research, programming and implementation." Development Studies Southern Africa Vol. 3 No. 4 pp. 346-368.

28. In practice one often has to make a trade off between sample size and confidence limits. As a general rule, sample size is determined according to the formula  $N = P.Q. (Z/D)^2$ , where  $N$  = sample size,  $P$  = percentage who responded in a particular way;  $Q = 100\% - P$ ;  $Z = Z$  score; and  $D =$  tolerable margin. Sutcliffe and Wellings (1985) p. 44.
29. It is interesting to note that the results obtained from surveys at six rural villages in north-east Transkei (with sample sizes, ranging from 25 to 40) compared well with a similar survey using a much larger sample (255) but restricted to three adjacent localities. See Osmond Lange Inc. (1982) op cit, chapter 5 and May J C (1984) op cit, chapter 1 respectively.
30. It is acknowledged that some of the results obtained from questionnaire surveys are not entirely reliable (especially data on incomes). However, there are ways of checking consistency and validity of responses and the regional planner will need to use these methods in conjunction with other information available at micro-scale to assess the results of his household survey. In the final analysis the planner will be better placed using carefully evaluated data from a specifically conducted household survey (with all its imperfections) than by using published, aggregate data.
31. Arthur Anderson & Co. (1985) op cit p. 1.
32. Notably the Europe 2000 study. See Appendix I.
33. To the best of the author's knowledge this approach has only been applied formally in two recent cases in Southern Africa. One was during an in-house planning exercise in Botswana (1978) and the other as part of the formulation of Transkei's Development Strategy (1980-2000), described in Robins and Robinson (1981) op cit.
34. Vickers G (1974) "Projections, predictions, models and policies" The Planner Vol. 60 No. 4, pp. 636-640.
35. See for example Mc Loughlin J B (1969) Urban and Regional Planning. A systems approach; Chadwick G (1971) A systems view of planning. Towards a theory of the urban and regional planning process; Roberts M (1974) An introduction to Town Planning techniques.
36. See reference 5 above.
37. See Chapter 3, pp. 46 - 50.
38. For example, public authorities in South Africa (such as the former departments of Community Development, Co-operation and Development) have frequently commissioned one firm of planners to draw up a plan then handed it on to another firm, or organisation, or branch in their department to implement without fully involving in original planners.
39. The Development Bank of Southern Africa is a prime example.

PART II - A CASE STUDY OF NORTH-EAST TRANSKEI

We now turn to the application of the planning doctrine built up in the course of the previous five chapters, and in particular of the proposed approach to spatial planning in a peripheral region of Southern Africa. The purpose of this chapter is to establish the context for development and planning (Phase I in Figure 5.3).

A strategic analysis of Transkei sets the context for our case study of its north-eastern region. In the first part of this chapter we shall identify the pivotal issues which either constrain or provide opportunities for development in Transkei. Against this background, its development goals, long-term strategy and short-term plans will be outlined and assessed. Thereafter attention will focus on the North East (NE) region.

#### Strategic focus

This section highlights the salient features of the present state of socio-economic development in Transkei, drawing on key statistical indicators to illustrate recent trends and patterns. The area now known as Transkei was occupied by the Xhosa-speaking descendants of the Southern Bantu by the beginning of the fifteenth century. In 1877 the territory was incorporated into the Cape Colony and subsequently became part of South Africa in 1910. It was granted internal self government by South Africa in 1963 and became independent in 1976 under South African law. Transkei's independence is diluted in practical terms both by its peripheral economic relationship to the South African core; and by its historical role as a source of migrant labour and a home for the families of those workers. As there is no reason for this dependent relationship to change over the next two decades, it emerges as the over-riding structural constraint on development within Transkei and, more than any other factor, influences the arena in which spatial planning can operate effectively. Within the wider South African context, Transkei is thus situated in the outer periphery of the national space.<sup>(1)</sup>

In constitutional terms, Transkei is a republic with "a nominal State President, an executive cabinet, a legislative assembly and an independent judiciary. Its parliament has 150 seats half of which are elected while the other half consists of appointed chiefs. At the last election, in September 1981, the ruling party (the Transkei National Independence Party) won all but one seat in a low poll estimated at only 31 percent."<sup>(2)</sup>

Transkei has a dual administrative system. The civil service is organised into a number of departments, many of which are represented in the 28 magisterial districts. In parallel with this structure is the tribal system comprising nine regional and various tribal authorities which control development at the local or village level."<sup>(3)</sup> The organisational and implementation capacity of this system is severely limited on account of a shortage of trained manpower; lack of experience in day to day administration; conflicting lines of authority and overlapping areas of responsibility; a widespread lack of motivation; and the absence of a strong tradition of accountability.<sup>(4)</sup>

Transkei's economy is small and of a highly dependent nature. The 1982 gross domestic product (GDP) was estimated at R 894 million of which 30,4 percent was contributed by the subsistence component. The extent of dependency of the economy is further emphasised by :

- the small contribution of modern sector manufacturing (11,2 percent);
- the dominance of community, social and personal services (41,6 percent of the modern sector);
- the GDP's share of gross national produce (GNP) falling from 75 percent to 44 percent; between 1970 and 1982; and
- in spite of rapid growth in per capita incomes since 1970 the 1982 GNP was only R276 making it one of the ten poorest countries in the world.<sup>(5)</sup>

Transkei's de jure population of 3,27 million (in 1983) is expected to grow to 5,27 million by the turn of the century, at a rate of 2,6 percent per annum. The settlement pattern is essentially rural while the only towns of any size are the capital, Umtata with a estimated population of 70 000 in 1984, Butterworth with 60 000, Ezibeleni and Ilinge (originally resettlement sites)<sup>(6)</sup> with 20 000 and 17 000 respectively. The remaining 26 small towns (which are designated municipal areas) have a combined population of 78 000. Thus Transkei has an population of 245 000 living in defined urban areas and an additional estimated 250 000 persons in the peri-urban periphery around Umtata and Butterworth.<sup>(7)</sup> Thus no more than 15 percent of the population is urbanized.

Statistics quoted in the Transkei Profile set the 1982 labour force at one million of whom 41,3 percent worked as migrants or commuters to the South African labour market, 19,2 percent held formal jobs locally; 6,4 percent were engaged in informal sector activities, 14,7 percent in subsistence agriculture, leaving a residual of 18,4 percent unemployed. Within Transkei, government is

the largest employer (35,7 percent) followed by domestic service (15,3 percent). As far as external migrants are concerned, mining is the most important sector employing 55,6 percent of males, while domestic service (with the lowest average earnings of only R822 per annum) is the largest employer of females (47,5 percent). On average migrants each earned R 2 523 in 1982.(8)

The editor of this journal remarked that "Transkei's limited domestic resources are perhaps nowhere more clearly revealed than in the structure of her labour force" and further, that "a disturbing feature of recent development trends is that despite an annual increase in the labour force of about 4%, employment in the key migrant sector seems to have stabilised, and future growth is likely to be confined to replacement of existing workers who retire."(9)

Household incomes are low and unequally distributed. Although urban incomes (median range R3001 - 4000 p.a.) are higher than those in rural areas (median range R801 - 1000 p.a.), an estimated 43 percent of urban and 77 percent of rural households have incomes below the household subsistence level.(10) Incomes are highly concentrated as indicated by the Gini index of 0,58. By way of illustration, the top 20 percent of households earned almost 60 percent of total incomes earned, while the poorest 20% earned a mere 2%.(11) It is also significant that whereas pensions were a major component of household income in the poorest income groups, the average value of a pension (R435 in 1982) was only about 15 percent of the household subsistence level.(12)

The sources of income for rural households, reveal a high dependence on wages (48,2 percent) and remittances (30,3 percent) as sources of cash.(13) Rural poverty is exacerbated by a number of factors including

- restrictions on the amount of land available per household; this has been reduced by a combination of laws relating to rural land, population influx and settlement control;
- insecure urban tenure which results in many households retaining their rural land base as places of retirement rather than for agricultural purposes;
- land pressure arising from overstocking (Transkei was 28 percent overstocked in 1982) even though at least half of the rural households have no cattle.(14)

Water is probably the most critical resource for the maintenance of basic health standards, vegetable and livestock production, as well as rural construction; yet most of the rural households obtain water from unprotected sources such as dams (22 percent) and springs (52 percent).<sup>(15)</sup> While surveys in a number of areas have revealed an alarming daily per capita water consumption in the order of only 10 litres.<sup>(16)</sup> A recent evaluation of access to water revealed that :

- only 17 percent of households had an adequate water supply defined as more than 20 litres per capita available at a distance of not more than 750 m and at a slope not exceeding 6 percent.
- More than half were in the needy category with 10-20 litres per capita available daily at a distance of between 750 and 1 000m on a slope of 6-12 percent.
- 20 percent were critically needy in terms of access defined as a distance of more than 1 km and a slope of more than 12 percent and
- 19 percent were critically needy in terms of supply defined as less than 10 litres of polluted water daily per capita.<sup>(17)</sup>

Health care services have been expanded in recent years but still need quantitative improvements as illustrated by the following statistics :

- average ratio of one clinic per 17 000 people in rural areas (the target being one per 10 000);
- 22 percent of Transkei's population live beyond reasonable walking distance (8 km) of a permanent health care centre; while
- eight of the 28 districts have less than five clinics per 100 000 persons and more than 22 percent of their population beyond 8 km of a clinic or hospital. <sup>(18)</sup>

The education system has been rapidly expanded in quantitative terms over the past ten years but currently experiences qualitative problems. In 1970 more than one third of Transkeians had received little or no education but what is even more serious is that half of those with no educational qualifications were adults.<sup>(19)</sup> In 1983 it was estimated that 75 percent of the population was illiterate and that the average length of schooling among adults ranged from three years in rural areas to seven in towns.<sup>(20)</sup> A mere 2,4 percent of school leavers obtain senior certificates or matric exemption, while 55 percent leave illiterate and 20 percent semi-literate. Even those with a standard 10 are likely to wait 2 - 3 years before getting a first job.<sup>(21)</sup>

However there are some positive trends: between 1970 and 1980 primary and secondary school enrolment increased by 70 percent; the proportion of school-aged population who were enrolled rose from 67 to 74 percent; and the proportion of pupils in secondary schools increased from 5 to 21 percent.(22)

Located on the south-eastern coast of Southern Africa, Transkei covers some 45 000 square km. in three separate areas - a large consolidated part and two smaller districts. See Figure 6.1. It is bounded by the Indian ocean in the south-east, Lesotho to the north and South Africa in the north-east and south-west, the country comprises three relief regions: a coastal plain of about 50 km. wide; the interior plateaux; and the highlands of the Drakensberg in the north-west. It has a broken topography with 60 percent of the land having slopes greater than 1 in 6, and only 10 percent more level than 1 in 20. The average rainfall is 815 mm ranging from 500mm in the highland region to 1 400 mm along the coast. Only one tenth of the country receives less than 750 mm per annum.

The most significant of Transkei's physical features are its spectacular, unspoiled coastline and its rivers. The country is dissected by seven large rivers flowing eastwards from the mountains to the coast, cutting deep valleys and resulting in a very broken landscape. It has no mineral resources of any substantial economic value.(23)

The space economy is characterised by a concentration of development in Umtata and Butterworth and to a lesser extent in towns along the main tar roads. Away from these axes, lack of development is coupled with large and rapidly growing populations, poor road communications, low levels of per capita welfare(24) and few wage-earning job opportunities. The provision of public and private services(25) in various settlements displays an hierarchical pattern, reinforcing the picture of development concentrated in the two main towns, while the majority of the rurally based population live in conditions of extreme poverty and deprivation.

To conclude this strategic analysis we need to identify Transkei's relative strengths and weaknesses. Historically, it has not been viewed as an important productive area in the South African space economy. The role it has played has been largely one of providing migrant labour to the RSA and providing homes and services for the families of these workers. Transkei may thus be seen as a productive rather than as a productive space in the wider South African economy. Its dependence on the RSA, which has been discussed above, is



Figure 6.1 Transkei in relation to Southern Africa

heightened by South Africa's substantial contribution to its budget. This external dependence upon the RSA is unlikely to change in the medium or even the long term. In regard to internal factors over which Transkei has more control, its relative strengths lie in its natural resources (coastline, hydro-power potential and high-potential land for agriculture and afforestation in certain areas). It is also significant to note that some progress has been made in aspects of education and health care over the last decade in response to government policies. The government's ability to determine internal development priorities, coupled with a sizable internal demand for basic consumer goods and services probably constitute's Transkei's second relative strength. But even these limited potentials are tempered by structural constraints such as the prevailing systems of migrant labour, land tenure, and administration; attitudes to livestock as a source of wealth; limitations on the role of women in development, to mention some. Development prospects need to be understood in terms of both external and internal issues.

#### Development goals and strategy

In 1978 a Development Strategy was drawn up covering the period 1980 - 2000. It outlined the long term goal as that of developing Transkei's economy so as to result in employment and incomes for the entire labour force.(26) In working out the strategy, assumptions were made "not of what will or is likely to happen but of what would need to happen in order to achieve the objective of employment and incomes for all."(27). The approach to planning was, therefore, in accord with Seers' view that a development plan should set out the steps to be taken to move from an existing situation to a desired future state.(28) In this way, the sectoral employment and output targets of the strategy indicated the general direction of policy decisions that would need to be taken to give effect to the strategy.

The point of departure for the development planners was the expected doubling of Transkei's population by the turn of the century. This implied that there would be twice as many people in jobs, or looking for jobs, as there were in 1978. Most of the people lived in rural areas and this was likely to remain the case for the next decade at least. The country's economy was based on agriculture yet output met only one third of the resident population's food requirements. This situation posed fundamental questions for development planners: how would the food requirements of the population be met ? and where would the labour force find employment ?

The Development Strategy (1980 - 2000) outlined what would need to happen in order to achieve the objectives of meeting basic needs and of providing employment and incomes for all. It set general policy directions that would need to be taken and targets to be met in order to give effect to the strategy.

In the Strategy it was noted that incomes in Transkei and employment in non-agricultural occupations were sustained, for the greater part, by the remittances of migrant workers in the mines and elsewhere in South Africa as well as by public transfers of one kind and another from the RSA. Agricultural output only provided one-third of the food requirements of the resident population and contributed virtually nothing to the cash earnings of the agricultural labour force within Transkei. Apart from employment in the construction boom associated with independence in 1976, the rest of the labour force in Transkei was either employed in various service industries, (half of which was government service), or looking for jobs in paid employment in South Africa.(29)

By 2000 the labour force was expected to have increased to about 1,2 million men and 0,4 million women. In order to create employment opportunities for this work force in the space of twenty years and to produce either the material goods and services required by a population of five million people, or the export earnings to pay for these goods, "a complete restructuring of the economy" rather than changes to the existing structures, was required.(30)

The Development Strategy envisaged agriculture as the cornerstone of this restructured economy, arguing that Transkei could on balance, feed its population by the turn of the century. "Allowing for no significant improvement in the consumption levels of the rural population as measured in cash terms, but for a much better pattern of consumption, particularly as far as food is concerned, the agricultural output which it would appear to be feasible to attain by the end of the century would then be able to provide a living for one third of the population."(31)

Industry would need to be the driving force in restructuring the economy. "Transkei will have to meet much more of its own needs, in manufacturing as well as foodstuffs, if it is to have the material goods which are appropriate, as well as reasonably priced, for those needs."(32) By 2000, some 15 percent of the labour force would need to be working in the manufacturing sector in order for the output of the income generating sectors of the economy to be

sufficient to assure employment opportunities throughout the economy; and for that income to be reasonably equitably distributed throughout the economy. It was envisaged that about half of this employment might be in industries mainly supplying the domestic market and half in comparatively labour intensive industries or processes supplying mostly the Southern African and other export markets further afield.(33)

Although Transkei was not a mineral-rich country, it had certain mineral resources which could provide a basis for labour intensive industries. Tourism was another sector with potential but the employment effect would be modest in the context of Transkei's needs. The major thrust of tourism development was to enhance economic development in Transkei and not simply to accrue benefits to mainly foreign investors.(34)

Waterpower was another resource capable of very large-scale development in Transkei. Although it was noted interesting from a revenue point of view, water based projects would not directly create much employment, except in the construction stages.(35) But exploitation of this resource would be a stimulus for industrial activities and for other sectors of the economy and could facilitate the widespread development of small scale manufacturing enterprises.

The Strategy allowed for 250 000 jobs in the income-generating sectors by 2000. Therefore, together with the agricultural output considered feasible in twenty years' time, and the income from the remittances of migrant workers, this would create demands from those sectors for a further 600 000 jobs in construction, transport, communications, commerce and other services, at levels of income no lower (at constant prices) than those prevailing in 1978 for the mass of the labour force.(36) The male labour force (and particularly the younger men) would need to continue to look to South Africa for employment opportunities. The strategy envisaged 400 000 men and 25 000 women working as migrants in South Africa at the end of the century. It was assumed that migrant workers would remit half their earnings - a substantially higher proportion than was the case in the 1970s. Table 6.1 shows the intended relationship between output and employment in various sectors.

Table 6.1 Transkei's Development Strategy: Output and Employment (1975 - 2000)

Sector	1975			2000		
	GDP R'million	Employment '000	Productivity R	GPD <sup>1</sup> R'million	Employment '000	Productivity R
Agriculture				135	542	250
Sugar and tea processing	91,2	350	250	15	2	7 500
Forestry and sawmilling				20	30	670
Fishing				1,5	0,5	3 000
Mining and quarrying	0,1	1	170	37,5	30	1 250
Manufacturing :	7,0	8	865			
for domestic market				100	100	1 000
for export markets				100	100	1 000
Tourism	-	1	-	20	20	1 000
INCOME GENERATING SECTORS IN TRANSKEI <sup>2</sup>						
Total	98	360	270	430	825	520
Excl. agriculture, forestry & fishing	7	10	800	260	250	1 030
Electricity and water	0,7	1	600	100	10	10 000
Construction	5,7	4	1 470	100	100	1 000
Transport, storage and communications	8,1	2	3 860	75	75	1 000
INFRASTRUCTURE <sup>2</sup>	14	7	2 025	275	185	1 490
Commerce	20,2	8	2 600	87,5	175	500
Banking	7,3		16 550			
Community, social and personal services	30,7	52	860	87,5	175	500
General government	22,9			65	65	1 000
SERVICES <sup>2</sup>	81	70	1 155	240	415	580
UNEMPLOYED		...			50	
TOTAL INSIDE TRANSKEI	193	437	416	945	1 475	640
Remittance of Immigrants	75			320		
AREA DISPOSABLE INCOME	268 <sup>3</sup>			1 265		
Migrant workers <sup>4</sup>	380 <sup>5</sup>	360	1 050	638 <sup>5</sup>	425	1 500
TOTAL	573 <sup>6</sup>	797	719	1 583 <sup>6</sup>	1 900	833

## Notes:

1. Gross domestic product excluding the profits of foreign investors and loans from abroad.
2. Sub-total rounded off.
3. Includes the profits of foreign investors and interest on loans from abroad.
4. Includes commuters.
5. Earnings of migrants and commuters.
6. Gross national income.

The Development Strategy concluded that "restructuring of the economy, which will need to take place if the five million people of Transkei by the end of the century are to have enough to live on and be able to build a better economic future, necessarily implies far reaching changes in the social structure as well.(37) The men of Transkei presently looked to South Africa for paid employment and to their land and cattle, and their children, for security. This precluded any significant increase in agricultural productivity which indeed, in spite of considerable government efforts, had not taken place. The existing economic structure was wholly unsatisfactory in meeting the people's most basic physical needs, in particular food and water, and with regard to the fulfilment of personal, family and social lives. The question was not "whether this economic structure, and the social structure that has become encrusted around it, should change but in which way it should."(38) A continuation of almost complete dependence on selling labour to South Africa to meet basic consumption needs and on the RSA for budget support to pay for the costs of the social services and the administration would not be able to sustain existing levels of consumption and current levels of public services because of the rate at which the population was increasing. Unless there was a transformation of the economy, and the social system of which it is part "the future can only hold increasing impoverishment and more and more evident unemployment." (39)

This strategy, which was endorsed by the Transkei cabinet in 1979, established the broad directions that would need to be followed, and identified the main changes that would need to be effected if Transkei was to provide food and jobs for its population by the turn of the century. It is thus an important component in the overall context for development in the north-east region.

#### Spatial implications of the development strategy

During the preparation of the Development Strategy, explicit consideration was given to its spatial implications. In mid-1978, Transkei's newly established Technical Planning Committee appointed consultants(40) to advise on the alternative spatial strategies. At that time Transkei's economic development strategy was in a formative stage and the task involved slotting the spatial alternatives into the planning process in such a way that decision-makers could assess the strategic choices in sectoral and spatial terms at the same time. In view of several operational constraints, particularly those of time and a less than adequate data base, it was decided to adopt a variation of the strategic approach, relying heavily on alternative scenarios and their implications.

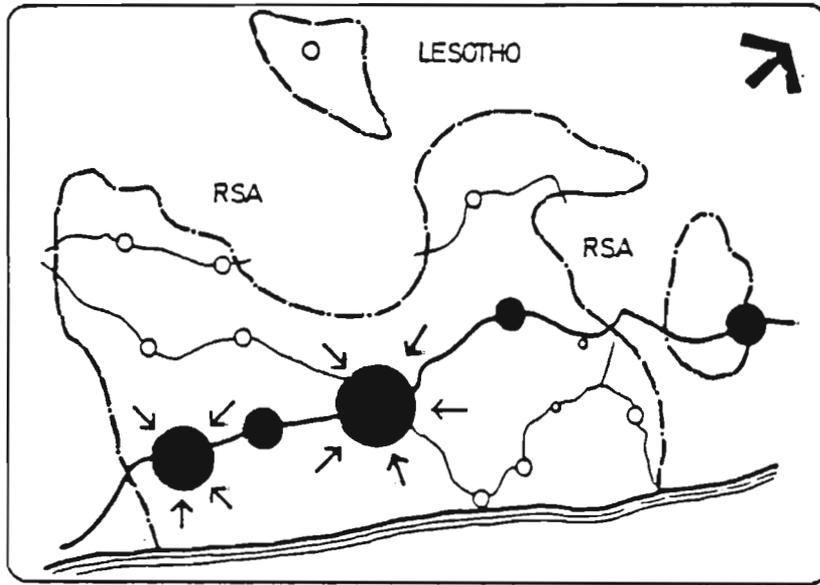
The strategic policies adopted by the government, with a view to guiding overall development, would have a strong impact on the future pattern of settlements. In order to demonstrate the spatial options which lay open, the consultants worked out three scenarios together with the consequences that seemed likely to arise in each case. These illustrate a set of feasible solutions to the inter-related questions of where the expected population was to live, and of how it was to be fed and employed; in addition they show what settlement patterns could occur as a result of policy decisions taken by government. Each scenario will be discussed in terms of policy assumptions and spatial implications.<sup>(41)</sup> Figures 6.2 to 6.7 illustrate diagrammatically the anticipated outcome of each scenario.

#### Scenario A Urbanization - industrialization (Figure 6.2)

The dominant policy is assumed to be one of encouraging industrialization and of concentrating this development in a few, large urban centres. It is assumed that industrial growth will generate wealth which can be reinvested throughout the country by both public and private sectors. In the allocation of public investment, it is assumed that priority will be given to extending the existing industrial base in Umtata and Butterworth, and possibly in a few other towns possessing good communications with the South African metropolitan centres.

Implementation of this policy would require the injection of a great deal of capital for infrastructure and industrial development. The cost of creating industrial jobs in Butterworth over recent years has been in the order of R13 000 per job.<sup>(42)</sup> It is unlikely that capital will be forthcoming in sufficient quantities to achieve the desired economies of scale envisaged by a policy of industrialization. The concentration of wage employment opportunities in an Umtata-Butterworth core will lead to a high level of internal migration to these centres from smaller towns and from the rural areas. Such migration is likely to be selective, tending to leave the old and very young in the rural areas. This trend will have severe consequences for agricultural production<sup>(43)</sup> and is likely to make Transkei largely dependent on imported basic foods and on imported skilled manpower. Furthermore, there will be little development outside the growth areas, thus sustaining and increasing the imbalance in opportunities between the urban core and rural periphery within Transkei. Benefits will accrue mainly to large enterprises based outside Transkei; and within the country to those relatively few people who are already in a position to reap the benefits of this policy. On the positive side, there is some advantage in focusing government investment and incentives in relatively few centres and in encouraging economies of scale.

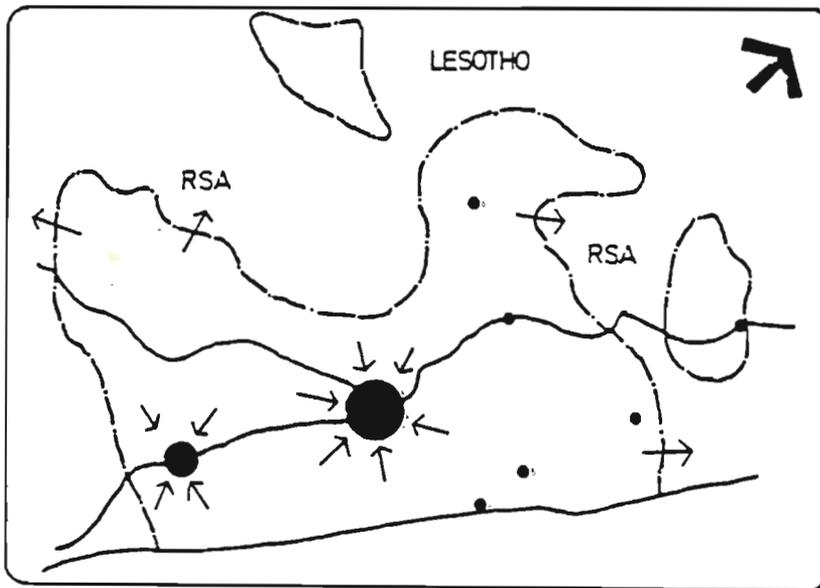
Figure 6.2 Transkei Scenario A : urbanization - industrialization



TRANSKEI  
SCENARIO A  
URBANIZATION  
INDUSTRIALIZATION

-  GROWTH CENTRES
-  OTHER SERVICE CENTRES
-  MIGRATION FLOWS
-  MAIN AXES
-  OTHER LINKS

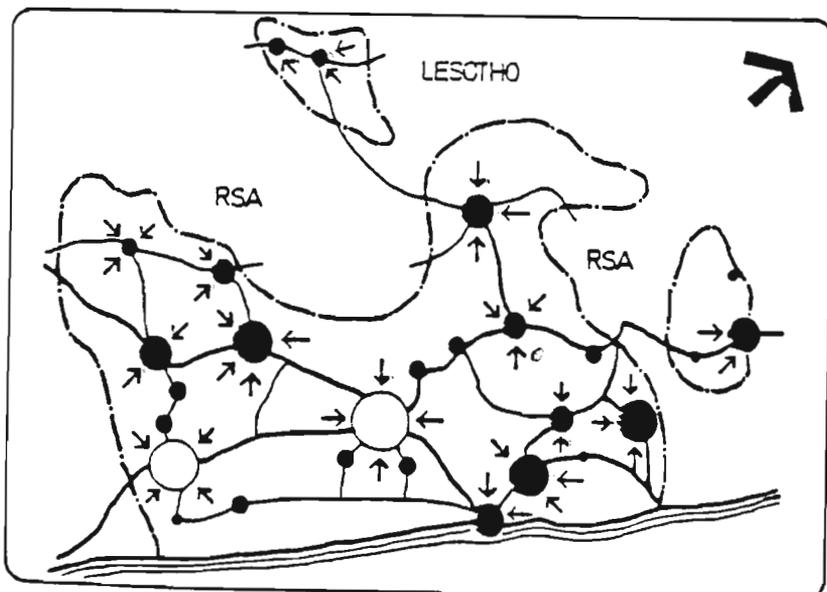
Figure 6.3 Transkei Scenario B : status quo



TRANSKEI  
SCENARIO B  
STATUS QUO

-  GROWTH CENTRE
-  OTHER SERVICE CENTRES
-  MIGRATION FLOWS
-  MAIN AXES
-  OTHER LINKS

Figure 6.4 Transkei Scenario C : integrated rural development



TRANSKEI  
SCENARIO C  
INTEGRATED RURAL  
DEVELOPMENT

-  RURAL SERVICE CENTRES
-  URBAN CENTRES
-  MIGRATION FLOWS
-  MAIN LINKS

0 50 100 kms

### Scenario B Status quo (Figure 6.3)

This scenario assumes that government does not wish to embark on an explicit long-term strategy for co-ordinated planning and that the status quo arrangements in national and regional development will continue. Most public investment is likely to be allocated on a sectoral basis with a strong bias towards urban/industrial projects and upon making Umtata an impressive capital. In this scenario rural areas and towns away from the existing main tar roads will be accorded a low priority with the possible exception of capital intensive irrigation schemes or industrial crop developments. Powerful and independent departments and para-statal are likely to establish themselves. Large-scale investment projects motivated by one or other of these agencies will achieve priority according to the relative bargaining power of each.

In that this policy does not conform to goals, it is likely to lead to divergent and unco-ordinated investment which will sustain and even exacerbate the existing imbalance in opportunities between urban and rural areas. This could well make the task of embarking on an active development policy, at some time in the future, increasingly formidable.

Incentives to private sector enterprises will be limited to the main urban centres. Coupled with increasing regional differences this could induce the outlying areas to form stronger links with neighbouring South African service centres than within Transkei and with Umtata. This policy is likely to increase Transkei's dependence on South Africa as a source of food imports as well as increasing the government's reliance on South African capital to finance its activities.

The settlement pattern under this scenario will be characterised by a high concentration of population in and around Umtata and Butterworth, with consequences similar to those of Scenario A; but to these must be added a high rate of unemployment together with inadequate basic public services and housing. Lack of opportunity in urban centres which fail to fulfil the needs of residence, and particularly of newcomers, may even stimulate emigration from the country altogether. Benefits, in the form of high personal incomes, will again be limited to a small proportion of the population.

The only apparent advantage of this policy is that government will not be required to introduce changes in the operation of the already established departmental system which is accustomed to dealing with changes as they arise.

Scenario C Integrated rural development (Figure 6.4)

The dominant policy is a more even distribution of public investment to provide equality of opportunity between rural and urban environments. It will focus on policies to promote agriculture with a view to providing sufficient food for the country and at the same time to provide employment for its labour force. Emphasis will, therefore, be on the comprehensive development of rural areas in conjunction with a hierarchy of service and marketing centres.

In spatial terms, this policy seeks to spread development from the existing string of relatively prosperous settlements along the Butterworth-Umtata-Umzimkulu road to a wider distribution based on towns that are presently lower order rural centres. In this way the policy will have the effect of strengthening districts which currently under-perform in supporting population in relation to their resources.

Emphasis in public investment is assumed to be on improving access to public facilities and delivery of public services in the rural areas; on encouraging small-scale projects to promote development in outlying towns and villages; and on offering incentives to small private enterprise activities. Emphasis in agriculture will be on the production of staple foods, and in manufacture of goods for the Transkeian market.

A decentralization of employment opportunities within Transkei is expected to slow down the rate of rural-urban migration and of Transkei-South Africa migrants, and channel it through a hierarchy of widely dispersed service centres. A large number of settlements, extending down the hierarchy to rural villages will be provided with basic public services. These include piped water, a primary school, a mobile clinic, public transport to larger settlements, local marketing and storage facilities and a community centre with electricity. Higher order settlements (including existing small towns) will support improved quality of basic services. Public investment of this order is likely to attract private investment and enterprise as well. District centres will be established in areas of high agricultural potential, thus reducing the transport costs for both agricultural products and manufactured goods for domestic markets.

An important outcome of this policy is that benefits, in the form of locally available wage paying jobs, will be widely distributed to the population as a whole. All parts of the country will derive some benefits from development. Improved opportunities in outlying towns will encourage key personnel to accept positions away from the capital.

The costs of providing the supportive infrastructure for this scenario will be heavy. Furthermore, it must be borne in mind that too thin a spread of investment is likely to result in projects not being undertaken because they require economies of scale on a higher level of investment than would be available under this policy.

#### Evaluation and refinement

Transkei's Technical Planning Committee favoured the latter scenario with its emphasis on spatial decentralization and on developing both agricultural and non-agricultural facets of the rural economy. The sectoral aspects of this scenario accorded closely with those embodied in the Development Strategy which was being prepared in parallel with the scenarios. In order to convince the political decision-makers of the urgent need to adopt an explicitly planned approach to development, the Committee requested the consultants to quantify the projections in order to demonstrate the spatial implications of two reformulated scenarios to the year 2000.<sup>(44)</sup> These were Scenario B, renamed the "Trend" projection; and Scenario C subsequently termed the "Development Strategy".

Clearly an exercise of this nature could only be tentative, and illustrative of what might occur. It was in no sense an attempt at prediction; but rather a venture into the realm of futurology, or minor broadening. What is relevant to our discussion here are the broad patterns that seemed likely to emerge from two alternative sets of strategic decisions. These are illustrated in Figures 6.5 and 6.6 which show the projected distribution of population (rural and urban) in 2000 by magisterial district, and Figure 6.7 which expands on Figure 6.6 to indicate the broad employment by sector, viz., agriculture, non-agriculture and migrant workers, with which the population of each district would be associated, assuming implementation of the development strategy.

The differences between the two are striking. The impact of the "Trend" scenario on rural areas shows that most districts (16 out of 28) away from the main towns will need to support more than double their 1975 rural population by the year 2000. The majority of these districts have low arable potential and







lack service centres of any size.<sup>(45)</sup> According to the "Development Strategy" projection these districts fare much better and would benefit from the growth of towns of sufficient size to support a considerable amount of non-agricultural employment and to offer a wide range of public and private services. This exercise in strategic planning demonstrated that there were real alternatives (i.e. "trend" as opposed to the "development strategy") and that implementation of one or the other would have significantly different effects on Transkei's future settlement pattern as well as profoundly divergent impacts on its people.<sup>(46)</sup> Strategic choices like these are important elements in understanding the context for development and planning in the north-east region.

#### Shorter term plans

Within the ambit of long-term directions set by the development strategy, Transkei's (formerly Technical, later National) Planning Committee (NPC) embarked on active planning in three fields. First was the encouragement of sectoral planning which operated mainly through departments and agencies,<sup>(47)</sup> and which culminated in successive drafts of a Five-Year Development Plan and a White Paper on Development Priorities (1983-1988),<sup>(48)</sup> the main elements of which will be discussed below in the context of their significance for the NE region. Suffice to note at this stage that the White Paper re-iterated the goals and directions of the Development Strategy and went on to explain the role to be played by each sector in contributing to Transkei's attempts to create employment. Apart from migrant labour (which contributed R700 million or half the earnings of Transkei's labour force in 1981), the key sectors were "those which generate exports - forestry, hydro-electricity and tourism - and those which replace imports - crop and livestock production, forestry, fisheries, quarrying and manufacturing of locally required consumer goods."<sup>(49)</sup> Government transfer from the RSA also had a major impact on the growth of the services sectors : general administration, education and health. Government expenditure over five years was projected for each sector and sub-sector<sup>(50)</sup> and sources of finances were identified.<sup>(51)</sup>

The spatial policy aimed at providing a stronger development framework in the form of a hierarchy of settlements ranging from Umtata, to the existing towns and an envisaged ninety rural nodes. This hierarchy and its communications network was intended to operate in support of agricultural projects

(transforming subsistence into market oriented farming); to improve the provision of basic services to the presently dispersed rural population; and to stimulate small scale industries and marketing activities.(52)

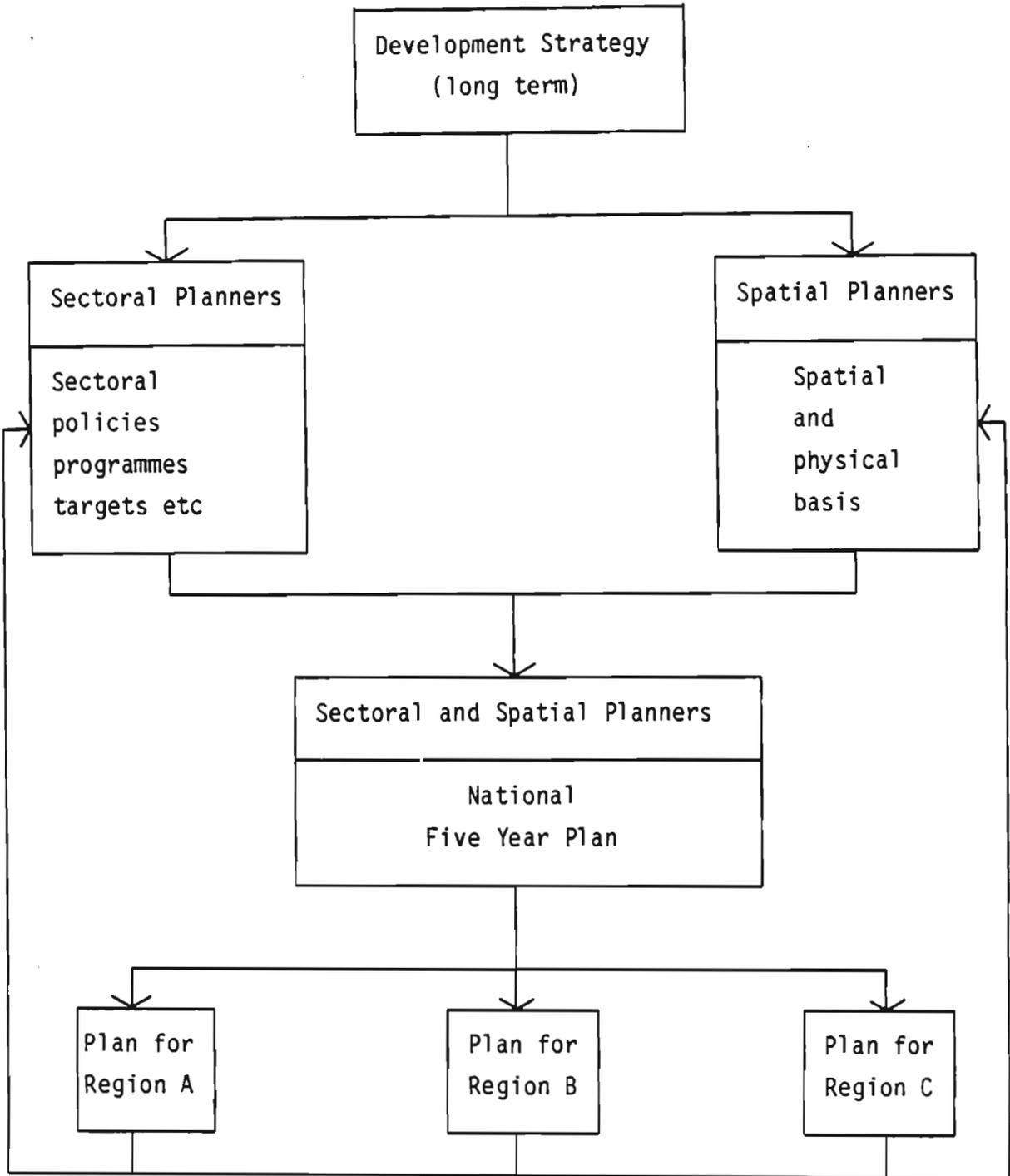
Secondly, the NPC played an increasingly important role in preparing motivations for project financing assistance, initially to the RSA department of Foreign Affairs, and since its establishment in 1984, to the Development Bank of Southern Africa as well. The third strand of the NPC's planning efforts relates to spatial planning. Figure 6.8 shows, conceptually, how the integration of sectoral and spatial planning is intended to operate at different scales in the Transkei. Between 1980 and 1983 the NPC commissioned a study to establish the physical and spatial basis for Transkei's first Five Year Plan(53); the preparation of detailed statistical bases for the planning of service centres in the north-east, north-west and south-east regions(54); followed by plans for the north-east, south-west and north-west regions.(55) Figure 6.8 shows, conceptually, how the integration of these sectoral and spatial planning initiatives is expected to operate at different scales. Clearly these three strands are closely interwoven and although the focus of our discussion remains spatial, the influence of sectoral and project planning is substantial as will become clear in the case study (chapters 10 and 11 in particular).

#### Case Study : The north-east region

One of the outputs of the spatial basis for the Five-Year Plan was the identification of four major regions. The main criteria for this delineation were a combination of regional authority boundaries, areas of homogeneous physical potential, levels of agricultural development, natural and topographical barriers to movement.(56) One of these regions, the north east (NE) attracted the attention of Umtata's decision-makers on account of its potential coupled with relative undevelopment within Transkei. It thus became an opportune case study for this thesis.

The NPC's decision to prepare a statistical base and subsequently to plan for the region as a whole, was based on the belief, statistically supported in the Hawkins report, that the NE region was relatively worse off than other regions, thus warranting priority attention.(57) From a research point of view the

Figure 6.8 Relationship between sectoral and spatial planning in Transkei



Source: Robinson (1981) Figure 1.

region constituted a most suitable area for testing out an approach to spatial development planning that has been developed progressively before and during the course of various planning studies in the area. The relevance of selecting the NE region for this case study lies in its remoteness, internal diversity, lack of access, very low levels of physical or economic development, high degree of dependency, widespread poverty and inequality and its interspersed pockets of considerable agricultural and hydro potential.(58) As such the region embraces many of the characteristics typical of the peripheral regions of Southern Africa.

The NE region is defined by the Mtata river in the south, the Indian ocean in the east and the Mtamvuna river in the north. To the west the region's boundary accords to the limits of the magisterial districts of the Qaukeni and Nyanda regional authorities which are completely contained within the NE region. For purposes of planning the separate district of Umzimkulu, itself a regional authority, was added to the NE region to bring its complement to nine magisterial districts. See Figure 6.9.

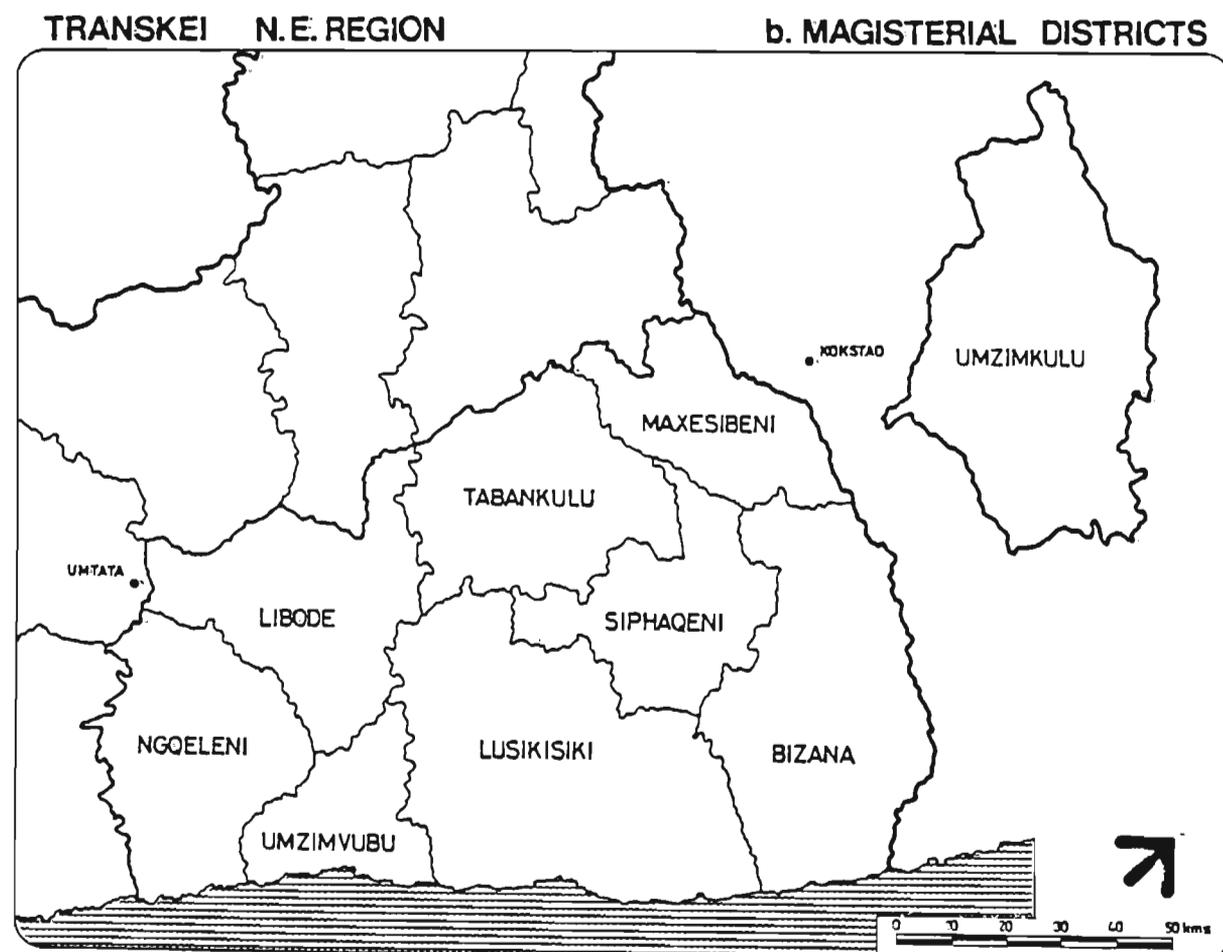
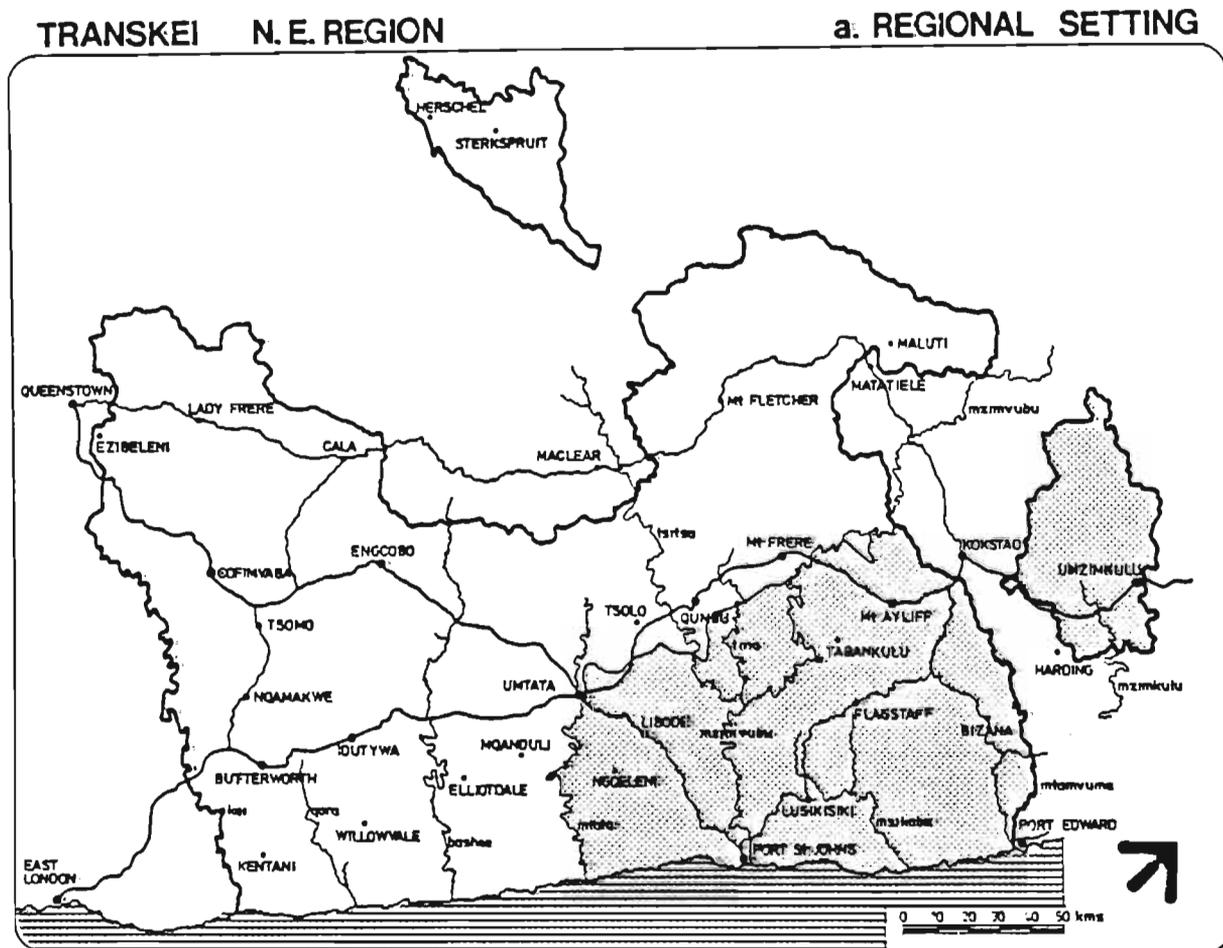
The NPC's underlying rationale in commissioning the preparation, firstly of a statistical base for planning service centres and secondly a regional plan for the NE, was based on conditions in rural Transkei generally and the NE in particular. This was explained in the introduction to the statistical base report.(59) Within the context of the Development Strategy, development of the rural areas was seen to involve three broad dimensions :

- an increase in agricultural productivity;
- the provision of such infrastructure and services as are necessary to improve the quality of life of rural people (eg domestic water provision, health centre, educational facilities etc.)
- the stimulation of non-farm, commercial and industrial activities to provide employment for those people who are in excess of the land's agricultural capacity.

These activities need to be tackled simultaneously in order to achieve integrated rural development.

However, certain aspects of the space economy inhibit this integrated approach. The rural areas are characterised by small, dispersed settlements mostly lacking adequate infrastructure, means of communication, health, education and commercial services. There are very few wage earning

Figure 6.9 Transkei North-East region



opportunities and the rural areas are consequently unable to sustain their populations. Even small rural towns do not provide an adequate range of functions, either in support of agriculture or to meet the basic needs of town and rural communities.

Beyond these towns and other small centres, the services available (both commercial and social) are of low order and tend to be widely dispersed. This means that rural people depend on the towns for all but the most elementary services. The cost, effort and time spent travelling to these often distant towns, imposed considerable hardship on rural people, particularly so where most journeys are on foot or by bus.

Thus Transkei and the NE region lack both a network of physical bases from which to deliver services, and the focal points needed to stimulate socio-economic activity and innovation. Under these circumstances government services tend to be poorly co-ordinated, dispersed, costly and often ineffective. Furthermore, because settlements are small and remote, and living conditions tend to be unsophisticated, it becomes difficult to attract staff of the desired calibre for rural positions. This lack of adequate infrastructure (physical, social, economic and administrative) means that the development effort does not reach rural communities.

The solution of these complex and interwoven problems requires more than simply increasing agricultural output or improving infrastructure. Any decisions relating to the rural areas involve several government departments and various territorial authorities. Therefore, a comprehensive planning approach is needed - one that will take into account simultaneously the economic, social, organisational and physical aspects; and that will co-ordinate national policies with local needs. It will also involve a commitment to long-term planning.

An appropriate strategy to resolve these problems and achieve the goals of improving agriculture, providing basic needs, creating job opportunities and improving quality of life would need to contain three elements :

- agricultural support (both producer and consumer services);
- infrastructure (primarily feeder roads and domestic water);
- stimulation of rural and small town industries.

These inputs require commitments in terms of land, capital and personnel - the location and spatial arrangement of which is important. Rationally, they should be located in centres that are accessible to the local population. In this way a system of rural towns, or service centres can be established, based on a hierarchy of functions. The resulting network will provide the channels for encouraging development in rural areas.

At the outset this approach requires a sound statistical base on which plans may be formulated. During recent years a number of reports and studies have been undertaken for Transkei, covering a wide range of development related topics. What has been lacking, however, is a detailed examination of the location and distribution of services and facilities in relation to population. Accordingly the NPC commissioned a study to establishing the statistical base required for planning service centres and regional development in the NE region.

As set out in the terms of reference, the scope of the work included the following stages :

- a) Data base. Updating and field checking data on the location of facilities, services and economic activities involved:
  - drawing on background material from related reports;
  - updating the data base in regard to the location of all shops, telephone and postal facilities, schools, hospitals and clinics, infrastructure, public transport and administrative services;
  - establishing a data storage system in Transkei.
- b) Official data. Sources relating to the NE region included:
  - 1980 Population census
  - 1979 Income and Expenditure survey
  - 1975 and 1981 Business census
- c) Existing Towns. Analysis of services available and effectiveness of the nine district towns in the NE region :
  - 1982 activity structure;
  - identification of constraints and potentials;
  - assessing performance of towns against similar grades of "model" service centres, drawing on research in comparable African countries.

- d) Basic needs. Examination of the extent to which rural and small town households meet their basic needs. This stage involved :
- collating results of household surveys conducted in the region since 1980;
  - conducting additional surveys;
  - comparative analysis of findings.
- e) Basic services. Examination of the way in which selected basic services were delivered, particularly in rural areas. This included surveys of rural traders and their customers, public transport operators, and administrative officials.

In this report the consultants were to concentrate on producing a lucid and readily usable statistical base. Interpretative analysis of the data would be undertaken later as part of the regional plan. Data was to be recorded in both tabular and map form, using the administrative area (or "location") as the basic spatial unit. Overall, the main objectives of the study were firstly, to relate the distribution of services and facilities to the distribution of population; and secondly, to draw up a profile of the day to day living conditions and priority needs of rural households.(60)

The study commenced in February 1982 with field surveys being conducted between March and August. Field teams included counterparts from Transkei's Department of Commerce, Industry and Tourism whom the consultants trained in data collection and storage, interviewing and map reading. The report, entitled "Transkei North East Region : statistical base for planning service centres" was completed in September 1982.

Shortly afterwards, the planning of the NE region was commissioned by the NPC with terms of reference drawn up in consultation with all government departments as follows:

- To analyse and identify the needs, potentials and problems of the North-East region;
- To prepare a plan for the region which incorporates a spatial framework for its development and the location of physical projects;
- To make provision in the plan for the needs of the region over a 20 year period;
- To draw up an implementation and phasing programme for the initial five years.

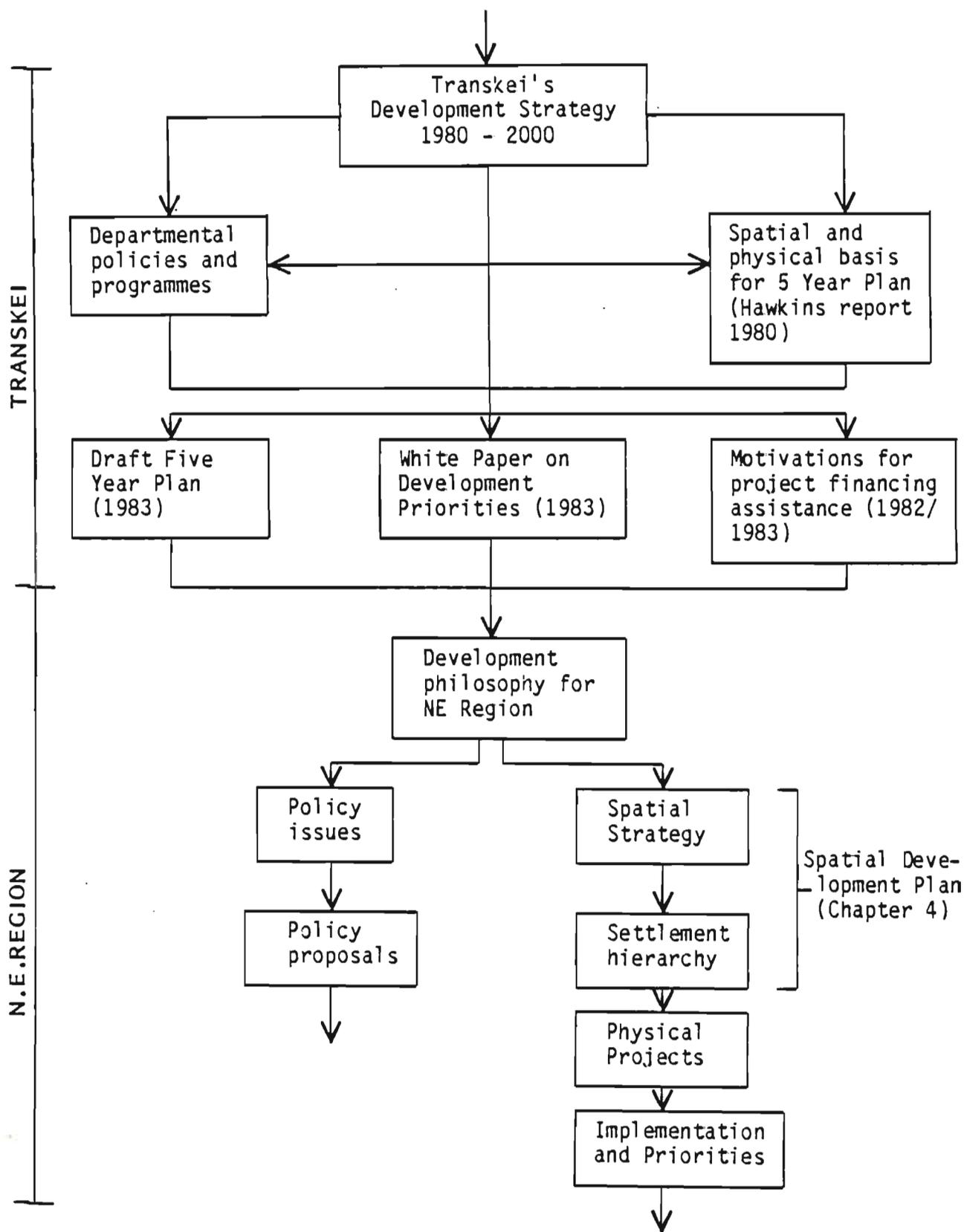
The Plan for the NE incorporates policy proposals contained in the first draft of the Five Year Plan and the White Paper on Development Priorities (1983-88), as well as detailed development project proposals which have arisen out of these reports. It was to be used by the government for guidance in decisions regarding the location of investments on physical development in the region.

During the early stages of preparing the plan, the consultants were requested to produce a separate, advance report on industrial development in the NE region to enable government to embark on its industrial development programme at an early date, and to enter negotiations with the RSA regarding the envisaged industrial development point in East Pondoland. This report,<sup>(61)</sup> which was submitted in April 1983, forms an integral part of the Plan, as does the statistical data base.

In August 1983 the National Planning Committee revised the original terms of reference in order to re-arrange the Plan into two separate documents. The first, referred to as the Spatial Development Plan (SDP),<sup>(62)</sup> was to concentrate on the location of physical infrastructure projects identified in the White Paper on Development Priorities and current drafts of the Five Year Plan. The SDP was intended for circulation and use by the NPC as well as various departments involved with physical and organisational aspects of the Plan. It was completed in December 1983 and produced in final form in February 1984. Figure 6.10 shows how the SDP relates to the overall context for planning in NE Transkei.

The second, document which was completed at the same time, is referred to as the Regional Policy.<sup>(63)</sup> It concentrates on policy considerations in addition to spatial and physical aspects. As such it touches on a number of sensitive issues which is the reason for the NPC requesting its production as a separate report for in-house use by the Committee. Their reason for splitting the reports was the realization that in a situation where government policy is far from resolved on a number of major issues (such as land tenure, betterment planning, commercial farming, business licensing, tourism, housing and administrative decentralization), it would be in the interests of development within the NE to concentrate, in the short term, on projects which were unlikely to cause disagreement at a policy level. Progress could then be made in the implementation of these components of the regional plan while more contentious policy issues were being deliberated. The planning consultants supported this pragmatic approach because it offered a realistic way of

Figure 6.10 Planning context for the North-East region



promoting development in the NE in the short term; while at the same time providing the central planning authority with a set of regionally based policy proposals which could be used as a basis for negotiating policy changes at national (Transkeian) scale.

In the light of our understanding of the context for development and planning in the NE region, we now proceed to demonstrate how the methodology proposed in Chapter 5 was applied. Chapter 7 explains how a statistical base was established to inform a strategic approach to spatial planning in the region. Chapters 8 and 9 outline the strategic focus and main elements of the spatial plan; while Chapters 10, 11 and 12 deal with different stages of implementation.

Notes and References

1. Fair (1982) op cit, pp. 57 - 58. Dewar et al (1984) op cit pp. 49 -50 and Dewar et al (1985) op cit pp. 28 - 29.
2. Transkei Profile (1985) No. 1 (Institute of Management and Development Studies). University of Transkei, p.1.
3. Ibid.
4. Some of these aspects are discussed in Tapscott CPG (1981) "Administrative structures : machinery for development", Transkei Development Review, Vol. 1 No. 1 pp. 49 - 60, while other are illustrated in subsequent chapters.
5. Transkei Profile (185) op cit p. 3.
6. Ibid p. 7.
7. Ibid.
8. Ibid pp. 10 - 12.
9. Ibid p. 10.
10. Cragg C (1984) "Estimated household subsistence levels for Transkei : urban and rural areas." IMDS Fact Paper No. 6, University of Transkei; also Transkei Profile (1985) op cit Tables 5.1 and 5.2.
11. IMDS (1982) Income and Expenditure survey. Unpublished results quoted in Transkei Profile (1985) op cit pp. 7-8.
12. Transkei Profile (1985) op cit p. 27.
13. Ibid p. 18.
14. Idid pp. 18 - 21.
15. Ibid pp. 24 - 25.
16. See pp. 212 - 213 below for details of studies in the NE region; also Osmond Lange (1982) op cit pp. 143 - 145; May J (1984) op cit pp. 104 - 108.
17. Quoted in Transkei Profile (1985) op cit pp. 23 - 24.
18. Hawkins Associates (1980) op cit pp. 133 - 135 and Table 13.3.
19. Transkei Profile (1985) op cit p. 45.
20. Ibid.
21. Ibid.
23. Winflied O (1977) "The geology and mineral resources of the Republic of Transkei." Bantu Mining Corporation, Pretoria.

24. Measures of per capita welfare were based on the provision of health and education services; ratios of trading revenue and fixed assets in the distributive trades; gross geographic product and remuneration in agriculture. See Robinson P S (1978) op cit pp. 18 - 19.
25. Private sector: finance and banking; commodity trade outlets; personal services; manufacturing, engineering and building; buses and taxis; agriculture trading organisation; labour recruiting organisations. Public sector: roads, piped water; electricity; post office; education (secondary and vocational); medical (hospital beds); government departments. Ibid.
26. Development Strategy (1979) op cit p. (ii).
27. Ibid.
28. Seers (1972) op cit.
29. Development Strategy (1978) op cit p. 45.
30. Ibid.
31. Ibid p. 46.
32. Ibid.
33. Ibid p. 47.
34. Ibid.
35. Ibid.
36. Ibid p. 48.
37. Ibid p. 53.
38. Ibid.
39. Ibid p. 54.
40. Prof D L J Robins and Mr P S Robinson of the Department of Town and Regional Planning, University of Natal, Durban.
41. Robins D L J and P S Robinson (1978 and 1981) op cit.
42. Le Roux J P and I J du M Marais (1979) "The present position regarding the establishment of industries". Report to Dept. of Commerce, Industry and Tourism, Umtata.
43. Westcott J "Obstacles to agricultural development in the Transkei" in Wilson F et al (eds) (1977) Farm Labour in South Africa.
44. Robinson P S (1978) op cit.
45. Ibid pp. 62 - 66.
46. Robins and Robinson (1980) op cit p. 100.

47. The term "agencies" is used to refer collectively to parastatal corporations such as the Transkei Development Corporation (TDC), Transkei Agricultural Corporation (Tracor), Transkei Electricity Supply Corporation (Tescor), Transkei Mining Company (TMC), Transkei Small Industries Development Organisation (Transido), Transkei Appropriate Technology Unit (TATU) Transkei Road Transport Corporation (TRTC) in addition to various non-governmental development and community organisations.
48. Transkei (1983) Development Priorities, and Public Sector Spending 1983 - 1988. Government White Paper, Umtata. Hereafter referred to as Development Priorities.
49. Ibid, para 2.13.
50. Ibid, Table 5.
51. Ibid, paras 3.53 - 3.55.
52. Ibid, paras 2.47 - 2.49.
53. Hawkins Associates (1980) op cit.
54. Osmond Lange Inc (1982, 1983a,b) op cit.
55. a) North East - Osmond Lange Inc (1983c, d, e,) op cit.  
b) South West - Rural Development Services (1983) "Development proposals for the South Western region of Transkei." Report to National Planning Committee.  
c) Vandeverre, Apsey Robinson and Associates (1985c) op cit.
56. Hawkins Associates (1980) op cit pp. 193 - 202.
57. Ibid, pp. 195 - 196.
58. Ibid.
59. Osmond Lange Inc (1982) op cit pp. 1 - 2.
60. Ibid p. 3.
61. Osmond Lange Inc (1983c) op cit. Referred to as the IDP report.
62. Osmond Lange Inc (1983d) op cit. Referred to as the Spatial Development Plan (SDP).
63. Osmond Lange Inc (1983e) op cit. Referred to as the Regional Policy Proposals.

CHAPTER SEVEN    NORTH EAST REGION : EXISTING SITUATION AND TRENDS

The material in this chapter represents a synthesis of the main results of the surveys and field work conducted in the NE region between 1981 and 1983. While the range of subjects covered is comprehensive, an exhaustive report on the findings would be too detailed for present purposes.<sup>(1)</sup> Accordingly, the aim of this rather lengthy section is to highlight the more important aspects of social, economic and spatial conditions in the region. In the following chapter attention will be drawn to the implications of the current situation and trends in order to identify appropriate areas for planning intervention.

The first part of the chapter explains how the methodology proposed in Chapter 5 was applied to establish a statistical base for development planning in the region. In the next part, eighteen sub-headings have been used to distinguish different sectors. However, it should be borne in mind that while these may relate to the activities of individual departments and agencies, they are not discrete decision fields. Instead they should be viewed as inter-related facets of a region with a fairly complex structure. The final sections of the chapter deal with basic needs of rural households and the problems encountered in small towns respectively. Statistical tables in support of the discussion have all been included in Appendix VIII so as not to burden the text with unnecessary detail.

Research methodology

The research method, which followed the guidelines set out in Chapter 5 (Phase II - framework for strategic analysis) fairly closely, rested on the twin principles of consultation and first-hand field checking. The consultation process continued throughout and operated at a formal level, in the cases of structured interviews or meetings, and on an informal level via discussions with a wide range of respondents with whom members of the planning team had contact in the course of the field work. The effectiveness of these consultations will be discussed below in Chapter 13, but suffice to say at this stage that the consultative approach yielded valuable results of both a quantitative and qualitative nature.

The experience gained from an involvement in national/regional scale planning in Transkei between 1978 and 1981 drew attention to the paucity of existing data needed to establish an accurate, reliable statistical base for planning.

Pilot studies had shown that data from official sources (such as lists of commercial licences) were unreliable and lacked adequate spatial definition at the micro scale.<sup>(2)</sup> Accordingly it was decided to undertake comprehensive field research, supported by the use of recently flown aerial photographs, with a view to establishing a detailed statistical base of field confirmed data. Transkei's National Planning Committee (NPC) which commissioned the study, envisaged that this would become the basis of a national information system to be operated by the Institute for Management and Development Studies (IMDS) at the University of Transkei. The NPC's intention to set up equivalent data bases in the other regions has been partly implemented with comparable data assembled and tabulated for 21 of the 28 districts.

Three main types of field survey were undertaken in the establishment of the statistical base. In the first place a series of household surveys were conducted to determine how and to what extent basic needs were being met. The object of this exercise was to obtain an accurate profile of the day to day living conditions and priority needs of rural and small town households. Surveys were carried out at six rural villages and two small towns (182 and 69 households respectively) in the region. The way in which these surveys were approached and the type of questionnaire used have been discussed previously in Chapter 5 and Appendix II; while the results of the surveys will be described further on in this chapter.

The second major field survey aimed to relate the distribution of services and facilities to the distribution of population. Having decided on the administrative area<sup>(3)</sup> as the basic spatial unit, this involved listing all the facilities that were located in each administrative area according to official data sources, then visiting every area and town to confirm (or otherwise) the data as well as to obtain more detailed information. By way of example, the tabulated results of this survey in respect of one district from the NE region (Bizana) have been included as Appendix VII while the mapped version of the findings are shown in Figures 7.1 and 7.2.

Third of the main field investigations was the survey of 60 rural traders (located throughout the NE region) and 122 of their customers. The purpose was to complement the understanding of rural life and to gain an insight into the most common interface between rural dwellers and the formal economy.

Copies of the questionnaires used are included as Appendix III; and results of the surveys are reported in this chapter. Information about a second influential area of contact, via migrant workers, became available from the IMDS income and expenditure survey conducted during 1982.

In addition to these surveys an analysis of aerial photographs was undertaken to plot the location and approximate size of rural villages and to calculate the length of tertiary road linking each village to the network of classified roads maintained by the Department of Works and Energy.

We now turn to an analysis of the existing situation and trends in the NE region, followed by an investigation into the basic needs of rural household and an assessment of the needs and problems that prevail in the region's nine towns.

### Existing situations and trends

#### Regional setting

The NE region comprises three regional authorities, nine districts and fifty tribal authorities (Table 7.1 in Appendix VIII). It stretches from the Umtata river in the south-west to the Mtamvuma river in the north-east; from the Umtata-Kokstad road to the coast; and it includes the district of Umzimkulu. It has an area of 13 671 square km and a population of 975 000 (mid 1983 estimates) increasing at about 2,6 percent annually. As such the NE is the home of nearly one third of Transkei's population.

Communications in the region are strongly influenced by the Umzimvubu river network with its tributaries, the Tina and Tistsa. These rivers are bridged only on the national road (N3) and at Port St Johns, with the result that the Qaukeni and Umzimkulu sub-regions are more closely linked to Kokstad, Harding and Port Shepstone. (See Figures 6.1 and 7.3 in Appendix VIII).

East Pondoland (Qaukeni) is cut off from Transkei's main development core and axes both by the Umzimkulu river and its tributaries, as well as the mountainous and extremely broken land in Tabankulu and Mt Ayliff. At the same time it is incised by several large rivers - Mzintlava, Msikaba, Mtentu - which constrain internal movement. The impact of topography makes East Pondoland one

of the most remote areas in Transkei and, indeed, of South Africa. Nyanda is similarly affected by the Mdumbi, Magwendane and Mngazi rivers which limit access within the sub-region. Umzimkulu is a completely separate sub-region, being detached from Transkei by a strip of land (20 to 40 kms in width) between Harding and Kokstad.

The NE is linked to adjoining regions by the national road (N3) from Pietermaritzburg, Kokstad and Umtata to East London; the Natal South Coast road which enters the region at Mzamba; and the road from Port St Johns, through Umtata to Queenstown. Although there are a number of roads crossing the border between Transkei and the RSA, the only customs control point is at Umzimkulu.

### Natural resources

According to the Hawkins report, the NE region has exceptional potential for agriculture with much of the land being suited to intensive cropping. The relief is generally rolling or undulating relief (except near the main rivers), and the soils are amongst the best in South Africa. The climate is equable: mild in the upland sub-region and sub-tropical along the coastal belt. The region has a high and diversified cropping potential, and existing crop production is above national average.<sup>(4)</sup> The report continues, this is clearly the region where a major crop production drive is most likely to succeed, and where the greatest response to the use of fertilizers and of mechanical tillage for land preparation may be expected. It is also the region with the greatest prospects for specialised and intensive development projects based on crops such as sugar, tea, nuts and sub-tropical fruits".<sup>(5)</sup> See Figure 10.4 in folder. Realization of this potential is severely constrained by the present and past lack of agricultural support services, education and health services, physical infrastructure and, indeed, the space economy of the region itself. The existing situation will be discussed under four sub-headings : land, water, minerals and coastline.

(i) Land. The region's land offers the best chance of stimulating socio-economic development. This potential is best described using the agro-ecological classification developed for Transkei as a whole in the Hawkins report.<sup>(6)</sup> The system was devised by combining the important production characteristics of rainfall data, temperature data, topography and available soil data, in order to identify areas, named agro-ecological units with varying potential. Figure 7.4 in Appendix VIII summarizes the results.

The conclusions reached by Hawkins are firstly, that the potential inherent in the land is diverse. Areas of high potential offer opportunities on a scale and intensity that can compare with the most productive regions in Southern Africa. The existing development of the timber industry is an example, and this is still being developed. Opportunities are available to expand intensive maize production, which can contribute significantly to reducing Transkei's large import requirement. Essential food crops, especially vegetables and sub-tropical fruits could be supplied from the region. However, there are areas with limited potential for development. Parts of Tabankulu and Maxesibeni districts have severe constraints in the form of steep topography, serious soil erosion and general environmental degradation, with limited natural resources besides the rivers.<sup>(7)</sup>

Secondly, the region's soils have to date been identified and mapped only sporadically, for specific projects. The pattern that has emerged is one of broad areas of high potential ground, as well as areas of a variety of soil types requiring specific management practices. For example, in the high potential coastal lowlands the soils require substantial potassium, phosphates and agricultural lime applications.

Thirdly, complicated patterns of land tenure are practised, particularly in Umzimkulu district. Here traditional tenure occurs alongside freehold on previously European owned farms, and together with the practice of undivided shareholding of large farm units, development will be essentially a social and not a technical programme. Umzimkulu district also has a combination of types of tenure, including freehold farms, traditional land use, and betterment settlements. Further, the towns in the region are pockets where freehold residential land is available, and town commonages are large areas to which the municipalities have a usufructory right.

In summary, the region's land represents a resource that is both highly valuable and extremely varied. Agricultural development in particular, offers good opportunities for socio-economic development but particular care needs to be taken in its implementation, in order to ensure reasonable and measure progress.

(ii) Water. The region is comparatively well endowed with water resources, which include rainfall, underground water and the river systems. The RSA Weather Bureau has recorded average monthly rainfall at rainfall stations at each district in Transkei. March is the wettest month for most stations, with the rainy season extending from October to March, although along the coastal belt about 30% of rainfall occurs in winter.

Eleven important rivers traverse or form boundaries of the region's nine magisterial districts. The Mtata, Umzimkulu, Umzimvubu, Tina, Tsitsa and Umzimkulu rivers are the most significant. Other important rivers are the Mzintlava, Msikaba, Mtentu, Mngazi and Mtakatye rivers. Little development of these resources has taken place apart from the hydro-electric scheme at First and Second Falls on the Mtata river just beyond the region's south western boundary, the Corana dam in Libode district and the Malenge flood irrigation scheme in Umzimkulu. Some small (42 ha) pumped irrigation schemes have been established adjacent to rivers.

Detailed hydro-power potential studies have been undertaken within the NE at sites on the Tsitsa river and other investigations have noted the feasibility of building dam sites for irrigation purposes at points on the following rivers in the region: the Mkosi, Msibaka, Mtentu, Mtamvuna (three sites on tributaries), Umzimkulu (eight sites on tributaries) Mngazi, Mgazana and the Mdumbi.<sup>(8)</sup> Ground water supplies have been investigated and indications are that the region has adequate groundwater reserves to meet estimated demand until the year 2010.<sup>(9)</sup> Significantly however, these projections are made on the assumption that boreholes are in future to be allocated rationally, and that no major drought periods will occur.

To sum up, the NE region's rivers represent a considerably under-exploited resource which can be utilised for hydro-power, irrigation and domestic water supplies. Technical constraints to development are largely the steep river valleys and problems of silt and sediment build up.

(iii) Minerals. Historically, the mining potential of Transkei has been regarded as low in comparison with the relatively large mineral deposits in the RSA. However, with techniques being developed in other parts of the world to mine small mineral deposits economically, it is now accepted that more research is required into Transkei's mineral resources.<sup>(10)</sup>

To date the following major deposits are known to exist in the region:

- Nickel. The Insizwe intrusive complex, comprising the Insizwe, Ingeli, Tonti and Tabankulu massifs in Maxesibeni district contain large quantities of nickel. The Pioneer Base Metal Exploration Co. is presently exploring these deposits and holds a prospecting licence until 1985.

- Limestone. Two deposits of limestone in the form of travertine exist at Port St Johns. The Isunka deposit, 8 km west, has been identified as having three million tons of material suitable for industrial and agricultural lime and cement manufacturing. At the Crater deposit, 41 km from Port St Johns, 435 000 cubic metres of material for decorative travertine has been identified.
- Limestone is also known to exist in the Bazana and Maxesibeni districts.
- Clay, sand and crusher material. These are found at numerous localities making it possible to "indicate a point of supply of each of these materials within a radius of 7,5 km from each of the planned growth points."(11)

The development of these resources has been retarded by factors of capital cost, infrastructure limitations and market demand. Future potential for the development of mineral resources lies in devising appropriate techniques for identifying and extracting materials that satisfy and supply local needs. Emphasis needs to be on establishing techniques that ensure maximum labour utilisation, and incorporate Transkeian entrepreneurs in the management of mineral exploitation.

(iv) Coastline. The region's coastline, extending from the mouth of the Mtata river to the Umtamvuna river on the northern border of Transkei, represents a natural asset which is recognised throughout Southern Africa and internationally as being a wilderness area of the highest order. Apart from the rare indigenous plants, ecologically delicate estuaries, spectacular cliffs, beaches and indigenous forest reserves which attract many visitors, the sea and shellfish also provide a subsistence level source of income for local residents.

Existing developments to date are:

- the resort town of Port St Johns;
- the casino complex at Mzamba (presently being extended with the addition of 44 rooms at a cost of R22 million);
- isolated clusters of fishing shacks, holiday cottages and camp-sites at Mkambati, Port Grosvenor, Goss point, Mbotyi, Silaka, Mngazi (and a hotel), Mpande, Preslies Bay and Umtata mouth;
- the hiking trail between Port St Johns and Coffee Bay.

Besides the exceptional public response to the casino development, the most popular forms of public participation along the coast are, in order; camping, caravanning, use of rest camps, cottages, hotels.(12)

The coastline's potential to generate income and employment is constrained by the lack of roads of a suitable standard, the isolated location of the most spectacular places, and the limitations that tourist development has in creating sufficient employment in relation to capital expenditure required. Careful planning and controlled development will be needed to ensure that the coastline remains a prized natural wilderness, to make it into a net income generating resource for Transkei, and to allow maximum feasible public participation in both its use and management.

Transkei's coastal waters are exploited by deep sea fishing, line fishing, and shell fishing. A little commercial fishing has occurred, with licensed fishing companies generally marketing shellfish collected by local residents and line fish caught by sports fishermen. The urban markets in Transkei are regulated. A detailed assessment of the potential of the off-shore fish resources is to be undertaken by the RSA Department of Fisheries.

#### Population, labour force and employment.

The region's population, including temporarily absent migrant workers, is in the order of 975 000, or about 165 000 households.(13) On the basis of demographic trends, and assuming a slow decline in future growth rates (on average 2,6 percent per annum to 2000) the NE region is expected to have a population of some 1,5 million, by the turn of the century and assuming a decline in household size, about 270 000 households.

The region's labour force stands at about 330 000 men and women in mid 1983 and is likely to increase at an annual rate of 2,8 percent (or about 9 000 per year) to about 525 000 by the end of the century. The male labour force of about 217 500 in mid 1983, is likely to increase to 337 500 by 2000; while the number of female workers (and work seekers) will rise from some 120 000 to 186 000 by the turn of the century.(14) See Tables 7.2 and 7.3 in Appendix VIII.

At present about 132 000 Transkeians from the NE region (mostly men) are employed in the RSA as migrant or contract workers. This represents 40 percent of the region's labour force. For Transkei as a whole, the level and rate of

employment of migrant workers has "declined during recent years due to the slow growth of the South African economy, the more selective labour needs of the mining sector - where about half of all male migrants are employed - and the practice of replacing contract labour by local (black) labour in South Africa's major industrial centres".(15) The impact of this trend will be felt in the NE where there are, on average, 1,3 migrants per family in rural areas and 62 percent of rural households have at least one migrant.(16) In addition there are almost 23 000 men and women from the NE working elsewhere in Transkei as internal migrants (Table 7.4).

There are a significant number of women in migrant work; in fact almost a third of internal migrants are women. Few of the women working outside Transkei have official contracts and it is estimated that about 65 percent of them (36 000) are working without permits in South Africa. The corresponding figure for male migrants is in the order of 13 percent or 50 000 men.(17)

The areas in which external and internal migrants work are listed in Table 7.5. It is notable that:

- 58 percent of all external migrants work in the Transvaal;
- 45 percent of external female migrants are working close to the Transkei border in Natal and the Eastern Cape. "The majority of these migrants are unmarried, remitting, and working in domestic service. This trend contradicts the traditional idea that most female migrants are migrating to follow husbands. There is little doubt that females play a significant part in the migrant labour system, albeit illegally from the RSA's official viewpoint.(18)
- more than half the internal migrants worked in Umtata (41 percent) and Butterworth (11 percent).

The attraction of migrants to Transkei's two largest towns is a particularly significant indicator of urbanization. Between 1970 and 1980, the annual urbanization rate in Transkei was 10,8 percent with Butterworth and Umtata growing at 28,9 percent and 9,0 percent respectively, and the smaller towns (excluding Ezibeleni and Ilinge) at around 2,5 percent. The rapid urbanization rate of Umtata and Butterworth is expected to continue in the future, and therefore attract a higher percentage of internal migrants."(19)

An earlier analysis of the spatial distribution of employment within the NE region reveals that in 1978 local wage jobs (some 33 600) provided for a mere 13 percent of the region's labour force<sup>(20)</sup>. See Table 7.5 in Appendix IX. The critical shortage is further emphasised by comparing the demand for wage jobs (number of households) with the actual number of jobs. It is also significant that whereas the NE region contains some 30 percent of Transkei's population it provided only 24 percent of the country's wage jobs<sup>(21)</sup> half of which are in the public sector and a further seven percent in the two tea estates.

#### Income and expenditure patterns

Income and expenditure surveys were conducted throughout Transkei in 1979<sup>(22)</sup> and 1982.<sup>(23)</sup> Results of the 1979 study were produced by magisterial district, while those of 1982 indicated that the criterion for differentiation should be rural, small town and large town (Umtata and Butterworth) households. Discussion with the 1982 researchers confirmed no significant differences in overall patterns between districts in the NE. The survey did not facilitate intra-district analysis. The following discussion based on the 1982 results for rural and small town households, is therefore regarded as representative of the present situation in the NE region.

Household income and expenditure are closely related to employment. The regional distribution of household income is shown in Table 7.6. The distribution of income among Transkei's households (rural and urban combined) is set out in Table 2.7. If incomes were evenly distributed, half of the population would earn half of the total income. However, this is not the case and Transkei's income distribution is highly skewed. The more wealthy half of Transkei's households earn as much as 89,4 percent of total income, while the poorer half earn 10,6 percent. At the upper end of the scale over a quarter of the country's income is earned by the most wealthy 5 percent of households; and at the bottom end, the poorest 21 percent of households earn a mere 2 percent of total income.<sup>(24)</sup>

Table 7.9 in Appendix VIII shows sources of household income by income group. Over half of Transkei households earn less than R1 000 per annum and depend on migrant remittances for almost 72 percent of their total income. Pension payments also account for a major portion of this annual income. Households earning between R1 000 and R3 000 per annum rely on migrant remittances for half of their annual income, with pensions playing a less significant role. Households earning more than R3 500 per annum generate most of their incomes

from wages. It is significant that household production never accounts for more than 4 percent of total income within any group. Among the households in the less than R500 per annum income bracket there are a number that receive no migrant remittances. The majority of these households earn below R300 a year and thereby constitute Transkei's most impoverished people.(25)

Remittances make a substantial contribution to household income as can be seen from Table 7.10. This is particularly the case for lower income households. Of households with annual incomes of less than R1 000, over 90 percent is contributed by migrants. Remittance figures are in cash terms only and exclude any foodstuffs or other items sent or brought back by migrants. The median amount remitted by external and internal migrants was R500 p.a. but the mean varied from R798 p.a. for external to R1 279 p.a. for internal migrants with an overall average of R875 p.a. The large difference between the mean varied from R 798 p.a. The large difference between the mean and median remittances is due to a relatively high proportion of migrants remitting substantial amounts.(26) (See Table 7.11 in Appendix VIII.) Cash remittances per external migrant have increased three fold since 1979. This is due largely to "...the increase in mineworkers' wages, and not to an increase in the percentage of wage packet sent home which has remained constant at ± 35 percent."(27)

Turning to consumer expenditure, the aggregate picture is described in Table 7.12. The salient features are that 43,4 percent of consumer expenditure in the rural areas is on food compared to only 27,5 percent in the towns. Rural households spend the most on grain products (13,0 percent), followed by vegetables (8,2 percent) and meat (7,5 percent). Urban dwellers in contrast spend the largest proportion on meat (8,2 percent), followed by grain products (5,7 percent) and vegetables (4,6 percent). Almost 12 percent of total consumer expenditure is spent on grain products.

To sum up, the IMDS survey underlines the imbalance between the distribution of people and jobs both in the NE region and in Transkei. Not only are a significant percentage (30 percent) of men and women forced to leave the region annually in search of work in the RSA, but a further 22 700 of NE residents have to migrate to Transkei's two main cities to find employment.

A large number of households live in conditions of severe poverty as indicated by the high proportion of aggregate household expenditure on food (43 percent) and the income distribution figures. People living under these circumstances

will not be able to accumulate the resources or energy to improve their lot or make a positive contribution to Transkei's economy without assistance from government. The type of inputs needed are the provision of basic infrastructure such as water, woodlots, access roads and telephones; adult training and community directed programmes; and generally ensuring that government's services and development effort reaches the outlying rural villages.

Even if the necessary facilities are provided to bring the level of basic services in rural villages upto a minimal standard, the region's rural areas offer very little to keep people there. Lack of job opportunities and adequate food production (which partly explains the high expenditure on food) together constitute a strong push factor encouraging households to move into urban areas.

This situation has major implications for the planning and provision of urban infrastructure and housing. If sufficient urban services and residential opportunities are provided timeously, it may be possible to channel this urbanization according to an overall strategy. Failure to do this will inevitably result in thousands of NE region families squatting in uncontrolled areas on the fringes of Umtata, Butterworth and cities in the R.S.A.

### Spatial structure

The existing spatial pattern of the NE can only be understood by tracing the historical evolution of the region. This involves a brief examination of the past and present social and administrative structures as well as their subsequent territorial or spatial implications. The analysis is divided into four time periods: (i) the pre-colonial era, (ii) the colonial period, (iii) the time of the Bantu Authorities system and (iv) the present, post-independence era. Each stage is examined in the light of its administrative system and the effect that this had on the spatial framework of the region.(28) See Table 7.13.

(i) Pre-colonial era. Prior to the late 19th century the NE region of Transkei was occupied to a large extent by the Mpondo chiefdom. Overall control rested with the paramount chief whose position was hereditary with sub-chiefs, councillors and ward heads being designated through hereditary and appointive procedures.

The chiefdom consisted of component districts, wards, neighbourhoods and homesteads whose boundaries were defined by topographical constraints and allegiances. Homesteads were organised into clusters in clearly defined areas, usually based on a dominant lineage or lineage segment.<sup>(29)</sup> Lineages were the land holding group with grazing land or streams separating different homestead clusters. This form of settlement pattern still exists in the NE as 48 percent of the population reside in traditional villages clustered around areas offering access to water and grazing lands.

(ii) Colonial period. The NE region was annexed by the Cape Colonial Government between 1879 and 1894. The administrative system changed from the traditional model to a bureaucratic system whereby direct rule was instituted in the form of appointed white magistrates. (See Table 7.13). In order to facilitate magisterial control in the region, formalized districts were demarcated and sub-divided into administrative areas. A town was established within each magisterial district to function as the administrative and judicial centre for the area. These towns therefore became the focal points of the district and over time developed into trading centres.<sup>(30)</sup>

(iii) Bantu authorities period. With the implementation of the Bantu Authorities Act, passed by the South African Government in 1951, the administrative structure of Transkei was altered again. A system of government was instituted which laid the foundation for Transkei's independence through the initiation of a local cabinet and civil service thus increasing Transkeian responsibility and autonomy (Table 7.13).

The new administrative system required the creation of regional authority areas which encompassed the magisterial districts. The area now referred to as the NE region includes three regional authorities: Qaukeni, Nyanda and Umzimkulu. See Table 7.1 and Figure 7.3. Each regional authority contained one or more magisterial districts. With local government playing an increasingly more important role, Umtata emerged as a rapidly growing centre through its importance as the administrative capital of Transkei.

It was during this Bantu Administration era that the policy of consolidated betterment villages was initiated.<sup>(31)</sup> The main force behind this policy was the Tomlinson Commission Report in which a strategy to encourage progressive farming, industrial activity and the settlement of surplus population into

closer settlements was outlined.<sup>(32)</sup> The government found the overall strategy unacceptable and only adopted the resettlement and land rehabilitation proposals. Over half of the NE rural population have now been settled into consolidated villages, many of which lack the intended minimum level of infrastructure and services. Furthermore there has been little or no change in the farming approach of people in these villages.

(iv) Post-independence era. After independence in 1976, Transkei maintained the basic administrative framework of the previous governing system in the NE (and other) regions. With Umtata being the capital of Transkei and therefore the seat of government and location of most civil servant jobs, the town has experienced a growth rate of 10,8 percent p.a. Many investment decisions have favoured Umtata rather than the regions because of its growth and decision-making role, and therefore, the development of the capital has been, in certain instances, at the expense of the regions. Umtata exerts a strong influence over its surrounding regional towns and this position has been intensified with the post-independence exodus of businessmen and officials from the district centres. This reduced commercial and organisational importance of the towns has meant restricted growth with the result that centres have not been expanding to meet the needs of the growing population. Thus although the towns still remain focal points, their overall importance has diminished from the time of colonial rule.

Finally, with respect to the region's spatial framework it is important to note that even with the coming 'independence', the NE remains a divided region with Umzimkulu district separated from the rest of the region because of a land dispute between Transkei and the RSA. Topographically East Pondoland and Nyanda are separated by the Umzimvubu river and its tributaries.

### Settlement pattern

The purpose of this section is, firstly, to describe the existing patterns of settlement that occur in the NE region; and secondly to examine the effect that this spatial arrangement has on the day-to-day lives of the people living there.

(i) Description. The most significant aspect of the settlement arrangement is that 98 percent of the region's population reside in rural areas (50 percent in consolidated villages and 48 percent in traditional villages) with only 2 percent living in the region's nine towns.

Traditional villages are composed of family homesteads fairly widely distributed across tribal land. Homesteads tend to cluster in locally defined, named areas, several of which may be found in each administrative area. Residential and agricultural plots vary in both size and shape with no formal standards being applied. These villages usually have smaller populations than consolidated areas.

The urbanized 2 percent of the NE population live in small towns, one in each of the nine magisterial districts. See Table 7.14. Towns are run by autonomous municipalities with jurisdiction over an area known as commonage. Although small in population size, limited in the services they offer, and separated by long distances, they remain focal points for the rural hinterland.

Within the region differences in the settlement pattern are shown by district variations in the distribution of population relative to area (Tables 7.15 and 7.16). In 1980 the NE had an average population density of 58 persons/km<sup>2</sup> with individual administrative areas varying from less than 36/km<sup>2</sup> (lowest ten percent) to over 100/km<sup>2</sup> (highest ten percent). If population densities are examined by administrative area, a substantial concentration of higher densities are found in the districts of Bizana, Lusikisiki and Siphaheni. Throughout the region, the district towns tend to be surrounded by high density zones. The relatively lower town densities are explained by their having fairly large commonage areas but few residential opportunities.

Table 7.17 shows the extent of which each district has been resettled. It is important to note that the policy of consolidating traditional villages into planned "betterment scheme" settlements has been implemented at an uneven rate. Of those areas that have been consolidated, 28 percent were carried out before 1962, 56 percent between 1962 and 1971 and only 16 percent since 1972. These statistics correlate with the resettlement of Libode and Umzimvubu (both 100 percent consolidated). Libode's resettlement started in 1948 with the final two administrative areas being completed in 1974. In Umzimvubu betterment planning was initiated in 1958 and finalised during 1974. In other words, the allocation of central government funds and services for rural residential infrastructure has fallen sharply during the last decade.

Movement between settlements and towns in the NE is severely constrained because of topographical features and major river courses. (See Figure 9.4). Rivers are usually incised with steep embankments and as such access across is

often restricted to places where bridges have been built. Furthermore, most magisterial areas have numerous smaller rivers running through them hindering intra-district communications. Ridges with slopes greater than 1:3 are common in the region and also act as movement barriers. Therefore, access between neighbouring villages is often restricted to road cuttings or traversing long stretches of terrain until a suitable crossing point is available.

Road layout is significantly influenced by these constraints with the result that road distances between towns are often far greater than the straight line measurement. Umtata is particularly difficult reach to from towns located in the central part of the region (namely, Bizana Lusikisiki, Flagstaff) where the movement system offers no direct link to the capital.

(ii) Implications of the settlement pattern. In order to gain a broader understanding of the existing settlement pattern and hierarchy of centres in the region, three separate analyses were undertaken. These involved examining air photographs of the entire area; a study of functions in various central places; and an analysis of the service populations of the district towns.

The air photograph analysis set out to establish the number of settlement clusters per administrative area (a cluster being defined as a minimum of 20 homesteads within close proximity to each other and distinctly separate from other adjacent clusters or settled areas); to distinguish between betterment and traditional villages; and to ascertain their road distance from the nearest classified (or government maintained) road.

The results, shown in Tables 7.18 and 7.19 (Appendix VIII) reveal that the region has 797 rural villages of which more than 70 percent comprise less than fifty homesteads. Only five percent have more than 100 homesteads. As is to be expected, traditional villages are generally smaller than consolidated villages. A total of 236 (about 30 percent) of these villages can be reached by classified (i.e. central government maintained) roads. But access to the remaining 70 percent is via an informal network of tertiary roads and tracks (some of which are occasionally repaired by tribal authorities or communities). The extent of this network in the NE is a formidable 1182 kms (Table 7.19). If the region's rural areas are to be revitalized (as proposed by the Development Strategy and Development Priorities reports), high priority will need to be accorded to upgrading these roads and tracks. These are the primary access routes along which 70% of the region's people need to travel in order to reach either a classified road (which is usually as far as buses will travel in rural areas) or the nearest small town.

The functional analysis aimed to identify and rank central places in the region; to determine the service areas and population of existing towns, and to identify areas which are particularly underserved. The methodology was based on that developed by Heath(33) and used with adaptations by the author in spatial analysis for the Hawkins report.(34) The relative importance of a wide range of functions and activities taking place in the region is determined by the frequency with which each occurs. See Table 7.20 in Appendix IX. Results of the functional analysis and ranking of towns and other places of some importance is shown in Table 7.21.

As anticipated, it is only the district towns that presently offer a relatively wide range of goods and services. Significantly, towns at the upper end of this hierarchy (Port St Johns, Lusikisiki and Flagstaff) offer more than double the facilities available in the smaller towns (Tabankulu, Ngqeleni and Libode). Similarly, there is a major divide both between the functional score of these towns and Rietvlei, and between it and the next cluster of places. This analysis is useful for describing the existing situation. In Chapter 9 these results are used to assist in identification of a desired future settlement hierarchy, towards which projects (Chapter 10) will be directed.

Although daily bus services cover a large part of the region(35) their route network does not offer a valid picture of the areas served by the region's nine towns. The reasons are firstly, because bus routes seldom extend beyond the classified road network and, as discussed above, only 30% of the population are served by that network. Secondly, the reliability of these bus services is tempered by both wet weather and poor maintenance. Thirdly, the low income levels of rurally based households mean that a bus fare (in the order of R 1,00 for a single 25 - 30 km trip in 1983) consumes a notable proportion of monthly income. Accordingly a more suitable measure was needed to assess the effective service areas of each town. Based on the assumptions that an adult could walk no more than 15 km each way on a trip to town, which would include some shopping and, therefore, the need to carry purchases home; and that a trip to town needs to be completed in one day, it became possible to define the area effectively served by each town. Results of this analysis (Table 7.22) show that, again, only 30% of the region's population are directly served by towns in the region and adjacent areas.(36)

### Physical Infrastructure

In this section we shall establish what physical infrastructure the region contains. This will be discussed under the sub-headings of regional and domestic infrastructure.

(i) Regional Infrastructure. The main roads in the region are: Umtata to Port St Johns (90 km of which 30 km are bitumen); Port St Johns, Lusikisiki, Flagstaff, Magusheni (120 km gravel); Magusheni, Bizana, Port Edward (80 km bitumen); Magusheni, Kokstad (50 km bitumen) and Kokstad, Umzimkulu (100 km national tar road).

Beyond these the region is served by a network of gravel roads for which the Department of Works and Energy is responsible. Parts of the region are underserved by this network, with particular inadequacies in the steep river valley areas of the confluences of the Tsitsa, Tina and Umzimvubu rivers as well as the coastal belt and coastal plateau between Lusikisiki, Holy Cross and Mzamba. The surfacing of the tarred national routes is generally good while the condition of the main and secondary gravel roads varies substantially.

The water resources of the region are at present under-utilised with the only existing water supply system being located at Malenge (irrigation); Magwa, Majola and Singisi (agro-industrial processing) and at Corana (reticulated rural water supply). The Umtata river has been utilised at First and Second Falls for hydro-electric power.

Electricity for towns and industries in the NE is presently supplied from generator plants. Tescor has a phased programme for the region with transmission lines from Umtata to Lusikisiki and Magwa almost completed. Bizana town is being connected to the Escom supply and lines for Lusikisiki and Flagstaff are in the planning stage, as is the line from Umtata via Mt Ayliff and Bizana to Mzamba. Port St Johns is scheduled for electrification in the near future. Essential services such as hospitals are supplied by generators, but with diesel shortages occurring frequently, serious disruptions occur.

(ii) Domestic infrastructure. The network of rural access road serving both resettled and traditional villages has been discussed above. These routes represent the tertiary network in the road hierarchy and are the responsibility of Tribal Authorities who often lack the technical expertise, staff and funds to maintain them. A large proportion of the roads are single lane routes made from either gravel or dirt. In general these roads are in poor condition with potholes, corrugations and erosion channels occurring frequently.

Very few rural households enjoy access to a formal supply of clean water for domestic use. This will be discussed more fully under basic needs later in this chapter. The NE has 219 operational boreholes serving only 118 administrative areas, which means that 59 percent do not have access to a borehole.

While large scale rural reticulated water systems have been designed for three districts (Kwa Bhaca/Tabankulu, Lusikisiki and Libode) only the first phase of the Libode scheme has been implemented. This proved to be extremely costly (around R16 million); the Corana supply dam is, at present, being pumped from dead storage due to the drought.

There is no supply of electricity to the rural areas. Households use paraffin and candles for cooking and lighting respectively. Wood fuel obtainable from the Department of Agriculture and Forestry's woodlot programme does not comprehensively reach all rural residents. District woodlots are of varying sizes and located unevenly across the districts, with the result that natural forests are being destroyed and the supply of firewood is decreasing relative to the number of rural communities. Hospitals and tourist resorts rely on diesel generators for electricity supply.

The region's nine towns are significantly better provided with domestic infrastructure than the rural areas. Yet in comparison to similarly sized towns in the RSA, these towns do not have much in the way of physical infrastructure. See Table 7.23.

### Housing

This section outlines elements of an acceptable living environment as a background to examining the more important aspects of housing and in rural and urban areas, as well as the growing incidence of informal settlements. Thereafter it considers the role of government and agencies in the provision of housing and highlights the issues to be addressed in a regional plan.

The concept of an "acceptable living environment" does not refer exclusively to housing but encompasses a broad spectrum of conditions which must be attained in order to provide the individual with an appropriate setting in which to live. Physical, social, economic and administrative/legal needs must be satisfied if this goal is to be achieved.

Acceptable living environments vary from society to society in the same way that physical characteristics area, norms and values of the people living in an area will influence the minimum standards required and the priorities. The framework set out in Table 7.24 details specific elements which must be satisfied to meet the needs of the people in the NE region. Some characteristics have universal applicability while others are specific to the area under study.

Housing in the rural areas is administered within the framework of the Tribal Authorities, with Indunas at the tribal wards responsible for the consideration of applications and the allocation of sites. At present most dwellings are the traditional round huts with thatched roofs, but the trend is for new buildings (either replacements, or additions to accommodate larger families) to be square, of traditional construction and with iron roofs. To date, very few rural dwellings may be described as modern in the sense of being constructed with block or brick walls. Typical households have three dwellings with an average occupancy of 1,9 persons per structure. See Tables 7.25 and 7.26.

In the consolidated villages the residential lot sizes vary from 2 000 square metres through 5 000 to 40 000 square metres. Residential plot sizes in traditional villages have to date not been surveyed but in general show the same variation, although boundaries are less rigidly defined.

The construction of rural houses is usually performed by the owner/occupiers or by an unregistered (informal) contractor who has often gained experience in the formal construction industry. Women play an important role in house-building, for example, in preparing local materials for wall and floor construction. Many women, including widows build their own houses.

In the NE region, land tenure, as a legal form of ownership is largely in the form of the "Certificate of Occupation". The binding conditions of this arrangement are: the principle of one-man-lot; land cannot be subdivided or consolidated, nor can it be sold; use of land is assured for the individual for life, provided he pays his taxes, makes beneficial use of the land, and is a law abiding citizen; inheritance is de facto, if not de jure.(37) The allocation of residential sites in rural areas falls under the responsibility of chiefs and headmen. However the process of application and land allocation is sometimes open to abuse, resulting in severe social and economic costs to members of the community.

In both the betterment villages and the tribal wards, problems have developed with the supply and allocation of housing and rights to land. In betterment villages there is an increasing tendency for houses to be built, illegally, outside the perimeters of the residential lots and usually on the land allocated for arable use. In the tribal wards increasing demand for housing is manifested in large numbers of people who have house sites allocated but who do not acquire de facto access to arable land.

Housing in the region's towns is administered by the autonomous municipalities in conjunction with the Department of Local Government and Land Tenure. The number of residential plots is small in relation to the size of the towns' commonages, and to the towns population. On average plots in the nine towns of the region are occupied by 3,1 households. Half the title deed holders are still occupants, 20 percent own (but do not occupy) other houses in the same town and 30 percent live elsewhere.(38)

The majority of residents occupy rented premises and live in crowded conditions. Surveys have determined the average room occupancy rate at 2,9 persons but half the households have five or more persons per room. Tenure to residential plots and housing is via the ownership of Title Deeds. The remainder of the commonages are owned by the State and the local authority has a usufructory right to this land.

The extent to which these households have been urbanized is revealed by two distinct profiles. The first group are members of the community who have very weak ties with rural areas, many of the younger members having been born in town and few expect to return to live in the rural areas. Significantly, the average period these people had spent in town was 12 - 14 years and 60 percent had lived in the town for over 10 years. The second group are town residents who have strong links in the rural areas and more than half expressed the intention to return to live there at some stage. Members of this group have spent less time in the town (average 6 to 10 years) and only 30 percent have spent over 10 years in town.(39)

In common with other peripheral areas in Southern Africa, the NE region is experiencing a growth in demand for housing in places which cannot be met through the existing channels outlined above. There is a tendency for self-provided housing to occur in densely settled pockets adjacent to towns in areas lacking basic urban services and infrastructure. In the North-East this trend is conspicuous at the following places;

- between Clydesdale and Umzimkulu town, where the status of previously mission owned land has not been resolved;
- on tribally administrated land adjacent the Singisi sawmills, where newcomers have erected houses;
- at Mtumbane, near Port St Johns;
- between the Magwa tea estate and Lusikisiki town.

Long term problems of exploitation, insecurity, official neglect and generally deprived living environments arise in these situations, indicating the need for co-ordinated planning and the provision of sufficient infrastructure in the towns and rural nodes.

### Agriculture and Forestry

Despite the region's considerable potential for agriculture, little has been achieved to date. In this section we shall focus attention on the nature of agricultural activity and constraints on production in the region as well as opportunities for further development. Agricultural production falls into two distinct categories, namely, traditional or subsistence farming; and commercial agriculture involving, for the most part, state run schemes.

(i) Traditional farming.<sup>(40)</sup> This form of agriculture is practised in both traditional and resettled villages. In the former, homestead fields and grazing lands are scattered and communal grazing land is unfenced. Basically the same products (some meat, milk, maize and vegetables) are produced in traditional and resettled villages. However, the latter have defined areas for ploughing and cropping (ranging in size from 1 to 3 ha.) and fenced grazing camps. The objectives of land and soil conservation in these planned areas have not been realized in most instances.<sup>(41)</sup>

In order to ascertain how people in the region manage their agricultural holdings and the extent of their productive activities, the surveys of basic needs among rural households (discussed below) included questions relating to land and production. The main findings were that:

- not all households use their allocated land, many allowing other people to develop it for them;
- only half the sample could manage entirely with their own draught animals, the remainder having to hire a borrow;
- maize is only grown by two thirds of the sample and produce was generally only sufficient for six months of the year;

- vegetables are grown by only 40 percent of the households, providing for homestead needs for about five months of the year.(42)

With such limitations on production, the potential for prospective farmers to accumulate capital resources for re-investment is minimal. Most producers are dependent on work opportunities in the RSA and this, in turn, limits the capacity of their households to develop their agricultural holdings. The problems inherent in increasing maize and vegetable yields along with sustained agricultural production are complex. Although yields and output (particularly of maize) in the NE have been higher than the Transkei average, this is largely due to favourable climatic and soil conditions.

The major problems facing traditional agriculture and production include:

- insufficient capital as well as poor access to inputs and markets;
- uneconomic arable units;
- land shortages;
- poor technical knowledge about crop production and animal husbandry e.g., planting populations, top dressing, weed control, inoculations, branding practices, dosing, using salt/phosphate/protein licks, the management of herd structures;
- poor access to information and advisory services;
- absence of male decision-makers on account of Transkei's dependent relationship with the larger RSA economy, resulting in a shift to women as decision-takers;
- the communal use of a single grazing resource which results in a situation where no-one accepts responsibility for its management;
- inadequate water supplies;
- irregular supply of family and local labour at critical planting, weeding and harvesting periods.(43)

At present there are five main government sponsored initiatives in traditional agriculture in the NE region.(44)

- a) Maize production. The Department of Agriculture and Forestry provides ploughing services for 800 - 1000 ha in a few (ranging from 3 to 6) administrative areas in each district. This service absorbs most of the time of the extension service. Major problems are the selection of land; ensuring adequate soil conservation; and co-ordination of ploughing and planting services with a shortage of trained, technical men. While the programme does assist landholders who cannot obtain sufficient oxen at the correct ploughing and planting time, it is

extremely expensive at both national and local levels, and reaches only a few select administrative areas.<sup>(45)</sup> Tracor provides a more comprehensive package scheme including land preparation, seed, fertilizer, herbicide and insecticide. At present this is available to 600 landholders (1000 ha) in Lusikisiki and 2000 landholders (3500 ha) in Umzimkulu.

- b) Community gardens. The Department has assisted in the development of upto 30 small (2 to 5 ha) fenced dryland gardens in each district. These have been successfully established but operate under constraints of insufficient water and un-co-ordinated planting programmes.
- c) Livestock production. Statistics do not reveal any major differences between the NE and the rest of Transkei. Only two thirds of households own cattle, with the average herd size being nine animals. But these figures obscure the skewed nature of cattle ownership, where many families have large herds but allow client families to care for and register their animals. Only 6 percent of the national herd is marketed formally and a number of saleyards in the region are ineffective. These official sales channels realise a poor turnover with mostly low grade animals to offer, with sellers usually selling as a last resort. Furthermore, no residual buying is built into the pricing arrangements so prices fluctuate greatly.

The provision of a comprehensive livestock dipping and inoculation service is effective and regular, and maintains the record keeping and registration system for all livestock in the region. However, noting the considerable investment in the programme, and the degree to which cattle are important to households, it must nevertheless be concluded that the programme supports a resource which has serious consequences for the physical environment.<sup>(46)</sup> The programme is likely to contribute to the increased destruction of veld, catchment areas and estuaries.<sup>(47)</sup>

The marketing of hides, skins and wool is handled by the Department of Agriculture, with two officials allocated to the N.E region in a training capacity. All products are consigned to Butterworth and handled by Agricultural Produce Brokers.

- d) Agricultural co-operatives. The extension staff also assist Farmers Associations in the region, as well as Agricultural Co-operatives.

Both movements have had very limited success to date. Attempts to strengthen the Co-operatives by providing strong, centralised leadership and training have been hindered by shortages of suitable staff.

e) Irrigation schemes. No large irrigation projects have been initiated in the region, apart from 280 ha of flood irrigation at Malenge in Umzimkulu. The development of minor irrigation schemes (42 ha units) adjacent to permanent rivers, to improve agricultural output and ensure year-round production, have largely been unsuccessful as a result of high running costs, insufficient funds, and a failure to adapt to the disciplines required for irrigation management. Schemes initiated at seven localities in the region have all effectively ceased to function.(48)

(ii) Commercial agriculture. At present a number of fairly large scale projects operate in the region.

a) Tea. The Magwa Tea Corporation have developed 1900 ha to tea at Magwa and Majola. In addition a pilot smallholder scheme involving twenty Transkeians is in operation at Magwa. Two factories process the 2 000 tons of green leaf picked annually, providing regular employment for 2 500 people. Seasonal production peaks provide employment for another 3 000 local people, mostly women. Production is being expanded by 400 ha to meet the present quota on the South African market of 3 200 tons in the first instance. Maize (400 ha) and potatoes are also grown by the corporation.

b) Sugar. Sugar trials and a seed cane farm have been developed at Vumise, near Mkambati in Lusikisiki district. These trials have shown that sugar cane can be grown in certain areas of East Pondoland at comparable yields to those obtained in Southern Natal. Motivations have been submitted to the RSA to establish 8 000 ha of sugar cane, which would supply two thirds of Transkei's domestic sugar requirements. This development would occur in the vicinity of Mtonjeni and be accompanied by the construction of a sugar mill (with bulk storage). Further north a second sugar cane planting project is in progress at Mfolozi between Bizana and Port Edward. Here 550 ha are being planted for milling in Port Shepstone. The RSA government has given favourable indications that this quota will be increased to expand the project to 4 000 ha. See Figure 10.4.

- c) Phorium Tenax. Although this is being produced and processed near Lusikisiki, recent feasibility studies indicate that production is uneconomic. A number of alternative crops are being considered for production on the 700 ha estate.
- d) Maize. Tracor has initiated maize production schemes in villages near Bizana, Flagstaff and Lusikisiki. Approximately 1 000 ha have been planted on land held by the local population. By 1985/88, 15 000 ha will be planted necessitating the establishment of centralized storage, milling and distribution facilities for surplus grain.
- e) A variety of other crops have been established either on a trial or small commercial basis. These include: potatoes, beans, goose-berries, citrus, coffee, guavas, granadillas, avocados, and mulberries (for silk-worms). In all cases problems of marketing, non-viability or insufficient time to evaluate the trials prevent expansion on a major scale.
- f) Forestry. To date 26 735 ha have been planted to commercial timber and woodlots, with Umzimkulu containing 76 percent of the region's total forested area. Land preparation and planting is done by the Department of Agriculture and Forestry, with exploitation, milling and marketing performed by the five large saw mills and the ten small sawmillers.

#### Rural development

The focus and directions of rural development programmes are substantially different to those of the conventional agricultural sector. In this section we shall comment on the major rural development programmes and organisations in the region.

Tracor has directed its attention to developing several large scale maize production schemes, largely on tribal land. Sites at Libode (500 ha) Umngazi valley (800 ha), Lusikisiki (500 ha), and Umzimkulu (3 sites totalling 1 500 ha) were prepared and planted during the 1983 season, with the intention of achieving a balance between high production and community involvement. This is being achieved within the framework of the "Masizakhe" movement which allows for "the rapid establishment of sizeable and viable production units whilst at the same time identifying and accommodating as much as possible the needs of project farmers and their families".(49)

The projects represent a considerable investment in both finance (estimated total costs are R800/ha) and manpower and are the leading edge, along with the maize-belt scheme, in attempts to boost national grain production and increase landholder's consumption. The schemes operate on the principle of a large scale, mechanised, planting cultivation and spraying programme in selected, or requested, areas and individuals are free to dispose of the crop as they desire. They are then charged the direct input costs, carried by Tracor. To date about 3 000 ha have been developed in this way and Tracor intends extending this to 8 000 ha in the 1983/84 season.

Certain problems have arisen with these projects concerning;

- The effect of the 1982/83 drought, which has necessitated supplementary irrigation at Umngazi valley. However, the other projects managed to return yields in the region of 3 to 4 tons per ha (making them marginally viable).
- Confusion has arisen among landholders as to where their respective boundaries begin and end, causing serious uncertainties and discontent about which person has access to different parts of the crop.
- Where the major cultivation of land has been carried out adjacent to areas where people lack access to land, the schemes have inadvertently led to growing differentiation in wealth. The result is an increasing impoverishment of sections of the population, (who buy the grain from those whose land was used) and this must be seen in direct contrast to the initial aims of the scheme.

Tracor also encourages, finances and advises individuals in establishing agricultural enterprises. At present, the amounts advanced are small and benefit relatively because of difficulties relating to security of tenure. To date one chicken producer has been established near Port St Johns. Management and training is carefully tied to the credit, ensuring gradual but effective progress.

A drought relief programme, run by an inter-governmental relief committee appointed drought relief co-ordinators in each magisterial district. Their funds are usually spent on food vouchers, pro-nutro handouts to malnourished people, water cartage and windmill repairs. The co-ordinators are under-utilised to a degree, and are having difficulty in identifying viable projects and in ensuring that the available funds are effective in assisting the most needy households and in generating rural employment. R2 million still remains to be allocated.

Africa Co-operative Action Trust (ACAT) concentrate on the formation of savings clubs and the provision of packaged inputs for agricultural production in the rural areas. About 300 clubs of some 20 members each have been formed in Transkei, a third of which are in the North-East. Considerable success has been achieved with their approach. The input packages consist of potato, bean and maize seeds and poultry. Training courses and demonstration trials are run centrally in Umtata, with members and fieldworkers returning annually for refresher courses. ACAT are now attempting to employ, rather than assist, the poorest section of the community in the construction of agriculturally related physical infrastructure such as fencing, dams and trenches.

The Transkei Appropriate Technology Unit (TATU) was formed as an integral part of an overall rural development programme. It aims to demonstrate alternative approaches to rural and industrial development by means of specific field tested prototypes. These currently include road building, clinic and classroom construction, housing and small scale water supply systems. Tatu's intention is to transfer this know-how to the relevant government departments, businesses and development organisations.

A large number of self-help activities in rural development are initiated and supported by Non-Government Organisations (NGOs) such as Zenzele and the Transkei United Women's Organisation (TUWO). Located in many of the villages and towns, these groups effectively mobilise significant numbers of women to become involved in agriculturally related activities such as gardening, farming, hand crafts, sewing and home-building. Further impetus to endogenous development in the rural areas is provided by the activities of organisations such as the Environmental Development Agency (EDA), the IMDS Nkanga project, Caguba development project and village health worker projects, inter alia.

The major thrust of rural development in the North-East is directed at the production of consumer goods, particular food, while at the same time promoting a limited degree of community organisation. By and large, these groups are successful, but projects need to be carefully worked out to avoid dissatisfaction among participants and increasing differentiation in wealth.

### Industry

There is virually no formal industry in the region. Two sawmills (agency industries) operates at Tabankulu and Lusikisiki and there is a home craft enterprise at Port St Johns together with 114 Transido assisted small

industrial enterprises.(50) The latter are unevenly distributed throughout the region with almost half being situated in Libode. This unusual spatial distribution can be explained in terms of Transido's main activities to date being conducted from its Umtata base (a region office is presently being set up in Lusikisiki); and on account of the TDC's college at Misty Mount.

Surveys carried out by the University of Transkei (Unitra) in 1981-82 (including field work in Lusikisiki) showed that small-scale industrial concerns employ 1,5 persons on average but in total provide jobs for almost half of the total number of workers in the large and medium scale, foreign enterprises. Yet investment per workplace in small concerns is only about one percent that of the capital investment in factories set up under the "agency" system.(51) Herein lies the potential for industrial development in NE region.

### Commerce

Commercial activity in the NE region is characterised by the rural General Dealers who provide low order consumer goods to customers living within about 30 minutes walk of their shops. This section describes the distribution, size and type of commercial enterprises in the region, distinguishing between rural shops town shops and informal sector activities. Specific problems for both entrepreneurs and customers are identified together with their implications for planning and development.

(i) Rural shops. Data relating to shops and commercial licences was obtained from central government departments. A field check by administrative area was undertaken to confirm these data and to include information about additional activities observed in the vicinity of the shops. In addition, a list of the main commodities stocked by each shop was collected during the field survey.

A complete list of all rural shops by administrative area is contained in the NE statistical base report and a regional summary is shown in Table 7.27. In total, there are 1143 rural shops in the NE region.(52) Most administrative areas contain at least one, usually a general dealer. Of all licences issued, general dealer's licences account for 22 percent of the total, followed by patent medicines (16 percent), and fresh produce and Post Office Agency licences (both 12 percent). Most businessmen hold more than one trading licence, with general dealer, cafe and/or patent medicine forming the most

common combination. Table 7.28 shows the ratios of shops to population (1,47 per 100 people)<sup>(53)</sup> Appendix VIII presents these statistics in disaggregated form for a sample district, namely Bizana.

The districts of Siphqeni, Umzimkulu and Lusikisiki have the highest ratios of shops/100 persons and offer a substantially larger number of functions to their customers. Bizana's shops also offer a diverse number of functions but because of its population size the shop/population ratio is poor. The two magisterial districts which exhibit the lowest number of shops per capita are Maxesibeni and Umzimvubu. These districts appear to be severely under served in respect to commercial activities as the total number of functions offered at their shops is also substantially lower than any other area.

The availability of various classes of products stocked by the shops reveals a clear hierarchy emerges with lower order goods being widely available and relatively higher order goods more scarce. Food, clothing, household goods, patent medicines, inflammable substances and tobacco are available in most general dealers, but furniture, bicycle spares, meat, petrol and milling facilities are found in less than 20 percent of the region's shops.

Few businessmen in the rural areas, had been in operation for any length of time - the majority of those interviewed had been running their concerns for less than five years and had less than five years trading experience. As far as education is concerned, two groups emerged: 44,3 percent had an education level of standard 8 or less, while 40,3 percent had received post-matric training, many as teachers.

Although slightly more than half of the traders reported that they had access to credit, almost exclusively from their suppliers, financial difficulties remained the major problem mentioned by businessmen. Table 7.30 lists the most common problems faced by rural traders in the NE. Turnover ranged widely (Table 7.31) with 38 percent of shops handling less than R 2 000 a month, while at the upper end of the scale, 15 percent turned over in excess of R 10 000 a month. The skewed nature of the distribution is further emphasised by the fact that the highest turnovers (20 percent) account for 64 percent of the total turnover.

The customer's views offer a complementary perspective of commercial services in the rural north-east. Shopping is generally undertaken on a daily or weekly basis with virtually all trips being made on foot. On an average trip, taking

is about 30 minutes each way, number of items purchased per trip was only two and a median trip expenditure of no more than R1,20. This emphasises the low levels of demand, itself a reflection of the extreme poverty found in the rural areas. Table 7.29 illustrates this in ranking the items (by product/weight) purchased most frequently.

Many rural customers do not have access to credit. Of those interviewed, over a third reported that they had never requested credit or did not want credit. Those who did receive credit (12,6 percent) had a ceiling of around R30,00. Most customers bought their provisions from only one shop.

Finally, although the NE region has more shops (1143) than either the south-east (822) or the north-west (906) regions, its ratio of shops per 100 people is substantially lower.

North east: 1,47 per 100 people

South east: 1,91 per 100 people

North west: 1,82 per 100 people.

Furthermore, shops in the SE and NW appear to stock a larger variety of goods and therefore meet the needs of their consumers better than in the NE. Average turnover was also higher in the other regions.

(ii) Town shops. Although only two percent of the region's population reside in the nine district towns, these are the focal points of socio-economic activity and are the source for higher order goods. (Table 7.32) lists the business activities in the region's towns. Although the towns all show a marked increase in commercial activity when compared to the smaller centres and rural areas, there are also substantial differences between them.

Lusikisiki is the major commercial centre in the region, while Port St Johns also has a wide range of commercial activities but these are geared more towards tourists. In general the towns of East Pondoland are far more bustling and active than those of Libode and Ngqeleni which fall under the shadow of Umtata and have little economic activity.

(iii) Informal sector. Street sellers are active in all the region's towns as well as at important road junctions such as Brooks Nek and Magusheni. The most common commodities are fruit, vegetables, cooked food, clothing and traditional

medicines.(54) There is a clear division of labour among street sellers with women dominating the fruit, vegetable, meat and clothing sectors. There are also explicit trends in the respective age and education of male and female sellers. Generally, the men are older and less well educated than the women. One of the main reasons for this is that both migrant labour and local employment opportunities are biased towards men. Consequently, it is only the old, sick and uneducated males who have to resort to the informal sector as a means of survival. The women, on the other hand, have little option other than to join the informal sector.(55) Savings were almost negligible amongst street sellers as 76 percent were found to be the sole income earners for their households. Competition was high which forced many to move temporarily to less economically active areas to sell their goods.

### Tourism and Recreation

At present, there are two major holiday resorts in the NE region. Port St Johns has two operating hotels, six rest camps/caravan parks and a number of holiday cottages; while the Mzamba casino complex, which offers 90 rooms as well as golfing, boating, gambling and cinema facilities, is being extended. Smaller hotels are located at Umngazi and Umtata Mouth and there are clusters of cottages at isolated places along the coast. See Figure 10.4.

Transkei's Coastal Development Control Plan has detailed an approach which concentrates holiday development in a limited number of places, leaving the remainder of the coast to be developed as conservation areas.(56) In essence the proposals are for "First Order Places" which are areas of the greatest concentration and attraction, and require a high level of facilities and access; for "Second Order Places" which should be developed to a lesser extent; and "Third Order Places" which should not be developed at all. In the North-East the designated First Order places are Mzamba, Port St Johns and Umtata Mouth. Second and Third Order places are shown on Figure 10.4.

### Transport and Communications

This section is concerned with the movement of people and goods as well as the flow of information within the NE region and beyond it to the rest of Transkei and adjacent regions. The framework for analysis is one that, firstly, compares the demand for trips and contacts with the means for making them, and secondly, identifies zones of relative accessibility within the region.

Rural people in the NE are forced to travel substantial distances in order to obtain consumer goods and to gain access to the services and institutions dispersed within the region. Most journeys are made on foot, while horse and cattle-drawn sledges are used frequently for local conveyance; public transport is the most common means for longer trips. Private vehicle ownership is very low at one vehicle per 122 households (see Table 7.33). Most vehicle owners become de facto taxi-operators, complementing the areas where public transport is inefficient or unavailable.

The present public transport service in the NE region is served by the Transkei Road Transport Corporation (TRTC) and private operators. Data on private companies is sketchy although it can be assumed that the service is hindered by the small number of vehicles and the condition of secondary and tertiary roads.(57)

In general, bus service extends into most administrative areas with the frequency varying from more than 20 a day to one per day. The pattern is one of strong linkages between the district towns and larger centres outside the region (Umtata, Kokstad) but weak linkages between rural areas. Bus terminals in the towns are no more than open sites, without shelters, toilets or paving; while in the rural areas there are, at most, five bus shelters. Return trips to the district towns during the course of a single day are impossible from many localities. Trips to the towns are, therefore, often difficult and costly both in terms of money and time for many rural people. Residents of villages situated away from major access routes generally have to walk long distances to the nearest bus stop. The average of 2.1 km<sup>(58)</sup> may not seem excessive until one considers the logistics of carrying home the type of goods purchased on infrequent trips to town, for example 20 litre tins of paraffin, 12,5kg bags of mealie meal or sugar, corrugated iron roofing, and so on.

Many people, even those living near fairly good bus routes, have to rely on taxis (licenced and unlicenced), mini-buses and informal public transport for some of their trips, especially journeys from one remote administrative area to another. A person can, however, reach almost any destination providing he can afford the higher taxi tarrifs. Charges vary from only slightly higher than the bus fares to R20 - R30 depending on whether or not other people are going in the same direction and whether the trip is being made out of "normal" times.

Goods transported by road in the NE are primarily undertaken from the railheads at Kokstad, Port Shepstone and Umtata. The South African Transport Services (SATS) are the largest haulier of goods in the region with private concerns accounting for only a small proportion and serving a generally limited local distribution function. SATS routes are mainly between the railheads at Umtata, Kokstad and Port Shepstone with depots located in most of the district towns. Air freight is minimal.

The only surfaced airstrip in Transkei is located at Umtata. There are 17 unsurfaced airstrips in the NE, mainly at mission hospitals, tea estates, holiday resorts and district towns. No scheduled internal flights within the region and the only commercial flight into the area is by a private firm operating between Durban and Lusikisiki. The majority of flights to Transkei are from Durban, East London or Johannesburg to Umtata.

Umzimkulu is the only district in the NE served by rail. Umzimkulu town is on the line between Kokstad and Pietermaritzburg, while a second line traverses the northern section of the district through Riverside and Singisi. These lines are part of the SATS network and do not carry sufficient freight to Transkei to warrant internal extensions.(59)

There are fifteen Post Offices in the NE region. Postal agencies are widely located throughout the rural areas, usually at general dealer stores, but these do not offer a full range of postal order and telegraphic services.

There are 178 telephone exchanges in the NE region. Many are only in operation for a set number of hours per day (ie. 9 - 5 Monday to Friday and 9 - 1 Saturday) therefore making communication difficult. From data available it is clear that more than half of the calls placed are to localities outside of the region while intra-regional calls are mainly between the towns.(60) The only telex facility is at Lusikisiki but it is privately owned and operated.

At present, intra-regional radio communication is virtually non-existent in the NE. Hospitals, police stations and government departments depend on the telephone service for communication purposes in spite of the frequent delays especially for intra-regional calls. Many individuals within both the urban and rural areas of Transkei have portable radios and receive Radio Transkei and Capital Radio transmissions. This represents a substantial opportunity for

dispersing information on development initiatives to the people of the country as well as affording a medium for educational instruction. Capital Radio, which was originally based at Port St Johns, has now moved and is located in Johannesburg but continues to broadcast to Transkei. The NE region has no local newspaper and delivery of daily papers from Umtata, East London, Durban and other nearby centres are usually several days late.

The only depot for repairs to government vehicles is located in Umtata. If these vehicles break down in the region, they can be taken to the nearest garage, but approval is needed from Umtata for repairs costing in excess of R100,00.

### Health

The health care system inherited by Transkei on independence proved to be unwieldy and generally directed at curative rather than preventative services and procedures. This necessitated a shift in priorities towards the fields of basic and primary health needs. The region's health services are organised around hospitals, residential and mobile clinics.

(i) Hospitals. The NE is relatively well provided with 14 of Transkei's 32 hospitals. See Table 7.34. Many were originally mission hospitals which were located without regard to spatial considerations, with the result that these facilities are not distributed optimally across the region. For example, there are no hospitals in four of the region's towns: Port St Johns, Flagstaff, Tabankulu and Libode. Many hospitals do not have adequate facilities and some are housed in very old buildings. The range of services offered by the 12 general hospitals differ, depending on the size, physical structure, equipment and the composition and experience of the staff. There is a specialized psychiatric hospital at Umzimkulu and a tuberculosis recovery centre at Mkambati. Staff shortages, lack of staff quarters, an overload of primary health care work and poor facilities make for difficult conditions at most of the region's hospitals.

(ii) Residential clinics. Forty seven such clinics constitute the base from which the region's primary health services are delivered. The range of services include ante- and post-natal care, clinics for under five year old children, family planning, immunisation, health education and treatment and referral of communicable diseases, minor and chronic ailments.

Each residential clinic requires a staff of two enrolled nurses and one assistant, but few enjoy a full complement. In many instances the poor quality of clinic buildings, inadequate or non-existent staff housing and remote locations combine to act as deterrents to attracting or retaining staff. The network of residential clinics is shown in Table 7.34 and Figure 10.3.

(iii) Mobile clinics. Medical teams operate from the district hospitals, usually on a weekly or bi-weekly schedule, visiting points in each district which have been demarcated by hospital staff or requested by the various communities. Services provided are, as far as possible, similar to those from the residential clinics, and are intended to serve people beyond walking distance from these clinics.

The recorded attendance and treatment of people at mobile clinic stopping points offers a basis from which to decide where new residential clinics need to be built in the under-served areas of the region. Problems experienced by the mobile clinic services which include maintenance of vehicles and the poor road conditions periodically limit the effectiveness of the service.

#### Education and training

In this section we shall concentrate on the distribution of schools in relation to population; government policy on the provision of schools; and other educational facilities.

(i) Distribution of schools in relation to population. Tables 7.35 and 7.36 show the existing provision of schools in the region, while Table 7.37 gives details of school enrolment by district in 1970 and 1980, and Table 7.38 compares the ratio of schools per capita by district. Interpretation of these statistics requires an understanding of the overlapping terminology used in Transkei's education statistics. Junior Primary (JP) provide for classes from Sub A to Standard 2 and Senior Primary (SP) from Sub A to Standard 5. Collectively these are often referred to as primary schools. Junior Secondary (JS) incorporates Sub A to Standard 7 while Senior Secondary education covers only Standards 8 to 10. Primary and Junior Secondary schools are located widely throughout the region providing a reasonably good coverage to both towns and rural areas. Senior Secondary schools, however, are usually located in towns, at mission hospitals or prominent rural places. Table 7.39 relates the distribution of Senior Secondary schools to population. It is notable that only 60 percent of the region's population live within 10 kms of a Senior Secondary school.

These tables summarize, at district level, a range of statistical indicators chosen to reveal under- and over-provision of schools throughout the region.(61) Suffice to observe here that the districts of Bizana, Lusikisiki and Umzimvubu perform poorly on most indicators. But while looking at inter-district differences, one should not lose sight of the often far greater variations that persist within districts.

In comparison with other regions in Transkei, statistics indicate an under provision of facilities in the NE:

	NE	NW	SE
Schools per 100 000 population :	97	120	106
Literacy in 1970	11%	29%	18%

(ii) Government policy on the provision of schools. Education and training have a major role to play in the future development of Transkei and the NE region. Appropriate education is necessary both to provide people with the opportunity to meet the country's growing manpower needs for industry, commerce and the civil service; and to allow migrants to compete more effectively in the South African labour market. However, it must be realised that as the RSA is likely to employ a decreasing proportion of Transkei's workforce during the next few decades, education will also need to focus on enabling people to become self-employed, especially within the local agricultural, industrial and trade sectors.

At present, about 40 percent of the population residing in the region are between the ages of 5 - 16 and thus school enrolment is likely to continue to rise, especially since individuals are leaving school at a later age due to decreased migrant work opportunities. Government's response to these educational needs was set out in the report of a Commission of Enquiry into Education (1978).(62)

It found that compulsory education could not be introduced at present because of inadequate facilities and staff. In order to remedy the shortfalls it established certain norms and targets. The existing structure of six years primary, three years junior secondary and three years senior secondary education was to be maintained. The goal set for 1984 pupil-teacher ratios in primary facilities should be 1:25 (existing ratios in Table 7.38); Junior secondary schools should cater for 180 - 300 pupils; and senior secondary, 500

- 600 students. For the immediate future, entry into junior secondary would be fixed at 30 percent of the primary intake and for senior secondary 55 percent of junior secondary enrolment. The siting of all new schools should take both demographic and geographic factors into consideration.<sup>(63)</sup> These targets have received high priority in Transkei's negotiations with the RSA Department of Foreign Affairs; one result of which is the major school building programme to which reference will be made in Chapter 10 below.

(iii) Other educational facilities. There is a vocational training school at Lusikisiki. It offers two year courses to 120 pupils (with a minimum Standard 8 pass) in:

- carpentry, joinery and cabinet making;
- plumbing, drain laying and sheet metal work;
- bricklaying, plastering and building;
- motor mechanics (3 years).

On average 55 pupils complete courses each year.

The Sigcau teachers training college near Flagstaff is responsible for training primary school teachers. Inadequate facilities, equipment and a shortage of suitably qualified staff hinder its performance. The future of this college is uncertain as government policy favours the concentration of teacher training in a few major centres excluding Flagstaff.

TDC has established a training centre at Misty Mount in 1981. Originally serving as a training school for trading store owners from 1965-76, it was later expanded to include wholesale as well as retail management. TDC's intention is to establish a garage management, hotel management and building trades courses there. The TDC also offers an after-care service training based at Misty Mount for Transkeians who borrowed money from the corporation to take over existing shops.

### Community Services

Zenzele and the Transkei United Womens Organisaion (TUWO) are voluntary, non-governmental organisations which provide for the increasing social and economic needs of women, particularly in the rural communities. Church groups of various denominations are active in most settlements and towns providing for spiritual and personal needs as well as assisting in the development of

organisational skills and leadership. ACAT provides assistance in the development of community and individual agricultural activities. However, there is a need for community facilities for adult education, and for youth groups throughout the region. Only in Port St Johns has an adult education programme been established. Sports and recreation facilities are lacking in most towns.

### Administrative Services

Transkei's public sector has a major role to play in initiating and sustaining socio-economic development. However, the shortage of administrative and technical manpower constitutes one of the most severe constraints on development. Unless government's capacity to implement development proposals and projects can be extended on a sustained basis its development initiative will surely fail. At present staff shortages within the public sector are estimated at 550 vacancies, but in many categories vacancy rates are in excess of 80 percent.(64)

The major reasons for this shortfall can be summarised as follows;

- a shortage of adequately trained Transkeians;
- uncompetitive public sector salaries;
- exclusion of Transkei from usual sources of international, technical and manpower aid;
- staff conditions, especially housing;
- inter-state competition for scarce skilled manpower in Southern Africa;
- specialised demands of high level manpower recruitment.(65)

For example, District Commissioners interviewed by IMDS identified their major problems to include lack of official reference material, lack of co-operation by chiefs, headman and strained relations with magistrates as well as poor training programmes and an absence of proper administrative channels.(66)

At present the Transkei government is attempting to recruit expatriate personnel to bridge the gap in development programmes. Meanwhile, changes in the present administrative system (Table 7.40) will need to occur and training programmes for local Transkeian personnel have to be upgraded in order to develop an efficient and effective administrative system. The cost of the required changes will be high in terms of both finance and time and hence "more

might be achieved if a few important programmes are selected and effort is concentrated on improving the relevant administrative and organisational structures to whatever extent is required for the successful implementation of these programmes".(67)

Development initiatives and proposals are constrained by the existing Transkeian administrative system. A clear delineation of the responsibilities of the various state departments is required in order that proposals can be implemented expediently and efficiently. Training programmes need to be upgraded so that present shortfalls and future staff requirements can be met by the indigenous labour force. Finally, in order to recruit appropriate personnel, salaries within the public sector need to become competitive with those offered on the open market.

Having completed an interpretive overview of the current situation and trends in the sectors with which development planning is usually concerned(68), we now turn firstly, to an investigation of the basic needs of rural households, and secondly to a discussion of the problems encountered in the region's towns.

#### Basic needs of rural households

A survey of rural households was undertaken in 1980-81 both to complement data on the distribution of population and facilities, and to obtain a more dynamic view of the basic needs and priorities of rural households.(69)

#### Basic needs

The sample covered 1206 people in 182 households at an average of 6.6 persons including temporarily absent migrant workers. Significantly 41,1 percent of the population is under the age of 15 years. The unbalanced male:female ratio, notably in the 15 - 40 year age group (17,1 percent men : 21,2 women) coupled with the periodic absence of 15,3 percent of the men as migrant workers, retards the capacity of rural households to farm their agricultural land effectively.

An activity analysis showed that only 3,5 percent are engaged in locally based wage employment; while a further 17,3 percent are migrant workers. Overall, no more than 20,8 percent of the population are in wage employment. Assuming that 33 to 40 percent of the population are potential workers, this suggests an unemployment level in the order of 12 to 19 percent. Turning to employment per

household, 17,8 percent of households have no-one in wage employment, while 15,9 percent of households have at least one workseeker. On average there are 1,3 wage earners per household, most of whom are in unskilled (skilled : unskilled = 1 : 4,9) migrant work in the RSA.

Each household in the survey was asked to state the income received by all working members from all sources - formal employment, informal activities, rents, pensions contributions in kind and so on. Only half the households in the sample gave useful responses and, as noted above, the data obtained in this way is not regarded as highly reliable. Nonetheless data on household and per capita income levels have been included because the overall distribution and average compared reasonably well with income from the 1979 BMR survey. On average each household had an annual income of R902 in 1980-81, with 71,5 percent of households earning less than R1 000 that year. Average per capita income was R131 per annum, with 71,6 percent of households earning less than R150. In view of the NE being identified as "less well off" and "underdeveloped" in relation to other regions of Transkei, these figures tally with the BMR findings that in 1979 the average per capital income of the poorest 80 percent of households in the North-East was R130.(70)

As far as food is concerned, no households are fully self-sufficient and all depend on the purchase of food from local shops to a considerable extent. Most households have de jure access to agricultural land (only 3,4 percent have neither fields nor gardens) and most plough their fields using their own resources or with the assistance of neighbours. Overall, 63 percent of households produce some maize and 33 percent some vegetables. However, these averages mask substantial local variations and, which means that the extent to which households are self-sufficient varies a great deal from one locality to the next.

Although some 70 percent of households own some stock the distribution is highly skewed and few families actually have viable herds. As many as 41,7 percent of households have no cattle and 63 percent have less than 5 large stock units.

Sources of water are also place specific but just over one half of rural households surveyed depend upon a river or spring for their main supply; others have access to a borehole but very few to a standpipe. Per capita consumption is low at an average of 10,8 litres per day.(71) Although distance to the water sources varies from one village to the next and depends on the relative

location of individual homesteads, more than half the sample households had a one way trip in excess of 30 minutes to their nearest water source. Each household undertakes several trips to fetch water each day, in most cases using a 20 - 25 litre container. On average a rural household devotes about 1½ hours per day to water collection and associated washing and social activities. See Table 7.41.

At the time of the surveys, 40 percent of rural households had built their own pit latrines. The 1983 figure would be higher as a result of the intensive sanitation campaign following the recent cholera epidemic.

Fuel for cooking is predominantly wood and for lighting, paraffin and candles. See Table 7.42. The significance of this is four-fold. In the first place the supply of firewood is decreasing relatively to the number of rural households. There are few organised woodlots and one can observe severe denudation of natural forests in many parts of East Pondoland. Secondly, paraffin is heavy and difficult to carry (a 20 litre tin weighs about 20 kg). Vehicle ownership is negligible and most households are some distance from the nearest shop or bus stop. Consequently households have to buy paraffin frequently and in small quantities. In the third place, dependence upon paraffin and candles as the only source of light means that the effective day for rural households is limited to day light hours. Fourthly, the average monthly expenditure on fuel is R7,70 per household. (BMR = R4,38 in 1979). On the basis of the number of rural households in East Pondoland it is estimated that in excess of R1-million is spent on fuel each month.

Modern health services are provided through a widespread network of hospitals, clinics (residential and mobile) and a few private doctors based in towns. In addition there are an un-determined number of herbalists and faith healers practising traditional medicine.

Education services in the NE are almost exclusively directed to children and are provided through an extensive network of schools. The widespread availability of primary education is a relative recent phenomenon. Taking alternative bench marks for literacy (Standards 3 and 5) and those age groups who could have achieved each level, it becomes clear that the younger generation are more literate than their parents. It is significant that some 45 percent of the region's adult population have not had more than a Standard 3 level of education and that 64 percent are probably not effectively literate.

### Basic services

Selected basic services were examined to assess how effective each is in reaching the people of the region. Reference to rural shops, vehicle ownership, public transport, telephones, boreholes and agricultural extension officers illustrate the main argument.

In the survey of rural shopping, each customer was asked to list the items bought on a particular trip. In all 286 different products were mentioned of which the most frequent purchased 25 are ranked in Table 7.29. Perhaps the most telling statistic (noted above) is that the average number of items purchased per trip is only two and the median trip expenditure no more than R1,20.

Vehicle ownership is very low (1,7 per 1 000 people, or 122 households per vehicle - see Table 7.33). This means that people depend heavily upon public transport for trips of any length, e.g., to higher order shops, post offices, banks, government departments and so on. The public transport services has been discussed above.

There are 178 telephone exchanges in NE region. At this stage records are not adequate for a thorough analysis of linkages. However, from the data available it is clear that more than half the calls are to places outside the region, while the intra-regional calls are mainly between the towns and their nearest neighbour towns. During the few recorded periods there were hardly any calls between rural exchanges.

The distribution of boreholes and windmills has been related to the settlement pattern in Table 7.43. Even this coarse level of analysis reveals a vast deficiency in the provision of water for domestic use and reiterates the need for a widespread village water supply programme. Plans for large scale rural water supply systems to cover the region were prepared some time ago but have not been implemented on account of high costs.

The serious shortage in the supply of agricultural extension officers can be seen from Table 7.44. Each officer is based in an Administrative Area from which he also serves a few adjacent areas. However, there remain many areas beyond the regular reach of this service. Ratios of extension officers to population emphasise the extent of this deficiency. The problems of the extension service relate, firstly, to inadequate work conditions,

organisational structure and training. Secondly, the branch is in a demoralized state and is poorly evaluated by the communities on account of past failures in agriculture and husbandry. Thirdly, there appears to be a lack of real desire among rural households to learn about agriculture and follow this through, resulting in a decrease in the demand for the services of the extension branch.(72)

Finally, households were asked to list their priorities for improvement. Once again priorities reflect local conditions and so it is even more noteworthy that 66,5 percent of households requested improvement in the water supply. In all but one sample area (where road access was first) water was the top priority by a wide margin. The next most requested improvement was for better road access and public transport, followed by increased provision of medical services and more shops. This represents a demand for improved residential infrastructure (see Table 7.24). Significantly agricultural claims do not emerge as priorities in the thinking of rural households. This suggests that they do not view themselves as predominantly agricultural communities.

A summary of basic needs indicators for the NE region is set out in Table 7.45, while Table 7.46 shows the performance of districts on a comparative basis.

#### Problems encountered by and in the towns

In order to complete this overview of the region's socio-economic and spatial development, attention should focus on those places where a number of services and facilities are concentrated. In the North East, where most people live either in small, dispersed planned villages with few facilities (50 percent), or in scattered traditional settlements (48 percent), the existing towns play an important role. For although these towns contain very few of the region's people, they are the focal points for most economic activity and the places upon which the entire region depends for all but the most elementary services.

During recent years concern about the performance of the towns has been expressed in both private and government sector circles. There are two main reasons for this. Firstly, there appears to have been a decline in the services and functions provided in the towns; secondly, towns have come under scrutiny for the very reason that the surrounding rural communities depend upon

them so heavily, and particularly so in a region like the north-east where topography and poor infrastructure combine to make communication with Umtata difficult and slow. The present situation in the region's towns will be discussed under three sub-headings: activities, facilities and infrastructure; basic needs of town residents; and problems faced by the towns.

#### Activities, facilities and infrastructure

Table 7.47 presents an overview of the activities to be found in each of the region's five towns as well as twelve small centres, which were identified in the field research as places having some concentration of socio-economic activity. Notable aspects of this table are the small population of the towns compared with that of surrounding Administrative Areas; and the concentration of administrative activities in the towns.

The physical infrastructure of the region's towns was summarized in Table 7.23. As far as developed land is concerned, there are a large number of vacant lots in each town. Furthermore, the number of residential plots is small in relation to the town's population. This shortage is illustrated by comparing the total number of households with the number of residential plots:

Bizana	2,8 households/plot	Port St Johns	4,7 households/plot
Flagstaff	3,6 households/plot	Umzimkulu	1,9 households/plot
Lusikisiki	4,3 households/plot	Ngqeleni	4,6 households/plot
Mt Ayliff	4,0 households/plot	Libode	4,1 households/plot
Tabankulu	2,4 households/plot	NE region towns	3,1 households/plot

Most existing residential plots are large and beyond the means of the majority of present day town residents who need housing. Yet the amount of land already planned, sub-divided and in potential use, represents no more than a small fraction of the commonage area (ranging between one and 12 percent of commonage land). This means there is ample land for future development but it first needs to be planned and sub-divided into affordable and appropriately serviced sites before this potential can be realized.

Water supplies are a problem in most towns and present capacities relate only to existing town population. Electricity is supplied from diesel generators to all towns, but the situation is changing and all but Flagstaff and Tabankulu are expected to be on either TESCOR or ESCOM power by the end of 1983. Most towns use a combination of sewage disposal systems.

Table 7.32 listed the business activities that occur in each town and in the small centres. As discussed above it demonstrates clearly the vast difference in business activity amongst the region's towns on one hand, and between them and the small centres on the other.

#### Basic needs of town residents

In order to understand the basic needs and priorities of small town residents towns, household surveys were conducted in two of the region's towns involving 69 households (276 people).(73). The age-sex structure reveals a familiar pattern of a youthful population (38,8 percent below the age of 15 years), with an unbalanced sex ratio (men : women = 45,6 : 54,4) particularly in the 15 - 40 years-age group (18,8 percent of men but 26,8 percent of women).

The average household size was found to be 4,0 persons in the sample survey, but other surveys estimate 5,4 persons(66). Of the active population 30,4 percent are in wage employment but a further 9,8 percent are unemployed. On average there are 1,2 wage earners per household. These people are engaged in a wide range of occupations from professional through managerial, administration and technical to unskilled work. Household income is in the order of R300 per month; a breakdown of the components of this income and of expenditure is shown in Table 7.48.

#### Problems faced by the towns

The constraints limiting development of the region's towns and the problems confronting their authorities may be grouped under four headings: economic, administrative, physical infrastructure and planning.(74)

(i) Economic constraints. The towns are primarily administrative centres and have very few economic linkages (forward or backward) with the surrounding rural areas. There is very little industrial activity. As such they lack an economic base for future growth. Related to this is the lack of wage-earning opportunities not only for residents but also for people from the surrounding areas who seek non-farm jobs. This, in turn, limits the buying power of the town population which further constrains commercial and business activity, particularly in regard to higher order functions.

There are a minimal number of ratepayers and towns are thus unable to generate enough revenue to carry out their prescribed functions. Revenue has not kept pace with rising costs of providing municipal services. Most towns have great difficulty trying to maintain services and infrastructure at existing levels and are consequently unable to finance infrastructure for expansion. Present business opportunities tend to be concentrated in the hands of a relatively small number of businessmen. This makes conditions difficult for small, less experienced operators. There is virtually no physical provision for small businesses and industries e.g., market stalls.

(ii) Administrative constraints.<sup>(68)</sup> The Town Councils are nominally autonomous but it is this very situation that retards their development - for autonomy carries with it certain responsibilities which the towns are unable to fulfill. There is a serious shortage of trained staff at all levels. In all cases Town Clerk's posts are doubled with that of Town Treasurer. Most incumbents have had virtually no training and very little experience; salaries are low. Prior to 1982 there had been no in-service training courses for Town Clerks.

Most Town Clerks and their staff are untrained in financial matters. The functions of the Town Clerk are generally not well understood by the Councillors, with the result that the latter often intervene in administrative matters. This situation, coupled with the Town Clerks' lack of training and experience, and their sense of isolation results in a state of affairs where Town Clerks are wary of playing their full roles as chief executives of the towns.

Municipal staff are largely untrained, and, according to the Town Clerks, often unco-operative. Only one town in the region has an engineer. Finally the procedures involved in granting business licences are lengthy and tedious, involving a number of authorities other than the municipality.

(iii) Physical infrastructure. All towns have water reticulation systems of some description but the supply is often inadequate resulting in cut-offs and rationing. The sewage systems are generally antiquated and unhygienic. Most towns still rely largely on the bucket system, a small number of users have septic tanks and the remainder use pit latrines (often communal).

At present, the provision of electricity is inadequate in all towns except Umzimkulu; and of the remainder, only Bizana provides power to the whole town; the others have only a partial supply. The rising price of fuel has led to increased costs resulting in a substantial difference between the 20-27c/unit for electricity supplied from diesel generators and the 0,8c/unit from Escom. Fuel costs are the largest single item of expenditure in almost all municipalities. However, as noted above, all the region's towns apart from Flagstaff are expected to be on Tescor or Escom power within the next few years.

Only few of the region's towns (Libode, Mt Ayliff, Bizana and Umzimkulu) can be reached on bitumen surfaces road. Roads to the other towns are preferably the best maintained in the region and are passable by two wheel drive vehicles throughout the year. Apart from the main streets, internal roads are gravel and receive little maintenance. In this regard, Port St Johns is a notable exception. Telephone services are inadequate because there are few lines and no direct dialing facilities. There are very few public telephones. In most towns the refuse collection facilities are inadequate with the result that streets are very littered.

(iv) Planning. The standards and procedures controlling development in the towns have been taken over directly from the Cape Provincial Administration. As such they are inappropriate and do not meet the needs of small African or Transkeian towns. Furthermore, in common with many systems of town planning and building regulations transposed into Third World countries, they have a negative impact and tend to retard development rather than encourage a high quality environment. An alternative more flexible set of standards that established basic safety and health controls and that permitted mixed uses would encourage development.(75)

Although the towns have vast tracts of unused land and many vacant erven, there are not sufficient business, commercial and industrial sites of the size required by potential users. Similarly, there are not enough residential plots of the size, cost and with the level of service appropriate to the needs and resources of town residents. A range of site and services, and reception area type of development offers a suitable approach at this stage to meet current needs and avert uncontrolled squatting. Housing for key government personnel is also inadequate. In order to attract officials of reasonable calibre to the small towns, some provision should be made of their housing. Recreation facilities are also inadequate.

The physical layout of most towns causes a conflict of pedestrian and vehicle activities. This is most pronounced in the vicinity of the main bus stops and informal markets. Furthermore, the lateral expansion of several towns has been neglected, resulting in "ribbon like" development stretching along the main street. These difficulties could be resolved fairly easily and without much expense by some imaginative town planning and urban design. However, none of the region's towns have planning officers to guide their future development.

Although there are instances where one or other of the problems listed here does not apply to a particular town, these constraints are typical and together constitute a formidable barrier to be overcome if the towns are to play a more active role in the region's development. Many of the problems are inter-related and most cannot be solved by the towns themselves. Consequently, there appears to be a case for intervention by central government to assist the towns to fulfill the roles demanded of them by virtue of their position in the country's settlement hierarchy.

#### Conclusions and implications for development

To sum up, the NE region has a large population but limited resources. It has distinct potential for agricultural development and there are prospects for the intensive development of such crops as sugar, tea, nuts and sub-tropical fruits. There is certain potential for hydro power and tourism but the costs of developing these are likely to far outweigh the benefits that could accrue to people living in the region.

However, this potential should not be over emphasised, for the north east's prospects are severely constrained. The region is poorly served in terms of physical infrastructure. Commercial activity is mainly of a low order; industrial activity minimal; there are very few wage earning opportunities; and social services are inadequate - health more so than education. There is a high rate of migrancy and the region depends heavily on these workers, whose remittances make up nearly a third of household incomes. Local circulation of money is limited as most of it is spent on goods produced outside Transkei. In functional and communication terms, the region is probably more closely linked

to the PWV (as the main source of migrant jobs) and southern Natal towns, than to Umtata and the rest of Transkei. The region is neither self sufficient, nor autonomous in any respect. In short, the NE is seriously undeveloped in an absolute sense, and enmeshed within an historically rooted cycle of structural underdevelopment within the wider context of Southern Africa. Moreover, the region is a deprived area within Transkei as is borne out by comparing statistics for the NE with Transkeian averages.

This situation has important implications for development planning and investment decisions:

- Land allocated for farming is not being used as effectively as it could, thus constituting a serious waste of the region's most important natural resources.
- Inadequate water supplies retard development across a broad spectrum such as health, nutrition, gardening and building.
- The present lack of wage job opportunities in the region and the high level of unemployment are accentuated when viewed in the context of a population growth rate of some 2,6 percent per annum and a male labour force increasing annually by 9 000 people.
- Incomes are very low and many households are unable to feed themselves adequately.
- Many households exist at marginal levels and will consequently not be prepared to engage the risk levels called for in even modest, low key development projects.
- Access to basic facilities and services is inadequate, thus forcing rural households to travel long distances under fairly difficult conditions to meet many of the daily, weekly and monthly needs. The cost of these trips should be measured in terms of opportunities foregone, over and above the cash, time and effort costs.
- Near absence of adult education and severe shortage of technical education contribute to the labour force being largely unskilled.
- The high degree of centralization, that requires most decisions to be made in Umtata, results in situations that manifest themselves as problems in rural areas.
- Administrative structures and capacity are unable to maintain the present (not very efficient) level of services, far less cope with the organisation needs of a regional development programme.

To sum up, the NE experiences widespread poverty; it lacks of basic infrastructure and there are large areas of high population density without adequate road access. Its local economy is limited to commerce (mainly consumer goods and food produced in the RSA) and a little agriculture. It has virtually no industries. The development problem faced is thus one of somehow using what resources the region has (i.e., people and land for agriculture) to meet the basic needs of its residents and provide them with jobs. The present economy has insufficient cohesion or momentum to tackle these problems without assistance.

Notes and References

1. For a full report see Osmond Lange Inc. (1982) "Statistical base for planning service centres in Transkei's north-east region"; also Osmond Lange Inc. (1983c, d, e) op cit.
2. See note 26, p. 127.
3. Administrative areas are small in size with radii of 3 or 4 km fairly common, which means that areas of 3 000 to 5 000 ha are typical. Osmond Lange Inc. (1982) op cit p. 34.
4. Hawkins Associates (1980) op cit p. 195.
5. Ibid.
6. Ibid, Chapter 7.
7. Ibid pp. 195 - 196.
8. Eksteen, van der Walt and Nissen Inc. (1979) "Report on the general hydrological properties of Transkei". Report to Department of Works and Energy, Umtata, Vol.2, section 8.
9. Ibid.
10. Mining (draft chapter of Transkei's Five Year Plan) (1983) mimeo, section 1.1.
11. Mining Corporation RSA (1982) "Known mineral occurrences in the Republic of Transkei" Report to Osmond Lange Inc.
12. Rosmarin, Els and Taylor (1979) "Coastal Development Control Plan". Report to Department of Local Government and Land Tenure, Umtata.
13. Population and labour force statistics for 1983 are based on Development Priorities paras. 2.8 - 2.10 together with the assumption that the NE region contains 30 percent of Transkei's population and accordingly, of its labour force and migrant workers.
14. Development Priorities (1983) para. 2.9.
15. Ibid para 2.10.
16. Wakelin P M (1983) "Migrant labour in Transkei (1982)" IMDS Statistical Series 2/83, University of Transkei, p. 4.
17. Ibid p. 5.
18. Ibid p. 10.
20. Osmond Lange Inc. (1982) op cit p. 24.
21. Ibid, Table 2.12.

22. Bureau for Market Research (BMR) (1980) "Income and expenditure patterns of black households in Transkei (1979)." University of South Africa, Pretoria.
23. Institute for Management and Development Studies (IMDS)(1983). During the planning of the NE region in 1982 and 1983, unpublished results were available. These are the figures used in Chapter 7.
24. IMDS Income and Expenditure Survey (1982) op cit.
25. Wakelin P M (1983) Personal communication.
26. Wakelin P M (1983) "Migrant labour in Transkei, 1982." IMDS Statistical Series, University of Transkei, p. 11.
27. Ibid.
28. Hammond-Tooke W D (1975) op cit, Tables 4,5 and 14.
29. Ibid Table 4.
30. Ibid Table 5.
31. See above Chapter 4, pp. 79, 82 - 84.
32. Hammond-Tooke (1975) op cit Table 14.
33. Heath R A (1979) "Rhodesian service centres and service regions." Unpublished M Phiel thesis, University of Rhodesia.
34. Hawkins Associates (1980) pp. 164 - 183 and 269 - 274.
35. Osmonde Lange Inc. (1982) op cit Figure 6.2.
36. The analysis of Tapscott et al (1984) which used 20 km radii to argue that the existing towns serve almost the entire Transkei is rejected on the grounds that "crow-fly" distances are unrealistic in a region as topographically broken as Transkei; and a 40 km round trip is not feasible on foot.
37. Southey C (1980) "Land tenure in Transkei". Report to National Planning Committee, Umtata.
38. Rosmarin, Els and Taylor (1983) "Transkei urban housing policy (draft)" "Report to Department of Local Government and Land Tenure, Umtata.
39. Osmond Lange Inc. (1982) op cit p. 171.
40. This section has been updated since the preparation of the SDP in 1983, on the basis of a recent report : Tracor (1985) "An agricultural development strategy for north-east Transkei". In essence the state of traditional farming in the region has not changed over the last two years.
41. Tracor (1985) op cit p. 14.
42. Osmond Lange Inc. (1982) op cit pp. 143 - 4; quoted in Tracor (1985) op cit p. 14.

43. Tracor (1985) op cit p. 15.
44. Ibid pp. 16 - 18.
45. Ibid p. 16.
46. Ibid p. 17.
47. Hawkins Associates (1980) op cit, Table 11.2; Osmond Lange Inc. (1982) op cit, Table 5.10.
48. Tracor (1985) op cit p. 18.
49. Agricultural sector (draft chapter of Five Year Plan) (1983), section 2.1.
50. Transkei Development Corporation (TDC) (1982) "List of Transkei based manufacturers"; Transido list of clients (1983).
51. Nattrass N (1982) "The informal sector - implications for employment in Transkei". IMDS, mimeo.
52. Osmond Lange Inc (1982) op cit Tables 4.11 to 4.20. See Appendix VII for an example of these data for Bizana.
53. These figures are presented in a disaggregated form by administrative area in Osmond Lange Inc. (1982) op cit, Tables 4.21 to 4.30.
54. Nattrass N (1982) op cit.
55. Ibid.
56. Rosmarin Els and Taylor (1983) op cit.
57. B. S. Bergman and Partners (1983) "Transkei transportation infrastructure development plan". Report to RSA Department of Transport, Pretoria, chapter 3.
58. Air photograph analysis 1983.
59. Maasdorp G G (1978) "Alternative strategies for the public transport sector in Transkei". Report to Technical Planning Committee, Umtata.
60. Data supplied by the Department of Posts and Telecommunications, 1983.
61. These results are based on the disaggregated analysis at administrative are level, reported in Osmond Lange Inc. (1983e) op cit pp. 223 - 230.
62. "Report of the Commission of Enquiry into Education in the Republic of Transkei." Department of Education, Umtata.
63. Ibid.
64. Project Motivation 17.1 of 1983/84. General administration key development personnel, para 1.1.
65. Ibid para 1.3.

66. Based on unpublished results of an IMDS in-service training course for Town Clerks and District Commissioners, reported in Osmond Lange Inc. (1982) op cit p. 160. A survey aimed at comparing the prescribed functions of rural based officials with their actual activities in order to pinpoint in-service training needs was blocked by the NPC on the ground that it was likely to stir discontent among the officials concerned.
67. Tapscott C P G (1981) op cit.
68. See above Figure 3.1 on p. 51.
69. A full report on these surveys is contained in Osmond Lange Inc. (1982) op cit, chapter 5.
70. Bureau of Market Research (1979) op cit Table 4.13.
71. As a general guide, 20 litres per person per day is regarded as the minimum consumption required for basic health in rural areas. For settlements served by communal standpipes at 100m intervals, typical consumption is in the order of 40 litres/person/day, increasing to 80 litres in situations where each household has its own standpipe but uses pit latrine sanitation.
72. Reported more fully in Osmond Lange Inc. (1982) op cit, pp. 115 - 117.
73. Reported more fully in Robinson (1980) "A plan to upgrade Mtumbane, Port St Johns" pp. 5 - 15 and 36 - 47; also Osmond Lange Inc. (1982) op cit, pp. 169 - 173.
74. Osmond Lange Inc. (1982) op cit pp. 174 - 6.
75. See for example, Botswana (1981) Urban development standards; and Building regulations; also RSA Department of Community Development (1983) Guidelines for the provision of engineering services in residential townships.

CHAPTER EIGHT

STRATEGIC FOCUS

Having established a comprehensive statistical framework for development planning the NE region, we now move to the next phase in the strategic planning process, namely that of making strategic choices. This is a transitional phase in which decisions have to be made as to the issues with which the spatial development plan (SDP) will be concerned, and about other (more policy related) matters that must necessarily be dealt with in other forums. It is, therefore, the most critical phase in the process of strategic planning.

We commence by projecting the growth of population, labour force and school age population over 25 years and then examine in parallel, the main components of a development strategy and the implications of three basic scenarios portraying alternative futures for the region. To complement this picture we then synthesise the main issues from the previous analysis. This provides a basis for distinguishing the particular issues upon which the SDP will concentrate, from those issues that require resolution at supra-regional or a-spatial levels of decision-making.

Projections of population, labour force and school aged children

Planning is concerned with identifying what is required in the future and ensuring that inputs are phased appropriately to achieve the desired future state. Therefore, in order to establish long-term infrastructure, service and institutional requirements for the NE it was necessary to project present population figures and ascertain estimates for the next two decades. While these are by no means the ultimate determinants of the plan, they provide an order of magnitude without which it would not be possible to formulate detailed policies and proposals for the development of the region.

The following sub-sections outline the general assumptions adopted for the projections and give broad guidelines with respect to the approximate number of people entering both the labour force and education system at specific time periods. The planning implications inherent in this increase in population are then summarized.

The projections set out below were calculated on the basis of data available during the first half of 1983 and assumptions in current use at that time. It is acknowledged that these projections are not fully comprehensive in terms of their underlying assumptions or base data; but they were made in order to establish the necessary strategic framework of population and labour force growth for the NE regional plan.

The subsequent availability of research into local fertility and mortality rates internal and external migrants together with corrections to the 1980 census and results of the 1985 mini census should provide the inputs needed for more sophisticated projections similar to those undertaken by the University of Natal in 1978.(1)

Transkei's present population is around 3 250 000 or about 550 000 households. It is expected that by the end of the century the country will contain approximately 5 million people and, with the expected decrease in household size, about 900 000 households(2).

The existing labour force is around 1,1 million and is expected to increase to 1,75 million during the next two decades. In the immediate future the annual increase should be about 2,8 percent per annum or about 30 000 per year.(3) "The male labour force of about 725 000 in mid - 1983 is likely to increase to 1 125 000 by the end of this century, supplemented by about 400 000 female workers (and work seekers) at present and about 625 000 by the year 2000"(4).

Approximately 420 000 Transkeian (most of whom are men) or 55 percent of the country's male labour force work in South Africa. However, in the long-term it is expected that migrant work in the RSA will decline and, therefore, the need to create employment opportunities for the expanding labour force within Transkei is considered by the government to be a key development goal.(5)

In order to carry out projections to establish the future population and labour force for the NE region and to identify long-term student enrolment it was necessary to formulate certain assumptions. The assumptions used in these projections are summarized in Table 8.1.

The starting point for the population projections was to establish a more accurate 1980 base year total. In order to do this the 1970 population of the NE region was increased by 2,8 percent p.a.-the growth rate in use in Transkei at the time (assumptions A and B). This total was then disaggregated by magisterial district based on percentages set out in assumption C. Table 8.2 summarizes these population projects from 1980 to 2005 at five year intervals.(6)

Table 8.1 Assumptions for <sup>-227-</sup>projections

Population

- A. The 1970 population census was accurate.
- B. The NE region has experienced a 2.8%pa growth rate since 1970 and this will continue until the turn of the century.
- C. The 1980 census figures were slightly low. However, the percentage of under-enumeration per magisterial district was constant and therefore, while actual figures may not be entirely accurate, the proportional breakdown of the region's population residing within each district is correct and is as follows:

Percentage breakdown of population per Magisterial District (1980)

Magisterial District	% of regional population
Bizana	15.7
Libode	9.3
Lusikisiki	19.2
Maxesibeni	5.9
Ngqeleni	11.8
Siphaqeni	9.8
Tabankulu	9.9
Umzimkulu	13.3
Umzimvubu	5.1
Total	100.0

Source: 1980 Census

- D. The present male : female ratio is 49.45 : 50.55 and will remain constant to the year 2005.
- E. The present population breakdown by age group will remain the same for the next two decades and is as follows:

Age breakdown of population

Age	Male	Female
0 - 4	12.35	10.67
5 - 9	13.62	10.46
10 - 14	10.93	10.81
15 - 19	9.50	10.67
20 - 24	10.12	9.90
25 - 29	7.92	10.39
30 - 34	7.44	7.95
35 - 39	4.91	4.19
40 - 44	5.94	5.02
45 - 49	4.51	4.95
50 - 54	3.33	4.25
55 - 59	2.85	2.37
60 - 64	2.61	3.07
65+	3.97	5.30
Total	100.00	100.00

Source: IMDS Preliminary Data (1982) Income and Expenditure Survey (NE Rural De Jure Population)

- F. All projections were based on the de jure population so as to obtain a total figure for the region. De facto numbers resulting from temporarily absent migrant workers can be extrapolated from this.
- G. An outmigration to the RSA of around 1 million by the year 2005 can be expected.
- H. That the rural population at 2005 will equal that of the 1980 corrected rural population (including migrants) and that urban centre(s) will therefore have to accommodate the increase in population.

Labour Force

- J. As the NE contains 30% of Transkei's population it also contains 30% of the country's labour force.
- K. The labour force will increase at 2.8% p.a. until the year 2000.
- L. 80% of all males between the ages of 15 and 59 will be seeking employment (56.52% of the male population fall within this age group)
- M. 40% of all females between the ages of 15 and 59 will be seeking employment (59.69% of the female population fall within this age group.)

Education

- N. Children of school going age are those in the 5 - 16 year age group.
- P. As the table in assumption E is divided into 5 year age groups it was necessary to take two-fifths of the 15 - 19 category in order to obtain the number of 15 and 16 year olds. It is assumed, therefore, that the distribution of people within this 15 - 19 section was even for each age group.
- Q. 28.35% of the male population is between 5 and 16 years of age.
- R. 25.53% of the female population is between 5 and 16 years of age.
- S. Education projections do not take into account enrolment percentages but give the total number of individuals which fall within the school going age.

As the NE region contains 30 percent of Transkei's population and labour force (assumption J), the workforce during 1983 was approximately 330 000 of whom about 210 000 were male and 120 000 female. By the year 2000 the work force is expected to have increased to around 525 000.

Table 8.4 shows the labour force projections. Based on Table 8.2 (population projections), the method used here involved the initial disaggregation of the population by magisterial district into male and female (assumption D). The number of individuals between the ages of 15 and 59 was then ascertained and finally, the percentage of individuals within this age group seeking employment was calculated (assumptions E, L and M). Figures obtained correlated closely with those outlined in the Development Priorities White Paper in which a 2,8 percent p.a. growth rate of the work force was projected for the next two decades.

The assumptions adopted for projecting the growth in the number of children of school going age are outlined in Table 8.1 while Table 8.3 summarizes the results of these projections. If 90 percent of the 1990 total is taken then figures match those contained in the education section of the Draft five Year Plan where enrolment figures were based on 90 percent attendance in the NE for 1990. (See assumption S).

To sum up, the NE region's population is expected to increase to 1,77 million by 2005, its labour force to 530 000 and the number of school aged children to 415 000. Although more sophisticated projections will differ from these figures in detail, it is anticipated that the overall order to magnitude will be similar. Accordingly the projections set out in Tables 8.1 - 8.4 may be used to assess the strategic options facing Transkei and so too, the NE region over the next 20 years. Government's response to issues at a national level will set the broad framework within which strategic issues facing the NE region can be tackled. What type of future is feasible and desirable for the NE? What steps are needed to achieve this? The next sections attempt to formulate a realistic response to these questions.

**Table 8.2 Population Projections for the NE Region 1980-2005**

Magisterial District	1970	1980	1985	1990	1995	2000	2005
Bizana	100 756	139 325	159 953	183 636	210 825	242 039	277 876
Libode	60 413	82 530	94 750	108 779	124 085	143 375	164 603
Lusikisiki	129 117	170 385	195 612	224 574	257 825	295 998	339 824
Maxesibeni	40 971	52 358	60 110	69 010	79 228	90 958	104 425
Ngqeleni	79 443	104 715	120 219	138 019	158 454	181 915	208 849
Siphaqeni	66 836	86 967	99 843	114 626	131 597	151 082	173 451
Tabankulu	69 850	87 854	100 862	115 795	132 939	152 623	175 220
Umzimkulu	90 188	118 027	135 502	155 564	178 597	205 040	235 398
Umzimvubu	35 700	45 250	51 959	59 652	68 484	78 624	90 265
<b>Total</b>	<b>673 282</b>	<b>807 419</b>	<b>1 018 810</b>	<b>1 169 655</b>	<b>1 342 834</b>	<b>1 541 654</b>	<b>1 769 911</b>

Source: Table 8.1 Assumptions A, B, C, F.

**Table 8.3 Labour Force Projections for the NE Region 1985-2005**

Magisterial District	1985			1990			2000		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Bizana	19 305	35 764	55 069	22 164	41 060	63 224	29 212	54 118	83 330
Libode	11 436	21 186	32 622	13 129	24 322	37 451	17 304	32 058	49 362
Lusikisiki	23 609	43 738	67 347	27 104	50 213	77 317	35 725	66 183	101 908
Maxesibeni	7 255	13 440	20 695	8 329	15 430	23 759	10 978	20 338	31 316
Ngqeleni	14 510	26 880	41 390	16 658	30 860	47 518	21 956	40 675	62 631
Siphageni	12 050	22 324	34 374	13 834	25 630	39 464	18 235	33 781	52 016
Tabankulu	12 173	22 552	34 725	13 976	25 891	39 867	18 421	34 125	52 546
Umzinkulu	16 354	30 297	46 651	18 775	34 783	53 558	24 747	45 845	70 592
Umzinvubu	6 271	11 618	17 889	7 200	13 338	20 538	9 489	17 580	27 069
<b>Total</b>	<b>122 963</b>	<b>227 799</b>	<b>350 762</b>	<b>141 169</b>	<b>261 527</b>	<b>402 696</b>	<b>186 067</b>	<b>344 703</b>	<b>530 770</b>

Source: Table 8.1 (Assumptions D, E, K, L, M) and Table 8.2

**Table 8.4 School age population projections for the NE Region 1985-2005**

Magisterial District	1985			1990			2000		
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Bizana	20 649	22 424	43 073	23 706	25 744	49 450	31 246	33 932	65 178
Libode	12 232	13 283	25 515	14 043	15 250	29 293	18 509	20 100	38 609
Lusikisiki	25 252	27 423	52 675	28 991	31 483	60 474	38 212	41 496	79 708
Maxesibeni	7 760	8 427	16 187	8 909	9 674	18 583	11 742	12 752	24 494
Ngqeleni	15 520	16 854	32 374	17 818	19 349	37 167	23 484	25 503	48 987
Siphaqeni	12 889	13 997	26 886	14 797	16 070	30 867	19 504	21 180	40 684
Tabankulu	13 021	14 140	27 161	14 949	16 233	31 182	19 703	21 396	41 099
Umzimkulu	17 492	18 996	36 488	20 082	21 809	41 891	26 469	28 745	55 214
Umzimvubu	6 708	7 284	13 992	7 701	8 363	16 064	10 150	11 022	21 172
<b>Total</b>	<b>131 523</b>	<b>142 828</b>	<b>274 351</b>	<b>150 996</b>	<b>163 975</b>	<b>314 971</b>	<b>199 019</b>	<b>216 126</b>	<b>415 145</b>

Source: Table 8.1 (Assumptions D, E, N, P, Q, R, S) and Table 8.2

### Components of a development strategy and spatial options

On account of the prevailing lack of development in the region and the existence of neither an economic base nor a strong spatial framework, Transkei's strategy for the NE is based on the parallel development of agriculture and industry within a planned spatial framework.(7)

The agricultural component involves the development of commercial and small-holder farming with emphasis on tea, sugar-cane, timber maize and other staple food crops. Meanwhile, the industrial component is based on small scale industries producing for local (i.e. mainly regional and Transkeian) demand. In support of agricultural and industrial initiatives, the region's physical infrastructure (both at regional level and in the main towns) needs to be upgraded in such a way as to encourage urbanization. On account of the shortage of skills in Transkei generally and the NE in particular, training and the building up of administrative capacity to implement and maintain projects is to be incorporated into all programmes. In parallel provision needs to be made for improving access to basic services and facilities in rural areas.(8) This development strategy will be expanded sector by sector in Chapter 10. Our attention will focus now on the broad spatial aspects.

Transkei's population will be about 5,8 million by 2005. Approximately 2 800 000 of these will be rural residents (assumption H) and taking into account those emigrating to South Africa, (assumption G) this means that a total of two million people will be seeking residential and employment opportunities in Transkei's towns by 2005. Within the NE region, it will be necessary to accommodate around 600 000 people in towns by 2005.

The question here is what spatial form the government should encourage over the next two decades. There appear to be three alternative strategic options:

- Concentration of the urban population in one or two centres (i.e. Umtata and Butterworth);
- Establish a hierarchy of towns throughout Transkei in order to attain a more even distribution of urban residential and employment opportunities.
- "Do nothing" and adopt a passive approach with government responding to population movements determined by exogenous factors, rather than using its resources to guide the pattern of urbanization.

The implications of each of these scenarios will be explored.

### Concentration

By concentrating urban growth in Umtata and Butterworth, both towns might be expected to grow to a size of around one million by the year 2000.<sup>(9)</sup> Thus planning and public expenditure would have to be directed to these areas in order to provide adequate infrastructure, services and facilities to support the urban residents. The costs would be substantial as inputs would have to be of a high standard because of the concentration of people and the hazards (i.e. health and safety) that could arise due to the resulting high densities. It can, therefore, be assumed that funds for planning and upgrading the remaining areas of Transkei would be very limited. The overall result of such a policy could be as follows:

- (a) Existing district towns would stagnate due to lack of development initiatives and infrastructural improvements being directed towards them. Therefore, the rural population would remain inadequately served in terms of higher order goods and services such as roads, telecommunications, health and education. Furthermore, rural living conditions are expected to deteriorate under this scenario.
- (b) Because of the scale and standard of services and infrastructure needed for Umtata and Butterworth and the short time period within which they would be required, it is unlikely that implementation could keep pace with demand and hence, a poor living environment lacking adequate basic services could well arise. This is particularly relevant for residential dwellings, sewage and water supply systems. Once efforts are focused on these two towns, rural-urban migration would probably occur as rural people perceive better opportunities in the urban centres and therefore large, crowded informal housing areas lacking basic amenities could result.
- (c) Through concentrating on only two areas, a limited number of Transkeian residents would benefit from development efforts. Therefore, opportunities for development across a broad spectrum and with a more equitable distribution would be lost.

### Hierarchy of towns

The second strategy that could be adopted for dealing with the distribution of the urban population within Transkei is to develop a hierarchy of settlement centres throughout the country. Planning implications of such an approach involve the identification of suitable centres and establishing what their service populations will be in order to provide an appropriate level of services and infrastructure. The result of this planned development policy would be:

- (a) Improving the infrastructure and services offered at all district towns, regional centres and the national capital as well as at selected villages or nodes. This would create a more even distribution of goods and services and would improve accessibility for the rural population to such facilities.
- (b) Increasing the number of residential, commercial and industrial erven at these centres. However, services would not have to be of the standard required in Umtata as densities would be substantially lower. Therefore, costs would be reduced and standards would be applied in terms of the given situation.

#### "Do nothing"

If government does not act to influence the pattern and rate of urbanization in Transkei during the next two decades it can be assumed that both rural and urban populations will increase substantially under unplanned circumstances; and that a substantial number of people may choose to leave Transkei permanently for relatively better employment opportunities and living conditions in the RSA cities. Many rural residents will be landless people as opportunities to acquire residential and/or agricultural plots will decrease as the pressures for land intensify due to increased demand. These people will have little opportunity to enjoy an adequate living standard or to provide even the basic needs necessary for survival (i.e. food, water).

The main urban centres will increase in size from both natural growth and in-migration by people unable to survive in the rural setting. Infrastructure is already inadequate in most centres so it can be assumed that living conditions in the small towns will deteriorate further, coupled with increasing squatting on the fringes of Umtata and possibly Butterworth.

#### Strategic choices for the NE region

This section formulates the strategic issues to be faced in the NE region; then interprets the region's spatial structure in order to identify specific fields of action with which the Plan should be concerned. The strategic issues relate to population distribution and growth in the short term ( $\pm$  5 years) and long term ( $\pm$  20 years).

Transkei's 1983 population is estimated at 3,25 million of whom some 0,1 million live in towns. The remaining 3,15 million are rurally based. In seventeen years time, at the turn of the century, Transkei's population is expected to be in the order of 5 million. The Development Priorities report envisages that some 1,2 million people will then be living in urban settlements.<sup>(10)</sup> Assuming this level of urbanization is achieved, there remain a further 3,8 million people. One alternative is for the rural areas will need to absorb 0,65 million people over and above their present population. This represents an increase of over 20 percent and will result in gross rural population densities rising from 73 to 88 persons/km<sup>2</sup>. This is not a desirable option. Alternatively, if the size of Transkei's rural population is to remain at its present level, it means either that some 650 000 people (or a large number of them) will need to move out of Transkei to the RSA permanently or that higher levels of urbanization in Transkei will be required; or some combination of these options.

Within this context, the NE region's 1983 population is about 975 000 of whom less than 20 000 live in towns. By the turn of the century the region's population will have risen to some 1,5 million people, an increase of 525 000 people. If the NE region's towns absorb their share of the envisaged urbanization i.e. some 205 000 more people, and the number of rurally based people is to remain at 1983 level, there still remain 320 000 people who will either need to live in rural areas in addition to the existing 95000 or move to Umtata or leave Transkei permanently. Out-migration appears the only feasible option.

From the spatial point of view the strategic issues facing the NE are:

- Where will the increasing numbers of people live?
- Will they remain in the NE region, or move to Umtata or beyond Transkei to the RSA cities?
- Can the region's rural areas support more people than the present numbers?
- How will the increased numbers of people be fed and where will they work?
- How can the demand for physical infrastructure, social, economic and administrative services be met, and where will this demand occur?

Many of these issues are beyond the influence of this plan. Nonetheless it is the function of the plan to make provision for the expected increase in population; and to do this in such a way as to be simultaneously feasible in terms of manpower and capital resources available, and flexible to accommodate future changes of a strategic nature.

Accordingly the NE region's spatial plan needs to outline a broad strategy to accommodate an urban population of some 225 000 people over about 20 years; but at the same time formulate more precise plans to cater for the more certain needs of the region's population over the next five or so years.

A number of definite points can be established, namely:

- During the next 5 years or so the region's population will increase by about 140 000 and a large proportion of these people's needs will have to be met within the NE region.
- The region's rural areas are, at present, unable to support the existing population, hence the dependence on migrants. Even with the most optimistic improvements in agricultural production it will not be possible to provide existing rural households with economically viable plots.
- As a result, many households presently living in rural areas will not, in the future, be able to earn a living from farming. This constitutes an additional "push" factor in the trend towards urbanization.

In its decisions regarding the location of investments, particularly in physical infrastructure and services, Transkei government can exert some influence on the direction and rate of urbanization. Its options may be formulated as a series of assumptions and questions.

- (a) It is assumed that government intends to provide adequate basic infrastructure and services for its expected population in the year 2000.
- (b) The question is where investment on such services and infrastructure is to be located. The options are either:
  - to concentrate investment in Umtata (and possibly one other centre such as Butterworth) at the expense of the other towns;
  - or to concentrate investment in one region at the expense of the other regions;
  - or to adopt a balance of such investment both between Umtata and the rest of the country, and between the four regions. It is assumed that the latter, more balanced approach will be followed on the basis of policies in the Development Strategy and Development Priorities White Papers.(11)

(c) Within the context of a balanced approach to regional development, where is investment to be located in the NE region?

There are four main options:

- concentration in the proposed "industrial development point";
- concentration in one of the existing towns such as Lusikisiki, Flagstaff or Port St Johns;
- disperse investment among the 800 or so rural villages where 98 percent of the people live;
- adopt a balanced approach between the existing towns and villages.

The balanced approach is preferable in the NE region because it would serve the widely dispersed population; it would strengthen the existing towns; and it would facilitate a settlement hierarchy to meet the region's needs over 20 years. These arguments are supported in the Development Priorities White Paper (para 2.49).

On the basis of these assumptions the plan will devise an overall strategy to meet the region's short and long term needs, while at the same time retaining certain flexibility to accommodate changes beyond the influence of the plan.

#### Strategic constraints and opportunities : decision areas for the plan

This section draws together the problems and opportunities arising from the previous chapters, with particular emphasis on the NE region's needs in relation to its resources and to the rest of Transkei (See Figure 5.3, Phase IV). It deals with the main planning issues facing the NE region. In order to structure the presentation, these issues have been grouped under various topic headings. However many are inter-related and not exclusive to any single sector.

#### Settlement

The North East is characterised by small, dispersed, rural villages where most of the region's people live. In the majority of these settlements, the provision of basic infrastructure such as water, feeder roads, electricity and telephones, are grossly inadequate. Within the region there are imbalances between the distribution of population and of social services, health and education in particular. The pattern of population density reveals areas of high density, which in many cases, are not well provided with facilities. A significant feature is the high densities around the region's nine towns, indicating a move towards the places at which services and facilities are available.

At a regional scale, topographical constraints hinder movement not only within the NE, but also beyond it to Umtata and other major centres. Furthermore, there is a severe shortfall in the provision of infrastructure to link the region's towns with each other and with the outside world. The main road (R61) is gravel, as are several other major routes; and maintenance, although a high priority, is not adequate for the demands made of these roads. There is no regional electricity network and the telecommunications system is poor. There is only one regional water supply scheme of any significance.

Although the towns are the focal points in the NE region's space economy, they are unable to perform either the comprehensive or the effective roles demanded of them by virtue of their location and position in the settlement hierarchy. Spatially, the existing towns provide a sound basic network of central places around which regional development can be articulated. However, the settlement hierarchy lacks comprehensive centres intermediate between those towns and the hundreds of tiny villages scattered throughout the region. Over 70 percent of the region's people live in villages situated beyond a day's walk (round trip) from one of the existing towns.

#### Problems in rural daily life (Figure 8.1)

The profile of daily living in these rural villages reveals a serious shortfall between the basic needs of rural households and the resources available to meet them at a minimum, acceptable level. If the existing shortfall is to be met, and if provision is to be made for the needs of a fast growing rural population, the following issues will need urgent attention.

As a result of the unbalanced sex ratio, particularly in the 15 - 40 year age group, coupled with the long absence of a large proportion of men as migrant workers, there is a shortage of fit, able-bodied men for farming and local productive activities. Consequently, land allocated for farming is not being used as effectively as it could, even allowing for constraints such as inadequate resources for early ploughing, fertilizers, etc. This constitutes waste in regard to the region's most important natural resources.

Inadequate water supplies retard development across a broad spectrum. For example, the present per capita water consumption levels are too low to ensure a health population or to meet minimal levels of sanitation; there is not enough water available for household vegetable gardens, water is needed for building; time spent fetching water could be put to more productive activities and so on.

The present lack of job opportunities in the region and the high level of unemployment is accentuated when viewed in the context of a population growth rate of some 2,6 percent per annum and a labour force increasing by at least 10 000 people annually.

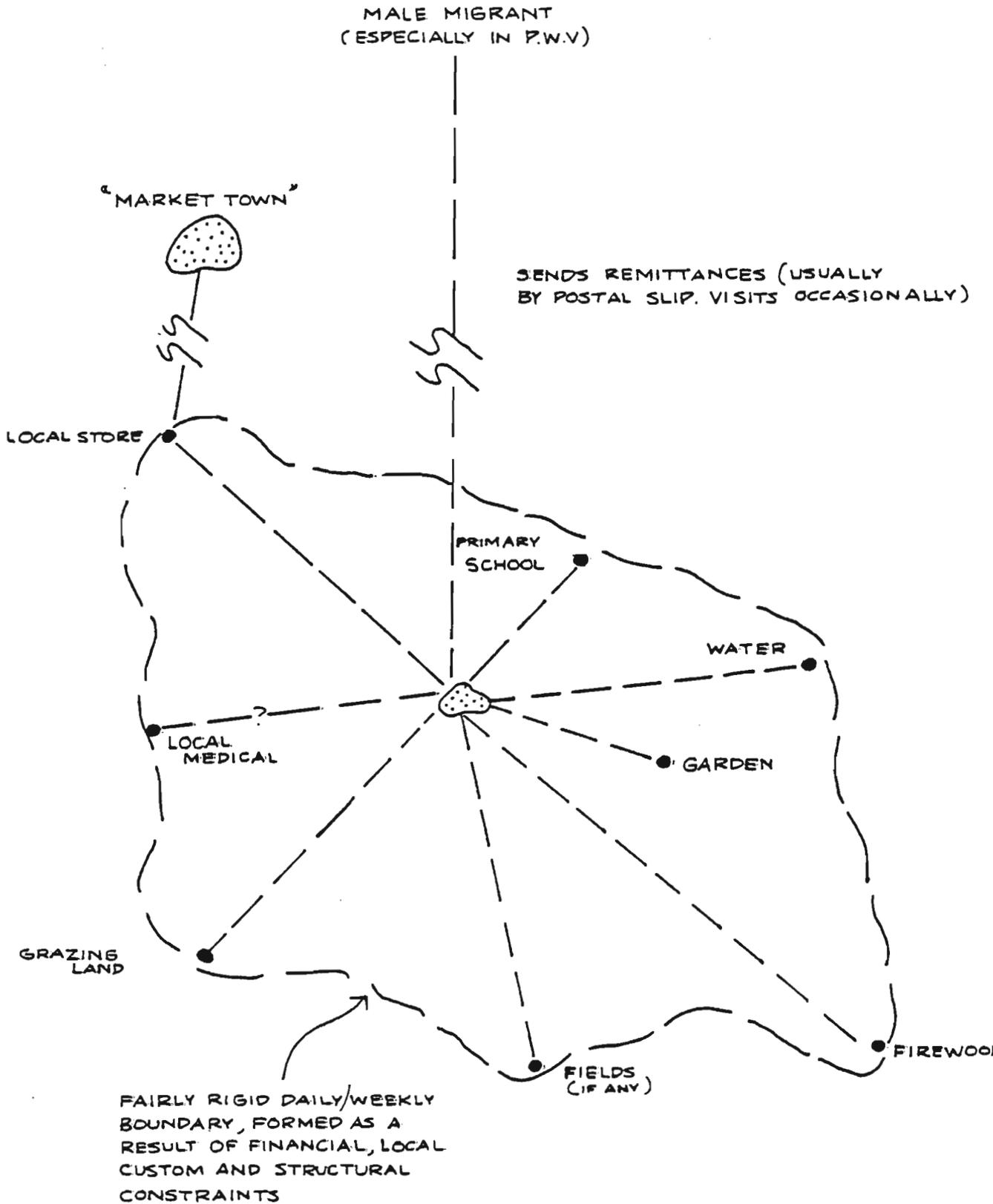
Incomes are very low and a high proportion of households are caught in a cycle of poverty. Taking the extent of self sufficiency as a starting point, even in the more productive localities, a household will need to purchase the major part of its food requirements. On the basis of reported income data and allowing for a degree of under reporting, it is clear that many households in the NE are unable to feed themselves adequately. Apart from identifying a shortfall in basic needs provision, the implication is that households are existing at marginal levels and will consequently not be prepared to engage the risk levels called for in even modest, low key development projects.

Access to basic services and facilities needed by rural households is inadequate. Included here is access to shops (both at the General Dealer and higher order levels), administrative departments (eg. for pensions), agricultural extension services, primary health care, wood for cooking and building, water, electricity and education. This situation forces rural households to travel long distances under fairly difficult conditions to meet many of their daily, weekly and monthly needs. The cost of these trips should be measured in terms of opportunities foregone, over and above the cash, time and effort costs.

The near absence of adult education and severe shortage of technical education both at school and post-school levels, results in a largely unskilled labour force. This limits individuals' income earning capacity and reduces the potential number of small entrepreneurs in the community.

The high degree of centralization that requires most decisions to be taken in Umtata, results in situations that manifest themselves as problems in rural areas. Two examples illustrate the point. Firstly, the acquisition of a trading licence involves a long, complex procedure requiring successive approvals from various authorities at both central and district level.

Figure 8.1 Profile of rural life



SOURCE: C. WADDY (1983)  
"SURVEY OF RURAL VILLAGES IN UMZIMKULU DISTRICT"

Secondly, there is little co-ordination between locally based officials, most of whom take their instructions from Umtata and have to refer all but mundane decisions back there. Even at central government level there is a lack of co-ordination between departments.

#### Problems facing the towns

As discussed above, the towns themselves do not provide an adequate range of functions, either in support of agriculture in their hinterlands, or to meet the basic needs of town and rural communities. The constraints limiting development of the NE region's towns and the problems confronting their authorities were outlined in Chapter 7, pages 215 to 218.

#### Natural Resources

The NE region has natural resources in the form of land with good agricultural potential, large rivers and a beautiful, rugged coastline. But to date these resources have not been harnessed to their full potential, nor has the present use contributed much to the needs of the region. The region's land represents a valuable and diverse resource that is capable in parts, of contributing significantly to supplying Transkei's food requirements. However, difficulties of ownership and tenure, as well as past and present uses combine to limit production.

In decisions regarding the use of land, insufficient attention has been given to land capability analysis. Furthermore there has been a marked absence of social and community surveys. Historical factors influencing land tenure have resulted in a present shortage of freehold land available for farming. At the same time, arable plots in betterment schemes are too small for viable farming. In some instances existing land tenure arrangements are a partial constraint to development. However, reform of land tenure in the rural areas will not, in itself, generate economic opportunity; guarantee development and productive growth.

The region's water resources are not being used to full capacity to provide either water for domestic use, or irrigation, or power. Development of the coastline has been hampered by the absence (until recently) of a clear policy and, currently, by the lack of adequate controls. This situation has fueled two conflicts. On the one hand, between conservationists and developers of

prestige holiday resorts; and on the other between the demands for considerable investment to improve infrastructure to the coast and demands for public spending that will generate more job opportunities.

Although the region has no mineral resources of significant value, it does possess mineral deposits whose exploitation, on a small scale, using appropriate techniques, could be used for infrastructure and agricultural development.

### Agriculture and forestry

The main issue is that the NE region imports most of its basic food requirements, yet it has the agricultural potential to meet its own needs and, indeed, to supply other regions in Transkei.

Low productivity from traditional agriculture is caused by a combination of factors discussed on pages 191 and 192 above, notably:

- existing land tenure arrangements limit expansion;
- most rural households have able bodied men and women away for long periods as migrant workers and dependency on their incomes limits capacity to become involved in direct production;
- lack of capital;
- poor infrastructure and support services.

The agricultural extension service in the region is ineffective because of shortages of staff, poor salaries, lack of in-service training and research support. In addition the service has very few women extension officers, and makes inadequate provision for transport and housing. Overall these factors contribute to the extension service having a poor image.

Commercial agriculture on freehold land in the Umzimkulu and Umzimvubu districts is not well developed because of difficulties relating to the handover of farms as well as poor training and support services. The existence of large blocks of "undivided shareholding" land being occupied by increasing numbers of relatives and kin, results in freehold land of good potential being under-utilized.

Tea estates have been highly developed on tribal land and offer potential for expansion. However, problems have arisen about working conditions and wage rates, resulting in strained community relationships. Another issue to be

considered is that these estates are not producing essential food crops at present. But they do have high potential for this, particularly in regard to maize and sugar. Beef could also be produced on estates in Umzimkulu and Umzimvubu districts.

The town commonages offer potential for high production of food crops and milk but these have not yet been developed. Timber plantations have been well developed, particularly in Umzimkulu. An important issue is that both the large South African and small Transkeian saw milling companies are looking to new plantations as a source of long term supply. Potential also exists to expand the region's timber plantations into tribal land provided consideration is given to community rights and participation in profits.

There is a shortage of wood for domestic use in the rural areas. This arises because there are insufficient natural forests to meet the demand, the unsuitable spatial arrangement of existing woodlots, and because of past difficulties between the Department of Forestry and local communities regarding the maintenance and administration of woodlots. At present a need exists for more, better distributed, smaller woodlots. The potential for future expansion of forestry in the NE region as well as the need to meet present demands, constitute a case for the establishment of a forestry training school in the region.

A new Nature Conservation branch is presently being set up under the Department of Agriculture and Forestry. At the same time nature reserves are being developed at Silaka, Hluleka and Mkambati; and a hiking trail between Port St Johns and Coffee Bay. Potential exists to establish a national park in the NE region between Poenskop and the Umtamvuma. Negotiating the establishment of this park and in its administration will fall within the ambit of the Nature Conservation Branch and the TDC.

The provision of slaughtering facilities in the NE regions is another issue requiring attention. At present regional abattoirs are being closed with a view to promoting an improved, central abattoir in Umtata. This will result in there being insufficient appropriate slaughtering facilities available to the region.

Finally, there is a shortage of freehold land available for enterprising farmers wanting either small or large farms.

### Rural Development

The foremost issue confronting rural development is that of mobilizing rural people and building upon initiative generated at village level. To date, several non-governmental organisations have made progress in this field and require support.

A comprehensive range of services is needed in support of small-holder agriculture. These include physical infrastructure, provision of agricultural inputs, credit, storage facilities, marketing and distribution services as well as extension services. Specifically there is a need for government departments and agencies involved with rural development to reach and assist individual farmers.

Tracor's maize projects (Masizakhe) have had some initial success, considering the 1983 drought. There is potential for extending these to more areas but attention will need to be given to problems that have emerged from the implementation of the early schemes.

A Drought Relief Programme has been set up but is experiencing difficulties in identifying viable projects and in ensuring that the available funds are effective in assisting the most needy households and in generating rural employment.

Rural development in the NE region needs some type of superstructure to co-ordinate the efforts of various bodies and to establish linkages between local initiatives and government agencies. In addition there is a shortage of trained persons in positions to implement projects. Inadequate means of communication (roads, telephones, public transport) within the region present major difficulties.

### Industry

The main constraint on industrial development in the NE region is its distance from the major metropolitan markets of the RSA and its lack of any raw materials of industrial significance on a large scale. As a result large and medium sized industries are unlikely to locate in the region.

The industries that were attracted to Butterworth and Umtata under the previous RSA incentive packages have not generated much in the way of local linkages or multiplier effects. At the same time the jobs they created have been at a high overall cost. The question this raises is whether it is in the interest of the NE region or of Transkei, to attempt to attract this type of industry to locate in the region, even if such a decision could be justified, from the industrialists point of view. However, recent RSA incentives are aimed more at the overall development of regions, and agreement has been reached about an industrial development point at a location to be determined in East Pondoland. This opens the way for Transkei to make the most appropriate use of an opportunity in terms of its own development objectives. See below pages 280, 284, 371 - 3 and Appendix IX for a more detailed discussion of the way in which Transkei responded.

The lack of adequate regional infrastructure (main roads, electricity, telecommunications and water) is a major constraint on the establishment of any type of industrial activity in the region. Another critical issue facing attempts to stimulate more appropriate industrial activity in the region, is that of encouraging industries that can produce goods presently being imported from the RSA. Expenditure on these goods represents a substantial proportion of annual household expenditure in the region, thus indicating a potential that could be taken up. At the same time opportunities exist for small scale manufacturing using local resources such as agricultural produce.

The recent establishment, and initial successes, of Transido offers the means of assisting small scale industries in the NE region. This would involve the expansion of Transido activities to bases in the region's towns. Further back-up for industrial development is needed in the form of incentives for small and medium scale industries throughout the region. Simultaneously training facilities need to be expanded at regular schools (practical and vocational subjects), at teachers training colleges, at special technical schools and by way of adult training courses.

The intended shift in emphasis of TDC's industrial activities will have implications for the region that need to be clarified, particularly if the industrial development effort is to be aimed at small scale industries using local materials and producing for the local market. Industrial development is only part of the development effort needed in the region. Accordingly industrial initiatives need to be integrated with agricultural, urbanization and other policies under the umbrella of the development of the region as a whole.

### Commerce

The main constraint on commercial development in the NE region is limited purchasing power as a result of low incomes. Other constraints relate to ownership, licencing, location, traders' qualifications, the outflow of purchasing power, influence of outside suppliers and the lack of local markets.

Since independence, the TDC has been in charge of handling the transfer to Transkeian businessmen of garages, hotels, wholesale businesses, supermarkets and general dealer stores whose previous (White) owners had sold to the South African Bantu Trust. This task has now been completed at a substantial cost. The implications of this change of ownership are firstly, that many of these "new" businessmen have only limited commercial experience and, therefore, many enterprises are not operating as efficiently as before. This means a decline in services and goods offered to the local consumer and in some instances increased costs for certain commodities. Secondly, because of outstanding loans and the subsidies offered, the state has had to absorb a substantial financial deficit in respect to TDC's functioning.

Applications for commercial licences are handled jointly by the headman, Tribal Authorities District Commissioners, the Regional Authority, Town Clerks and the Department of Commerce. The funds required to apply for a General Dealer (R 8 000) or Cafe (R 5 000) licence are excessive when considering average annual incomes in the region and the limited savings capability of the people. Therefore, those with initiative and limited financial backing are hindered from developing their potential. In this way, the number of possible shops is restricted and thus the present shortage of commercial facilities in the NE region tends to be perpetuated.

General Dealers are required to locate at a minimum distance of 8 km from each other. Cafes must be at least 3 km away from the next cafe. This impedes clustering of commercial activity occurring in rural areas which in turn discourages economies of scale and linkage relationships from developing. It also increases the number of trips required by rural residents to obtain a diversity of goods. The rural business centres of Malawi and Zimbabwe provide good examples of spontaneous clustering of economic activities at this scale.

As seen in the customer and business survey, many traders have little business experience. Furthermore, experience obtained has usually occurred after leasing or buying a shop. This leads to trial and error management resulting in loss of trade, low turnovers and a decrease in services and goods offered to the public.

Existing consumer expenditure by Transkeian residents indicates that a large percentage of goods are obtained outside Transkei's national boundaries. This constitutes an outflow of purchasing power or capital to the RSA. Therefore, local businessmen received only a small share of local consumer and producer spending. The main issues arising from this complex situation can be summarized as follows:

- shop turnovers are lower than could be expected even taking into account the income levels of the local market;
- due to lack funds local dealers stock a fairly narrow range of goods and, therefore, re-inforce the need for outside spending in respect of more sophisticated merchandise;
- in practical terms, this lost business, "implies lost commission, lost wholesale/retain margins and lost local employment".(12)
- in the overall context it means less commercial sector growth and a lower multiplier effect.

Due to the lack of manufacturing within the NE region and Transkei as a whole, outside suppliers have been able to capture a large portion of the local market. This occurs by direct delivery, mail-order sales, door-to-door agents and, of course, through external purchases by returning migrants and residents. The implications of this heavy reliance on outside suppliers is again, the outflow of purchasing capital from the region. Furthermore, it is difficult to break into this already well established externally based marketing system. Local entrepreneurs with their limited funds and lack of natural resource inputs cannot match either the high quality products or direct delivery arrangements offered by these firms.

At present district towns and small centres in the NE region have no formalized market areas or facilities. People with surplus products to sell from agricultural production or home industries are, therefore, not catered for in the commercial environment. Opportunities for profitable exchange of such goods are foregone and unnecessary imports of certain commodities, which are in fact available in the region, occurs. The lack of market outlets discourages the establishment of small scale enterprises. Finally, informal sector traders and businessmen are constrained both by the absence of suitable facilities from which to conduct their trade and by regulations that restrict their operation.

### Tourism and Recreation

The Coastal Development Control Plan has demarcated three orders of places for development as tourist resorts.

- Mzamba, Port St Johns and Umtata Mouth - intensive development.
- Msikaba, Mboyti, Mngazi and Mgazana - semi intensive development.
- New tourist development at other, designated places.

The first issue is the extent to which the intensive development envisaged for Mzamba should be permitted to extend geographically. For each extension has certain impacts on the surrounding areas in terms of ecology, service demand, housing, infrastructure, etc., which are often not considered by developers. The second issue is whether public funds should be invested in support of second order coastal resorts before all the first order resorts are established, or whether investment in support of tourism warrants higher priority than investment in other sectors and places.

The stimulation of Port St Johns as a first order tourist resort and a town of significance in the region is another issue requiring urgent attention. Present constraints on the town's development include the inadequate water supply; an inadequate living environment for almost half the town's permanent residents at Mtumbane; the silting up of the Umzimvubu river and the associated erosion of first beach; and the severe over-crowding at peak season, occasioned mainly by day visitors.

This draws attention to another problem namely the lack of facilities along the NE region coastline for day trips. As household incomes rise and vehicle ownership increases so too will the demand for recreation facilities on the coast by families from the region and Umtata making single day outings to the coast. At the same time there is a shortage of sports and recreation facilities in all the region's towns with the exception of Port St Johns.

At present arrangements regarding privately owned holiday cottages on the coast are in a state of flux. This situation needs to be resolved and the future tenure and use of existing cottages clarified in conjunction with overall development needs of the region.

Consideration is presently being given to the establishment of a National Park incorporating land under a number of different uses, namely clusters of cottages, nature and forest reserves and tribal land. Along with other tourist related schemes this requires an organisational framework to administer the projects, legislation and regulations and trained staff to monitor it.

### Physical infrastructure

The present condition and maintenance of the region's main roads linking its towns to each other and to major centres outside the region is a constraint to a wide range of development possibilities. So too is the lack of good access route through East Pondoland from Lusikisiki, through the belt of high agricultural potential south east of Holy Cross, to the Bizana-Mzamba road.

Other secondary roads also require better maintenance, but the next greatest need is for upgrading and proper maintenance of the tertiary or feeder roads which connect rural villages with the central government road network. These roads are the responsibility of tribal authorities which lack the funds and staff to maintain them in good condition.

Another major constraint on many aspects of development is the lack of an electricity network covering the region's nine towns and major facilities such as rural hospitals. Associated with this is the possibility of developing hydro power. Inadequate telecommunications systems also limit the development possibilities throughout the region and more particularly in the towns. Existing airstrips need to be maintained in good condition if improved air services within the region are to be achieved. The towns are all underprovided with basic utility services (water, sewage treatment and internal roads) for their present, small populations. None have the spare capacity to provide for any further population increases, nor do any have an adequate maintenance system.

Although several large scale rural water supply schemes have been investigated, none have been implemented in full, and few major dams have been constructed. There are also relatively few small earth dams which further limits the region's agricultural potential.

Overall the region's capacity to maintain infrastructure is extremely limited from the organisational staff, funding and training points of view. Associated with this is a lack of capacity to implement infrastructural projects of either large or small scale. To date most of the efforts of the Department of Works and Energy in the NE region have been devoted mainly to maintenance of the major roads. The recently established TATU could play an important role by devising technologies appropriate to the needs of the NE region and by assisting small contractors.

Basic infrastructure is lacking in most of the rural villages throughout the region. This includes safe, reliable water sources for domestic use, access roads passable most of the year by regular vehicles, and access to woodlots.

### Housing

It is important to recognize that the issues discussed under the heading of "housing" refer to the provision of an acceptable living environment. This applies equally to the regions towns and its rural areas.

Rural living environments are constrained by shortages of plots for both residential and arable purposes, by the small size of plots, the absence of basic utility services and, perhaps to a lesser degree, by the absence of individual title to their plots. There are also increasing numbers of people in the NE region without access to arable land, thus forcing them into marginal living situations. Another problem is that the compensation rates paid to households moved into betterment schemes bear no relation to the real cost of materials and labour.

Living conditions in the region's towns are constrained by a severe shortage of residential plots of a size and cost affordable by present day town residents. Utility and community services are quite inadequate for the needs of existing town residents. A further difficulty is the shortage and high cost of rented accommodation in the towns.

In both towns and rural areas attention needs to be paid to the location of future residential areas in relation to job opportunities, productive resources and basic services. Lack of residential opportunities appear to be limiting the population growth of towns themselves. But at the same time, are increasingly dense settlements are emerging in administrative areas adjacent to these towns. This factor needs to be taken into account when detailed physical planning of these towns is undertaken.

Existing urban development standards and town planning regulations were designed for a type and scale of development not found in the towns of the NE region. Accordingly these regulations are inappropriate and tend to stifle, rather than encourage development. Simpler regulations have been drawn up in other countries for towns similar to those of the NE and could be adapted to meet the existing situation.

For the most part, government officials posted to various parts of the NE region have to find their own accommodation, resulting in their often living in unsatisfactory conditions. Clearly this affects their work and discourages them from becoming committed to their jobs. Serious consideration needs to be given to government's role in providing housing for its officials. Government's role in the wider housing field is vague and needs urgent clarification before other participants in the provision of housing can fulfill their roles. In the past, government and its agencies have contributed to the provision of housing intended mainly for expatriates, most of whom are working in Transkei on fairly short contracts. At issue here is whether these houses will be affordable by Transkeians who will take them over in due course.

A further issue of concern to the NE region is whether the emphasis of government involvement in housing will focus on Umtata, or whether attention will be paid to the needs of the region's towns. The provision of adequate physical, social, economic and administrative infrastructure necessary to ensure an acceptable living environment has been discussed under separate sections.

#### Transport and Communications

Private vehicle ownership in the NE region is low with the result that most people are entirely dependant on public transport for trips beyond walking distance.

A good public transport (bus) service exists between the towns and outside centres of Umtata and Kokstad. However there is only a limited service from rural areas to these towns, and between rural areas. A contributory factor is the poor condition of many rural roads which results in high vehicle operating costs. An outcome of this situation is that buses stop several kilometres from the villages. Maintenance of rural roads will have to be improved before the public transport service can be effected. It is difficult for rural villagers living away from the main access routes to make a return trip in a day to the nearest town. The full cost of these trips is high. There are few licensed, though many more unlicensed taxis. However, fares are high in relation to incomes and taxis are generally used for emergencies rather than regular trips.

Freight transport is mainly provided by the SATS from its Kokstad depot, but rates are high. Once again the condition of the main roads contributes to this situation.

In a region characterised by rough roads and hilly terrain, the lack of a regional maintenance depot for government vehicles is a significant constraint. All the towns and other places have airstrips but few are maintained regularly. There are no scheduled air services linking the NE region to Umtata or other major centres. There is no economic justification either extending the railway network into the NE region in the medium or long term, or for building a port, except possibly for small craft (yachts and ski-boats).

With fifteen comprehensive Post Offices in the NE and a large network of postal agencies in the rural areas, the region is reasonably well off but more savings and telegraph facilities are needed. The NE region has no automatic telephone exchanges; the night service is reduced; and many areas in the region are under-served in regard to telephones. The result is that it is difficult to make or receive calls to other parts of the region or beyond it. The only telex facility is at Lusikisiki. There is no system of radio communications between government departments or other organisations. The region has no local newspaper and delivery of daily papers from Umtata, Durban, East London and Pietermaritzburg are usually several days late.

#### Health Services

Primary health care is provided by clinics. The spatial distribution of residential clinics does not cover the NE region adequately and there are a number of densely populated areas beyond 5 km of a clinic or hospital. These clinics do not all operate with their full complement of staff and their activities are further limited by inadequate telecommunications, poor roads as well as insufficient and poorly maintained vehicles.

The mobile clinic service is intended to provide a partial service on a more widespread basis than the residential clinics. But they do not achieve the full range of services intended, nor are they able to maintain a regular schedule of weekly visits. As a result the hospitals are now attempting to provide full immunisation programmes throughout their areas of control.

The region's 12 general hospitals provide secondary health care facilities. Some of these hospitals are not optimally located with the result that four of the towns and several other densely populated areas are long distances from secondary health facilities. The existing hospitals face a heavy demand for their services but in addition have to provide a considerable amount of primary health care because of inadequacy of that service. These hospitals are constrained by poor equipment for x-rays, ordinary and emergency operations, by poor facilities in the wards, lack of adequate storage space and inadequate vehicle maintenance. No more than a few houses are available for hospital staff.

Poor telecommunications and the absence of radio links between hospitals, between each hospital and its clinics are another major constraint. The health service is also constrained by the shortage of properly qualified nurses, doctors, and paramedics in the NE region.

In order for the rural hospitals to concentrate on the task of providing secondary health care, it will be necessary for the Umtata hospital to be upgraded to offer a full range of specialised services. At the same time, the means of transport and communications between Umtata hospital and the rural hospitals will have to be improved.

Finally the day-to-day activities of region's hospitals mean that significant numbers of people converge on these places daily. This constitutes an opportunity for other activities that depend upon volume of customers to be located in purpose trips. To a lesser extent certain residential clinics offer the same potential. The type of activities that could feasibly locate near hospitals, perhaps initially on a periodic (say bi-weekly) basis include: mobile post office with telegraphic and money order facilities, markets for fresh produce; hawkers, meetings to address local people; facilities to pay taxes, licence fees; pension payment points; and demonstrations by extension officers.

#### Education

At present the region is under-supplied with schools, yet enrolment is likely to increase in the immediate future because pupils are staying at school longer (also influenced by lack of job opportunities) and because of population growth.

Primary schools are widely distributed throughout the region with one in most administrative areas; Junior Secondary schools are also fairly widely distributed. However, there are only 27 Senior Secondary schools in the region and consequently they serve extensive areas and many lack adequate boarding facilities. The single technical school is wholly inadequate for the needs of the NE region. Similarly the Teachers Training College at Flagstaff does not cater for the region's needs, nor does it provide any vocational training. The Agricultural College at Tsolo needs to be upgraded to meet the extension officer needs of the NE region, apart from needs generated from other regions.

School curricula are also inappropriate to the needs of people living in the region. Pupils do not learn the basics required for either tertiary or vocational training.

Overall, the region has insufficient schools, teachers and classrooms; there is an urgent need to improve the basic educational standards; there is not enough room in secondary and vocational schools to absorb primary school graduates; the region needs more and better trained teachers; and curricula need to focus more on teaching basic skills that are relevant to self employment, business and technical vocations.

There is no widely organised provision of adult education or literacy training in the region; yet adult literacy rates are low and there appears to be a latent demand for skills training. Housing for teachers is unsatisfactory.

#### Community services

With few exceptions there are no opportunities for adult education or training in the region. The limited domestic electricity supplies constrain opportunities for learning at night. Pensions are low, paid bi-monthly, with long trips required to distribution points. There is an overall lack of facilities for community activities in the region's towns and rural settlements.

A large number of small community based activities are currently taking place throughout the region. These groups offer a focus for government contribution to community development and a possible vehicle for the implementation of other programmes.

### Administration

Administrative services in the NE region are constrained by poor communications within the region and with Umtata, by a shortage of trained personnel and the lack of in-service training. In many cases, public authorities (central and local government) lack the capacity to implement decisions and projects and there is an absolute shortage of capable people to do this. Conflicts also arise in regard to the respective roles and lines of accountability of various administrative authorities in the region.

Increasing demands are being made on the domain of Regional and Tribal Authorities for sophisticated administration. This is not being handled very effectively because of lack of experienced staff, shortage of funds and vested local interests.

Having focussed attention on the planning issues facing the region, it is necessary to look, briefly, beyond the region, to clarify its relationship to the wider political economy of Southern Africa, before proceeding to identify those decision areas upon which the spatial plan can concentrate.

### Strategic focus: the context for development

The point of departure for planning in the NE region is that planning per se cannot tackle all the problems of the region. For many of the problems encountered there are structurally resistant to planning. Consequently, the Spatial Development Plan (SDP) for the NE should focus attention on those issues that are amenable to planning measures.<sup>(13)</sup> It is important to realize that problems related to issues such as migrant labour and land tenure practises cannot be resolved in a plan for the NE region or even for Transkei.

Historically, Transkei (and so too its NE region) has not been viewed as an important productive area in the Southern African economy. Its role has been to provide migrant labour to the RSA, while ensuring that dependants remain settled within its territory. For many years therefore, Transkei, and particularly its remote north-east, has received little investment in infrastructure or services. There is no reason to believe that Transkei's dependent relationship within the political economy of Southern Africa will change much during the next two decades.<sup>(14)</sup>

The decentralization policies, of the 1960s and 1970s which attempted to provide work opportunities in the homelands, had little impact on the NE because of its location constraints and limited industrial potential. The few modern sector economic activities found in the region have arisen because of its natural resources. These are predominantly export oriented (tea and timber) and do not serve the needs of the region to any great extent. Therefore the NE has remained underdeveloped in respect of work opportunities, services and infrastructure.

At the same time, the influx control, and associated legislation in the RSA restricted opportunities for people to move from the NE to South African cities. As a result the region has experienced increased rural population densities, and an annual cycle of migrant labour that takes a large number of the most able men and women out of Transkei for upto 10 months each year.

One outcome is that today, many people in the NE region are erroneously termed "rural" because they have residential rights (and some have arable land as well) in tribal areas. Yet most of them have no real options except to retain their rural base, even though their main sources of income (remittances) and the nature of the services they require (access to shops, water, electricity, transport, telephones, health, education and recreation facilities) are essentially urban. And whereas the region's towns might have played a role in meeting these needs, their retarded growth, and particularly the shortage of suitable priced residential sites, has again restricted movement into Transkeian towns by people who have little interest in farming and who lack the capacity to make it a viable occupation.

In distinguishing issues for attention in the NE region SDP, the first step was to establish the role occupied by Transkei in the wider political economy of South Africa. These arguments have been well documented from various ideological viewpoints<sup>(15)</sup> and recognized in Transkei's Development Strategy 1980-2000. It is accepted that Transkei's role in relation to the politically and economically dominant RSA core, has been to provide labour for the RSA mines and metropolitan economies and to provide housing and services for the families of these workers. Therefore, if development planning is to be effective, it will need to address itself mainly to the consumption needs of the region.<sup>(16)</sup>

This means that the priority fields of action for planning in the NE region (and indeed in Transkei) should relate to the provision of goods and services needed by the region's people. These include the provision of food, materials and manufactured products for local (i.e. Transkeian) consumption, as well as the provision of such public goods as physical infrastructure, means of communication, health, education and administrative services.

The approach advocated in the NE region SDP is thus not only ameliorative, but has a positive developmental focus as well. The term "development" is taken to mean a process which makes people in general better off by increasing their command over goods and services and by increasing the choices open to them.<sup>(17)</sup> Accordingly the development projects and programmes proposed for the NE region were designed not only to improve the provision of public services and physical infrastructure, but also to generate opportunities for Transkeians within the region. This may take many forms including the promotion of small scale industries producing for local demand, encouraging marketing, increased use of local contractors, and includes training and maintenance as integral parts of town and village scale infrastructure projects.

The remainder of issues identified in this chapter, which fall beyond the range of matters that can be dealt with by a Spatial Development Plan (SDP), are summarized, together with policy proposals, in Appendix X. While these matters are of considerable importance for the NE region's development, their inclusion in an SDP would, as discussed above (p. 164), delay implementation of physical components while debate continued on policy issues, many of which require changes in the South African socio-political forum. This would inevitably result in further delays with regard to implementation of development projects in the region. For these reasons, it was considered necessary to channel the supra-regional, the mainly policy-oriented and non-spatial proposals via a different route to those of a clearly spatial character. Progress in regard to implementation of these proposals will be discussed in Chapter 12, while the following three chapters focus on the spatial development plan and its physical components.

Notes and References

1. Population projections using a cohort-survival method were prepared for Transkei in 1978 by Prof. J Nattrass of the University of Natal. See Transkei (1978) Population Projection 1970 - 2000. This projection was disaggregated by district according to alternative scenarios for use in the report on spatial implications of Transkei's Development Strategy. See Appendix II by J Nattrass in Robinson (1978) op cit pp. 69 - 80.
2. Development Priorities (1983) op cit para 28.
3. Ibid para 2.9.
4. Ibid.
5. Ibid para 2.12.
6. See Osmond Lange Inc (1983e) op cit. Appendix II for a breakdown of these projections by age, sex and district.
7. The original plan documentation did not include an explicit statement of a development strategy for the region although the elements were implicit in the policies guiding the identification of physical projects (See Chapter 10 below). In November 1985, at an inter-state meeting between Transkei government and the DBSA team for the north-east region, the strategy, as set out here, was endorsed by both parties. See VARA (1985) "Economic development in north-eastern Transkei. Report prepared in response to the DBSA document as a Development Strategy for North-Eastern Transkei." Department of Commerce, Industry and Tourism, Umtata, para. 4.
8. This strategy is entirely consistent with Transkei's Development Strategy (1980-2000) and its Development Priorities 1983-88.
9. Robins and Robinson (1978) op cit; also Development Strategy op cit, Map 7.
10. Development Priorities (1983) op cit paras 2.8 to 2.10 and 2.49.
11. Ibid para 2.49.
12. Thomas W H (1983) "Consumer spending and the economic development of Transkei." National African Chamber of Commerce, Third inter-regional seminar.
13. Horton, S.E.G. (1983) "Implementation in planning: the case for theory" (mimeographed) University of Natal, Durban p.11.
14. Fair T J D (1982) op cit p. 57.
15. See for example Clark R. (1979) "An economic development strategy for Transkei: a case study" Development Studies Southern Africa Vol. 1 No. 3; Thomas W.H. (1982) "Socio-economic development in Transkei in the context of Southern Africa's urban-rural nexus". IMDS Fact Paper No. 5/82 University of Transkei; Southall R (1982) South Africa's Transkei. The political economy of an 'independent' bantustan.
16. Horton S.E.G. and M.O. Sutcliffe (1983) "Comments on planning in Transkei's North-East region" mimeo.
17. See above pp. 14 - 15.

CHAPTER NINE

SPATIAL DEVELOPMENT PLAN

At a regional scale, planning operates as a merger of vertical and horizontal functions. The vertical function involves co-ordination of local level needs and aims with those expressed at a national level. The horizontal function requires co-ordination between various sectors and the translation of development principles into physical plans and implementable projects.<sup>(1)</sup> Achievement of this merger was an important theme in the preparation of the spatial plan for NE Transkei.<sup>(2)</sup> The purposes of this chapter are, firstly, to outline the approach used for spatial planning in the region and secondly, to show how earlier ideas regarding one component of the spatial organisation (namely "service centres") has been evolved to meet the particular circumstances of both Transkei and its north-east region.<sup>(3)</sup> Thirdly, it responds to critiques of the use of "service centres" as a policy instrument in Transkei<sup>(4)</sup>; and fourthly it relates planning in the NE region to recently published material on settlement policy<sup>(5)</sup> and rural development.<sup>(6)</sup>

Spatial development problems in the NE region

As discussed in the previous chapter, provision will have to be made in the NE region for a rually based population equivalent in size to the present number (viz., 955 000) and an urban population of 225 000. This assumes that a further 320 000 people will have left the region permanently for cities in Transkei or the RSA by 2000. It is the function of a spatial plan to make provision for this expected increase in population; and to do this in such a way as to be simultaneously feasible in terms of manpower and capital resources available, and flexible to accommodate future changes of a strategic nature.

Analysis of the NE region's spatial structure revealed a number of problems related to the geographic distribution of people, services and economic activity, that act together as constraints on the overall development of the region. These problems may be grouped into several areas of concern for attention by the SDP.<sup>(7)</sup>

- a) Dispersed settlements lacking basic infrastructure. Ninety-eight percent of the region's people live in some 800 small, dispersed rural villages in most of which the provision of basic infrastructure such as clean water, feeder roads, electricity and telephones are grossly inadequate. Only 30% of these villages are served by the network of classified roads. (ie. those maintained by central government.)

- b) Inadequate access to basic services and facilities. Most households in the NE experience difficulty in reaching basic facilities and services such as shops (both at the general dealer and higher order levels), administrative departments, agricultural extension services, primary health care, wood for cooking and building, regular public transport and schools. This situation forces members of rural households to travel long distances under fairly difficult conditions to meet many of their daily, weekly and monthly needs. It is significant that over 70% of the NE region's people live in villages situated beyond a day's walk (on average 15 kms each way) from one of the existing towns.
- c) Unbalanced distribution of population and opportunities. Within the region there are imbalances between the distribution of population on the one hand, and of social services (health and education in particular) and job opportunities on the other. The pattern of population densities highlights two aspects of the settlement pattern : firstly, some areas of high density are not well served with facilities; and secondly, tribal areas surrounding the region's nine towns all have high densities.
- d) Underdeveloped towns. Although less than two percent of the region's people live in towns they are, nonetheless, the places where most commercial activity is located. For this reason people living in the rural areas depend on these towns for all but the most elementary services. Yet these towns have not developed in such a way as to encourage productive and marketing activities. In the NE region, most people look to larger towns outside the region - notably Kokstad, Harding, Port Shepstone and Umtata - for higher order goods and services.
- e) Little rural commercial activity and high outflow of cash. Although there are 1143 rural shops in the NE region, many are poorly stocked and carry a very limited range of goods. A survey in 1982 revealed that on average only two items were purchased on a shopping trip and median trip expenditure was R 1,20.<sup>(8)</sup> Furthermore whereas most households depend on migrant remittances for a large proportion of their incomes, over 60% (at least) is spent on items produced outside Transkei.<sup>(9)</sup> Very little money circulates within the local or regional economy.

- f) Scarcity of land. Access to land is limited with arable plots being more scarce than residential plots in tribal areas. The result is increasing land pressure which has a number of implications for spatial planning:
- there will be an increasing number of people without access to arable land who will, therefore, have to become entirely dependant on non-farm jobs within or beyond the region;
  - the present size of arable plots is too small (given the level of available inputs and support services) to make a living comparable with incomes from migrant or wage jobs;<sup>(10)</sup>
  - there are very few residential plots available in the towns which means that access to residential land is virtually limited to the tribal areas thus forcing people whose main sources of income are from non-farming activities to reside in remote, underserved and dispersed settlements away from the towns.
- g) Topographical barriers and inadequate regional infrastructure. At a regional scale the topography (deeply incised rivers and broken, mountainous terrain) hinder movement not only within the NE region but also beyond it to Umtata and other major centres. Furthermore, there is a severe shortfall in the provision of infrastructure to link the region's towns with each other and with adjoining regions. The main road through the region has a bitumen surface for no more than half its length; there is no regional electricity network and the telecommunications system is poor.

The Spatial Development Plan (SDP) for Transkei's NE region responded to these problems by formulating a long term spatial strategy and shorter term projects to influence

- the location of investment in physical infrastructural projects geared to meet the needs of villages and towns, and to link the focal points of the region to each other, to their hinterlands and to adjacent centres;
- the location of investment to encourage productive and marketing activities in the form of small industries and commercial enterprises catering for local demand;
- the location of facilities for the provision of public goods and services.

### Spatial planning

The space economy of a region has three main components: overlapping areas of economic potential and of relative socio-economic welfare; focal points or nodes representing concentrations of either population, economic activity or services, or any combination of these; and a communications network.<sup>(11)</sup> These elements combine to make up the spatial organisation of a region; and at the same time they may be regarded as avenues for the effective planning of that region.

In order to maximize the impact of public sector investment, particularly in physical infrastructure, it is necessary to ensure that the main elements of the space economy are treated in a complementary manner. From a planning point of view this involves the following steps. Firstly areas of relative welfare need to be identified, distinguishing those that are either well off, or underserved as far as access to basic services, job opportunities and incomes are concerned. Secondly, a hierarchy of towns, villages and other places of significance need to be developed to act as focal points in the region. This system of towns and centres should be designed to meet not only the needs arising from the existing distribution of population and economic activities, but also to provide the nodes in a spatial framework to support the region's potential for future development. Thirdly, a communications network is needed to simultaneously:

- link the towns and other centres to each other and to adjoining regions;
- provide the means whereby people living in small, rural villages can have access to places where basic and higher order services can be obtained, and where economic opportunities exist;
- provide access to and from the region's economic resources.

In this way, the spatial form of a region can be planned to assist government to allocate its resources in a rational manner, not only to meet existing needs but also to encourage future development.<sup>(12)</sup>

### Transkei's policy on spatial development

During recent years considerable discussion has taken place within official circles on the subject of the Transkei's spatial development. Whilst not necessarily spelled out in detail in government documents, the main directions to be followed were set out in the 1983 White Paper on Development Priorities.

Here government outlined its intention to establish a hierarchy of "urban" settlements comprising: a capital city, regional centres, towns and rural nodes.<sup>(13)</sup> The reasoning behind this approach was that a large proportion of Transkei's people live in rural areas which are unable to sustain them or to offer wage earning opportunities. Small rural towns do not provide an adequate range of functions in support of agriculture or to meet the basic needs of surrounding rural communities. If, as outlined in the Development Strategy 1980-2000, Transkei hopes to employ a large proportion of its future population on the land, the function of larger settlements will have to serve the economic needs, other than food production, as well as the social and administrative requirements of Transkei as a whole.<sup>(14)</sup>

If the people working on the land are to earn their living from the land, they will need markets in which to sell their output. This will be one of the primary functions of smaller towns. And if the farming population is to produce enough food to feed the required three to four times its number, it will need inputs from larger centres than those where farmers now live. To achieve this aim," Transkei requires an effective policy instrument and it is proposed that a Service Centre approach be implemented. This should result in the establishment of a hierarchical network of physical bases from which to deliver public services; agricultural support services to increase productivity with a view to transforming subsistence into market oriented farming; the provision of basic infrastructure, i.e. feeder roads and water for domestic use; stimulate rural industries.<sup>(15)</sup>

These inputs require commitments in terms of land, capital and personnel - the location and spatial arrangement of which is important. Rationally they should be located in centres that are accessible to the local population. In this way a system of rural towns, or service centres can be established based on a hierarchy of functions. The resulting network will provide the channels for encouraging development in rural areas.

An important feature of the envisaged hierarchy of service centres is that it incorporates all existing towns, some of which will eventually become higher order centres, together with other places which at present suggest themselves as suitable due to accessibility or an existing concentration of activities.

The policy calls for "small towns (Service Centres) situated in rural areas, each acting as a focal point in which a range of essential services can be obtained. The minimum range of these services should include administration, residential, utilities, agricultural extension, health, education, commerce and industry."(16)

This policy statement identifies the broad directions that Transkei's government intends to follow in regard to spatial development. Its effective translation into an implementable plan for the NE region, depends, to a large extent, on parallel spatial planning taking place at two other scales of decision-taking. These refer, firstly, to the need for explicit plans to accommodate in-migration to cities and towns in the RSA; and secondly, to the need for co-ordination of spatial planning in all regions of Transkei and, in particular, for a comprehensive plan to guide the rapid urban growth in and around Umtata. The greater the uncertainty about spatial planning at these levels, the more difficult it becomes to formulate a realistic plan for Transkei's NE region.

At the plan formulation stage of the NE region's SDP, no such plans had been drawn up (or even commissioned).(17) However, the question facing planners in the north-east remained: What can be done in the region to cope with expected population growth over the next 20 years; to encourage the levels of urbanization envisaged in the White Paper; but at the same time to meet the more certain needs of the region's people in the short term (say 5 to 10 years)?

In response to these constraints and to the current needs of the region's people, the Spatial Development Plan set out objectives and formulated a strategy to guide the region's development over a period of some 20 years. In the first place, this strategy embodied an adaptation of the "service centre" approach to develop a hierarchy of settlements to act as focal to support and stimulate productive activities points in the region. Secondly, the strategy made provision for the physical infrastructure (main roads, electricity, telecommunications) needed both in support of the region's potential for commercial agriculture and forestry and to link the towns to each other, to their hinterlands and to adjoining regions.

### Spatial planning of the NE region

In this section we shall identify objectives to guide spatial development in the NE and then proceed to formulate a spatial strategy for the region. Thereafter, discussion will turn, firstly, to the concept of service centres and, secondly, to their use as a policy instrument for spatial planning.

#### Spatial planning objectives

On the basis of Transkei's spatial development policy, as set out in the White Paper on Development Priorities and in various project motivations, the spatial planning objectives for the NE region are assumed to be the following:

- To provide an investment framework for a more integrated spatial structure of the region.
- To enable people living in the region's villages to have better access to a comprehensive range of services.
- To provide an alternative living environment to the region's people who either lack access to arable land, or who are largely dependant on migrant remittances, or both.
- To promote the development of the region's economic potential (mainly agriculture, forestry, small industries and marketing).
- To reduce imbalances in the provision of infrastructure and services between districts and localities within the NE region.

#### Spatial Strategy

The spatial strategy for the NE region, which is set within the ambit of Transkei's stated policy of using a service centre approach to develop a hierarchy of urban settlements<sup>(18)</sup>, makes general provision for the region's long term ( $\pm$  20 years) needs and more precise plans to meet its short term ( $\pm$  5 year) requirements. The strategy is built upon the existing patterns of spatial organisation in the region and takes cognizance of the previously identified opportunities for effective planning as well as the region's spatial development problems. The strategy is made up of the following, interwoven strands:

- (a) Identification of a hierarchy of settlements through which services can be effectively and equitably distributed. This hierarchy is based on that identified in the White Paper but is extended to include Villages where some 98 percent of the NE region's population live at present.

The four grades in the NE's settlement hierarchy are thus:

- Villages - traditional and consolidated villages widely dispersed throughout the NE region.
- Rural Centres - places of significance on account of some facility (eg. a hospital) or a concentration of investment and economic activity (termed "Nodes" in White Paper).
- Towns - existing towns (one in each of the nine magisterial districts).
- Regional Centre - major town in the region.

- (b) Establishment of performance criteria for service provision to ensure that residents of settlements at each tier enjoy reasonable access to a safe water supply, health services, primary education, markets and production opportunities.
- (c) Re-inforcement of the region's existing towns as the focal points of the spatial structure by providing them with adequate infrastructure and services to meet present and future demands.
- (d) Establishment of a network of places beyond the towns called Rural Centres, at which a number of essential services will be provided initially on a specified day every month or two weeks. In other words they will start out as periodic centres. The range of mobile facilities to be provided will include: health, market, postal, banking, agricultural, administrative, training and maintenance services. In addition support services will be provided for small scale businessmen and industrialists.
- (e) Provision of adequate basic physical infrastructure, viz. safe water supply and an all weather access road for each village.
- (f) Promotion of multiple and more specialised consumer services in the towns, and where the opportunity occurs, encourage productive and marketing activities for local demand.
- (g) Development of affordable residential areas in each of the region's towns, in which families can enjoy security of tenure at least equivalent to that of a residential plot in a tribal area; improved access to infrastructure and services; as well as easier access to a wide range of consumption services and goods, and to productive/marketing activities.

- (h) Provision of the physical infrastructure (main roads, electricity, tele-communications) needed in support of the region's commercial agriculture, forestry and industrial potential, all geared mainly to local and Transkeian demand. This regional infrastructure is also required to link the towns to their hinterlands, to each other and to adjacent centres and regions.
- (i) Phasing of physical development to ensure a balance of priorities between projects with highest potential and the most needy groups and areas; also to ensure an equitable distribution of investments among districts in the NE region.

Having outlined the main tenets of the Spatial Strategy for the NE region, attention will now focus on the way in which the plan proposes to use service centres as an element in the spatial organisation of the region.

#### Service Centres : the concept(19)

Southern Africa's urban hierarchy identifies eight orders of towns ranging from metropolitan areas through major country towns (eg. Umtata, Queenstown), and country towns (eg. Kokstad, Port Shepstone) to local and low order centres (eg. Lusikisiki, Flagstaff, Bizana).(20) Transkei's spatial strategy, as set out in the White Paper, added a further category - Rural Node (or rural service centre); and in planning for the NE region it has been necessary to extend the settlement hierarchy yet further to include villages, where most of the people live.

The term "service centre" as used in the literature and in Transkei's documents on development planning (often interchangeably with "rural service centre", "rural centre", "rural node") refers to places at the lower end of this hierarchy, between the more active of Transkei's existing towns and the rural villages.

The concept of a service centre is that of a focal point at which a comprehensive range of essential services can be obtained by people living in its vicinity. As such each service centre will act as a "pool of human and physical resources from which the inputs necessary for rural development can be distributed efficiently, and from which rural people can draw to promote their development."(21) The range and degree of speciality of these services will increase from those available in the smallest settlements in the hierarchy (villages) to those available in larger settlements (successively rural centres, towns and regional centres).

Similarly, the area served by each settlement or service centre will increase with size of centre and the type of services and activities available there. Thus, using the terminology of the Development Priorities White Paper, the area served by the village will be limited to its residents and people living closer to it than to the next village. The area served by a rural node will encompass the service areas of those surrounding villages closer to it than to the next rural node. Similarly, the service area of a town will extend to about midway to the next town and will include all rural nodes and villages within that locus. The regional centre will serve the entire region.

#### Service Centres as a policy instrument(22)

Policies incorporating "service centres" fit into the generic category of growth centres; but they are specifically small, low key settlements, established at relatively low cost to provide essential services to their own (often small) population and more particularly to that of the surrounding rural areas.(23)

Service Centre type of policies have been implemented with some success in Botswana, Swaziland, Zimbabwe (Rural Service Centres) and Malawi (Rural Growth Centres).(24) In each case the generic approach has been adapted to local needs with the result that the actual service centres developed in these countries display wide differences in function, scale and form. In the same way, the conceptual model of service centres and the generic approach needs to be adapted to meet the specific circumstances of NE Transkei. This transformation process has been under way in Transkei for some years.(25)

The concept that has emerged and enjoys widespread support is that service centres should:

- encourage marketing, production, small entrepreneurs and the provision of services (public and private) at places accessible to Transkei's widespread population;
- be developed around anchor activities such as the existing small towns or places of significance like rural hospitals which attract many people on a daily basis.

It is also agreed that Transkei's service centres are not intended merely as welfare distribution points.

### Application of a service centre concept in the NE region

Application of this concept in the NE region led to the identification of a hierarchy embracing four tiers of settlement and performance criteria for each. The four grades(26) are :

- Regional Centre - the region's major town
- Towns - existing towns
- Rural Centre/Node - to be set up initially as periodic markets at places of established centrality. In due course demand for the permanent location of activities may result in the development of a more formal Rural Service Centre, possibly with a residential component as envisaged in the Development Priorities White Paper.(27)
- Villages - existing villages where 98 percent of the region's population live at present.

Settlements in this hierarchy will be expected to perform different functions. The range and scale of the activities and services envisaged for each grade of settlement is set out in Table 9.1. This represents a general model - the exact size and nature of activity required for any particular centre will need to be determined individually when planning that settlement. To facilitate this, performance criteria were defined in order to identify the actual functions that are likely to be needed in settlements at each level. These steps are necessary pre-requisites to the detailed planning that will become the basis for the actual development of any centre. The following sub-sections outline priorities and performance criteria for each graded settlement.

#### Villages

Settlements at the village grade in the NE region's hierarchy are mainly residential in function. Development initiatives are, firstly, to provide all villages in the region with safe water supplies and passable access roads, at the same time ensuring the maintenance of these facilities; and secondly, to improve access to a wider range of services and activities on a periodic basis in the nearest rural centre and to higher order functions in the nearest town.

**Table 9.1 Main functions and services for different grades of settlement**

District Town (1)	Rural Centre (periodic)	Village
<p style="text-align: center;"><u>Public</u></p> <p><u>Physical</u></p> <ul style="list-style-type: none"> <li>* Bitumen access road</li> <li>* Bulk water, electricity supply</li> <li>* Internal roads</li> <li>* Sewage disposal system</li> <li>* Government offices and Court</li> <li>* Post Office, public and private telephones</li> <li>* Police Station</li> <li>* Community/School hall</li> <li>* Schools (Senior Secondary, Junior Secondary, Primary); Creche</li> <li>* Hospital or District Health Centre</li> <li>* Bus station and Public toilets</li> <li>* Factory flats for small industries</li> <li>* Premises for small traders</li> <li>* Covered market place and warehouse</li> <li>* Airstrip</li> <li>* Housing for Government staff.</li> </ul> <p><u>Functional</u></p> <ul style="list-style-type: none"> <li>* Maintenance of physical infrastructure and vehicles</li> <li>* Adequate staffing for public sector functions</li> <li>* Administration (municipality, central government departments, development agencies eg TDC, Transido, Tracor)</li> <li>* Agricultural Extension service centre</li> <li>* Adult training</li> <li>* Support services for small scale businessmen and industrialists</li> </ul> <p style="text-align: center;"><u>Private</u></p> <ul style="list-style-type: none"> <li>* Shops (30+) consumer, durable and specialist goods</li> <li>* Personal and professional services</li> <li>* Bank(s)</li> <li>* Hotel</li> <li>* Garage(s) with spares and repair facilities</li> <li>* Bus service (20 times/day) to higher and lower order centres</li> <li>* Small, service industries</li> <li>* Employment bureau</li> <li>* Co-operatives (producers and suppliers)</li> <li>* Residential Areas</li> </ul>	<p style="text-align: center;"><u>Public</u></p> <p><u>Physical</u></p> <ul style="list-style-type: none"> <li>* All weather access road</li> <li>* Bulk water supply to main consumer.</li> <li>* Electricity to main consumer</li> <li>* Telephone, Public and Private</li> <li>* Agricultural demonstration plot</li> <li>* School with hall</li> <li>* Bus stop area</li> <li>* Space for small industries and traders</li> <li>* Market/meeting place</li> <li>* Woodlot</li> <li>* Staff housing</li> <li>* Residential clinic</li> </ul> <p><u>Functional: services provided on a periodic basis</u></p> <ul style="list-style-type: none"> <li>* Maintenance of physical infrastructure</li> <li>* Adequate staffing for main activity</li> <li>* Pension and licence payments</li> <li>* Circuit court</li> <li>* Mobile post office</li> <li>* Mobile bank</li> <li>* Agricultural extension service</li> <li>* Training courses</li> <li>* Meetings of Development Officers</li> <li>* Support for small scale businessmen and industrialists</li> </ul> <p style="text-align: center;"><u>Private</u></p> <ul style="list-style-type: none"> <li>* Space for development of               <ul style="list-style-type: none"> <li>- shops</li> <li>- small service industries</li> <li>- private residential</li> <li>- freehold agricultural plots</li> </ul> </li> </ul>	<p style="text-align: center;"><u>Public</u></p> <p><u>Physical</u></p> <ul style="list-style-type: none"> <li>* All weather access road</li> <li>* Clean water source for domestic use.</li> </ul> <p><u>Functional</u></p> <ul style="list-style-type: none"> <li>* Maintenance of feeder road and water supply</li> <li>* Visiting agricultural extension offices</li> <li>* Access to               <ul style="list-style-type: none"> <li>- Mobile clinic service</li> <li>- Post office agency</li> <li>- Public telephone</li> <li>- Woodlot</li> </ul> </li> </ul> <p style="text-align: center;"><u>Private</u></p> <ul style="list-style-type: none"> <li>* Access to               <ul style="list-style-type: none"> <li>- Shops</li> <li>- Bus service</li> </ul> </li> </ul>

Notes:

1. The Regional Centre would have the same public facilities (physical and functional) as a Town, and in addition government offices relating to the co-ordination of the region. It would have a much larger and more diverse private sector component than a Town.
2. A distinction has also been made between the physical inputs required and those of a functional nature. The latter are critical to the success of the centre for without adequate manpower, training co-ordination and maintenance, investment in the physical elements will be largely wasted.
3. It should also be noted that government's use of its resources and powers can lead to the provision of some, but not all, of the activities needed for an operational service centre at all levels. Other activities depend on private sector initiative and will generally not emerge until government action has provided a certain threshold of infrastructure and services.

Thirdly, with encouragement at the community level, it is anticipated that some villagers will engage increasingly in small enterprises such as house building, carpentry, repairs, sale of garden produce. Space needs to be made available at some central point in the village, for these activities, although for the most part these will be undertaken from individual homes.

The performance criteria for the activities envisaged in villages are:

- \* Water - access to reliable source(s) of clean water for domestic use within easy walking distance (less than 0,5 km)(28).
- \* Roads - access road to next village, rural centre or town passable by two wheel drive vehicles year round except for a few days after exceptionally heavy storms.
- \* Maintenance - water supply and road.
- \* Fuel - access to a woodlot (within 5 km).
- \* Post Office - access to a postal agency within 5 km.
- \* Telephone/radio - access to a telephone or radio for emergency messages within 45 minutes walk (3 - 4 km).
- \* Education - access to a primary school (sub A to std. 5) within about 45 minutes walk of each village (3 - 4 km).
- \* Health - access to a mobile clinic once every two weeks, within 2 hours walk (8 - 10 km).
- \* Public transport - access to a daily return bus service to a higher order centre within 2 km.
- \* Shopping/market - access to at least one shop within 2 km  
- access to a market at least one per month within 8 - 10 km.
- \* Housing - for staff at primary school and maintenance foreman.
- \* Agriculture - access to extension services every 2 weeks within 8 - 10 km.

Highest priorities in the short term (1 - 5 years) are to provide secure water supplies and passable access roads to all villages in the region, at the same time ensuring the maintenance of these facilities. The phased development of a typical village is shown in Figure 9.1.

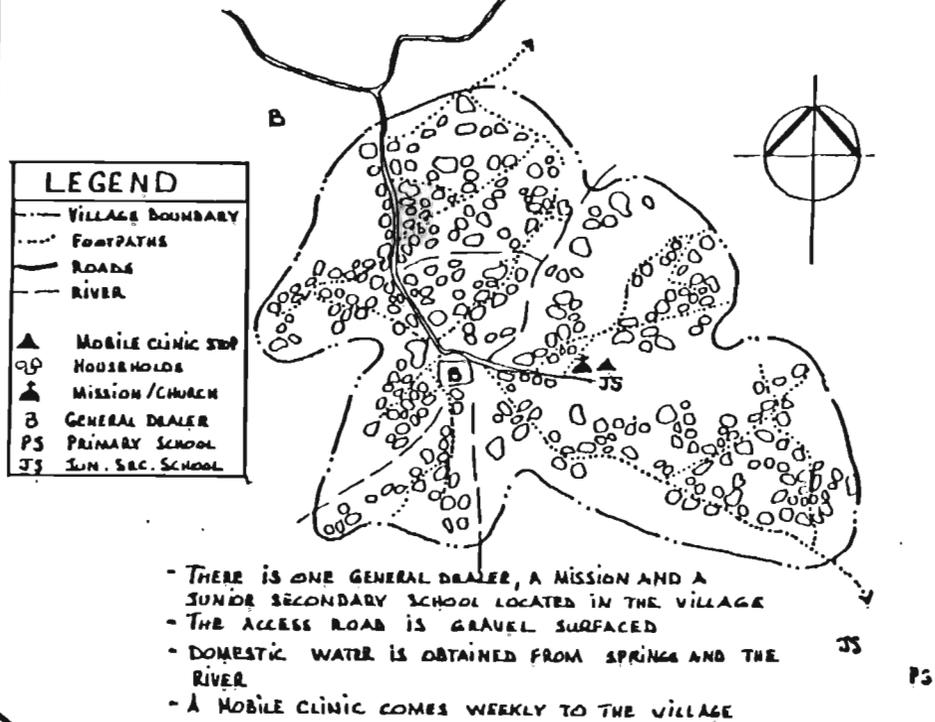
## BRIEF

TO DRAW UP A SET OF PLANNING PROPOSALS FOR THE PROVISION OF BASIC SERVICES FOR THE RURAL VILLAGE OF UKUGADUKA.

### GUIDELINES

- FULL UTILIZATION OF AND INTEGRATION WITH EXISTING SERVICES & FACILITIES
- MEETING THE BASIC NEEDS OF THE COMMUNITY AND UPGRADING EXISTING INFRASTRUCTURE.
- ALL PROPOSALS SHOULD BE OF AN APPROPRIATE SCALE AND TECHNOLOGY AND FEASIBLE IN TERMS OF AVAILABLE RESOURCES

**EXISTING SITUATION** - 10 km TO NEAREST SECONDARY ROAD  
 PHYSICAL - VILLAGE LOCATED IN RUGGED TERRAIN - 32 km TO NEAREST TOWN  
 - PERENNIAL STREAM RUNS THROUGH THE CENTRE OF THE VILLAGE  
 FUNCTIONAL - THERE ARE APPROXIMATELY 250 HOUSEHOLDS IN THE VILLAGE



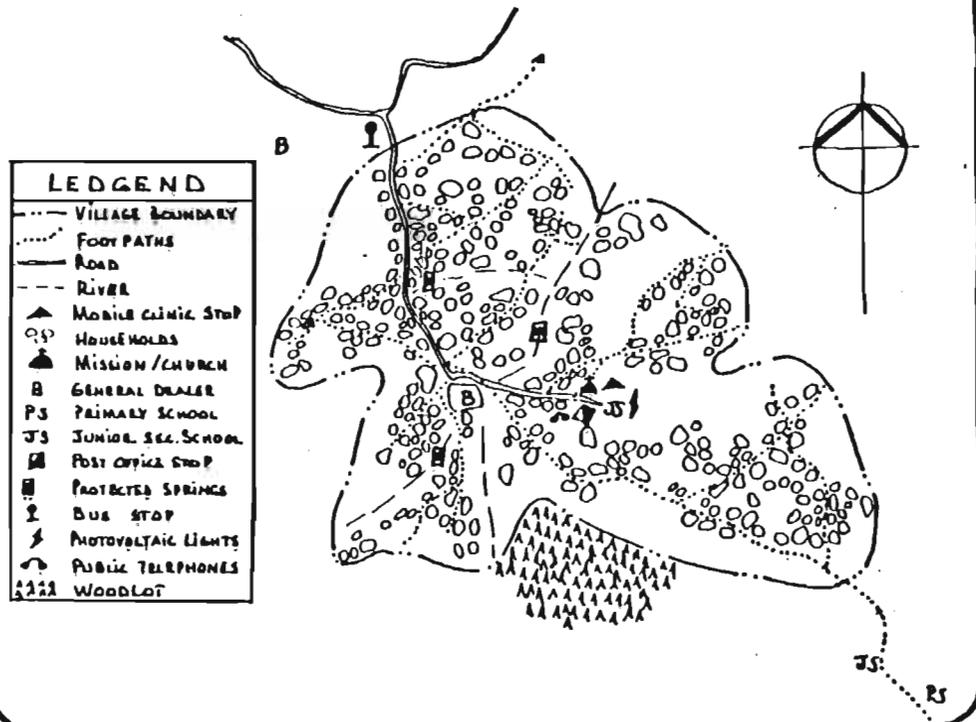
## PROPOSALS

### PHASE 1 (YEAR 1)

- UPGRADE AND MAINTAIN ACCESS ROAD FOR ALL WEATHER USE - TATU
- PROTECT VILLAGE'S 3 SPRINGS - TATU
- IMPROVE BUS SERVICE FROM VILLAGE TO NEAREST RURAL CENTRE AND BUILD A BUS SHELTER AT THE BUS STOP - XRT

### PHASE 2 (YEARS 2-5)

- INSTALL A PHOTOVOLTAIC LIGHTING UNIT AT THE JUNIOR SECONDARY SCHOOL
- INSTALL A PUBLIC TELEPHONE AT THE MISSION
- PLANT A WOODLOT FOR FUEL AND BUILDING PURPOSES.
- ORGANIZE A PERIODIC POSTAL SERVICE AND PENSION PAYOUT POINT ON THE SAME DAY.



### Rural Centres.

These are places that have emerged as having a significant degree of centrality either on account of their location; or because of public investment there (eg., a hospital); or because of the creation of a large number of jobs (eg., the tea estates). In the NE region it is proposed to establish periodic markets initially at these locations.

The particular value of periodic markets is that they provide a regular focal point, (usually within walking distance) for local marketing and service transactions. Their effect is to concentrate the economic and service requirements of small, remote and poor communities in such away that economies of scale are achieved for households, and for businessmen, official development agents, co-operatives and government services. Congregating people in this way would cut down on the use of scarce manpower particularly if use is made of demonstrations, lectures and films; especially prepared for purposes of agricultural and veterinary extension, for adult education; health and other specialist functions. These markets would also result in job creation, even if only on a part-time basis and people would generally gain wider experience through the operation of these markets.(29)

In the longer term (10 - 20 years) rural centres are seen as service and production centres and some may well attract a residential population of up to about 5 000 people(30) but this will depend on the productive base of the centre establishing itself in competition with opportunities in other towns and cities. Progress along this time scale will clearly vary depending on local conditions and initiative.

At this stage the proposed policy is to establish rural centres as activity and service delivery points that can provide, on a specified day every two weeks or so, a wider range and higher order of functions and services than are available in the surrounding villages. In the first instance many of these will be provided on a periodic basis; they will only be upgraded into permanent facilities as and when there is a proven demand, and provided adequate funding is available for both the physical facility as well as its continuing operation and maintenance. In this way the spatial system retains a degree of flexibility to respond to possible future changes in migration patterns brought about by factors exogenous to the region and to Transkei.

The range and performance criteria of activities to be available at each rural centre will vary from one to the next. The following activities are to be available at each centre on its day of operation:

- \* Road - all weather access road to nearest town.
- \* Water - bulk supply with reticulation to main consumer (eg. hospital) and standpipes for other users.
- \* Electricity - in short term a source of power to provide light for  $\pm$  4 hours every night and to run a small medicine fridge (for residential clinics).
- \* Fuel - woodlot in immediate vicinity.
- \* Post Office - postal agency.  
- fully serviced post office bi-weekly with money order and telegraph facilities.
- \* Telephone/radio - radio at either hospital, police station, residential clinic, post office or senior secondary school for emergency use.  
- telephone lines for main user(s) with some private lines and several public call-boxes.
- \* Sewage - waterborne for hospitals, residential clinics etc.  
- pit latrines for public use eg. at market, bus stop.
- \* Small Industry - facilities and support services for small industries as demand occurs.
- \* Community - covered meeting place or hall attached to main activity or school.
- \* Finance - travel bank (bi-weekly).
- \* Housing - for government officials permanently based at the rural centre.
- \* Agricultural extension - demonstration plot, initially extension officer present on a bi-weekly basis.  
- later a demonstration plot of similar size to that of a typical arable plots in the area.
- \* Justice - circuit court (as needed but on market days)
- \* Government - pension payment (bi-monthly) to co-incide with market days  
- licences etc.
- \* Education - junior secondary and primary school.
- \* Health - mobile clinic (bi-weekly).
- \* Public transport - bus rank and shelter.  
- space for 6 to 10 buses/day.
- \* Shopping/market - bi-weekly market with covered facilities.  
- space for upto 10 shops in medium term.

Priorities for the development of periodic markets are :

- basic planning, design and construction of the main physical inputs, viz., the market, bus shelter and public toilets, around which the periodic functions will take place;

- organisation of the effective delivery of mobile and periodic activities on the appointed market days;
- upgrading the main access roads between each rural centre and adjacent towns.

This will involve, firstly, the preparation of a simple organisational and spatial plan for each centre showing where the mobile facilities will be set up in relation to existing facilities. See Figure 9.2. Secondly, the programme requires the appointment of a co-ordinator, based in Umtata, whose functions will be to:

- work out the overall programme for market days at each rural centre;
- arrange the availability of mobile services from departments and organisations;
- co-ordinate their arrival and operation at the appointed time and place; and to attend all market days to monitor the operation of the rural centre
- program and report monthly to his/her departmental head.

### Towns

These are existing towns some of which already have a fairly wide range of public and private sector activities. It is envisaged that these will provide human and physical resources from which the inputs necessary for development of their rural hinterlands can be distributed effectively, and from which people living both in the town and its service area can draw to promote their development. In the longer term, towns can become the bases from which periodic activities are provided to the surrounding rural centres and villages.

The range of activities and performance criteria for towns are:

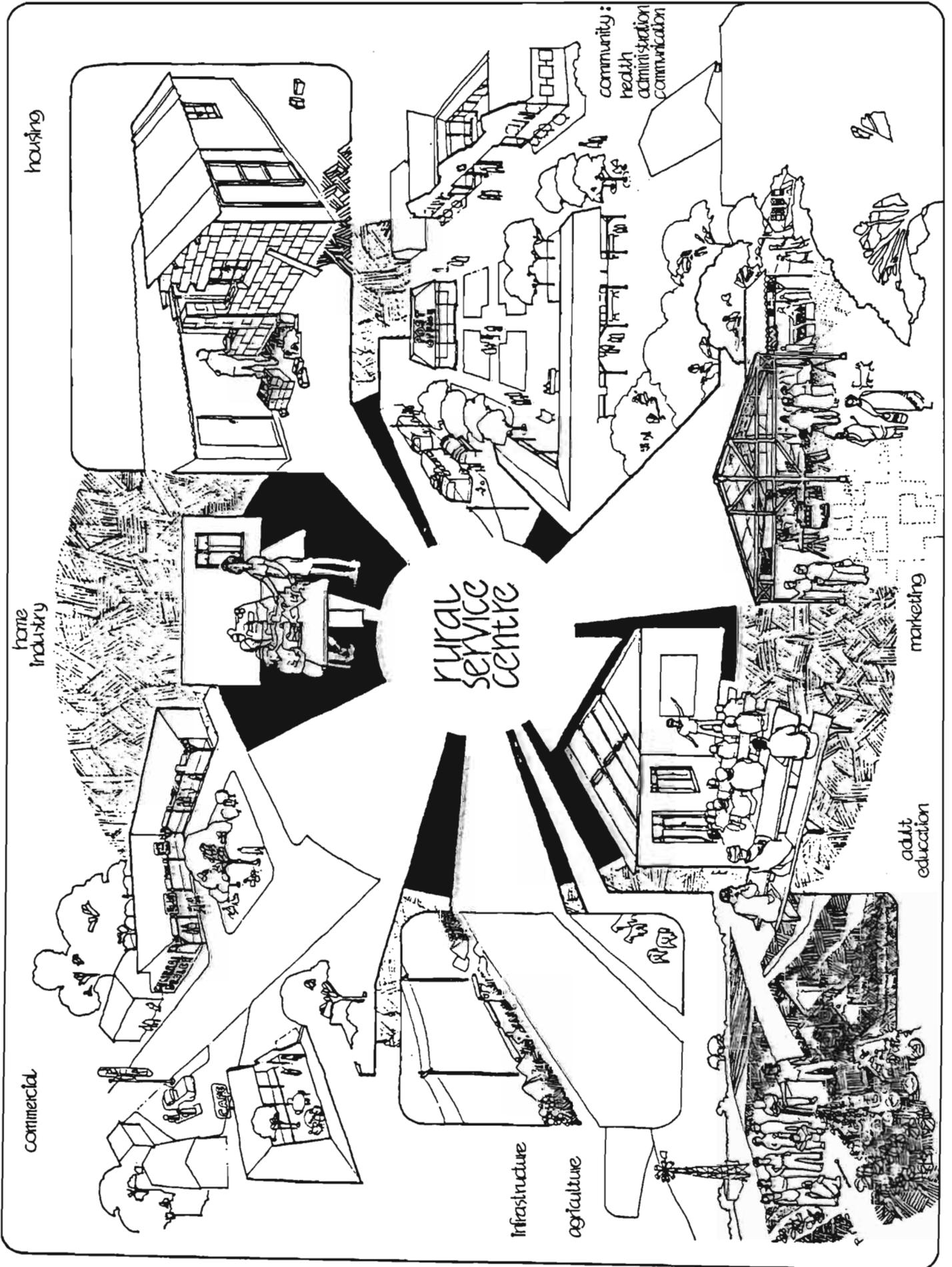
- \* Water
  - bulk supply with reticulation to both individual users and communal stand pipes to residential areas in the town as well as the peri-urban areas (ie. densely settled areas adjacent to the commonage).
- \* Roads
  - bitumen access roads to adjacent towns
  - gravel and cleared internal roads with stormwater drainage channels.
- \* Sewage
  - waterborne sewage disposal system for fully developed areas of the town, and pit latrines in peripheral site and service areas.
  - public toilets eg. at bus rank and market.
- \* Electricity
  - lighting to public and private users
  - power to large scale users.
- \* Refuse
  - removal service and dump.

- \* Cemetery - space with provision for future requirements.
- \* Post Office - fully serviced Post Office with telex facilities.
- \* Telephones - private and public lines on automatic exchange.
- \* Fuel - woodlot in commonage.
- \* Police - Police station with radio link to hospitals, rural post offices, clinics etc.
- \* Administration - municipality, central government department agencies: base for district activities.
- \* Justice - magistrate's court.
- \* Agriculture - extension service centre.
- \* Public transport - bus rank and shelter.  
- space for at least 20 buses/day.
- \* Community - hall for public meetings, entertainment etc.
- \* Education - senior secondary, junior secondary including primary classes, creche.  
- boarding accommodation for secondary school pupils.  
- non-formal and adult education and training facilities.
- \* Health - hospital or health centre.
- \* Industry - sites and facilities for medium and small scale industries.  
- support services for small scale industries and businessmen.
- \* Commerce - space for ± 30 - 50 shops providing consumer durables and specialist goods.  
- facilities for small, professional and other offices.  
- market place with covered facilities.  
- banking facilities.
- \* Marketing - co-operatives  
- storage facilities  
- credit agency.
- \* Housing - houses for government officials.  
- provision for residents to erect their own dwellings on plots serviced to a range of affordable standards.
- \* Recreation - sportsfields.

Short term priorities for the development of towns are:

- planning each town to cater for specified target population (both within the present urban area and on its fringes) as well as for more productive use of the town commonage:
- provision of sites for residential, commercial, industrial and public uses for the first phase of each town's expansion.

Figure 9.3 Facilities to be available in towns



- provision and maintenance of adequate physical infrastructure (water, sewage disposal, internal roads) for this first phase using local contractors where possible;
- provision of facilities for small scale entrepreneurs and industrialists.

### Regional Centre.

This is the town which, by virtue of its location, economic base, present level of development and potential for future growth, recommends itself as the major centre in the NE region. It will need to provide the same comprehensive range of activities as a town (Table 9.1) but will offer greater variety within each category. The regional centre will also offer a logical location for any decentralization of government (and possibly private sector organisations) to cover the region. As such it will need to accommodate higher order administrative and business functions than the towns. High priority is accorded to development of the regional centre itself; while within the town short term priorities will be the same as in the other towns.

### Implementation in the NE region

Having established the intended roles and functional composition of centres at different grades in the hierarchy, the next step is to apply this general model to specific locations in the NE region and then to indicate the sequence, in which projects are to be implemented to develop this hierarchy.

### Settlement hierarchy

Identification of the future settlement hierarchy was based on analysis of the NE region's linkages to adjacent areas; its topographical constraints; functions of existing towns and places with some clustering of activities; areas of particular need; as well as places exhibiting potential for economic development. On the basis of this analysis, the following principles were adopted as guidelines for identifying the settlement hierarchy:

- re-inforcing the role of existing towns and extending their functions;
- making optimum use of places that have demonstrated themselves to be centres of some functional significance in the region;
- providing services to the widely dispersed population of the region;
- locating rural centres (periodic markets) to serve densely populated areas that are beyond a day's walk (round trip) from existing towns.

Table 9.2 Proposed settlement hierarchy for the NE region (See Figure 9.4)

Grade in hierarchy	Location in NE region
Regional Centre	Lusikisiki
Towns	Bizana, Flagstaff, Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabankulu, Umzimkulu.
Rural Centres (initially as periodic markets)	<p>a) For establishment during years 1 to 5: Bambisana, Canzibe, Holy Cross, Ibisi, Isimelela, Isilindini (Sipetu), Lubaleko, Magwa, Magusheni, Majola, Malenge, Mfolozi, Mtonjeni<sup>(1)</sup>, Nkanga, Old Bunting, Rietvlei<sup>(2)</sup>, Tombo and two further places to be selected in Bizana (near Makwanteni) and Lusikisiki (near Mantlaneni).<sup>(3)</sup></p> <p>b) For possible inclusion in the network at a later stage :</p> <p>Buntingville, Glengarry, Greenville, Lourdes, Ludeke, Mfundisweni, Mtata Mouth, Mzamba, Marubeni, Misty Mount, Mkambati, Nkantsweni, Ntlaza, Palmerton, Riverside, Rode, Singisi, Tina Falls.</p>
Villages	All existing traditional and consolidated villages in the region ( $\pm$ 800).

Source: Spatial Development Plan for NE Transkei, Table 4.3

- Notes:
1. Mtonjeni has been designated as the location of East Pondoland's "Industrial Development Point" and programmed for development during the 5 - 10 year period. Hence its inclusion as a Rural Centre that could be incorporated into the network as and when associated developments in the vicinity (eg. sugar, roads) commence. See Appendix IX. While Mtonjeni has been chosen as the IDP with a view to maximizing development throughout the whole East Pondoland region, this is not to say that the other existing centres have been overlooked. In fact, close scrutiny of the IDP proposal (12.2 of 1983/4) will show that during the first phase more than 99% of the expenditure on urban infrastructure will be directed at Lusikisiki, Flagstaff and Bizana. (R30 068 million).
  2. In the same way as the IDP project examined the needs of East Pondoland as a whole, it is proposed that because of the particular circumstances and location of Umzimkulu, Ibisi and Rietvlei, they too be planned in a concerted manner.
  3. A brief description of each place identified in this Table is set out in Appendix III of the NE region SDP.

The proposed hierarchy, which is set out in Table 9.2, and Figure 9.4, embraces four grades of centre below the level of the capital (Umtata). These are :

- Regional Centre - Lusikisiki, the region's major town
- Towns - 8 existing towns, one in each district
- Rural Centres - 19 places of established significance (with a further (periodic markets) 18 for possible inclusion at a later stage)
- Villages - Some 800 existing villages.

Each place identified in Table 9.2 was carefully evaluated in terms of its functional significance and its role in the local space economy. The hierarchy displays diverse characteristics blended to regional needs. By way of illustration, entire settlement hierarchy falls within the service areas of higher order centres located outside the NE region viz. Umtata, Kokstad, Port Shepstone and, to a lesser extent, Harding and Mt Frere. Towns display markedly different characters and vary in their potential for development. For example, Libode and Ngqeleni are stunted because of their proximity to Umtata; Mt Ayliff and Umzimkulu are on the main route through Transkei and Natal/KwaZulu; and Port St Johns has potential as a resort town.

Rural centres also vary in their anchor activities or *raison d'etre*. For example, several are based on long established, remote hospitals such as Holy Cross, Sipetu and Canzibe; one is at a major road intersection (Magusheni) while others serve inaccessible but densely populated areas like Makwanteni and Mantlaneni. The rural centres are not all point form locations - for example those based on the tea estates at Magwa and Majola or the irrigation scheme at Malenge. The only entirely new centre in the proposed hierarchy (Mtonjeni) will, at such time as it is developed, be in the vicinity of, and providing support functions for, a proposed sugar mill to serve an 8 000 ha estate. See Appendix X.

In combination, several groups of centres (at various grades) will strengthen particular routes; for example Magusheni - Flagstaff - Lusikisiki - Port St Johns; or Umzimkulu - Ibisi - Rietvlei. Villages will also be developed differentially according to their resources, relative locations and, particularly, in response to local community motivation.

It is clear, therefore, that the model has not been applied in a rigid manner and that development of the settlement hierarchy will respond to the diverse needs and potentials of various areas as well as to the varying rhythms<sup>(31)</sup> associated with dominant activities and movement patterns, such as hospital and clinic schedules, daily bus trips from rural areas to district towns, seasonal agricultural or tourist cycles, pension pay days and so on.

### Targets and phasing

In order to specify the inputs required for settlements at each grade in the hierarchy, it is necessary to make certain assumptions about future population size. These are not to be regarded as projections but rather as feasible targets. As such they are indicative of the level of population and services that will be needed if the urbanization and settlement planning strategy outlined in the Development Priorities White Paper (para 2.49) and the NE region's spatial strategy is to be achieved over the next two decades. Progress towards these targets will need to be monitored continuously and adaptations introduced to meet changing needs. At this stage, however, estimates of short term estimates of demand are required to budget for the inputs needed, both physical and manpower. The following targets are for the five year period 1983 - 1988.

- a) Villages. The short term target for villages is to stabilize their population sizes at present levels. This would require that an equivalent number of people to the natural increase would be attracted to either the towns, or the regional centre, to Umtata or even out of Transkei.
- b) Rural centres. In keeping with the policy of limiting the provision of permanent facilities to those existing, and of increasing the range and quality of services available on a periodic basis, the short term target is to stabilize the population of rural centres at present levels, allowing for a small increase in the order of 10 or 20 percent. This could allow for a few new residents who might be attracted by the opportunities arising from the periodic clustering of people at the centres.

There may be some exceptions to this in cases where a rural centre is a productive centre with an expanding economic base. As in the case of villages, this assumes that a number of people, equivalent to the natural population increase will be attracted to higher order centres. In the longer term (say 10 - 20 years) some of these could grow to a size of some 5 000 people. The space implications of this possibility should be borne in mind if and when any permanent facilities are being established at a centre.

- c) Towns and the Regional Centre. It is envisaged that the market towns and the regional centre will become major foci of activity and settlement in region. Accordingly provision will have to be made for substantial increase in the capacity of their physical infrastructure and in the number of sites available for residential and business purposes. Provisional targets for five and ten years are set out in Table 9.3. Because it is the availability of these facilities that is likely to attract people to the towns, the population targets outlined here are unlikely to be achieved within five years unless these facilities are provided.<sup>(32)</sup> These population targets form the basis for the estimates of physical projects and infrastructure discussed in the next chapter.

Implementation of the physical and organisational inputs of the settlement hierarchy has been phased on the basis of the following principles:

- building upon and re-inforcing the existing settlement hierarchy;
- providing basic services to the most needy areas;
- optimizing the use of existing facilities and infrastructure;
- equitable distribution of investment among the Regional Authorities and districts on the basis of population;
- investment in projects at places that will have the greatest local multiplier and where it is least likely to be wasted.

This will involve three parallel approaches that need to be tackled simultaneously. First are the inputs to the region's nine towns to enable them to function as effective higher order centres (principles: "optimizing use of existing facilities", "equitable distribution" and "least likely to be wasted"). Secondly, inputs to consolidated and traditional villages are needed to ensure that their residents have access to basic services, notably feeder roads and water supply (principles: "most needy first", "optimizing use of existing facilities" and "equitable distribution"). Thirdly, additional services need to be provided in selected intermediate places to establish them as operational rural centres (principles: "optimizing use of existing facilities", and "least likely to be wasted").

Taking a five year time horizon, the proposed phasing of the settlement development in the NE region is set out in Table 9.4. A pilot project was proposed with a view to identifying difficulties in practice and to monitor the early operation of all four levels of centre. If it is found that the

**Table 9.3 Provisional target populations for designated Towns and Regional Centre(1)**

Town	1980 Census	Population targets (2)	
		1988	1995
Lusikisiki	1 500	10 000	30 000
Bizana	1 300	5 000	22 000
Flagstaff	1 000	4 000	26 000
Mt Ayliff	1 500	3 000	12 000
Port St Johns	2 900	4 000	10 000
Tabankulu	1 000	4 000	10 000
Umzimkulu	1 600	6 000	12 000
Libode	700	2 000	3 000
Ngqeleni	650	2 000	3 000
Mtonjeni	-	-	15 000
NE Region	12150	40 000	143 000

- Notes:**
1. These targets are based on the population of each town and the adjacent, densely populated administrative areas, as well as the potential attraction of other activities to be located in the town.
  2. These figures are disaggregated into urban (±60%) and peri-urban (±40%).
  3. Targets for 2000 to be set after progress upto 1988 has been assessed.

**Table 9.4 Phased upgrading of NE Region's settlement hierarchy**

Grade of centre	1984-85		1985-86		1986-87	1987-88
	1 - 6 months	7 - 12 months	13 - 18 months	19 - 24 months		
<u>Villages</u>	100 <sup>(1)</sup>	100	100	100	100	100
<u>Rural Centres</u>	Canzibe Old Bunting Tombo Majola Nkanga Isimelela	Rietvlei Ibisi Malenge	Sipetu Bambisana Magwa Holy Cross Mantlaneni	Magusheni Lubaleko Mfolozi Makwanteni	Mtonjeni and others from group b) as demanded	
<u>Towns</u>	Flagstaff		Umzimkulu Port St Johns Bizana		Tabankulu Mt Ayliff	Libode Ngqeleni
<u>Regional Centre</u>	Lusikisiki					

**Note** Villages to be selected by Drought Relief Co-ordinators and co-ordinated with TATU's Rural Initiative Water programme. Physical inputs will be water supply and feeder road improvements.

anticipated impacts are substantially different to those expected, plans for the other settlements can be adjusted accordingly. Thus the 1984-85 phase, as set out in Table 9.4 becomes the pilot project, with major feedback to the National Planning Committee intended at six monthly intervals.

We now pause to review this spatial plan in the light of recent literature, before setting out the physical components (Chapter 10) that will give it effect.

### Evaluation

The impact of the SDP on the NE region cannot be evaluated until such time as some or most of the projects and programmes that constitute it have been implemented. At this stage, looking in particular at the service centre component of the spatial strategy, the expected positive and negative results can be argued from theoretical standpoints.

Anticipated benefits arising from the proposed programme include:

- establishment of a spatial framework specifically for the NE region within which individual projects can be located rationally;
- an increase in accessibility for rural people to basic facilities and to higher order functions and centres;
- the clustering of activities periodically at rural centres, or permanently in towns, allows for the possibility of multi-purpose trips;
- the expansion of towns and the occasion of periodic markets at rural centres is expected to create opportunities for small, local entrepreneurs and to open more options for home production of food and other items at village level;
- through the provision of more residential opportunities and rights in towns, people who now reside in tribal areas but have no active involvement in farming will have the opportunity to move to towns on a permanent basis;
- the hierarchy of "service centres" provides a spatial framework for administrative decentralization;
- the development of these centres will act as a statement of government commitment to the development of the NE region as a whole;
- at the same time, these centres can become foci for motivation of rural communities.

When establishing a hierarchy of settlements, cognizance must be taken of criticisms levelled at service centres within the context of Transkei. These relate to the overall cost in terms of necessary infrastructural and other inputs in order to sustain the development of a hierarchy of service centres; the danger of wasted investment if people by-pass service centres; and the limited manpower and administrative capacity available to operate service centres or maintain the infrastructure.<sup>(33)</sup> These pitfalls can be avoided in practice through a system of periodic markets operating as low order service centres concurrently with the development of existing towns as higher order centres. Periodic markets can offer a more flexible and locally responsive approach to development in rural areas as they introduce a strong temporal dimension to the spatial organisation of the region. It is this temporal element that provides much of the dynamic for urban growth, for as markets grow or decline, the periodicity with which they operate increases or reduces. Their intensity of use then determines the allocation of investment and future inputs necessary for the development of a fully-fledged, permanent service centre.

Clearly there is a need to maintain a balance between the concentration and dispersal of investment through the settlement hierarchy. Wastage of scarce resources can be avoided partly by concentrating investment in the existing towns which are long established focal points as the higher order service centres, and partly by careful selection of lower order service centres based on proven centrality. However, Transkei's population and economic resources are widely dispersed, and therefore, unless a strategy is adopted which includes a decentralised development approach, the needs of the majority of people will not be met, nor will specific economic and agricultural opportunities be maximized.

At present the shortage of manpower and administrative capacity is the most serious constraint on developing a hierarchy of service centres in Transkei. The solution to this lies in training - and here a service centre strategy could itself become a vehicle for increasing the country's pool of skilled manpower provided the cost of training and maintenance is included into the overall service centres programme - and not regarding the costs as merely those of physical infrastructure.

Furthermore the time scale of the SDP proposals should be recognised. These projects and programmes cannot be implemented quickly, and the plan outlines the overall directions and intended spatial organisation some twenty years ahead. The first phase covers the period 1983/84 to 1987/88.(34) In the light of progress during this period, and in response to the impacts of various projects in different areas, the SDP will undoubtedly need to be adjusted and updated. Thus it is by no means a fixed "master plan" for the NE region: instead the SDP sets the directions for rational development in the region. In the long term it identifies firm projects (within the long-term parameters) to meet the immediate needs of the region and its people.

In parallel with our research and planning in the NE region, other researchers have been investigating urbanization and regional development with particular reference to the peripheral regions of Southern Africa.(35) Their findings were for the most part not available when the NE region SDP was being formulated. However, as these have now been published, it is appropriate to comment on their criticisms of spatial planning and rural service centres.

Dewar, Todes and Watson are critical of the use of standardised settlement goals and policy packages. Pointing out that the causes and forms of underdevelopment are historically determined, they argue, firstly, that the identification of strategically feasible improvements can only occur on the basis of detailed analysis of a specific context; and secondly, that settlement policy can only tackle one facet of a broader problem.(36) On this basis they question whether settlement goals, such as promoting more equal regional development, can be adopted universally.(37) The approach should rather be to start by defining context specific social goals for overall policy and then proceed to analyse the ways in which settlement planning can further those goals.(38)

These are valid points which do not conflict in any way with the approach to settlement planning in the NE region. Socio-economic goals for Transkei and the region had been defined at the outset(39) and in the full realization that spatial planning could not solve all the underdevelopment problems of the region,(40) it was used for tackling a specific set of context-determined issues.(41) As discussed earlier in this chapter, the concept of rural service centres was adapted to meet the particular requirements of the NE region, while the projects emanating from the spatial plan (see Chapter 10 below) address socio-economic needs at local and regional level.

Dewar et al have also argued that the services required in rural areas depend on different support systems and embrace different delivery cycles.<sup>(42)</sup> This was also taken into account and, as has been pointed out above,<sup>(43)</sup> the detailed planning (organisational and spatial) of each rural centre/periodic market would need to make provision for the specific needs of its anchor activity and hinterland. It would be incorrect, therefore, to interpret the performance criteria defined earlier in this chapter as a standardised package to be applied in a uniform manner (as has been the case of Malawi's rural growth centres).<sup>(44)</sup> The list of activities that might occur at any of the places designated as rural centres, and priorities for each, will vary widely.<sup>(45)</sup>

Turning specifically to Transkei,<sup>(46)</sup> Dewar et al argue further that neither of the two generally accepted approaches to rural settlement policy, namely, betterment schemes or rural service centres, can work. We would agree with their criticisms of betterment planning and its negative impact<sup>(47)</sup>, but take issue with their view that rural service centres are being used in Transkei as an instrument of rural settlement policy. This is a misconception. In the spatial planning of NE Transkei the more generalised term "service centres" was used deliberately to break away from an exclusively rural connotation. In this context "service centres" embrace the entire spectrum of existing settlements in the region, from rural villages (betterment or traditional), small and large towns to include Umtata and so link into the wider South African urban hierarchy.<sup>(48)</sup>

They are used in the NE region as an instrument of urbanization policy, as explained in this and the previous chapter. The criticism that Dewar et al level at Transkei's 1983 service centre strategy is based on its summarized statement in the White Paper on Development Priorities, and takes no account of more comprehensive explanation in the Spatial Development Plan<sup>(49)</sup> where the 'national' policy is translated and applied in the specific context of the NE region.<sup>(50)</sup> Furthermore, the critics of the spatial planning strategies advocated here for Transkei<sup>(51)</sup> and the NE fail to offer any tangible alternatives.

The entire argument is now becoming diffuse, which seems to indicate that the time has come for planners to formulate a positive approach to spatial planning in South Africa's peripheral regions, taking into account the lessons from the recent debate and, most important of all, to test it in practice. The present chapter represents an attempt both to refurbish the relevant planning doctrine and to set in motion a means of testing it in practice.

Notes and References

1. Weitz R. (1979) Integrated Rural Development. The Rehovot approach, pp. 28 - 29.
2. Osmond Lange Inc (1983d) "North-East Region Spatial Development Plan 1983-2003" Umtata (hereafter referred to as NE region SDP).
3. See for example: Hawkins Associates (1980) op cit pp. 208-213; also Osmond Lange Inc (1982-83) "Statistical bases for planning Service Centres in Transkei's NE, NW and SE regions, chapters 7 and 8.
4. Tapscott C.P.G., Haines R.J. and P.M. Wakelin (1984) "A critique of Rural Service Centres with special reference to Transkei". IMDS Discussion paper No. 16. Also May J (1985) Development planning in the Transkei - the Rural Service Centre approach." Working Paper No. 15, Development Studies Unit, University of Natal.
5. Dewar D, Todes A. and V. Watson (1984) "Issues of regional development in peripheral regions of South Africa with particular reference to Settlement Policy: The case of Transkei". Working Paper No. 29. Urban Problems Research Unit, University of Cape Town; also Dewar et al (1985) op cit.
6. May J (1984) An economic assessment of essential services and subsistence production in rural Transkei Development Studies Unit, University of Natal, Durban.
7. NE region SDP pp. 37 - 38.
8. Osmond Lange Inc (1982) op cit, p. 156.
9. Based on rural consumer expenditure 1982 (IMDS survey).
10. Westcott G. (1977) "Obstacles to agricultural development in the Transkei" Wilson, Kooy and Hendrie (eds) (1977) Farm labour in South Africa, pp. 139 - 153.
11. Board C, Davies R.J. and T.J.D. Fair (1970). "The structure of the South African space economy: an integrated approach" Regional Studies Vol. 4 pp. 367 - 392.
12. NE region SDP p. 43.
13. Development Priorities (1983) op cit, para 2.49.
14. Ibid para 2.47.
15. Ibid para 2.48.
16. Ibid para 2.49.
17. The situation still pertains at the end of 1985.
18. NE region SDP p. 45.
19. Ibid pp. 43 - 45.

20. Davies R.J. and G.P. Cook (1968) "Reappraisal of the South African urban hierarchy." "South African Geographical Journal Vol. 50, pp. 116 - 132.
21. Horton S.E.G. (1981) "Rural Service Centres" (Mimeo)
22. Robinson P.S. (1983) "Rural Service Centres as a policy instrument for regional planning in South Africa". Proceedings of SAITRP Conference, Cape Town, pp. 135 - 139.
23. Appalraju and Safier (1975) op cit; see also p. 26 above.
24. a) Botswana. Botswana (1980) National Development Plan 1979 - 85 pp. 83 - 97; also Fair T J D (1981) Towards balanced spatial development in Southern Africa, pp. 12 - 17.  
b) Swaziland. Fair (1981) op cit pp. 35 - 36;  
c) Zimbabwe. Zimbabwe/Rhodesia (1979) Urban development in the main centres; Whitsum Foundation (1980) Rural Service Centres Development Study; and Reynolds N (1981) "The design of rural development : proposals for the evolution of a social contract suited to conditions in Southern Africa".  
d) Malawi. Malawi (1977) "Rural Growth Centres project : background and programme"; (1978) "Mkhota Rural Growth Centre"; (1980) "Bolero Rural Growth Centre"; and Christiansen et al (1983) "An economic assessment of the Rural Growth Centres programme".
25. Evolution of a service centre approach specifically applicable for Transkei may be traced through a series of reports, namely Transkei's Development Strategy (1978); "Spatial implications of the Development Strategy" (1978); the "Physical and Spatial basis for Transkei's first Five Year Development Plan" (1980), "Statistical base for planning service centres in Transkei's NE, NW and SE regions" (1982-83); the White Paper on Development Priorities (1983); the "Spatial Development Plan for Transkei's North East region" (1983); "Development Proposals for the South Western region of Transkei" (1983); and recently in TATU's paper (Cook and Letlaka) on "Rural Production and Marketing Centres" (RMPCs) (1984).
26. This hierarchy can be extended to include a higher order centre, such as Umtata, thus making it applicable to Transkei as a whole or to other peripheral regions in Southern Africa.
27. Dewar et al (1984, 1985) treat Rural Service Centres and Periodic Markets as distinct and separate forms of rural settlement planning.
28. Project Motivation 3.1 of 1983/84. "Rural development - Rural Initiative water Programme", para 4.1.
29. Reynolds N (1981) op cit p. 99 - 126.
30. As envisaged in the long term Development Priorities para. 2.49.
31. Dewar et al (1985) p. 41.
32. Details of the specific inputs needed in individual towns and rural centres are set out in the NE region Spatial Development Plan, Appendix III.

33. Tapscott et al (1984).
34. NE region SDP Table 6.1.
35. Dewar D, Todes A and V Watson (1982, 1983, 1984 and 1985) op cit.
36. Ibid p. 150.
37. Ibid p. 151.
38. Ibid.
39. See above pp. 145 - 9, 158, 234 and 239 - 257.
40. See above pp. 257 - 259.
41. See above pp. 261 - 263.
42. Dewar et al (1983) op cit pp. 146 - 7.
43. See above pp. 275 - 278 and 283.
44. Malawi (1977, 1978 and 1980) op cit. The rural growth centres at Mkhota, Bolero and Thekerani (inter alia) have all been developed according to a rigid model and constitute a good example of the standardised package of which Dewar et al are critical. In the cases of Mkhota and Bolero, however, their weaknesses as effective growth centres is more on account of unsuitable location (a political decision) some 10 - 15 kms from bustling Admark depots.
45. See above p. 281; also NE region SDP, Appendix III which specified inputs and priorities for each town and rural centre individually.
46. Dewar et al (1984) op cit.
47. See above pp. 80 - 82, 182, 237 - 241; also Appendix X para. 1.7.
48. See Davies and Cook (1968) op cit regarding the position of the NE region's small towns in the South African urban hierarchy.
49. NE region SDP chapters 3 and 4 in particular.
50. Haines R (1985) "Marking time on the periphery" Development Southern Africa Vol. 2 No. 4 p. 542.
51. Dewar et al (1984) op cit; Tapscott et al (1984) op cit.

CHAPTER TEN

IMPLEMENTATION I - PHYSICAL COMPONENTS

The next three chapters concentrate on implementation in order to show, in some detail, how the physical components of the development strategy (outlined in Chapter 8) and the spatial strategy (Chapter 9) are motivated and translated into a phased programme of implementable projects.

The present chapter identifies the physical and organisational components of the spatial plan for Transkei's NE region. It explains the reasons for the location of physical projects so that, in combination, they support the spatial strategy set out above in Chapter 9. Many of the physical inputs are derived either from current government project motivations, or draft sections of the Five Year Plan, or from the White Paper. As such they represent projects to which government has made some commitment. In certain instances it has been necessary to propose additional projects to complement those existing.

The chapter is arranged in six sections, each dealing with a specific facet of intended public investment in the NE region:

- Infrastructure
- Social services
- Agriculture and forestry
- Industry and commerce
- Other sectors
- Administration.

Sub-sections outline Transkei's policy for each sector and comment on the ways in which projects will contribute to development of the NE within the context of the spatial strategy. Details and cost estimates of each project are set out together with an indication of the department or agency responsible for administering the project and of particular importance, guidelines for its implementation.

Physical Infrastructure

Included under this section are roads, water, power, telecommunications, urban services, construction management and maintenance.

Roads

(i) Transkei's Policy. Transkei attaches a great deal of importance to road development as is shown by it being the largest single item (accounting for 12,6 percent) in the planning expenditure on capital and development projects over the next five years. This arises from the recognition that Transkei's

economic development depends on an adequate and well maintained road network. At present, however, development of parts of the country is severely constrained by poor roads.

(ii) Relevance in NE region. This is particularly the case of East Pondoland in the NE region, which has been under-supplied with roads. It has only two stretches of black top road - 50 km of the national road passing through Mt Ayliff and 118 km from Brooks Nek to Mzamba. For the rest, the region's main access route from Port St Johns through Lusikisiki and Flagstaff to either Kokstad or Port Edward is gravel. The other important access route from Tabankulu to Flagstaff is a narrower, twisting gravel road. Large parts of the region are poorly served by roads, notably in the areas to the east of Magwa - Holy Cross Mission - Bizana, where road access is definitely inadequate.<sup>(1)</sup> Four districts in the NE region (Bizana, Lusikisiki, Siphaheni and Tabankulu) are markedly underprovided with bitumen roads. Together these districts have a population of some 430 000 (1980); cover an area of about 6 700 square km and contain two of the region's main access routes. Yet they have a mere 115 km of bitumen surfaced road.<sup>(2)</sup>

The NE region needs adequate roads firstly, to link its towns, rural centres and villages to each other and to adjacent regions and centres; secondly, to provide access to areas with large populations and which presently have an inadequate road network; and thirdly, to provide access to areas of high agricultural potential.

The condition of rural roads throughout Transkei is poor and this is especially so where topography and relatively long distances from Umtata hinder road maintenance generally. The topography of the NE can best be described as rolling to rugged with mountainous areas to the north and along the many river systems traversing the region. This, combined with lack of funds and staff for maintenance and the fact that many roads are not maintained by the Department of Works and Energy, result in a generally poor road network. The main route through Eastern Pondoland, (R61), from Port St Johns to Magusheni is a good example. The road winds its way through the Umzimvubu cutting, around blind corners, hairpin bends and up steep gradients, on a loose rough surface to Lusikisiki. From Lusikisiki to Flagstaff and on to Magusheni the road is flatter and straighter, although rough patches of potholes, corrugation, rocky outcrops and loose, skiddy surfaces create dangerous driving conditions. A safe average of no more than 55 - 60 km/hour can be maintained on the Magusheni - Port St Johns stretch.

Investment in tertiary roads can be expected to have a significant impact on the rural economy of the region. Recent research in Swaziland has shown that rural road improvements can be expected to "increase accessibility to markets, consumption levels, agricultural services and health facilities, and provide rural families with a wider choice regarding their participation in the case based market economy". Furthermore, "time savings gained from road improvements are dramatic and have a positive effect on commercial crop production and the consumption of goods manufactured outside the local community."<sup>(3)</sup> Despite certain differences in the development of small holder agriculture in Swaziland compared with NE Transkei, the overall effect of improving tertiary, rural roads in the region can be expected to be similar to the Swazi experience.

(iii) Projects in NE region. See Figure 10.1. Road proposals for the NE region<sup>(4)</sup> are divided into three main categories:

- a) Main roads whose purpose is to link the major towns of the region to each other and to the outside world; as well as roads to open areas of high agricultural potential (Table 10.1).
- b) Secondary roads to link the rural centres to the towns (Table 10.2).
- c) Tertiary or feeder roads to link the region's 800 villages to the government road network (Table 10.3). These roads do not fall under the Department of Works and Energy but are the responsibility of the Tribal Authorities. This situation causes difficulties because the latter Authorities lack the funds, staff and equipment to repair and maintain their roads. The result is that these important feeder roads, which link the villages to the main road network are for the most part no better than potholed, eroded, unsurfaced tracks, frequently impassable after rain. Consequently, many of the bus companies refuse to use these roads, because of increased operating costs. This means that many villagers have to walk several kilometers to the nearest bus stop, which is usually where the tribal road meets the government road.

(iv) Implementation. The highest priorities for road development in the NE region are firstly, improving the road from Port St Johns to Magusheni because this is the main access route through the region; and secondly, improving tertiary roads to link the rural villages, where most of the population, live to the government road network. A third priority is the construction of a road

**Table 10.1 Main roads programme**

Purpose	Road works needed	Estimated Cost (Rm)	Phasing
1. Link Lusikisiki to Kokstad	Upgrade Lusikisiki - Flagstaff - Magusheni (77 km) (Road 61)	9,155	1983/4-87/8
2. Link Lusikisiki to Umtata	Upgrade Lusikisiki - Port St Johns (38 km) (Road 61)	6,827	1983/4-87/8
3. Link IDP (Mtonjeni) to Lusikisiki and Southern Natal (railhead at Port Shepstone)	Upgrade and construct road from Lusikisiki via Mtonjeni to Mfolozi (including bridges) (83 km) and from Redoubt to Mpunzi Drift (14 km)	32,774	1983/4-87/8
	Sub-total	48,756	1983/4-87/8
4. Link IDP to Flagstaff	Upgrade Flagstaff - Holy Cross - Mtonjeni (54 km) (Road 23)	7,707	1987/8-92/3
5. Link Lusikisiki to Mkambati	Upgrade remainder of Lusikisiki - Mkambati (Road 24) (22 km)	2,697	1987/8-92/3
6. Improve link between Umtata and Port St Johns	In progress		

Source Based on Project Motivations 11.1.83/4 Table 2 and 12.2.83/4 Table 8.21.

**Table 10.3 Tertiary roads upgrading**

Magisterial District	Total no. of Villages (1)	No. of Villages on classified roads (2)	Total access road length (km) (excl. classified roads) (3)
Bizana	77	31	103
Libode	97	22	155
Lusikisiki	91	20	134
Maxesibeni	69	11	123
Ngqeleni	118	18	195
Siphaqeni	102	33	136
Tabankulu	93	33	143
Umzimkulu	100	51	121
Umzimvubu	50	17	62
NE Region	797	236	1 172

Source: Air photograph analysis (1983)

- Notes:**
- The term "Village" refers here to a distinctive cluster of homesteads.
  - "Classified" roads refer to those for which the Department of Works and Energy is responsible. Other roads fall under Tribal Authority jurisdiction.
  - Road lengths are estimates from air photos
  - On the basis of discussions with TATU the estimated costs of upgrading tertiary roads are as follows:
    - R3 000/km to reconstruct existing tertiary roads.
    - R250/km per annum maintenance.
    - Assuming a target of 300 km for 4 years from 1984/5 the estimated cost of the tertiary roads programme is R120 million.

to link the IDP (Mtonjeni)(5) to Lusikisiki and to southern Natal (railhead at Port Shepstone). This road will open an area of high agricultural potential and population density that is at present inaccessible except by a few minor roads, generally in poor repair, running parallel to the major rivers.

The Department of Works and Energy will be responsible for projects involving main and secondary roads; while tertiary road projects fall under Tribal Authorities within the Prime Minister's Department. The proposed East Pondoland Infrastructure Development Unit (EPIDU), whose role and functions are described later in this chapter, will be responsible for the design, construction and maintenance of the proposed roads for a period of ten years. Thereafter maintenance will be carried out, under auspices of the Department of Works and Energy, by small contractors, trained by EPIDU.

Investment of the amounts required for these roads can be justified to meet the needs outlined above (and the overall spatial planning objectives) but only if they are going to be maintained and if the process of their construction becomes part of the development initiative. To achieve this it is proposed that the following guidelines be adopted for the implementation of the roads (main and secondary) programme:

- Roads to be designed to functional standards which are compatible with the needs and resources of the areas;
- Roads be constructed or upgraded using a mix of conventional, partially conventional and labour based methods.
- Small local contractors and entrepreneurs should be used.

A new implementation Unit (EPIDU) be established, initially in East Pondoland, to undertake all design, contract administration and site works associated with the roads program. Details of the organisation and functions of this Unit are set out below.

In regard to tertiary roads it is proposed that the initial identification of priorities be the responsibility of the Drought Relief Co-ordinators based in each district and responsible to TATU, each working through Water Resource Committees (see below). Once priorities have been identified the work required will be assessed and undertaken by TATU in consultation with EPIDU. Funds for these road works should be channeled through the Rural Development Fund and allocated equitably to districts, depending on population unserved and the condition of feeder roads in each district.

Table 10.2 Secondary roads : maintenance and upgrading

	Purpose	Road works needed	Estimated cost (Rm)	Phasing
<b>District Town</b>				
Ngqeleni	Link Ngqeleni to Umtata	-	-	-
Tabankulu	Link Tabankulu to N2	-	-	-
<b>Rural Centres</b>				
Bambisana	Link to Lusikisiki	Upgrade Bambisana-R61 (17 km)		85/6
Canzibe	Link to Ngqeleni and Umtata	Upgrade Canzibe - Ngqeleni fork (26km)		84/5
Holy Cross	Link to Flagstaff and Mtonjeni	See Table 5.2		87/8 <sup>(3)</sup>
Ibisi	Link to Umzimkulu and Kokstad	-	-	-
Isimelela	Link to R61	Upgrade Isimelela - R61 (17 km)		84/5
Isilindini (Sipetu)	Link Sipetu hospital to N2 and Mt Frere	Upgrade Sipetu hospital - N2 (38 km)		85/6
Lubaleko	Link to Mt Ayliff and Kokstad	Upgrade Lubaleko to N2 ( km)		85/6
Magwa	Link to Lusikisiki	Upgrade Magwa - R61 (12 km)		85/6
Magusheni	Link to Bizana Flagstaff and Kokstad	See table 5.2		83/4 <sup>(4)</sup>
Majola	Link to Libode and Umtata	Upgrade Majola - R61 (20 km)		84/5
Makwanteni	Link to Bizana, Holy Cross	Upgrade Bizana - Holy Cross road and to Makwanteni		85/6
Malenge	Link to Umzimkulu	Upgrade Umzimkulu - Lourdes - Malenge (47 km)		84/5
Mantlaneni	Link to Lusikisiki	Upgrade Mantlaneni - R61 ( km)		85/6
Mfolozi	Link to Mtonjeni	See Table 5.2		85/6
Mtonjeni	Link to Lusikisiki Flagstaff, Bizana	See Table 5.2		83/4
Nkanga	Link to Libode	Upgrade Nkanga - Libode (30 km)		84/5
Old Bunting	Link to R61	Upgrade Old Bunting - R61 (23 km)		84/5
Rietvlei	Link Umzimkulu and Kokstad	-		84/5
Tombo	Link to Port St Johns and Umtata	Under construction		84/5

Source: Ninham Shand (Transkei) Inc.  
Transkei North-East Regional Plan - Report on Infrastructure - September 1983.

- Notes:
- Road works listed in Table 10.3 represent the shortest link routes. In the long term, a circular road network is proposed for the region - ie. Sepetu hospital will be included in the Mt Frere - Isilindini - Tabankulu network.
  - Road works outlined on the table are for the 1983-1988 time period. Those rural centres listed in Table 4.3 section (b) are not included as these are proposed long term rural centres and surveys will need to be conducted before the road works required and their cost estimates can be detailed.
  - Holy Cross is designated to be developed as a rural centre during 1985/6 although the road works will only be initiated in 1987/8.
  - The Magusheni road will be upgraded during 1983/4 while the village will only become a rural centre during 1985/6.
  - The Mtonjeni - Lusikisiki Road is to commence construction during 1983/4 although the rural centre is only to be developed during 1986/7.

## Water

(i) Transkei's policy. Rural and urban water supplies are listed among the most critical bottlenecks to Transkei's development<sup>(6)</sup>. In the White Paper, Government expressed its commitment to: rapid expansion of the rural as well as urban water supply base;<sup>(7)</sup> the provision of water in close proximity to rural residential areas;<sup>(8)</sup> and to a shift in emphasis away from costly irrigation schemes to urban and low cost rural water supplies.<sup>(9)</sup>

This section of the plan concentrates on the supply of water to rural residential areas; while urban water supplies are discussed below. Irrigation schemes are included under agriculture and hydro-electric projects under power.

The main objectives of government's proposed Rural Initiative Water (RIW) programme are to enable "local communities, tribal authorities and NGOs to initiate rural water supply project"<sup>(10)</sup> thereby adding a self help dimension to government's approach to the "provision of an adequate supply of clean water for domestic consumption, water for stock, and water for small scale, intensive agriculture"<sup>(11)</sup>. In the longer term, the RIW programme aims to "permanently decentralize a significant share of the cost (through local taxation) and maintenance of responsibility for rural water supply to the local user community and to the tribal authority"<sup>(12)</sup>.

The RIW programme will establish Water Resource Committee (WRCs) in each Tribal Authority. The WRCs will "plan and develop self-help rural water projects with the programme providing materials and technical expertise and the the local communities providing labour for construction of the projects."<sup>(13)</sup>

The type of activities funded through the R.I.W. programme include "spring protection, maintenance contracts with local persons for windmill maintenance, repair and construction of ponds, small scale irrigation projects, well drilling and hand pump installation, donga control and watershed protection projects."<sup>(14)</sup> WRCs are to include a representative from each location/administrative area in the tribal authority.<sup>(15)</sup> Its function will be to "develop an appropriate mix of projects which address the particular problems of its area"<sup>(16)</sup> and submit a project plan and budget to the Rural Development Fund (RDF).

(ii) Relevance in NE region. The vast majority of the region's communities lack an adequate supply of portable water for domestic uses, and it is not unusual for households to travel 5 km round trip to fetch water for home use.<sup>(17)</sup> Typically, water for domestic use is obtained from the closest rather than the cleanest source. It is estimated by the NPC that more than half the rural households obtain their drinking water from unimproved springs, stock ponds and small streams which are often highly contaminated with bacteria, parasites, and other pathogens. Field research in six villages (discussed in Chapter 7) confirms that this situation is characteristic of the NE region. Not surprisingly, rural households listed water as the most urgently needed of the improvements they required.

(iii) Projects in NE region. Most of the region's 800 villages require improvements in their present water supplies. The most economical way meeting this need over the next 5 to 10 years, given existing financial and manpower constraints, is to undertake low cost measures such as spring protection. On average each village will need two or three protected springs depending on the size of its population. TATU estimated the cost of protecting a spring and setting up a small rural water supply system at R1 500 - R2 000 (1983 prices). It is therefore proposed that a village water supply project for the NE be set up, possibly as a pilot for the RIW programme. It will be geared to protect two springs in each of 800 villages over 5 years at a cost of R 4 224 million.

(iv) Implementation. The village water supply project as a whole should receive the highest priority both on account of existing needs, and because, at a relatively modest cost, it will make a substantial impact towards improving standards of living in the rural areas.

This project logically falls under the Department of Commerce, Industry and Tourism as part of its rural development programme. Alternatively it could become the responsibility of the Department of Agriculture. The project will be implemented by TATU from a regional base to be set up in Lusikisiki. Materials, technical expertise and training will be provided by TATU, while labour and future maintenance will be provided by each community.

It is proposed that WRCs be set up throughout the region. This can be done by the Drought Relief Co-ordinators at present based in each district and responsible to TATU. The initial activities of these WRCs concentrate on the water supply needs of the 800 villages, and on meeting these by means of spring protection (on average 2 or 3 per village). Selection of villages for priority attention is to be undertaken by the WRCs working on the principle of "most needy first", and submitted to the RDF.

Of the funds available for RIW programme in Transkei, 30 percent should be allocated to the NE region (based on its share of population). Within the region these funds should be available to each district on a proportional basis according to population. These spring protection projects are not to be treated as a government "hand out". Instead it is proposed that government put up the funding and each community repay the capital cost with interest over 10 years. This will amount to about R150 per village per annum at 1983 prices.

In order to address the road access problems faced by many of the region's villages, the WRCs should take on the additional responsibility of identifying which villages require road improvements first, selecting priorities on the "most needy first" principle and submitting these to the RDF. TATU will need to establish a base in the NE region at Lusikisiki from which to carry out the village water supply project.

#### Power

(i) Transkei's policy. In keeping with the policy of maximizing the provision of services at the most centralized level possible, Transkei intends to extend the electricity supply grid, gradually over the next five years.<sup>(19)</sup> The long term economic development of Transkei depends on mainline electric power being available to the Regional Centres, Towns, Rural Centres and other places with a concentrated demand for electric power (eg. major irrigation schemes, tea factories, saw mills, hospitals and military installations)<sup>(20)</sup>.

Electricity supplies are also needed in government institutions (such as offices, schools, hospitals, barracks, prisons), in commercial enterprises and industrial (mainly small scale) undertakings in the small towns. In addition electricity supplies are needed for the middle income households in the towns.<sup>(21)</sup> Transkei's policy is to supply this demand at as low a cost as possible.

Transkei has substantial hydro-electric potential in the Mzimvubu river basin of the NE and NW regions. Projects to develop this are again under investigation with a view to the sale of peak load power to the RSA and, at the same time, to supply local demand for industrial and domestic use at low costs.<sup>(22)</sup>

(ii) Relevance in NE region. Although the vast majority of the NE towns and rural centres have to rely on diesel generators for their present electricity needs, the governments initiative with respect to extending electricity supply

into the region will have a major impact on its potential for rural and urban development. Work currently in progress will extend mainline supplies from Zimbane (Umtata) to Port St Johns and Lusikisiki. Umzimkulu is the only region town which is presently supplied from a main line grid.

The rural areas also need electricity to meet the lighting and cooking needs of the region's 165 000 households, most of whom now depend on paraffin, candles, wood and cowdung as their main sources of energy. In 1982, Transkei's fuel bill of R100 million represented 10 percent of total consumer expenditure, and three quarters of the energy consumed in Transkei was for household and industrial use.(23)

The provision of power for lighting and running small appliances (eg. fridge, slide projector, tape recorder) can make a substantial contribution to education (adult and children) and community development by enabling people to work and learn at night.

(iii) Projects in the NE region. See Figure 10.1.

a) Urban network. In 1982 TESCOR began work on the construction of a 66 kV transmission line, with 22 kV auxiliary lines to extend mainline electricity supplies from Zimbane (Umtata) to the tea factories and estates of Majola and Magwa and to Port St Johns and Lusikisiki. This work is due for completion by the end of 1983.(24) Further extensions to the NE region's transmission network to be undertaken during the next five years are set out in Table 10.4.

These extensions are economically sound investments. The effect of linking up the NE towns to the national network will be the improved supply of electricity for public utilities, street lighting, public offices, businesses, clinics and schools in the towns. Secondly, the improved service should provide a stimulus to agricultural, forestry and industrial development. The completion of the ring circuit will make it possible to supply the remaining town (Tabankulu) as well as most Rural Centres. Although the Libode - Misty Mount extension cannot be justified on the basis of present electricity usage, Libode has long term potential as a marketing and service centre but it needs electricity as part of its basic infrastructure. Part of the capital cost of the Misty Mount connection will be met by the TDC.(25)

**Table 10.4 Electricity supply - urban network<sup>(1)</sup>**

Section	Estimated cost (Rm)	Phasing	Comments
1. Umtata - Lusikisiki (Magwa) - Port St Johns	5,12	1983/4	Under construction; due for completion early 1984
2. Lusikisiki (Magwa) - Flagstaff	0,90	1984/5	66 kV but initially 22 kV
3. Libode - Mount Nicholas Mission - Misty Mount - Mafini	0,19	1986/7	22 kV line
4. Transkei Defence Force bases in Port St Johns	0,12	1986/7	22 kV line
5. Second Beach cottages, Port St Johns	0,07	1986/7	22 kV line
6. NE region ring	7,97 <sup>(2)</sup>	1984/5	Extension of the 66 kV network from Umtata to Mt Ayliff, Mzamba, Mtonjeni and Lusikisiki
7. Low voltage Municipal distribution to Lusikisiki, Port St Johns and Bizana	0,55	1985/6	
8. As in 7 for other 6 towns		1987/8	
9. Tabankulu - NE ring		1986/7	
10. Rural Centres - NE ring		1987/8	

**Source:** Based on project motivations 9.1 of 1984/85 (Electricity transmission and distribution (draft) and 12.2.83/84 (East Pondoland Industrial Development Point)

- Notes:**
1. Sections 1 - 7 inclusive included in project motivation 6.2.83/4 (draft)
  2. Tentative estimate based on costs set out in East Pondoland Industrial Development Point (Project Motivation (12.2.83) Table 8.2.2 and assuming the cost of linking Mtonjeni to Mzamba will be the same as Mtonjeni - Lusikisiki.

b) Rural (domestic) demand. In order to meet the needs of the region's large rural population, a Rural Electrification project is proposed. This will provide one photovoltaic unit to each of the region's 100 residential clinics (existing and planned), 150 mobile clinic stops and about 750 schools during the 1983/84-87/8 phase, and subsequently to other villages. This involves some 1000 electrification points. The unit (developed experimentally by TATU) provides a 200 watt peak load for about 8 hours before recharging by means of solar panels. This means that a community could run electric lights and operate a radio, tape recorder, or slide projector for several hours every night, clinics could operate a small medicine fridge periodically.

On the basis of research by TATU and the installation of a photovoltaic unit at Nkanga, this solar system (using the most advanced technology) will cost R5 000 per unit at 1983 prices including the cost of setting it up and explaining its operation. If the unit is properly looked after it has no recurrent costs because solar panels recharge the battery. Total project cost for the 1983/4-87/8 period is estimated at R5,0 million and as with the village water supply project, this project can be expected to make a major contribution to the standard of living in rural areas; and at the same time increase the opportunities for adult education and productive activities.(26)

c) Hydropower. It is proposed that investigations into the Mzimvubu hydro-electric scheme be worked into a firm project motivation taking into account Transkei's needs and its strategic value to the RSA.

#### (iv) Implementation

Equal priority is given to the Rural Electrification project (1000 points); to the Magwa - Flagstaff extension and the NE ring network to link the region's towns. The Department of Works and Energy is responsible for mainline and urban electricity projects as well as for hydro-electric projects. The Rural Electrification project could fall under this department as well, or under the Rural Development section of the Department of Commerce, Industry and Tourism. These projects will be administered by Tescor (urban network) and TATU (rural supply), while the hydro project will be investigated jointly by the Department of Works and Energy together with the National Planning Committee.

TATU will be responsible for arranging the supply, and installation of the 1 000 photovoltaic Units and for making the project known to rural communities; as well as for training local communities in their use and maintenance. This can be done from TATU bases in Umtata and Lusikisiki.

Funds allocated for this project are to be allocated (annually) by district on the basis of rural population; and within each district to communities making motivation for the installation of a unit at their clinic or school. These motivations can be made to the Drought Relief Co-ordinators. As a general principle, in order to give the project widespread impact, only one unit should be provided in a locality during the first phase (1983/4-1987/8).

### Posts and Telecommunications

(i) Transkei's policy. Improvements to Transkei's internal telecommunications network are to be accorded top priority during the next five years. "Post and telecommunications services are a king-pin in the entire economic and social development of Transkei, or any other country, in both the public and private sectors. The development and capital expenditure of these services needs therefore to keep pace with, or preferably slightly ahead of, the demand for these services, and not lag woefully behind, as more usually happens, and as has been happening in Transkei".(27) As far as capital expenditure on physical infrastructure is concerned, high priority is being given in Transkei's Five Year Plan for the period 1983/84 to 1987/88 to expenditure on telephone, telex and postal services as well as to urban and rural water supplies; these being at present, the more critical bottlenecks to economic and social development in Transkei.(28)

It is generally accepted that postal services are a public service the costs of which cannot be wholly recovered from the direct users and must therefore be provided by the state. However, there is no reason why "users of telecommunications services, be they commercial or private users, should not pay the full cost of these services ...including a profit element thereby in effect subsidising the postal services."(29) Accordingly the proposed capital expenditure is regarded not only as "essential for the effectiveness of Transkei's economic and social development programme, but is also revenue earning, over and above the operating costs and the costs of serving loan funds."(30)

Transkei intends putting this policy into practice through a project motivation (10.2.83/4) aimed at improving posts and telecommunications services throughout the country and in the major urban centres. This involves extension of telephone exchanges, provision of a micro-wave radio link and improvements to Post Office buildings.

(ii) Relevance to NE region. As has been argued in previous reports<sup>(31)</sup> the present level of posts and telecommunications services in the NE region constitute a major stumbling block to development. This applies not only to future development prospects in towns and rural areas; but also to the day-to-day activities of government, industries, businesses and households in the region. Improvements to the telecommunications system will enable existing activities to operate more effectively; facilitate improved delivery of public services; and will open the way for more productive activities. On the other hand, failure to improve telecommunications services in the regions towns (particularly) will retard, if not nullify, all other development initiatives in the region.

The improvement of telecommunications at Lusikisiki, Flagstaff, Bizana and Mtonjeni is an essential element of the East Pondoland industrial development point project.<sup>(32)</sup> As such it has been given top priority in Transkei, along with improvements in Umtata, Butterworth and Ezibeleni.<sup>(33)</sup>

The Telephone exchanges at Lusikisiki, Flagstaff and Bizana are inadequate and unreliable. They are serviced by overhead cables in difficult terrain. Breakdowns are common and repairing them takes time.<sup>(34)</sup> To date these towns are serviced by three manual exchanges with a total of 420 lines and a present demand for 412 lines and 171 outstanding applications. Exchanges in other towns in the region are under similar pressure and it must be borne in mind that many would-be subscribers have not applied for telephones because of the long waiting lists.

(iii) Projects in the NE region. See Figure 10.1.

The posts and telecommunications projects proposed for the NE region are as follows:

- a new 1 000 line exchange providing a service for the East Pondoland "industrial development point" at Mtonjeni as well as Lusikisiki, Flagstaff and Bizana by 1986;
- a new exchange at Umzimkulu to provide 500 lines by 1988;
- similar improvements to the exchanges in the other towns after 1988;

- Improvements to Post Office buildings and facilities, initially in Lusikisiki and Flagstaff; later in the other towns;
- provision of a micro-wave ring network to link the region's major towns and its extremities to Umtata; and
- provision of a smaller scale radio network to convey urgent messages to and from the rural areas.

Details of these projects are discussed below and summarized, with cost estimates in Table 10.5.

a) Telephone exchanges. It is proposed that the Bizana, Flagstaff and Lusikisiki exchanges be replaced by a 1 000 line EMD exchange which, in addition to satisfying present demand, will serve the longer term needs of Mtonjeni, which is situated between these three towns. The main exchange will be located at Lusikisiki, with satellite concentrations (Flagstaff, Bizana and Mtonjeni) being connected by radio link.<sup>(35)</sup> The use of radio is proposed in order to obviate service problems arising from the difficult terrain and the high failure rate of overhead cabling in this area. The present trunk line from Umtata to Lusikisiki is extremely unreliable and is out of operation as often as not. Therefore it is essential that the new exchange be serviced by a radio link. It will use the equipment previously used by Capital Radio at Port St Johns and will necessitate the purchase of an additional reflector and power unit for Lusikisiki.<sup>(36)</sup> Umzimkulu telephone exchange has 120 lines at present, with 105 subscribers and a waiting list of a further 120. It is proposed to upgrade the exchange to 500 lines in 1987/88.

b) Micro-wave radio network. The Umtata-Mzamba together with the Umtata-Lusikisiki radio network will form a "ring system with 'hot standby' for Eastern Pondoland. The 'hot standby' will normally carry television signals. The terrain of Eastern Pondoland is conducive to failure of overhead trunk lines and with difficult access it is advisable that the more reliable and easier to maintain microwave carrier system be used. The microwave will provide radio contact between Umtata and Mzamba with drop off facilities to Qumbu, Mt Frere, Mt Ayliff and Bizana. Bizana will also be connected to the Umtata - Lusikisiki link providing continuity of service in the event of breakdown. This continuity is important in view of the envisaged development of Eastern Pondoland, particularly with regard to the holiday complex at Mzamba and development envisaged in this area.<sup>(37)</sup>

**Table 10.5 Telecommunications : upgrading and extension**

Centre	Purpose	Details	Phasing	Estimated cost (Rm) at 1983 prices
1. Bizana Flagstaff	Improve tele- phone services	Upgrade facilities and extend exchange to 1000 lines	1985/86 to 1986/87	R 5,150 m
2. Umzimkulu	Improve telephone service	Upgrade facilities and extend exchange to 500 lines	1987/88	R 3,837 m
3. Lusikisiki	To provide a reliable radio contact between Umtata and NE region towns	Establish a Micro- wave radio network linking Umtata to Qumbu, Mt Frere, Mt Ayliff, Bizana, Mzumba, Mtonjeni, Flagstaff, Lusikisiki Port St Johns on a ring feed system	1984/85	R2,216 m
4. Mt Ayliff Port St Johns, Tabankulu, Libode, Ngqeleni	Improve telephone services	Upgrade and extend exchanges	1987/88	To be cal- culated at a later stage
5. Flagstaff Lusikisiki	Improve postal services	Upgrade Post Office building and facilities	1983/4 to 1984/5	R 0,11 m
6. Remaining 7 NE region towns	Improve postal services	Upgrade Post Office buildings and facilities	1987/88	To be cal- culated at a later stage
7. Rural areas	Provide a radio network for urgent messages to and from the region's rural areas	Establish a radio network to link an Umtata base to all Rural Centres Policy Stations, Hospitals, Residen- tial Clinics and Senior Secondary schools in the NE	1984/85	R 0,3 m
8. Rural Centres (18)	Provide a mobile postal service with money order and telegraph facilities to all 18 Rural Centres on a 2-weekly basis	Provide vehicles staff and back-up service to fit in with the "market day" schedule	1984/85	

Source: Projects 1, 2, 3 and 5 are included in Project Motivation 10.2.83/84.

A microwave link exists between Umtata and Port St Johns. This was originally installed to provide music circuits for Capital Radio, but these are no longer required. It is planned to move this equipment to Lusikisiki and hence provide a service for the Eastern Pondoland IDP.

This work can only be completed after the installation of the Umtata-Mzamba link in order to maintain continuity of service to Mzamba. The second phase of this network will be to connect Bizana, Flagstaff and Mtonjeni to Lusikisiki exchange via microwave. This is considered necessary in order to maintain a reliable service to those points and to complete the ring feed system to Mzamba.(38)

- c) Rural radio network. In addition it is proposed that a separate smaller scale radio network be set up to convey urgent messages to and from the rural areas of the region. This network will cover, initially, all rural centres, police stations, hospitals and residential clinics in the region, and will later be extended to senior secondary schools in the NE; it could also be extended to other regions.

A radio network of this scale is presently being set up by ACAT in order to link its rural stations to the Umtata base. The possibility exists that certain facilities could be shared with ACAT.

It is proposed that this project be initiated by the Rural Development section of the Department of Commerce, Industry and Tourism or by TATU. It will involve setting up a repeating aerial at an Umtata base which will have to be manned continuously (ie. 4 full time operators). It may be necessary to set up an additional 2 or 3 repeater aerials to ensure coverage of the remoter parts of the region. Each of the ± 100 bases requires a radio set. In addition a training officer (with a clerk) will be needed for the first year to establish each base. This function as well as maintenance costs could be shared with ACAT. Allowing a contingency figure of R15 000, the estimated cost of the entire project is R300 000 at 1983 prices.

Its impact would be considerable in providing a means of communication between the rural areas and linking them to the regions main centres and to Umtata. It can be established during 1984/5. One will complement the telephone and microwave radio network of Project 10.2.83.

(iv) Implementation. Highest priorities in the NE region are the Bizana, Flagstaff, Lusikisiki exchange the microwave radio network the Rural radio network and the mobile postal service to rural centres.

With one possible exception, these projects fall under the Department of Posts and Telecommunications. The Rural radio network could be placed within the responsibility of the Rural Development section of the Department of Commerce, Industry and Tourism. Implementation of these projects can be undertaken by the Department of Posts and Telecommunications, with co-ordination of the mobile postal service with other periodic rural centre functions being undertaken by the co-ordinator responsible for rural centres. The rural radio network can be implemented by TATU working in conjunction with ACAT.

Wherever practical, implementation should use the services of firms and contractors based in Transkei. Establishment of each rural radio base should include full explanation to selected local persons, training in operation of the set and the purposes of which it should be used; as well as creating the means for calling on Tatu's services in the event of a breakdown.

#### Urban infrastructure

(i) Transkei's policy. The two "most compelling reasons requiring Transkei to undertake an urban development program are the growth of the population and the increasing rate at which this population is residing in the urban areas."<sup>(39)</sup> As discussed previously, the country's population is increasing rapidly. Between 1970 and 1980 the formal urban population rose from 57 000 to an estimated 160 000 (nearly a three fold increase). By the year 2000 some 25-30 percent of Transkei's population (ie. 1,2 million people) are expected to be living in urban areas.<sup>(40)</sup> Over and above the population growth and urbanization trends, Transkei's present development activities (including industrial and commercial growth) will require additional infrastructural services to those needed in earlier decades.<sup>(41)</sup>

These factors yield a clear and undeniable picture of increasing urbanization in Transkei for a number of years to come. The effects of this trend have alarming implications for the existing urban infrastructure which has long been inadequate. It is already apparent that those administrative areas bordering the town commonages are generally far more densely populated than are the more distant areas.<sup>(42)</sup>

As the population increases the capacity of the rural areas to accommodate additional people diminishes, alternative opportunities must be created in Transkei's urban areas. Infrastructure projects will in themselves create employment opportunities which will, in turn lead to job creation in the informal sector. Failure to construct the requisite services and to plan to meet changing demographic circumstances will result in a deterioration of the quality of life for the people of Transkei and will increase the pressure for out migration to the RSA.(43)

(ii) Relevance in NE region. The towns are the main focal points around which the region's spatial development plan is built. Therefore it is of cardinal importance for the development of the entire region that the nine towns are adequately provided with urban services. The need for urban infrastructural services arises from the present shortfall in all the NE region towns in the provision of water, sewage removal and internal roads. Considerable improvements will be needed to cope with the increase in town population that can be expected as a result of the combination of proposals for the region. It will also be necessary for the towns to make provision for the infrastructural needs of the peri-urban population which is expected to increase over the next 10 or so years.

On the other hand, failure to provide adequate urban services will stunt further growth of the towns for people cannot be expected to move there from rural settlements unless tenure is at least equivalent and services and opportunities markedly improved. Furthermore investment in main roads, electricity, telecommunications and industry in the region will be largely wasted without parallel investment in urban infrastructure. Urban services are one of the key elements in establishing the towns as effective centres in the region, and their importance cannot be over emphasised.

Specifically the urban services to be provided are:

- long term structure plans (phased) to outline the future size and shape of each town; supplemented as needed by detailed layouts of new residential (site and service) areas, and extensions to the commercial, and industrial zones etc.;
- provision of water;
- sewage system;
- internal roads;
- serviced residential plots and sites for commercial, industrial and public uses.

(iii) Projects in the NE region. See Figure 10.1. Urban infrastructure projects for the NE region derive from three main sources:

- Transkei's National Urban Development Plan (to be prepared) which will "emphasise the decentralization of urban services to meet the needs of a rather large rural population and the need to allocate sufficient resources to promote the infrastructural development of Transkei's smaller urban centres."<sup>(44)</sup>
- East Pondoland's "industrial development point" project which identifies the infrastructure necessary to stimulate the overall development potential of the area.<sup>(45)</sup> This area has high agricultural potential. "Infrastructural development is vital to the industrial growth of this area and will provide employment opportunities as well as impetus to the general development of the area".<sup>(46)</sup>
- A project (4.1 of 1983/84) to provide urban infrastructure in 23 towns in Transkei, included among which are the 9 towns in the NE region.

Together, the projects outlined in these reports go part of the way towards establishing the towns proposed in the NE region's spatial development strategy. (See Chapter 9 where the location and performance criteria as well as proposals for the phased development of the settlement hierarchy is set out).

Projects set out in Table 10.6 make provision for the comprehensive development of these Towns to meet the population targets set out in Table 9.4 above. Additional project proposals are made for the development of the 19 Rural Centres listed in Table 9.2.

(iv) Implementation. Urban infrastructure is accorded the highest priority for the development of the NE region. The sequence in which towns are to be provided with infrastructure is set out above in Table 4.5 to accord with the overall spatial plan for the region and with government's priority for the development of East Pondoland.

Urban infrastructure falls under the ultimate responsibility of the Department of Local Government and Land Tenure. The projects should be carried out by the proposed EPIDU. The main reasons for creating this implementation agency are that the Municipalities lack the expertise, experience and financial resources to undertake the works required, and the Department of Works and Energy is already committed beyond its manpower resources to other, mainly on-going works. Details of the branches of EPIDU to undertake the projects in each town are described below.

Table 10.6 Urban Infrastructure

Town	Works	Estimated cost (Rm at 1982 prices)	
		Phase I 1983/4-87/8	Phase II 1987/8-92/3
Lusikisiki	Water	5,815	4,136
	Sewage	2,781	5,444
	Roads	1,703	0,818
	Fees etc	<u>1,415</u>	<u>1,12</u>
	Sub Total	11,714	11,518
Flagstaff	Water	3,031	7,972
	Sewage	1,663	6,243
	Roads	1,660	0,817
	Fees etc	<u>0,997</u>	<u>1,597</u>
	Sub Total	7,351	16,629
Bizana	Water	5,727	2,125
	Sewage	2,251	5,274
	Roads	1,789	0,817
	Fees etc	<u>1,236</u>	<u>0,929</u>
	Sub Total	11,003	9,145
Mtonjeni (IDP)	Water	-	4,484
	Sewage	-	4,104
	Roads	-	0,894
	Fees etc	<u>0,025</u>	<u>1,15</u>
	Sub Total	0,025	10,632
Estimated cost (Rm at 1983 prices)			
Umzimkulu	Water	1,458	1,881
	Sewage	1,292	0,561
	Roads	0,020	0,120
	Fees etc	<u>0,428</u>	<u>0,376</u>
	Sub Total	3,198	2,938
Port St Johns	Water	1,562	1,226
	Sewage	0,133	0,267
	Roads	0,015	0,015
	Fees etc	<u>0,230</u>	<u>0,238</u>
	Sub Total	1,940	1,746
Mt Ayliff	Water	1,931	1,622
	Sewage	1,174	1,709
	Roads	0,015	0,015
	Fees etc	<u>0,389</u>	<u>0,392</u>
	Sub Total	3,509	3,738
Tabankulu	Water	0,385	2,265
	Sewage	1,010	1,357
	Roads	-	0,413
	Fees etc	<u>0,238</u>	<u>0,444</u>
	Sub Total	1,633	4,479
Libode	Water	0,722	0,152
	Sewage	0,433	0,471
	Roads	-	0,400
	Fees etc	<u>0,204</u>	<u>0,134</u>
	Sub Total	1,359	1,157
Ngqeleni	Water	0,082	1,418
	Sewage	0,352	0,417
	Roads	-	0,413
	Fees etc	<u>0,089</u>	<u>0,275</u>
	Sub Total	0,523	2,577

## Source:

1. Ninham Shand Inc. Reports on infrastructure in NE region. December 1982 and September 1983.
2. Project Motivation 12.2.83. Table 8.2.4 and Appendices E and H (IDP report)

As discussed above, the way in which these services are developed and their long term maintenance are as important as the infrastructure itself. A township's infrastructure can and should preferably be designed to provide maximum employment opportunities for the community. For example, labour intensive construction methods will raise the general level of skills and will ensure that a large proportion of the money invested in the infrastructure will circulate within, and be of benefit to, the community.

The following examples serve as indicators of the types of labour intensive methods that could be adopted:

- instead of using conventional bituminous surfaced roads, a permanently hardened road surface can be obtained by using interlocking roadstones manufactured with local labour and materials and developed by the C.S.I.R.
- trench excavations (for services such as sewage reticulation, water reticulation etc) could be done by hand and machine employed only when necessary to dislodge hard materials;
- surface channels for stormwater runoff can be constructed by hand using hand placed stone pitching;
- underground stormwater drainage structures can be constructed using in situ concrete invert slabs, grouted stone vertical sides and locally manufactured precast concrete cover slabs.

In addition to the economic benefits to be derived by employing labour intensive methods in the provision of the infrastructure, similar benefits can be derived by selecting suitable methods of construction for the housing units. Self-help schemes employing the maximum degree of "sweat equity" should be selected for this purpose. The National Building Research Institute of the CSIR has been involved in a variety of research projects and pilot housing schemes in different parts of the RSA and it is recommended that the Institute's advice should be sought in selecting the most suitable construction methods for a particular town. Careful selection of the basic design of housing units and construction methods are on record as having created an entrepreneurial construction sector.

Accordingly in the implementation of the urban services programme it is recommended that:

- A mix of conventional and labour intensive methods be used along the lines described above;
- Small, local contractors be used;
- The proposed EPIDU again be responsible for all physical planning, design, contract administration and site works related to the provision of urban services.
- The Unit also be responsible for giving technical advice and assistance to people building their own houses on serviced plots;
- The proposed Transkei Housing Corporation be responsible for granting building loans to residents of East Pondoland towns wishing to build their own homes.

#### Construction and maintenance

(i) Transkei's policy. The construction sector is regarded as a significant contribution to local employment and one that can give important impulses to local manufacturing industries. The White Paper on Development Priorities outlines a policy shift from large scale external construction firms to smaller scale local (or joint) construction ventures. Government's role will be one of providing assistance to the construction sector by way of bridging finance, training and overcoming specific developmental obstacles. It is envisaged that the expected rapid expansion of both private (residential, commercial and industrial) and public (schools, health centres) sector construction, largely funded by projects outlined in the White Paper, will ensure growth of the construction sector.(47)

(ii) Relevance in NE region. Most of the projects described in this report require physical inputs, for example road upgrading and construction, dams and water supplies, sewage disposal systems, housing, building of school classrooms, clinics, health centres, markets and so on. The volume and scale of construction required by these and other projects is without precedent in the NE region. The reasons for this being partly historical neglect of the region's physical infrastructure, and partly on account of the major development initiative now being undertaken in the region.

At present none of the NE region public authorities, nor central government departments operating in the region have the capacity or experience to undertake and manage the full spectrum of construction. It is also important to ensure that once construction has been completed the infrastructure and buildings are maintained.

There is no purpose in investing large amounts of capital in infrastructure unless the means exist whereby it will be properly maintained. It is therefore necessary to make a parallel investment (almost an insurance) in manpower training specifically in support of the projects outlined in this report. The guiding principle is that every development project have a training and maintenance component built, in so as to leave behind local people trained to carry on when the services have been provided.

(iii) Projects in the NE region. Within the framework of Transkei's policy, these difficulties cannot be overcome through the efforts of a single organisation. Instead the solution lies in spreading the load among existing and new organisations in such a way as to optimize on the use of existing skills and capacity, while at the same time introducing additional expertise in a manner that is compatible with government policy. This means using existing departments where possible and supplementing their effort with an organisation that can undertake additional work, and train local people to take over maintenance of the projects at a later stage.

An organisation is, therefore, needed to manage and undertake some of the additional infrastructural works (particularly roads and urban services). It is proposed that this be undertaken by a new East Pondoland Infrastructure Development Unit (EPIDU), which will be established with a site office in the region for ten years. EPIDU will be run as a private concern, responsible to an Advisory Board comprising representatives of Transkei's key development departments.

The objectives of EPIDU will be to:

- a) undertake physical planning, with training of local people included;
  - b) undertake design of physical projects, with training of local people included;
  - c) undertake contract and construction administration, with training of local people included;
  - d) undertake site supervision, with training of local people included;
- and in the course of doing a) - d) to achieve:

- the maximum amount of training that can be included in a project;
  - the minimum amount of outside management that is practicable for
  - the implementation of the proposed project.
- e) provide technical and design assistance for home builders;
  - f) ensure liaison with the Appropriate Technology Unit to agree on the most suitable technologies for the projects;
  - g) design and construct tertiary roads as and when requested;
  - h) offer training courses for contractors, foremen etc;
  - i) assist small contractors with bookkeeping etc;
  - j) set up implementation units for each Town, as required, to carry out the infrastructural and building works;
  - k) maintain water, sewage and roads in towns, by means of small contractors and later hand over co-ordination of this function to the municipalities;
  - l) promote the necessary skills for maintaining the various services after these have been provided.

An amount of R0,5 million (1982 prices) will be required for establishing EPIDU. Operating costs will come from fees already allowed for in construction costs.

As outlined previously, EPIDU's activities can be extended to other sub-regions within the NE as and when required, or similar organisations can be set up, depending on EPIDU's progress during the early years of its East Pondoland operations. Construction work will also be undertaken by:

- Department of Works and Energy: road maintenance, building of schools, clinics and health centres, hospital renovations etc.
- Transido - building of depots and premises for small industries.
- TATU: village water supplies, tertiary roads, low cost clinics and classrooms, rural markets etc.
- Tracor: small irrigation schemes, depots for maize projects etc.

The organisation to be responsible for construction involved in each project has been identified in the Project Administration sub sections of this chapter.

(iv) Implementation. Success of each component of the Plan and, indeed, of the entire developmental initiative in the NE region depends on there being suitably experienced organisations with the capacity to implement the projects

outlined here according to the proposed program. As such, adequate staffing and operating funds for existing government of EPIDU should be accorded the highest priority.

The overall co-ordination of activities initiated by the NE region Plan should lie in the hands of the National Planning Committee. EPIDU will be responsible to an Advisory Board comprising representatives of government's key development departments. Urban infrastructure services are the responsibility of the Department of Local Government and Land Tenure.

It is proposed that Transkei government appoint/commission a firm of consulting civil engineers as project managers, charged with responsibility for operating the East Pondoland Infrastructure Development Unit and reporting to the Advisory Board.(48) The selected firm will be screened from those that have an operating office in Transkei, and will be deemed suitable because:

- they are sufficiently large to cover the whole field of the works, in depth;
- have demonstrated an appreciation of appropriate technology;
- have demonstrated a willingness to take up the challenge of adjusting procedures to meet the needs of Transkei.

Each item listed above will be spelt out in the applicable Terms or Reference to which the selected firm must agree before being commissioned for the project for a period of 10 years.

In the case of urban infrastructural projects the Department of Local Government and Land Tenure has outlined the following objectives and principles in regard to the provision of urban infrastructure:

- The town councils and clerks must understand the basic elements of urban infrastructure development.
- The town councils must assume responsibility for the operation and maintenance of the urban infrastructure they propose to develop.
- The town councils must agree to establish and effectively administer rate structures which are sufficient to properly maintain the proposed system.
- The Government of Transkei through the Department of Local Government and Land Tenure will provide the necessary training for two officials and clerks and the technical back-up expertise should problems arise beyond the scope of the towns and their personnel.(49)

In order to achieve these objectives in the medium term (about 10 years) and at the same time to accommodate the shorter term population targets for the NE region's towns, it is proposed that EPIDU undertake the planning, design and works required in the immediate future, while at the same time training personnel, and small contractors, and assisting the municipalities in such a way that they can take over the envisaged administrative and maintenance functions progressively during the next ten years.

The community can derive as much benefit from the process of providing the required infrastructure as from the infrastructure itself. The implementation process should, therefore, be undertaken in such a way as to maximize the benefits which could be obtained by the local community from the process. Such benefits include planning in close consultation with local communities (see Appendices V and VI Planning Process); promotion of local entrepreneurs; use of local materials, skills and the local market; design of residential environments and housing in close consultation with local demand; and the encouragement of community participation and self reliance.

### Social Services

In the future growth of the tertiary or services sector (including social services) Transkei government's involvement will be guided by three principles namely:

- satisfaction of basic needs amongst all segments and in areas of the community;
- the direct involvement wherever possible of local entrepreneurs and local initiatives;
- the application of labour intensive appropriate technologies.(50)

### Education

(i) Transkei's policy. Government has highlighted education as a key element in the development strategy of Transkei and has stated its objectives as, firstly, the education of a generation of capable and informed people who can contribute to the growth and development of society; and secondly to provide individuals with skills which prepare them for work opportunities both in Transkei and elsewhere in Southern Africa.(51)

The first objective requires the provision of "free and universal education"(52) and government has stated that "the improvement of primary education should enjoy priority over secondary and tertiary levels."(53) The second objective which deals with work opportunities in Transkei and the RSA encompasses "the need to expand technical training facilities, improve the quality of English in schools, the upgrading of science and mathematics teaching and the recognition that these is an obvious justification for substantial South African subsidization of Transkei education."(54) Therefore government is focusing on primary and vocational/technical education for the short to medium term.

Objectives relating to the provision of classrooms and teachers have been based on the Commission of enquiry report with the goal being set at pupil:teacher ratios of 50:1 and 40:1 in primary schools by the beginning of 1985 and 1995 respectively and maintenance of a ratio of 25:1 in secondary classes.(55) An intermediate goal of 50 pupils per teacher in junior primary and 40 pupils per teacher in senior primary classes is proposed for 1990.(56)

Adult education programmes directed at combining literacy training with health care, agricultural demonstration and extension and possible training in technical skills are to play a crucial role in the overall education strategy.(57) The Draft Five Year Plan notes that a rural development approach focusing on service centres and a hierarchy of concentrated services and facilities will have important implications in respect to the attainment of this objective.

The Education department accepts that the existing teacher training colleges are in need of considerable renovations and are generally inadequate to meet the demands for teachers implicit in the plan.(58) Therefore the policy is to establish "teacher training programmes to provide an adequate flow of newly qualified teachers and to upgrade the skills of the existing teaching force through in-service courses."(59) Government has stated that although it recognizes that it has the "dominant role in the provision of education, encouragement will be given to non-governmental organizations and the private sector to develop private initiatives in the field."(60)

(ii) Relevance in the NE region. The present and projected shortfall in the provision of teachers classroom and other school facilities are described in Table 10.7 (Primary and Junior Secondary schools), as well as Table 10.9

(Senior Secondary schools) and shown graphically on Figure 10.7. Technical training facilities in the region are minimal. If government's long term objectives regarding Education and its more immediate development initiatives in the NE region are to be met, substantial physical inputs will be needed in support of education and training.

(iii) Projects in the NE region. See Figure 10.2. Physical projects in support of Transkei's education policy in the NE region are derived from proposed building programs set out in Project Motivation 1.1, 1.2 and 1.3 of 1983/84. These documents also provide the basis for cost estimates, although research in progress by TATU indicates that considerable savings can be achieved in the unit cost of building classrooms and administration blocks in Transkei. Projects relating to Technical education are based on Project Motivation 12.2 of 1983/84.

Projects are arranged in four categories according to priority in the NE region:

- a) Primary and Junior Secondary Schools. Table 10.9 sets out the proposed building program for the construction of classrooms and administration blocks in the NE region. Costs are estimated on the basis of R16 000/classroom or administration block comprising a staffroom and an office, at 1983 prices.<sup>(61)</sup> Priorities for the location of new classrooms and administration blocks is to be determined on the basis of providing for the most needy areas first. In the light of information currently available, the location priorities should be those set out in Table 10.7.
- b) Technical education. It is essential to establish the means whereby the infrastructure called for in this project will be properly maintained. Accordingly, a parallel investment (almost an insurance) is required in manpower training, specifically in support of this project. Transkei's policy is that every development project in East Pondoland is to have a training and maintenance component built in so as to leave behind local people trained to carry on when the services have been provided.

At present the only vocational school north of Umtata is located at Lusikisiki, where courses in bricklaying, plumbing, carpentry and motor mechanics are offered to 120 pupils. A very large training effort is needed in East Pondoland for the industry, construction and related activities included in this project. The facilities required are set out in Table 5.8.

**Table 10.7 Primary and Junior Secondary Classroom Building Programme**

District	Existing Situation								Building Programme										Total	
	No. of schools	Pupils/Classrooms	Admin. Blocks Available	Admin. Blocks Required	Classrooms Available 1980 <sup>(1)</sup>	Classrooms Required 1980	Shortfall 1980	Additional Class-rooms required 1986	80-82		82/83		83/84		84/85		85/86		80-86	
									Classrooms	Admin.	Classrooms	Admin.	Classrooms	Admin.	Classrooms	Admin.	Classrooms	Admin.	Classrooms	Admin.
Bizana	89	63	-	68	482	708	226	93	50	5	48	3	62	17	78	18	81	25	319	68
Libode	82	54	6*	48	399	509	110	72	28	3	27	3	35	11	44	11	48	14	182	42
Lusikisiki	102	50	6	77	689	802	113	109	35	5	34	4	43	17	52	18	58	27	222	71
Maxesibeni	55	53	5	38	316	393	77	53	20	3	20	3	25	8	30	8	35	11	130	33
Ngqeleni	88	50	3	50	441	521	80	70	23	3	22	2	29	12	36	12	40	18	150	47
Siphaqeni	70	55	3	47	388	493	105	64	26	3	25	3	33	11	40	11	45	16	169	44
Tabankulu	89	55	2*	51	420	533	113	72	29	3	28	2	36	12	43	12	49	20	185	49
Umzimkulu	111	49	13*	67	604	704	100	102	32	5	30	3	39	14	48	15	53	17	202	54
Umzimvubu	35	56	-*	22	174	227	53	31	13	1	13	-	16	6	20	6	22	9	84	22
NE Region	721	485	38	468	3913	4890	977	666	256	31	247	23	318	108	391	111	431	157	1643	430
Transkei	2323	53	315	1565	13114	16475	3422	2274	890	93	860	65	1100	317	1350	325	1500	450	5700	1250

Source: Project Motivation 1.1 of 1983/84 Education - Primary and Junior Secondary Schools, Appendix II

Notes: \* Estimates

(i) Assuming 50 pupils in Junior Primary, 40 in Senior Primary, and 30 in Junior Secondary Classes.

- c) Teacher Training. In order to improve the general facilities available for teacher training in the NE region improvements are required for the Sigcau college which is located on the outskirts of Flagstaff. These include renovations and extensions to existing facilities, library and laboratories; and housing for teachers. Budget cost is R0,62 million, phased to start in 1983/4. If further Colleges of Education, similar to that proposed for Umtata, are to be built in the regions, it is proposed that one be located adjacent to the existing Sigcau college in order to optimize the use of existing facilities, facilitate the co-ordination of teacher training facilities and to develop education as an element of Flagstaff functional base.
- d) Senior Secondary schools. Table 10.9 outlines the proposed building program for classrooms in the NE region. Costs are estimated on the basis of R 16 000/classroom.<sup>(63)</sup> Priorities for the location of new classrooms, schools and additional facilities is to be determined on the basis of providing the most needy areas first. From the information currently available the location priorities should be those set out in Table 10.9.
- (iv) Implementation. Transkei has accorded Education a high priority in its national budgeting and this applies equally in the NE region. In geographical terms the most needy areas have been given the highest priority for the construction of classrooms. See Table 10.7 and 10.9.

Education and teacher training project fall under the Department of Education; while the Department of Commerce, Industry and Tourism will be responsible for industrial and vocational training. Schools buildings, the Teachers Training college renovations and Lusikisiki Vocational school additions will continue to be constructed under the auspices of the Department of Works and Energy. However, in order to meet the substantial short term demand for additional classrooms, coupled with present financial constraints, it is proposed that TATU be involved in the building programme to construct low cost classrooms. Transido will undertake the construction and administration of its training projects.

Table 10.8 Training facilities

Proposed Facilities	Estimated Cost (Rm)	Phasing
1. a) Upgrade Lusikisiki Vocational school from a capacity of 120 to 350 pupils	2,20	1983/4-87/8
b) Operating costs	1,12	1983/4-87/8
2. a) Establish a Technical Training facility at Mtonjeni to train artisans, semi-skilled workers and entrepreneurs	4,00	1987/8-92/3
b) Operating costs	*	1987/8-92/3
3. "On job" training staff and facilities for Transido depots at:		
- Bizana, Flagstaff, Lusikisiki	2,80	1983/4-87/8
- Mtonjeni	0,80	1987/8-92/3

\*Operating costs for the 1987/8-92/3 phase will be worked out at a later date.

Table 10.9 Senior Secondary Classroom Building Programme

District	1980 shortfall in classrooms	Classroom required p.a. to meet 2,6% growth	Classroom Building Programme					Total <sup>(1)</sup> 81-86
			81/82	82/83	83/84	84/85	85/86	
Bizana	4	3,0	6		9	9	11	35
Libode	15	2,7		6	8	8		22
Lusikisiki	13	4,8	15	11	13	15	17	71
Maxesibeni	9	2,3		5		8	8	21
Ngqeleni	(-2)	2,0	6			7		13
Siphaqeni	(-3)	2,1			6	6	6	18
Tabankulu	7	1,6			6	5	6	17
Umzimkulu	15	4,2			13	14	15	42
Umzimvubu	5	1,1		5	5		6	16
NE Region			27	27	60	72	69	255
Transkei	325 (-23)	95	109	101	177	190	200	777

Source: Project Motivation 1.2 of 1983/84 Table 2.

Note: 1. District allocation determined by reference to district growth trend, need for expansion indicated by secondary pupils per 1 000 of population and 1980 shortfall in classrooms.

## Health

(i) Transkei's Policy. The overall policy objective for health services is to "provide adequate primary health care needs at a community level and referral and secondary health care needs to everybody at a price that the individual can afford."<sup>(64)</sup> Emphasis is to be placed on primary health care services with particular attention being given to reducing infant mortality and secondly, to decreasing the annual population growth rate - "it is essential for the country to operate a determined and voluntary family planning policy based on family health considerations."<sup>(65)</sup>

The Department of Health proposes to build 123 rural clinics during the next five years to supplement the already existing 175.<sup>(66)</sup> The extension of the clinic service is coupled with the establishment of 13 community health centres to serve areas which are remote from existing district hospitals. An extension of the mobile clinic service and the further encouragement of community participation in health modernisation of secondary health care centres - primary district hospitals - will also be undertaken."<sup>(67)</sup> Umtata hospital is to be upgraded and expanded with its major functions being a national training centre and a referral hospital. National priority has also been given to expanding TB control, health education and physiotherapy as well as increasing ambulance services.

The Department of Health, in conjunction with other government departments, has undertaken to work towards promoting rural development "through education in proper health practices paying particular attention to the provision of safe drinking water, nutritious food, sewage disposal and adequate housing."<sup>(68)</sup>

(ii) Relevance in the NE region. The widespread distribution of the region's population in relation to the location of Hospitals and Residential Clinics reveals a number of areas that are not adequately provided with health services. See Figure 10.3 and Tables 10.10 and 10.11. In addition four of the region's towns do not have a hospital. Improved health facilities are most important in support of other projects proposed for the NE region.

(iii) Projects in the NE region. Physical projects for health services in the NE region are derived from the Health section of the Draft Five Year Plan and from Project Motivations 2.1 and 2.2 of 1983/84. They may be classified into three groups:

Table 10.10 Residential Clinics in NE Region : proposed building programme

District	Existing Clinics	Proposed new clinics to be constructed during:					Total 1982/3-86/7	Estimated Cost (1)	Upgrading existing temporary clinics
		82/83	83/84	84/85	85/86	86/87			
Bizana	5	-	-	3	3	-	6	R 690 000	2
Libode	7	-	-	-	2	2	4	R 460 000	1
Lusikisiki	7	1	1	1	2	-	5	R 575 000	1
Maxesibeni	4	-	-	-	-	-	-	-	-
Ngqeleni	8	-	-	2	1	1	4	R 460 000	1
Siphaqeni	3	-	-	4	-	-	4	R 460 000	1
Tabankulu	5	-	-	1	-	-	1	R 115 000	2
Umzimkulu	8	-	-	-	-	-	-	-	-
Umzimvubu	3	-	-	-	-	-	-	-	-
<b>NE Region</b>	<b>50</b>	<b>1</b>	<b>1</b>	<b>11</b>	<b>8</b>	<b>3</b>	<b>24</b>	<b>R 2 760 000</b>	<b>8</b>

Source: Draft Five Year Plan (Health) Table 2 and Memorandum from Department of Health 01.03.84.

- Notes:
1. Assuming R115 000/clinic at 1983 prices.
  2. In addition a further 28 clinics have been proposed by the Hospitals but not yet programmed by the Department of Health. See Figure 10.

Table 10.12 Hospital improvements

Magisterial District	Hospital	Improvements	Estimated Cost (1983)	Phasing
Bizana	Greenville St. Patricks	Out-patients department	R 400 000	83/4-87/8
Libode				
Lusikisiki	Bambisana Mkamoati St. Elizabeth	Laundry, ablution TB Ward Laundry extension Admin., theatre, CSSD Maternity, x-ray, Lab. Out-patients department	R 150 000 R 200 000 100 000 700 000 500 000	83/4-87/8 88/9-92/3 83/4-87/8 83/4-87/8
Maxesibeni	Mt. Ayliff	Admin., kitchen, dining ) stores and OPO )	950 000	83/4-87/8
Ngqeleni	Canzibe	Out patients department ) kitchen, dining ) maternity, admin. )	700 000	83/4-87/8
	St. Barnabas	Nurses home Lecture department Kitchen, dining ) Admin )	R 100 000 R 100 000 R 500 000	88/9-92/3 88/9-92/3 83/4-87/8
Siphaqeni	Holy Cross	Out-patients department ) Admin., X-ray conversion ) Maternity ) Lecture department )	R 200 000 R 400 000	83/4-87/8 88/9-92/3
Tabankulu	Sigecu			
Umzimkulu	Rietvlei St. Margarets Umzimkulu	Laundry, CSSD New wards (2) Nurses home	R 350 000 R 400 000	83/4-87/8 83/4-87/8
Umzimvubu	Isimilela	Out-patients department Laundry extension X-ray extension Stores	R 300 000 R 100 000 R 50 000 R 300 000	) ) ) )
	All	Accommodation for approximately 30 medical officers	R 300 000 R 1 050 000	83/4-87/8 88/9-92/3
<b>NE Region</b>			<b>R 7 350 000</b>	
<b>Transkei</b>			<b>R 19 310 000</b>	

Source: Draft Five Year Plan (Health) Table 5 and memorandum from Department of Health 01.03.84.

Table 10.11 Location of Residential Clinics

District	Existing Clinics	Admin. Area No.	Proposed Clinics 1982/3 to 1987/8	Admin. Area No.	Phasing	Proposed Clinics 1988/9-2003	Admin. Area No.
Bizana	Makwanteni (t)	21	Nkundla	7	85/86	Ngxokozeiweni	5
	Kanyayo (t)	23	Mpetsheni	6	84/85	Ndlovu	7
	Ludeke	1	Amandenga	9	84/85	Nkoza	12
	Mzizi	16	Amantshangase	11	84/85	Lukholo	16
	Gowane	1	Amapisi	22	85/86		
			Lugwijini	18	85/86		
Libode	Zitatele (t)	12	Ngcolora	7	85/86	Mpindweni	10
	Mevane	19	Mangcwanguleni	16	85/86	Empilisweni	25
	Nkanga	14	Mhlanga	8	86/87	Corana	1
	Marubeni	13	Mbalisweni	25	86/87	Rainy	2
	Sibangweni	9				Dikeio	14
	Tina Falls	25					
	Mgwenyana (t)	22					
Lusikisiki	Good Hope	11	Xurana	18	84/85	Mpungu	11
	Mantlaneni	10	Mpoza	8A	83/84	Goso Forest	26
	Ntafufu	35	Mtambalala	41	85/86	Bhukada	12
	Buchele (t)	41	Malangeni	29A	85/86	Ntandayo	14a
	Magwa	32	Bomvini	16	82/83		
	Palmerton (t)	20					
	Qaukeni (t)	28					
Maxesibeni	Lubaleko	21				Brooks Nek	9
	Dundee	11				Ndzongiseni	22
	Rode	24				Xama	7
	Mwaga	31					
Ngqeleni	Buntingville	2	Nkanunu	41	84/85	Lujizweni	21
	Mgangqweni	7	Lucingweni	16	85/86	Nkumandeni	25
	Umtata Mouth	50	Old Bunting	35	86/87	Mgamnye	20A
	Mncibe	47	Ntsundwane	41	84/85	Ntshilini	49
	Mampondomiseni	29					
	Ntibane (t)	43					
	Double Falls	31					
	Cwele	38					
Siphaqeni	Flagstaff	0	Bala	8	84/85	Lucwaba	7
	Mfundisweni (t)	3	Xoposo	4	84/85	Manquzi	15
	Ntlenzi	7	Nkoza	16	84/85		
			Qasa	10	84/85		
Tabankulu	Mtukukazi	16	Mdyobe	8	84/85	Cwebeni	4
	Tabankulu (t)	0				Ngqana	4
	Mbangweni	1				Ngqwash	27
	Mnceba (t)	24				Cola	22
	Mvenyane	3					
Umzimvubu	Port St Johns	-				Kohlo	9
	Majola	6				Qandu	16
	Tombo	4					
Umzimkulu	Malenge	6					
	Singisi	33					
	Sihleza	18					
	Lourdes	38					
	Mvoti	9					
	Ibisi	0					
	Rietvlei	23					
	Gugwini	21					
NE Region	Total = 50		Total = 24			Total = 28	

Source: Department of Health and Draft Five Year Plan (Health) Table 2 and memorandum from Department of Health 01.03.84

Note: 1) (t) denotes a temporary residential clinic.

In order to achieve a standard of one residential clinic to about 10 000 people<sup>(69)</sup> in the NE region by 1990, Transkei intends to build a further 59 residential clinics. This will bring the total of 102 residential clinics.<sup>(70)</sup> The estimated cost at a 1983 price of R115 000 per clinic is R6 785 million. Recent research by TATU has, however, shown that the unit cost of these clinics in Transkei can be reduced to somewhere in the order of R40 000; which would mean a total cost of R2,36 million at current prices. The proposed building programme for residential clinics is summarized in Table 10.10 while Table 10.11 and Figure 10.3 identify the precise location within each district.

Community Health Centres are planned for those towns that do not have a hospital. In the NE region these are: Flagstaff, Libode, Port St Johns and Tabankulu.<sup>(71)</sup> At an estimated cost of R1,375 million each, those are phased to start in 1985/6. Table 10.12 gives details of the works necessary to improve existing hospitals in the region.<sup>(72)</sup> Phasing is based on discussion with officials in the Department of Health and the hospitals.

(iv) Implication. Overall, health services are accorded a high priority in the Transkei national budget and so too in the NE region. Spatial priorities for the construction of clinics are on the basis of "most needy areas first" as depicted in Table 10.11. Health projects fall under the Department of Health while the construction of Clinics, Health Centres and Hospitals improvements are traditionally undertaken by the Department of Works and Energy. But in order to meet the existing shortage of Clinics within the funding available, it is proposed that certain clinics be constructed by TATU using the cost effective measures being pioneered in Transkei at present.

### Housing

(i) Transkei's Policy. Government has accepted that there are deficiencies in respect to housing and housing infrastructure within both the urban and rural areas of Transkei. However, because of existing financial constraints and the urgent priority of other development programmes the policy is that "the state can only play a supportive and facilitating role in the actual supply of housing capital and even with respect to housing infrastructure, progress can only be gradual."<sup>(73)</sup> Furthermore, initial priority must be directed towards

"regional centres and specifically identified new growth points" or service centres.(74) Government has also recognised the need to supply civil servants with housing and in particular, to provide units in the smaller centres and remote areas in order to make rural postings more attractive.(75)

As far as possible funds and initiatives for residential housing will have to come from the private sector, stimulated by employers, local authorities and financial institutions.(76) Government is promoting the development of alternative housing programmes such as site and service schemes in order to reduce costs and is facilitating implementation through advocating, change in present building and servicing standards. The general housing objective is to provide individuals with the opportunity to house themselves and to minimize government expenditure and involvement wherever feasible.

(ii) Relevance in the NE region. Transkei's policy regarding housing in NE region towns is to:

- encourage the building of new housing for all income levels at a pace that will ensure that no town residents will be forced to reside in unauthorised settlements;
- adopt appropriate standards for urban development;
- introduce self-help, site and service schemes.(77)

In addition current project motivations for education, health, forestry inter alia, include items for housing of officials in rural areas.

Residential facilities will be required for local and outside industrialists, administration and service personnel associated with various aspects of the East Pondoland IDP project and with other development projects in the NE Plan. Furthermore if the target populations for the region's towns are to be adequately provided for, pleasant and affordable residential environments will be needed.

(iii) Projects in the NE region. Project motivation 12.2 of 1983/4 makes provision for a portion of the region's housing needs; additional items are included in Table 10.13 Phasing is in terms of the programme for urban development set out in Table 9.4. Table 10.14 shows the number of residential plots (serviced to a range of standards affordable by local people) that are to be made available in the regions towns.

**Table 10.13 Residential facilities**

Residential facilities	Estimated Cost (Rm)	Phasing
1. Serviced residential plots in - 9 towns ) See Table 5.19 - Mtonjeni )	Included under urban services in Table 5.6	1983/4-1987/8 1987/8-1992/3
2. Houses for government officials associated with the industrial development project (40 @ R25 000 average; and 20@ R40 000 average) - Mtonjeni (7 + 3) - Bizana (10 + 5) - Flagstaff (10 + 5) - Lusikisiki (13 + 7)	0,355 0,550 0,550 0,745	1987/8-1992/3 1985/6 1984/5 1984/5
3. Houses for government officials associated with other projects in the Physical Plan (price ranges as in 2. above) - Libode (7 + 3) - Mt Ayliff (10 + 5) - Ngqeleni (7 + 3) - Port St Johns (10 + 5) - Tabankulu (10 + 5) - Umzimkulu (10 + 5)	0,355 0,550 0,355 0,550 0,550 0,550	1987/8 1986/7 1987/8 1985/6 1986/7 1985/6
4. Houses for government officials posted to rural areas	Included under sectoral project motivations	

Source: Items 1 and 2 based on Table 8.5 in Project Motivations 12.2 of 1983/4.

**Table 10.14 Residential Erven required for urban population**

Town	Existing No. Residential Erven	Total Residential Erven needed for:		Phasing	Cost
		1988 target population	1995 target population		
Lusikisiki	68	1 018	3 036	1984/5	)Cost included under urban services
Flagstaff	47	384	2 500	1984/5	
Bizana	63	491	2 143	1985/6	
Umzimkulu	136	536	1 250	1985/6	
Port St Johns	124	534	1 250	1985/6	
Tabankulu	64	357	893	1986/7	
Mt Ayliff	96	446	1 250	1986/7	
Libode	40	179	268	1987/8	
Ngqeleni	26	179	268	1987/8	
Mtonjeni	-	-	1 429	1987/8	

Sources: 1. Rosmarin, Els & Taylor (1979-80) Structure Plans for towns in NE region.  
2. Ninham shand (Transkei Inc. "Transkei North East Regional Plan - Report on Infrastructure" September 1983.  
3. East Pondoland Industrial Development Point Project Motivation (12.2.83/4) (April 1983).

Notes: 1. Urban target populations are taken from Table 9.3.  
2. The total number of residential erven needed is based on the assumption of 5.6 persons per household and one household per plot.  
3. Plot sizes vary from 400 m<sup>2</sup> to 1 000 m<sup>2</sup>.  
4. Erven for other uses (ie. commercial, industrial) are provided for under the urban services section.  
5. Refers to erven within the commonages. Additional plots will be needed for some 3 000 families expected to live in serviced peri-urban settlements (1988).

(iv) Implementation. The provision of sufficient and pleasant residential environments in the region's towns are an essential component of the overall spatial plan and are a vital support element to projects aimed at upgrading the towns eg. water, sewage disposal, internal roads etc. The provision of housing for government officials is of major importance if suitably motivated and experienced persons are to be based in the region to administer the projects outlined in this report and other motivations.

Housing is the responsibility of the Department of Local Government and Land Tenure. As discussed above, it is proposed that urban infrastructure projects be undertaken by EPIDU in the immediate future and until such time as the municipalities are able to carry out maintenance and associated administrative functions from their own resource. Accordingly the operation of housing projects (eg. site and service schemes) and the provision of government housing in the towns should also be undertaken by EPIDU. Provision of government housing in rural areas (eg. at clinics, schools) should be carried out by either the Department of Works and Energy or TATU, depending on which organisation is constructing the main buildings. Emphasis in the implementation of housing projects should be on using the provision of housing to create opportunities for employment - directly in construction and indirectly in the manufacture of building materials.(78)

### Agriculture and Forestry

#### Agriculture

(i) Transkei's policy. Agriculture is recognised as the most important sector of Transkei's economy and "hence must make the greatest contribution to meet the national objectives of increased good production and increased employment."(79)

The government's objectives in respect to agriculture are:

- to increase food production to reduce the country's dependence on food imports;
- to raise the incomes of the rural people and thereby to arrest the rural-urban migration;
- to raise national income by increasing the value of agricultural production;

- to maintain agricultural land, flora and fauna for future generations;
- to develop the country's water resources for irrigation, power and domestic use; and
- to create work opportunities in the rural areas.(80)

Highest priority is to be given to crop and livestock production for sale locally and on the export markets. The creation of a class of full-time small scale farmers is desired with improvements to present production being achieved though building upon technologies appropriate for small scale farming. The establishment of small irrigation schemes (less than 5 ha) which can be managed by the local people will be given particular emphasis.(81) The development of large scale irrigation schemes are not being considered in the short term. Commercial agriculture will also be stimulated by providing credit to individuals and groups. Transkei Agricultural Corporation is to direct its efforts towards establishing co-operatives and company and group masizako farms.(82)

Participation by rural people in project identification, planning and implementation is considered important by the government. The need for Regional and Tribal Authorities to develop closer communications with their constituents has been identified and these authorities are to promote the establishment of community organisations.(83)

Finally, by the turn of the century, government's aim for the agriculture sector is "to be able to employ a third of the male labour force of 1.2 million - and half the female labour force - at income levels to the rural population which are no lower than at present."(84)

(ii) Relevance in the NE region. The NE region's potential for economic development lies in its people and its natural resources, particularly agriculture. This has been well documented(85) and described in broad terms in above and in Figure 10.4.

The area of East Pondoland with the greatest potential for agriculture is a belt approximately 15 km wide, stretching 75 km from Lusikisiki to the Mtamvuna. It comprises 100 000 hectares of which 50 000 ha are arable and suitable for intensive crop production. The RSA Department of Agriculture has recently estimated the agricultural potential of this belt at seven tons, or.

100 bags of maize per hectare. The other main areas suitable for intensive crop production in East Pondoland stretch from Mt Ayliff to Bizana (comprising 170 000 ha of which 30 percent or some 50 000 are considered arable); and to the west of Lusikisiki (40 000 ha of which 8 000 ha are arable); the remainder of the sub-region being suitable for livestock, particularly beef. See Figure 10.4.

The Nyanda and Umzimkulu sub-regions are broadly similar to the inland areas of East Pondoland, with potential for semi-intensive mixed farming and livestock. In addition parts of Umzimkulu have high forestry potential.

If the inherent potential of these areas can be developed, the NE region (and East Pondoland in particular) could produce enough basic foodstuffs (in maize, poultry, vegetables, dairy products and sugar) for its own needs, and possibly, to supply other parts of Transkei. Therefore the establishment of agricultural enterprises (large and small scale) and agro-industrial ventures are priorities for the economic development of the NE region.

(iii) Projects in the NE region. For the most part these are fairly large scale, commercially oriented projects. The Plan's contribution to smallholder farming lies in projects to establish markets, demonstration plots and slaughter blocks at Rural Centres and in the improvement of tertiary roads and other rural infrastructure.

Agricultural projects in the NE region, are derived partly from the Draft Five Year Plan, and project motivations, and partly to complement these projects. They may be grouped under eight headings: Maize, phorium tenax, sugar, tea, minor irrigation schemes, commonage production, slaughter blocks, demonstration farms and plots.

a) Maize

- Tracor Maize production schemes are to be expanded as indicated in Table 10.15 at an estimated cost of R 2,636 million in 1983/4.(86)
- Extension of the existing 400 ha of maize cultivation at Magwa to 1 000 ha at a cost of R 604 000.(87)
- Establishment of 2 000 ha under maize in the area between the Mtuntu and Msikaba rivers (See areas 4, 5 and 5A on Figure 6) at an estimated cost of R 1,73 million.(88)

- Development of the 700 ha presently under Phorium tenax to the production of maize at an estimated cost of R 560 000.(89)
  - Maize handling facilities. Construction of appropriately sized maize drying, storage and milling facilities (approximately capacity of 35 000 tons per annum) at the site of the present Phorium Tenax factory.(90)
- b) Phormium Tenax. The estate and factory adjacent to Magwa Tea estates produces 1 000 tons of fibre a year. Production is uneconomic and investigations are currently under way with a view to converting the land use and factory to the production of food crops.
- c) Sugar. At Mkambati, trials conducted in recent years have shown that sugar cane can be grown in certain areas of East Pondoland at comparable yields to those obtained in southern Natal (ie. about 50 tons/ha year). On the basis of a feasibility study, Transkei will initiate a project to put 8 000 ha to sugar cane. 4 500 hectares on presently sparsely populated land will be managed as an estate; while the remaining 3 500 ha of sugar area will be cultivated by small holders. Large tracts of this land can be put under maize in preparation for the growing of sugar cane. (See Figure 10.4). This will be accompanied by the construction of an 85 ton capacity sugar mill (with bulk storage) in the vicinity of Mtonjeni to produce 40 000 tons of sugar annually for the Transkei market.(91) It is envisaged that the project will create 2 500 jobs in agriculture and another 200 in manufacturing. The estimated costs of land development are R10 million (R1250/ha) and of the sugar mill R 50 million at 1982 prices.(92)

Further north at Mfolozi a second sugar cane planting project is in progress at Mfolozi, between Bizana and Port Edward. Here 550 ha are being planted for milling in Port Shepstone. The RSA government has given favourable indications that this quota will be increased to expand the project to 4 000 ha.

- d) Tea. Production at Magwa is being expanded by 400 ha to meet the present quota on the South African market of 3 200 tons in the first instance. At Majola about 350 tons of green leaf tea is picked and processed annually at the adjacent factory.
- e) Minor irrigation schemes. Six areas in the NE region have been selected for 42 ha irrigation schemes, on the basis of the proximity to rivers and the existence of owner operated farmland in the vicinity. In

each of the administrative areas selected, 42 ha of land has been fenced and set aside for irrigated farming by individual farmers; each being allocated about 2.5 ha. Soils in the selected areas are of sufficient depth to permit sprinkler irrigation. At an average capital cost of R 26 700 per scheme, the overall estimated cost of the project is R 160 000 at 1982 prices.<sup>(93)</sup> Irrigation schemes are located at: Mandlovini (Ngqeleni) Big Umngazi (Umzimvubu), Intsimbini (Umzimvubu), Mfulamle (Umzimkulu), Nyasana (Lusikisiki), Dutyini (Maxesibeni). See Figure 10.4.

- f) Commonage production. In order to make optimal use of the areas of the town commonages not presently in urban use, a project has been put forward to facilitate intensive agricultural schemes on this land. The type of agricultural schemes feasible will vary, depending upon local potential; but in general the type of farming to be introduced includes dairying, poultry and fresh produce production.<sup>(94)</sup>
- g) Slaughter blocks and saleyards. It is proposed that the poorly served regional abbatoirs in the NE be closed down and that Umtata Central abbatoir be rebuilt to modern hygienic standards. The nine regional towns and proposed rural centres should be provided with simple but effective and clean slaughtering blocks to accommodate the present average slaughter rate of one beast per day. The effective saleyards at Xura Drift, Glengarry, Lourdes, Ntafufu and Nkumzimbini should be upgraded.<sup>(95)</sup>
- h) Demonstration units. Demonstration farms are to be established in towns and rural centres (in the different agro-ecological areas) namely at Marubeni (agro-ecological unit 3M) Big Mngazi (Unit 1L) Lusikisiki (2L) and Bizana (2M). These demonstration units should be developed jointly by the extension service, Tracor, ACAT and TATU.

It is also proposed that a small agricultural demonstration plot, similar in size to the average arable land holding in the surrounding area, be established at each Rural Centre. Here the local extension officer can show the holders of similar pieces of land how they can improve production particularly of food crops, within the means available to them. Phasing would be in accordance with Table 9.4 above.

Table 10.15 Tracor maize production schemes

District	Area in ha		
	1981/2	1982/3	1983/4
Bizana		500	1 000
Libode		500	750
Lusikisiki		500	1 000
(Mkambati)			500
Maxesibeni			
Ngqeleni			
Siphaqeni			500
Tabankulu			
Umzimkulu	500	1 500	2 500
Umzimvubu	550	800	1 000
NE Region	1 050	3 800	7 250
Transkei	2 050	6 000	11 000

Source: Project motivation 5.1 of 1983/4 para 1.

Table 10.16 Pole and Fuelwood plantation planting programme

District	Existing (ha)		Existing Woodlots (2) (ha)	Proposed planting (ha)	Total (ha)
	Pines (1)	Eucalyptus			
<u>Coastal</u>					
Bizana	200	500	100	4 000	4 800
Lusikisiki	1 200	300	400	2 000	3 900
Ngqeleni		300	400	2 000	2 700
Umzimvubu		200	100	3 000	3 300
<u>Plains</u>					
Libode		1 200	1 000	2 000	4 200
Maxesibeni		100	300	1 000	1 400
Siphaqeni	700	700	400	1 000	2 800
Tabankulu	400	200	400	2 000	3 000
<u>Mountainous</u>					
Umzimkulu	20 000	900	200	1 000	22 100
NE Region	22 500	4 400	3 300	18 000	48 200
Transkei	43 800	14 200	12 000	60 000	130 000

Source: Project Motivation 6.1 of 1983/84 (draft)

- Notes:
1. Pines are not suitable for fuelwood.
  2. Very low productivity.

(iv) Implementation. As the most important sector of Transkei's and the NE region's economy, agricultural projects receive a high priority, particularly those concerned with the production of food crops for local consumption.

Projects listed in this sector are the responsibility of the Department of Agriculture and Forestry. Unless otherwise indicated all agricultural projects in the NE region are to be undertaken by Tracor. In order to ensure that the schemes are implemented effectively, while at the same time minimizing the negative spin-offs, it will be necessary to observe certain pre-conditions for planning. It is recommended that extremely careful attention be paid to the existing circumstances of the local population who will be affected by, and who could benefit from each development. Specifically:

- The allocation of land to the major maize (or possibly sugar cane growing and processing) ventures that are proposed should occur without interfering with the existing settlement of local people, ie. plantations should be planned around existing residential areas with the requisite storage depots at existing settlements.
- Under circumstances where any traditional grazing lands have to be used, this should only be done on condition that other land be set aside for use by locally owned herds of cattle, prior to placing such land under other uses.
- Where possible, consideration should be given to the carefully planned development of smallholder plots, contiguous to the major schemes, so that, subject to their relative circumstances and choices, local people can benefit from the services and facilities becoming available.
- The above will necessitate continuous consultation with the relevant local authorities, leaders and committees in order to avoid misinterpretations and misunderstanding.
- Agricultural proposals should not be seen in isolation but the planning and implementation should be undertaken in co-ordination with other
- Departments and agencies active in the area.

Any private or government run agricultural project should have built-in, on-going training programmes. The aim is to train local people to perform the full range of functions at some future date, possible on another, similar project.

## Forestry

(i) Transkei's policy. Government policies for forestry sector are aimed at satisfying both local demand for wood and towards maximizing its potential as an export product. A countrywide programme of woodlots to supply fuel to the rural population is presently being prepared by the Transkei Technology Unit (TATU). It is proposed that a number of pilot schemes be initiated at select locations.

Government intends to capitalize on the comparative advantage that Transkei has in respect to supplying the RSA market with timber and therefore an annual afforestation programme of about 10 000 hectares has been initiated. "Local communities whose land are afforested will become partners in the programme, receiving a proportion of timber sales, and also of the profits for sawmilling, and a rental based on timber values until the trees are ready for felling."(95)

(ii) Relevance in the NE region. From an agro-ecological point of view, parts of the NE region are highly suited to afforestation; and a significant amount of forestry development has taken place. There is scope for extending the areas under timber. At the same time the region needs timber for processing, building materials and as inputs for other local industries. Furthermore the extent to which the region's 165 000 rural households depend on wood as a source of fuel makes the development of a large number of woodlots on a widespread basis a high priority.

(iii) Projects in NE region. See Figure 10.4. Existing areas under plantation and woodlots, together with the proposed planting programs for each District for the period 1983/84-87/8 are set out in Table 10.17. The estimated costs (at R500/ha) are R9,0 million at 1983 prices.(96)

(iv) Implementation. Forestry and sawmilling are to play an important part in the region's future development. Projects fall under the Department of Agriculture and Forestry, whose Forestry branch will administer plantation and woodlots jointly with TATU and local communities. Sawmills are to be run by private sector concerns.

## Industry and Commerce

### Industry

(i) Transkei's policy. The Transkei government does not regard industry as a substitute for agricultural development. The two are viewed as largely complementary by supplying inputs and consumer goods to each other, and by creating an effective demand for each other's products through the incomes generated.

In the past, industrial development has largely been initiated by TDC. However, changes in the overall policy are underway and future investment plans will be as to change TDC's role from a major supplier of industrial capital to the more direct role of a channelling for industrialization incentives, financed jointly by the RSA and the Department of Commerce, Industry and Tourism. Only in exceptional cases will the state for TDC become the full owner of industrial enterprises. Increasing emphasis will be placed on the establishment and stimulation of locally owned or joint industrial ventures, and less on wholly external "agency" enterprises.<sup>(97)</sup> Efforts will also be made to expand small scale and indigenous or informal industrial activities, to ensure that small scale indigenous industries are able to compete on at least an equal footing with larger industries through equivalent incentives being made available and through simple registration procedures.<sup>(98)</sup> Finally, labour intensive techniques will be emphasised in industrial projects.

(ii) Relevance in the NE region. The industrial incentive policies agreed to by the governments of the RSA and the TBVC states in regard to East Pondoland are listed in Table 10.17. In the North East, it is Transkei's policy that these incentives will apply on an ad hoc basis to approved industries based on local resources located throughout the region. Accordingly, Transkei will offer financial incentives to medium and small scale manufacturing concerns which are too small to avail themselves of incentives listed in Table 10.18. In general government will give priority to industrial ventures which develop or utilize local agriculture, forestry or mineral resources; supply inputs for other industrial, construction, agricultural or service industries; replace imported goods for local consumers; or which can develop a competitive advantage in their exports to RSA or foreign markets."<sup>(99)</sup>

Table 10.17 Industrial incentives -339-

	Rail re-bate (%)	Employment incentives (for 7 years)		Training granted	Factory rental and interest subsidy (%) for 10 years	Housing subsidy (% of interest rate)	Relocation allowance	Price preference tenders (%)
		% of total wage bill	Maximum amount per worker -R per month					
Transkei - A point in Eastern Pondoland	50	95	105	Yes	70	50	Yes	10

Source: South Africa (1982)

Table 10.18 Industrial projects

Project action	Estimated Cost (Rm)	Phasing
1. Make available incentives listed in Table 5.1 and Appendix D of the IPD report (1983)	*	1983/4-87/8
2. Establish industrial sites at: - Mtonjeni (IDP) - Bizana, Flagstaff, Lusikisiki (secondary development nodes) - Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabanklulu, Umzimkulu (secondary development nodes)	)Included under )Urban Infrastructure	1987/8-92/3 1983/4-87/8
3. Construct premises for small industries at: - Mtonjeni - Bizana, Flagstaff, Lusikisiki - Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabanklulu, Umzimkulu	0,76 2,28	1987/8-92/3 1983/4-87/8
4. Construct and stock depots for Transkei Small Industries Development Organisation (Transido) at: - Mtonjeni - Bizana, Flagstaff, Lusikisiki - Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabankulu, Umzimklulu to provide financial assistance, purchasing, marketing training and advisory services	0,45 1,35	1987/8-92/3 1983/4-87/8
5. Transido loans	3,20	1983/4-87/8

\* Incentive payments will be made out of the budget provision for this purpose in terms of the agreement between the RSA and TBVC states.

Notes: Costs only included for those industrial areas to be developed during the first Phase and for the IDP.

In the NE specifically Transkei's industrial development policies are to:

- establish an Industrial Development Point (as agreed by the RSA and TBVC states) at Mtonjeni and secondary industrial nodes at the existing district towns to act as focal points for the overall economic development of the region. Priority will initially be given to Bizana, Flagstaff and Lusikisiki.
- encourage and develop the capacities of local industrialists - either Transkeian or permanent residents;
- promote as many small scale industries as possible, some of which may in time develop into medium scale concerns.

(iii) Projects in the NE region. Five interrelated types of industrial projects are to be undertaken in the NE. See Table 10.18 and Figure 10.1.

- a) Incentives equivalent to those in Table 10.17 (or Appendix D of the IDP report in the case of small scale industries) are to be made available to any industry based on local resources, commencing in 1983/84.
- b) Sites for medium and small scale industries are to be provided in all the region's towns.
- c) Premises for small industries are to be constructed in all the towns and at rural centres as demand occurs. In some cases these premises may be developed jointly with the markets (see Commerce below.)
- d) In support of small industrialists, Transido is to establish a base in the NE region (preferably at Lusikisiki) from which to operate stock depots in the region's towns and to provide support services and loans.
- e) A "industrial development point" (to use the RSA terminology) is to be established at Mtonjeni based on the proposed sugar mill associated with the 8 000 ha Mkambati sugar project described above. Phased to come into operation during the 1988/9 to 1992/3 period, this mill is expected to generate ancilliary small industries for which provision will be made in the planning and development of Mtonjeni, first as a permanent rural centre (with a full range of facilities for the 3-5000 people expected to be employed by the mill, their families and related service activities) and later if demand warrants it, as a small town.

(iv) Implementation. Transkei regards industrial development mainly for local consumption as a vital complement to agriculture. Within the NE region high priority is given to the East Pondoland IDP Project (12.2.83/4) which itself incorporates many of the main roads, electricity, telecommunications, urban services, construction, management, training, housing and administration projects set out in the overall plan.

The Department of Commerce, Industry and Tourism is responsible for industrial projects. Implementation of the industrial projects will be undertaken jointly by the Department and Transido. Emphasis will be on encouraging industries manufacturing for the local market; encouraging and developing the capacities of local industries, be they Transkeian or permanent residents, and promoting as many small scale industries as possible.

### Commerce

(i) Transkei's policy. Government policy for commerce is to reduce its financial commitment to the commercial sector and to concentrate those remaining funds on after care services and training.<sup>(100)</sup> Secondly, the strategy is to spread commercial and financial services of at least a minimum standard to all parts of the country. The development of service centres will play an important role in stimulating commercial activity, particularly in rural areas. Furthermore, the government recognises the role that the informal sector can play with respect to employment creation and supply of the goods and services and therefore does not support restriction or harassment of activities.<sup>(101)</sup>

Finally, in order to stimulate the commercial sector, the government intends to review present commercial regulations and standards and to adopt these to meet the present needs of the economy.

(ii) Relevance in the NE region. As described above, the level of commercial activity throughout the region is of a low order. If the costs of consumption in the region are to be reduced and if the commercial sector is to be stimulated, certain physical inputs (inter alia) will be needed in the rural areas (particularly at the designated rural centres) and in the towns.

(iii) Projects in the NE region. See Table 10.19 and Figure 10.1. The physical facilities proposed to encourage commercial activities in the region are: market places for the rural centres; towns and additional commercial sites in the towns (costs are included under urban infrastructure in Table 10.6. Phasing of these buildings will be according to the programme set out in Table 9.4.

Table 10.19 Buildings required for Rural Centres and Towns

Rural Centres		Towns		Comments	
Function	Estimated (1) cost (1983)	Function	Estimated cost (1983)		
Market (250 m <sup>2</sup> )	R 40 000	Market 250 m <sup>2</sup>	R 40 000	Buildings to be used by the EPIDU and later taken over by public and private sector users	
Bus shelter/ Meeting Place (60 m <sup>2</sup> )	R 4 800	Bus shelter (60 m <sup>2</sup> )	R 4 800		
Toilets (6 x R1500)	R 9 000	Toilets (10 @ R1 500)	R 15 000		
Phase I Total	R 53 800				
		<u>EPIDU</u>			
Workshops (6) (6' x 30 m <sup>2</sup> )	R 28 800	Admin. (80 m <sup>2</sup> )	R 16 000		Future offices
Administration/ Offices (40 m <sup>2</sup> )	R 6 400	Building supply store (300 m <sup>2</sup> )	R 60 000		Future hardware shop
Training Centre (100 m <sup>2</sup> )	R 16 000	Training centre (100 m <sup>2</sup> )	R 20 000		Future adult education
Phase II Total	R 51 200	Workshops (6) (6 x 60 m <sup>2</sup> )	R 57 600		
			R213 400		

Note: 1. Cost estimates based on unit costs for a range of building methods:

- a) Traditional: R20-30/m<sup>2</sup>
- b) Wattle and Daub: R48-70/m<sup>2</sup>
- c) Block construction: R125-160/m<sup>2</sup>
- d) Brick construction: R138-206/m<sup>2</sup>

(See Vandeverre W C (1982) "Standards in Urban Development" p 88)

Table 10.20 Nature Reserves

Location	Development Proposed	Estimated Cost (Rand)
Silaka Mtamvuma	Fencing, hiking trails, picnic sites, roads	100 000
Umgazana Msikeni	Fencing, picnic sites,	40 000
Total		140 000

Source: Project Motivation 6.3 of 1983/84

Note: In addition to an estimated cost of R100,000 for establishing the two reserves, an addition R65 000 will be required for ablution blocks and water supply. The amount is based on the assumption that of the four reserves proposed for Transkei, the two in the NE account for 65% of the initial cost and therefore will also require 65% of the estimated cost for these services.

a) Rural Centres. The priority physical inputs for the proposed Rural Centres (Table 10.20) are the market, meeting place, bus shelter and public toilets (see Figure 9.3). These are to be provided for all the rural centres according to the programme in Table 9.4. The second phase development of rural centres (which will be undertaken when the demand for additional facilities is established) involves the construction of additional buildings to house administrative, training and workshops for small industries. (See Figure 9.2)

b) Towns. Market centres in the region's nine towns require similar physical inputs to those outlined for the rural centres (phases 1 and 2). The market/bus shelter will be larger and more public toilets will be required. In addition the first buildings to be constructed by the proposed implementation Unit (EPIDU see above) will later become part of the administrative, commercial and industrial core of each town. Details of the buildings required for a typical town and cost estimates are set out in Table 10.20.

(iv) Implementation. High priority is accorded to commercial projects in order to stimulate latent economic activity in the towns, and to initiate periodic markets at the designated rural centres. The departments of Local Government and Land Tenure together with Commerce Industry and tourism will be responsible for motivating projects, but they will be administered by Transido, TATU, TDC and municipalities depending on the context.

### Other sectors

#### Tourism

(i) Transkei's policy. Tourism has been rated as a low priority sector in Transkei's development strategy because of its rather limited capability for creating employment and incomes. "This sector of the economy is to be developed very slowly because the heavy expenditure in publicly financed infrastructure required for its expansion is outweighed by the more pressing demands of other sectors."<sup>(102)</sup> However, government has adopted a Coastal Control Plan to ensure that development occurs in a planned manner in order to preserve the natural beauty of the coastline.

(ii) Relevance in the NE region. The NE region contains some of the most popular tourist attractions in the Transkei and a considerable proportion of the country's scenic coastline. Therefore, although tourism is to receive little public investment, policies have been adopted by the government in order to protect its natural beauty and to cater for controlled expansion of the holiday nodes. In essence proposals for tourist development has been divided into three categories; First Order Places, Second Order Places and Third Order Places. (See Figure 10,2). Any tourist development during the next five years should be directed at the First Order places of Mzamba and Port St Johns.

(iii) Projects in the NE region (See Figure 10.1) Proposals regarding tourism are derived from the Coastal Development Plan, the White Paper and the project motivation on the development of nature reserves (6.3.83/4).

- a) Mzamba. An action area plan is presently being prepared for an area of some 3 km radius around Mzamba. The purpose is to assess the environmental impact of various proposed private sector developments and to ensure that such developments are in keeping with the Coastal Development Plan.
- b) Port St Johns - It is proposed that the brief for the planning of Port St Johns to accommodate a short term population of 4 000 (see Table 9.3) be extended to include specific investigations and proposals for stimulating the town as a First Order tourist resort. Consideration needs to be given to both Transkeian (particularly day visitors) and outside tourists. Present constraints include the town's water supply and the silting up on the Umzimvubu river and the associated erosion of First Beach.
- c) National Park. It is proposed that the current investigations into establishing a national park within the region take into account the surveys being undertaken by Unitra's Botany department, that Mkambati and the adjoining state forests be included within the limits of the park; and that the National Park project involve the local people in nature conversation. These investigations should be undertaken in close consultation with the departments responsible for tourism and nature conservation.
- d) Nature reserves. The development of two nature reserves in the NE has been proposed but more detailed planning needs to be carried out. See Table 10.20.

The following guidelines need to be adhered to with respect to tourist development. Firstly, development of Mzamba and Port St Johns is to be directed by the principles laid down in the Coastal Development Plan; and secondly, implementation of the National Park and Nature Reserves will be based on standards and approaches of the Natal Parks Board and SA Wildlife Society of Southern Africa as these offer appropriate guidelines and are a readily accessible source, of advice and expertise.

### Mining

(i) Transkei's policy. Government intends to set up a Transkei Mining Corporation (TMC) in the near future to investigate the mining potential of the country and to promote the development of the industry. TMC will be responsible for "geological surveying, prospecting and exploration work, as a prelude to the establishment of local small scale mining groups."(103)

(ii) Relevance in the NE region. The establishment of TMC to identify and promote the exploitation of mineral deposits has relevance to the NE where deposits of nickel, limestone and clay, sand and crusher material have been identified. These minerals can be utilized in development projects for the region as well as providing employment opportunities for the residents.

(iii) Projects in the NE region. It is proposed that once TMC is operational, the following priorities be given immediate attention in the region.

- the statutory delineation of an exploitation - free zone extending from the north to the Mtata river in the south, and for about one kilometre inland in order to preserve the coastlines natural beauty;
- investigations into the exploitation and processing of the agricultural and industrial lime deposits near Port St Johns;
- investigation into and co-ordinated delineation of appropriately located deposits of crusher material for use in the construction of main and other roads as well as physical infrastructure in the region's towns. The Mining Corporation Report (1982) states that such deposits exist with 7,5 km of all towns in the region.(104)

(iv) Implementation. Priority for identifying and exploiting crusher material deposits should be co-ordinated with the programmes for the construction of roads and other infrastructural projects in the region. (Refer to Table 10.1.)

The Department of Commerce, Industry and Tourism will be responsible for setting up TMC and its operation. TMC will be responsible for implementing the projects outlined above. According to project motivation 19.1.83/4 TMC's operations are to be guided by the following principles:

- investigations should be directed towards medium and small scale developments which can provide employment opportunities for Transkeians through their applicability to labour intensive techniques.
- priority needs to be given to exploiting deposits needed in development projects and which are situated at economically accessible locations.
- reclamation of conservation regulations should be established.

#### Administration

(i) Transkei's policy. One of the most severe bottlenecks constraining development in Transkei is the lack of administrative capacity to implement and run projects and to maintain them.(105) Government has formulated a number of policies aimed at increasing this capacity. These include:

- recruitment of technical and administrative staff to fill key development positions.(106)
- increased on job and in-service training;(107)
- encouraging local communities to become more involved in their own development;(108)
- increased responsibility of municipalities in the maintenance and financing of urban infrastructure;(109)
- support for non-governmental organisations undertaking development projects, particularly in rural areas;(110)

(ii) Relevance in NE region. The manpower crises experienced by the country as a whole is heightened in the NE region on account of its remoteness (particularly East Pondoland and Umzimkulu); poor communications; lack of facilities and amenities for government officials in towns and rural areas; and by the distinctive regionalism of East Pondoland. A further difficulty faced by all public departments and agencies operating in the NE region is the attractiveness of Umtata, relative to a posting in any of the regions towns.

The outcome is a severe, region-wide shortage of suitably trained, experienced and motivated people in key administrative and technical position. This situation has led to a variety of problems which act together to restrict the effectiveness of on-going government functions and act as a major stumbling block to any positive development initiatives.

It is proposed that these problems be tackled simultaneously on a number of fronts, building on existing administrative structures within the region. It is also proposed that an interim bridging organisation (EPIDU) be set up for a fixed period to carry out the urgently needed infrastructural projects without delay, but at the same time train and encourage local people and contractors by participation in the projects, so that, over time the capacity to administer and maintain projects in the region is built up to the required level.

(iii) Projects in the NE region

Implementation of these proposals and of the physical projects described above requires the following organisational inputs:

- a) Projects proposed in the SDP for the NE region are to be carried out by the organisations indicated in the "project administration" sub-section (discussed here under "implementation").
- b) Government departments that are presently engaged in various projects in the region will retain their responsibility for implementing those projects and future projects of the same type eg. road maintenance, hospital renovations, school building etc. Additional manpower required to carry out these on-going projects will be motivated by the department concerned in the normal manner.
- c) EPIDU which will be appointed as an agent of the EPRDA, will undertake planning and design and will manage construction of the physical infrastructure as outlined above.
- d) Nyanda and Umzimkulu It is proposed that the geographical scope of EPIDU's be extended to include urban infrastructure projects in Nyanda and Umzimkulu subject to the organisation having made a satisfactory start to its East Pondoland operations.
- e) Transido will play a major role in the implementation of small industrial projects, including the provision of depots, training and support services. Capital costs of its operations have been included under industrial and training projects; the manpower costs for the period 1983/4-87/8 are estimated at R0,5 million at 1984 prices.

- e) TATU's role will be in the implementation of projects designed to bridge the gap between existing needs in the rural areas and the provision of major regional infrastructure. Capital costs of its Lusikisiki depot are R 55 000. In addition its operational costs to undertake the village water supply, rural electrification, rural radio network, markets and tertiary roads projects is estimated at R 73 000 p.a. for the period 1983/4-87/8.
- f) Tracor's operations in the NE region are, in the main, providing for under its existing budget. Additional involvement such as in commonage production, will need to be included under that project motivation.
- g) Tescor's immediate operations are included under existing project motivations; but future projects, such as distribution of electricity in the towns (phase II) will need to be motivated at a later stage.
- h) TDS's main contribution to the Plan will be its training activities at Misty Mount and promotion of larger scale industrial enterprises. Administrative costs of these are covered under the existing TDC budget.
- i) Non-governmental organisations such as ACAT, Zenzele and others active in the NE region will require continued government support under the Department of Commerce, Industry and Tourism's rural development section.
- j) Municipalities. In the course of implementation of physical projects in the Towns by EPIDU and Tatu these organisations will train municipal officials to enable them to undertake maintenance of the projects.
- k) Regional and Tribal authorities. It is proposed that EPIDU and Tatu investigate appropriate ways in which these authorities can become involved in maintenance of tertiary roads, and undertake the necessary training.
- l) Industrial Incentives. Incentives for resource based industries in the NE region and loans (through Transido) for small industries are to be made available by the Department of Commerce, Industry and Tourism.

(iv) Implementation. Responsibility for initiating the next stage of the planning process lies with the National Planning Committee. Project administration is to be undertaken as indicated in the text by the various organisations listed above. The NPC will need to adopt several tactics simultaneously in order to initiate and monitor the SDP. These include:

- liaison with officials in departments and agencies whose inputs are needed;
- motivating political support for the Plan at cabinet, departmental regional and local levels;
- negotiating project financing from the RSA;
- organising budgetary support for projects, including the necessary manpower and training inputs.
- establishment of a monitoring group within the NPC to co-ordinate activities under the SDP and to evaluate the need for amendments arising from the future changes or response to developments initiated by the Plan.

To sum up, this chapter has shown how the economic and spatial strategy of Chapters 8 and 9 should be applied in the NE region to identify and motivate a large number of specific physical projects, indicating in each case who is to be responsible for implementation, the expected cost, and phasing. The next stage is to co-ordinate these projects into a comprehensive programme.

Notes and References

1. Hawkins Associates (1980 op cit p. 116.
2. Ratio of bitumen road per 1 000 population and per 100 sq.km highlight the underprovision in East Pondoland:

<u>Districts</u>	<u>Km bitumen per 1000 pop.</u>	<u>Km bitumen per 100 km<sup>2</sup></u>
a) On N3 (Maxesibeni, Umzimkulu)	0,72	3,2
b) East Pondoland (Bizana, Lusikisiki Siphagani, Tabankulu)	0,27	1,7
c) Nyanda (Libode, Ngqeleni, Umzinvubu, assuming completion of Uta-PSJ road)	0,46	2,9
3. Derman P J and G G Maasdorp (1981). "The importance of time savings in road project appraisal; evidence from Swaziland." Occasional Paper No. 12, Economic Research Unit, University of Natal, Durban, p. 33.
4. These proposals were reached after extensive discussions with officials in the Department of Works and Energy, and the NPC about priorities in the NE and in Transkei. No formal cost-benefit analyses were carried out, although, under different circumstances this would be a recommended approach.
5. See Table 9.2, note 1; Appendix IX; and Chapter 12 for further details about Mtonjeni; also Osmond Lange Inc 1983c, and 1983d Appendix IV.
6. Project motivation 10.2.83 para 3.1.
7. Development Priorities para 2.31.
8. Ibid para 2.20.
9. Ibid para 2.38.
10. Project motivation 3.1.83 para 4.2.
11. Ibid para 3.4.
12. Ibid.
13. Ibid para 1.1.
14. Ibid para 1.2.
15. Ibid para 6.2.
16. Ibid para 1.2.
17. Ibid para 3.1.
18. Ibid.
19. Development Priorities para 2.31.

20. Draft project motivation (Electricity) 6.2.83 p. 8.
21. Ibid p. 22.
22. Ibid and Development Priorities para 2.39.
23. Ibid p. 12.
24. Ibid p. 2.
25. Ibid p. 32.
26. Derman P (1977 and 1981) op cit.
27. Project motivation 10.2.83 para 1.1; also Development Priorities para 3.41
28. Ibid para 3.1.
29. Ibid para 1.2.
30. Ibid.
31. Hawkins Associates (1980) Osmond Lange (1982) and (1983).
32. Project motivation 12.2.83.
33. Project motivation 10.2.83 para 3.4.
34. Ibid para 5.2.
35. Ibid para 6.5.
36. Ibid.
37. Ibid para 6.8 (i).
38. Ibid para 6.8 (ii).
39. Project motivation 4.1.83 para 4.1.
40. Ibid para 4.3.
41. Ibid para 4.4.
42. Ibid para 4.6.
43. Ibid para 4.7.
44. Ibid para 3.6.
45. Project motivation 12.2.83 para 1.2.
46. Project motivation 4.1.83 para 4.5.
47. Development Priorities para 2.30.
48. Project motivation 12.2.83 para 8.2.5.

49. Project motivation 4.1.83 para 7.2.
50. Development Priorities para 2.32.
51. Ibid para 2.38.
52. Ibid para 2.39.
53. Ibid.
54. Ibid para 2.40.
55. Draft Five Year Plan (Education) para 3.14.
56. Ibid.
57. Development Priorities para 2.41.
58. Draft Five Year Plan (Education) para 1.14.
59. Ibid.
60. Development Priorities para 2.41.
61. Project motivation 1.1.83 paras 5.1 and 6.1.
62. Project motivation 1.3.83 para 5.1.
63. Project motivation 1.2.83 para 6.3.
64. Development Priorities para 2.44.
65. Ibid.
66. Ibid para 2.42.
67. Ibid.
68. Ibid.
69. Project motivation 2.1.83 para 2.4.
70. Draft Five Year Plan (Health) Table 2.
71. Ibid para 2.2.
72. Ibid Table 6.
73. Development Priorities para 2.46.
74. Ibid.
75. Development Priorities para 3.51.
76. Development Priorities para 2.46.

77. Project motivation 12.2.83 para 8.52; also Transkei's Housing Policy (draft) para 5.3.2.
78. Housing Policy para 5.2.12.
79. Development Priorities 2.14.
80. Ibid para 2.15.
81. Ibid para 2.18.
82. Ibid para 2.19.
83. Ibid para 2.17.
84. Ibid para 2.16.
85. Hawkins Associates (1989); Wood P C and A M van Schoor (1976). "The Agricultural potential of Transkei".
86. Project motivation 5.1.83 paras 1 and 6.
87. Based on 600 ha at R765/ha plus equipment and operating costs for one year.
88. Based on estimates in Tate and Lyle report to Tracor, p. 167.
89. Based on 700 ha at R765/ha plus equipment.
90. Under investigation 1983.
91. Project motivation (Sugar) (Draft) unnumbered 1983/4, paras 1,2, and 3.3.
92. Ibid paras 2.3 and 11.1.
93. Project motivation 5.13.82 paras 2 and 7.
94. Draft project motivation under discussion 1983.
95. Development Priorities para 2.22.
96. Project motivation (Fuelwood and Pole plantation) (Draft) 11.1.83.
97. Development Priorities para 2.27.
98. Ibid.
99. Ibid.
100. Ibid para 2.35.
101. Ibid para 2.36.
102. Ibid para 2.33.
103. Project motivation 19.1.83/4.

104. Mining Corporation (1982) "Known mineral occurrences in the districts of Mt Ayliff, Flagstaff, Lusikisiki and Bizana in the Republic of Transkei." Report to Osmond Lange Inc.
105. Development Priorities paras. 3.35, 3.50; Project motivation 17.1.83.
106. Project motivation 17.1.83.
107. Project motivation 4.1.83 and 12.2.83. White Paper paras.
108. Development Priorities para 2.22, 3.36 and 3.51.
109. Project motivation 4.1.83.
110. Development Priorities para 2.21 and Table 5 item 3.5.
111. Project motivation 12.2.83 paras 9.2 - 9.3.
112. Ibid.

CHAPTER ELEVEN      IMPLEMENTATION II - PROGRAMME AND PRIORITIES

This chapter focusses attention on the second stage of implementation. After spatial principles (Chapter 9) have been translated into firm, implementable projects (Chapter 10) they need, firstly, to be arranged into detailed schedule for implementation; secondly to be prioritized; and thirdly, each project needs to be written up as an application for financial assistance (except in the case of the rare project that will be funded entirely from Transkei's internal resources). This chapter deals with each of these stages in turn.

Schedule for implementation

A strategic approach operates at the long-range (direction-setting) and short-term (action-oriented) levels. In keeping with that approach, the SDP for the NE region has set out its long-term strategy (Chapter 9) and has worked out a large number of specific, component project (Chapter 10) for each of which an expected duration time, starting date and estimated cost has been established.

In order to co-ordinate the short-term implementation of the plan at regional level, an integrated schedule of implementation is needed. This schedule should indicate what projects are to commence in each year (for a five-year period), their duration period, expected cost, as well as the department or agency responsible for its implementation. This has been set out in Table 11.1 - Schedule for implementation. Implementation proposals for the first five years of the plan (1983/4 - 87/8) have been programmed in detail while long term proposals have been listed under the broad 1988/89 - 2003 period for more precise phasing in the light of experience during the first five years. All cost estimates are at 1983/84 prices unless otherwise indicated. For ease of reference by departments and agencies, a different version of this table has also been drawn up (Table 11.2 in Appendix XI) setting out physical projects by sector. A third table in the series (Table 11.3) identifies those projects requiring further investigation or motivation prior to entering the project cycle.

**Table 11.1 Schedule for implementation**

Year 1983/84	Projects	Estimated cost (R million)	Duration (years)	Plan reference	Comments
<u>Rural</u>	Education: Primary and Junior Secondary	6,82	1	5.3.1.3	Construct 318 classrooms and 108 administrative blocks
	Senior Secondary	0,96	1	5.3.1.3	Construct 60 classrooms
	Health: Residential Clinics	0,115	1	5.3.2.3	Construct 1 residential clinic
	Rural Hospitals	1,90	5	5.3.2.3	Upgrade hospitals at Holy Cross, Bambisana, Canzibe, St Barnabas and Rietvlei
<u>Urban</u>	Industry: Premises for small industries	0,76*	1	5.5.1.3	Lusikisiki
	Health: Hospitals	3,050	5	5.3.2.3	Upgrade St Elizabeth, Umzimkulu, Mt Ayliff and St Patricks Hospitals.
<u>Regional</u>	Main roads: Umtata - Port St Johns			5.2.1.3	Under construction
	Electricity: Urban network			5.2.3.3	Umtata - Lusikisiki (Magwa) - Port St Johns line under construction
	Tourism: Mzamba		1	5.6.1.3	Plan to control future expansion
<u>Agriculture</u>	Maize: Tracor schemes	2,636*	1	5.4.1.3	Expand existing schemes at Bizana, Flagstaff, Libode, Lusikisiki, Mngazi, Mkambati and Umzimkulu
<u>Administration</u>	Co-ordination: EPRDA	0,5*	10*	5.7.3	Establish EPRDA
	EPIDU	0,5*	10	5.2.6.3 / 5.7.3	Establish EPIDU
	Industrial incentives		10*	5.7.3	Organise incentives
	Transido loans	3,2*	10*	5.7.3.	Organise loans
	Tramincor		10*	5.7.3	Establish Tramincor
	Implementation: Tatu, Transido, Tescor and Tracor			10*	5.7.3.2

- Notes:**
1. Denotes 1982/3 prices;  
Denotes 1984/5 prices; all other estimates are at 1983/4 prices.
  2. Basis for cost estimates - See Ninham Shand 1982-83.
  3. Where cost estimates not included in Tables 11.1 and 11.2 these are to be worked out at a later date.

Table 11.1 cont.

Year 1984/85	Projects	Estimated Cost (R million)	Duration (years)	Plan reference	Comments	
Rural	Rural Centres: Plan and organise		1	4.6, 5.7.2, Table 4.5	Plan Rural Centres and organise mobile services at: - Canzibe, Isimelela, Old Bunting, Tombo, Majola, Nkanga - Ibisi, Rietvlei, Malenge	
	Markets	0,484	1	5.5.2.3	Build markets - bus stop - toilets for each Rural Centre	
	Water: Village water supply	1,056	1	5.2.2.3	Supply water to 200 villages	
	Power: Rural electrifi- cation	1,25	1	5.2.3.3	Provision of 250 photovoltaic units.	
	Roads: Tertiary roads	0,975	1	5.2.1.3	Upgrade 300 km of tertiary roads	
	Secondary roads to Rural Centres		1	5.2.1.3	Upgrade and maintain shortest routes to Canzibe, Isimelela, Old Bunting, Majola, Nkanga, Malenge	
	Telecom: Rural radio network	0,3	2	5.2.4.3	Establish radio network link- ing and Umtata base to Rural Centres, hospitals, clinics, Police stations and senior secondary schools.	
	Mobile postal services		1	5.2.4.3	Initiate mobile post office service to Rural Centres in Nyanda and Umzimkulu Regional Authorities	
	Education: Primary/Junior Secondary classrooms	8,03	1	5.3.1.3	Construct 391 classrooms and 111 administrative blocks	
	Senior Secondary classrooms	1,15	1	5.3.1.3	Construct 72 classrooms	
	Health: Residential clinics	1,265	1	5.3.2.3	Construct 11 residential clinics	
	Rural hospitals			5.3.2.3	See Table 5.13.	
	Housing: Government officials in rural areas		1	5.3.3.2	Provision of houses for officials in rural areas	
	Urban	Towns: Lusikisiki (phase I)	11,714*	5	5.2.5.3	) Planning design and provi- ) sion of water, sewage ) disposal, roads and sites ) (residential, commercial, ) industrial, administrative etc)
		Flagstaff (phase I)	7,351*	4	5.2.5.3	
		Mtonjeni (plan)	0,025*	1	5.2.5.3	
		Administration: EPIDU	see 1983/4		5.2.6.3	Establish EPIDU operations in Lusikisiki, Flagstaff.
		Telecommunications: Post Office	0,11	1	5.2.4.3	Upgrade Post Offices at Lusikisiki, Flagstaff.
		Commerce: Markets	0,427	1	5.5.2.3	Plan and construct markets for Lusikisiki, Flagstaff
Industry: Transido depots		0,9*	1	5.5.1.3	Establish Transido depots at Lusikisiki and Flagstaff	
Premises for small industry		0,76*	1	5.5.1.3	Flagstaff	
Education: Technical training		3,32*	4	5.3.1.3	Upgrade Vocational school at Lusikisiki to 350 pupils	
Teachers training		0,62	2	5.3.1.3	Upgrade Sigcau College near Flagstaff	
Hospitals				5.3.2.3	See Table 5.13.	
Housing: Government officials in Towns		1,295	1	5.3.3.3	Lusikisiki (20), Flagstaff (15)	

Contd.

Table 11.1 cont.

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Year 1984/85 contd.	Projects	Estimated Cost (R million)	Duration (years)	Plan reference	Comments	
<u>Regional</u>	Main roads:	Lusikisiki - Magusheni	9,155*	3	5.2.1.3	) Design and construction ) (bitumen surface) )
		Lusikisiki - Port St Johns	6,827*	3	5.2.1.3	) Design and construction ) (bitumen surface) )
		Lusikisiki - Mtonjeni - Natal	32,774*	6	5.2.1.3	)
	Power:	Urban network	0,9	1	5.2.3.3	Extend 66 kV to Flagstaff (initially 22 kV)
			7,97	1	5.2.3.3	Extend 66 kV ring network from Umtata to Mt Ayliff, Mzamba, Mtonjeni and Lusikisiki
	Telecom:	Hydro-electric power		1	5.2.3.3	Prepare project motivation for Mzimvubu scheme
		Micro-wave radio network	2,216	1	5.2.4.3	Micro-wave link up between Umtata, Qumbu, Mt Frere, Mt Ayliff, Bizana, Mzamba, Mtonjeni, Flagstaff, Lusikisiki and Port St Johns
	Tourism:	National Park		1	5.6.1.3	Prepare project motivation for National Park
		Nature Reserve	0,1	2	5.6.1.3	Establish Nature Reserve at Port St Johns (3rd Beach) and Mtamvuma.
	<u>Agriculture</u>	Maize:	Magwa	0,60		5.4.1.3
2 000 ha in areas 4, 5, 5a (Fig 6)			1,73	3	5.4.1.3	Preliminary investigations and establishment of 2 000 ha Maize scheme between Mtentu and Msikaba rivers (Figure 6)
700 ha under Phorium Tenax Tracor maize scheme			0,56	5	5.4.1.3	Convert 700 ha from Phorium Tenax to Maize.
Sugar:		Mkambati		10+	5.4.1.3	Establish new projects at
		Mfolozi	4,3	6	5.4.1.3	Organise project funding
Tea:		Magwa		1	5.4.1.3	Expand from 550 ha to 4 000 ha
		Majola		1	5.4.1.3	Expand Tea estate by 400 ha
Towns:		Commonage production		1	5.4.1.3	Expand
Irrigation:		42 ha schemes	0,186	1	5.4.1.3	Initiate intensive production on commonage land
Livestock:		Upgrade saleyard		2	5.4.1.3	Establish 7 x 42 ha irrigation schemes at Mandlovini, Big Umngazi, Intsimbini, Mfulamhle Nyosana, Dutyini and Makola
		Slaughter blocks	0,084	4	5.4.1.3	Xura Drift, Glengarry, Lourdes, Ntafufu and Nkumzimbini.
		Forestry:	Firewood and pole plantations	9,0	5+	5.4.2.3
<u>Administration</u>		Co-ordination: EPRDA	see 1983/4	10+	5.7.3.1/2	Planting 18 000 ha for woodlots and plantations
		Implementation: EPIDU, Tracor, Tescor and TDC				)
			Tatu	0,347	4	5.7.3.1/2
	Transido		0,55**	4		)
					Capital cost R55 000 operating cost R73 000 pa for 4 years	

Table 11.1 cont.

Year 1985/6	Projects	Estimated Cost (R million)	Duration (years)	Plan reference	Comments
<u>Rural</u>	Rural Centres: Plan and organise		1	4.6, 4.7.2 Table 4.5	Plan Rural Centres and organise mobile services at: - Bambisana, Holy Cross, Magwa, Sipeu and Mantlani - Lubaleko, Maqusheni, Mfolozi and Makwanteni.
	Markets	0,484	1	5.5.2.3	Build market/bus stop/toilets at each Rural Centre
	Water: Village water supply	1,056	1	5.2.2.3	Supply water to 200 villages
	Power: Rural electrification	1,25	1	5.2.3.3	Provision of 250 photovoltaic units.
	Roads: Tertiary roads	0,975	1	5.2.1.3	Upgrade 300 km of tertiary roads
	Secondary roads to Rural Centres		1	5.2.1.3	Upgrade and maintain shortest routes to Bambisana, Holy Cross, Magwa, Sipeu, Lubaleko and Makwanteni.
	Telecommunication: Mobile Postal services		1	5.2.4.3	Initiate mobile post office service to Rural Centres in East Pondoland
	Education: Primary/Junior Secondary School	9,41	1	5.3.1.3	Construct 431 classrooms and 157 administration blocks
	Senior Secondary Schools	1,10	1	5.3.1.3	Construct 69 classrooms
	Health: Residential clinics	0,92	1	5.3.2.3	Construct 8 residential clinics
	Rural hospitals			5.3.2.3	See Table 5.13
	Housing: Government officials in rural areas		1	5.3.3.3	Provision of houses for officials based in rural areas
<u>Urban</u>	Towns: Bizana (Phase I)	11,003*	3	5.2.5.3	) Planning, design and provision of water, sewerage disposal, roads and sites (residential, commercial, industrial, administration etc)
	Port St Johns (Phase I)	1,940	3	5.2.5.3	
	Umzimkulu (Phase I)	3,198	3	5.2.5.3	
	Administration: EPIDU	see 1983/4		5.2.6.3	
	Telecommunications: Telephone exchanges	5,15	2	5.2.4.3	Replace Bizana, Flagstaff and Lusikisiki exchanges with a 1 000 line EMD exchange in Lusikisiki.
	Commerce: Markets	0,64	1	5.5.2.3	Plan and construct markets for Bizana, Port St Johns and Umzimkulu
	Industry: Premises for small industries	2,28*	1	5.5.1.3	Bizana, Port St Johns and Umzimkulu
	Transido depots	1,35*	1	5.5.1.3	Bizana, Port St Johns and Umzimkulu
	Health: Community Health Centre	1,375	1	5.3.2.3	Port St Johns
	Hospitals			5.3.2.3	See Table 5.13
	Housing: Government officials in Towns	1,65	1	5.3.3.3	Bizana (15) Port St Johns (15) Umzimkulu (15)
	Power: Urban network	0,55	1	5.2.3.3.	Low voltage distribution, Bizana, Lusikisiki, Port St Johns
<u>Regional</u>	Demonstration: farms		2	5.4.1.3	Establish demonstration farms at Marubeni, Big Mngazi, Lusikisiki and Bizana
<u>Agriculture</u>					
<u>Administration</u>	Continuation of 1984/85 projects				

Year 1986/7	Projects	Estimated Cost (R million)	Duration (years)	Plan Reference	Comments
<u>Rural</u>	Rural Centres:		5+	Tables 4.5 and 4.5	Investiagie possible future Rural Centres (Category b) in Table 4.3) and expansion of existing Centres.
	Water: Village water supply	1,056	1	5.2.2.3	Supply water to 200 villages
	Power: Rural electrification	1,25	1	5.2.3.3	Provision of 250 photovoltaic units
	Roads: Tertiary roads	0,975	1	5.2.1.3	Upgrade 300 km of tertiary roads
			1	5.2.1.3	Upgrade shortest route to any new Rural Centres
	Education: Primary/Junior Secondary School		1	5.3.1.3	)
			1	5.3.1.3	) Construction programme
			1	5.3.1.3	) pending
	Health: Residential clinics	0,345	1	5.3.2.3	Construct 3 residential clinics
	Rural hospitals			5.3.2.3	See Table 5.13
	Housing: Government officials in rural areas		1	5.3.3.3	Provision of houses for officials based in rural areas
<u>Urban</u>	Towns: Mt Ayliff (Phase I)	3,509	3	5.2.5.3	) Planning design and provi-
	Tabankulu (Phase I)	1,633	3	5.2.5.3	) sion of water, sewage disposal, roads and sites (residential, commercial, industrial, administration etc)
	Administration: EPIDU	see 1983/4		5.2.6.3	Establish EPIDU operations in Mt Ayliff and Tabankulu
	Commerce: Markets	0,427	1	5.5.2.3	Plan and construct markets for Mt Ayliff and Tabankulu
	Industry: Transido depots	0,9*	1	5.5.1.3	Mt Ayliff and Tabankulu
	Premises for small industries	1,52*	1	5.5.1.3	Mt Ayliff and Tabankulu
	Health: Community Health Centre	1,375	1	5.3.2.3	Tabankulu
	Hospitals		1	5.3.2.3	See Table 5.13
	Housing: Government officials in towns	1,1*	1	5.3.3.3	Mt Ayliff (15), Tabankulu (15)
<u>Regional</u>	Power: Urban network	0,19	1	5.2.3.3	Libode - Misty Mount (22 kV)
		0,12	1	5.2.3.3	Transkei Defence Force (PSJ) Port St Johns (22 kV)
		0,07	1	5.2.3.3	Second Beach Cottages (Port St Johns) (22 kV)
<u>Agriculture</u>	Maize: Milling facility	3,3	2	5.4.1.3	Connect Tabankulu to NE ring
	Demonstration: Plots		2	5.4.1.3	Convert Phormium Tenax factory to maize drying, storage and milling plant.
<u>Administration</u>	Continuation of 1985/6 projects				Establish demonstration plots at Rural Centres

Table 11.1 cont.

Year 1987/8	Projects	Estimated Cost (R million)	Duration (years)	Plan Reference	Comments
<u>Rural</u>	Water: Village water supply	1,056	1	5.2.2.3	Supply water to 200 villages
	Power: Rural electrification	1,25	1	5.2.3.3	Provision of 250 photovoltaic units
	Roads: Tertiary roads	0,975	1	5.2.1.3	Upgrade 300 km of tertiary roads
	Education: Primary/Junior Secondary schools			5.3.1.3	) ) Construction programme
	Secondary Schools			5.3.1.3	) pending
	Health: Residential clinics			5.3.2.3	)
	Rural hospitals			5.3.2.3	See Table 5.13
Housing: Government officials in rural areas			1	5.3.3.3	Provision of houses for officials based in rural areas
<u>Urban</u>	Towns: Libode (Phase I)	1,359	2	5.2.5.3	) Planning, design and provision of water, sewage disposal, roads and sites
	Ngqeleni (Phase I)	0,523	2	5.2.6.3	) (residential, commercial, industrial, administration etc)
	Administration: EPIDU	See 1983/4		5.2.6.3	Establish EPIDU at Libode and Ngqeleni
	Telecommunications: Telephone exchanges	3,837	1	5.2.4.3	500 line exchange at Umzimkulu
	Health: Community Health Centre	1,375	1	5.3.2.3	Flagstaff
	Commerce: Markets	0,427	1	5.5.2.3	Plan and construct markets for Libode and Ngqeleni
	Continuation of projects				
<u>Agriculture</u>	Sugar: Mkambati	10,0 *	6	5.4.1.3	Plant 8 000 ha to maize, then sugar
		50,0 *	3	5.4.1.3	Construct 85 ton sugar mill at Mtonjeni.
<u>Administration</u>	Continuation of projects				

Year 1988/89 - 2002/3	Projects	Estimated Cost (R million)	Duration (years)	Plan reference	Comments
<u>Rural</u>	Rural Centres: Expansion			Tables 4.2, 4.3 and 4.5	Plan extensions of Rural Centres as demand occurs.
	Power: Rural Centres			5.2.3.3	Connect Rural Centres to NE ring network
	Roads: Secondary roads			5.2.1.3	Upgrade through routes link- ing Rural Centres to Towns and main roads
	Education: Schools			5.3.1.3	Continue school buildings to meet demand as and where it occurs
	Health: Clinics			5.3.2.3	Extend clinic services as and where demand occurs
	Hospitals	1,35	5	5.3.2.3	Upgrade the hospitals of Canzibe, St Barnabas, Holy Cross and Isimilela
	Housing: Government officials			5.3.3.3	Continue housing program
<u>Urban</u>	Towns: Mtonjeni (Phase II)	10,632*			
	Lusikisiki	11,518*			
	Flagstaff	16,629*			
	Bizana	9,145*			
	Umzimkulu	2,938			
	Port St Johns	1,746			
	Mt Ayliff	3,738		5.2.5.3	Planning phase II of each Town design and provision of services and sites as demand occurs
	Tabankulu	4,479			
	Libode	1,157			
	Ngqeleni	2,577			
	Administration: EPIDU			5.2.6.3	Continuation of operations
	Power: Low voltage distribution			5.2.3.3	Extend to Flagstaff, Umzimkulu Mt Ayliff, Tabankulu, Libode and Ngqeleni
	Telecommunications: Telephone exchange			5.2.4.3	Upgrade exchanges to serve Libode, Mt Ayliff, Ngqeleni, Port St Johns and Tabankulu
	Post offices				Improve postal facilities at Bizana, Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabankulu and Umzimkulu
	Commerce: Market	0,213	1	5.5.2.3	Mtonjeni
	Industry: Transido depot	0,45*		5.5.1.3	Mtonjeni
	Premises for small industries			5.5.1.3	Mtonjeni
	Education: Technical training facility	4,0*		5.3.1.3	Mtonjeni
	Housing: Government officials	0,355*		5.3.3.3	Mtonjeni (10)
	Health: Hospitals	0,020	5	5.3.2.3	Upgrade St Elizabeths
	Community Health Centre	2,75	2	5.3.2.3	Ngqeleni, Libode
<u>Regional</u>	Main roads: Flagstaff to Mtonjeni	7,707*	3	5.2.1.3	)
	Lusikisiki	2,697*	1	5.2.1.2	) Design and construction ) (bitumen surface) )
	Mkambati				
	Power: Rural Centres				Included under Rural projects
	Hydro-electric				Implement Mzimvubu scheme
<u>Agriculture</u>	Further commercial projects to be investigated				
<u>Administration</u>	Co-ordination: EPRDA				) Continuation of operations
	Implementation: EPIDU, Tatu, Transido, Tescor, Tracor and TDC				) as required. EPIDU to ) progressively hand over ) maintenance of urban infra- ) structure to municipalities ) and of main roads to small ) contractors.

**Table 11.3** Projects requiring further investigation or motivation (Includes all projects in Table 11.1 and 11.2 for which specific project motivations have not been prepared in either final or draft form).

Plan reference (SDP)	Project	Comments
5.2.1.3	1. Secondary roads to Rural Centres	Upgrading and maintenance: Phase I to link Rural Centres by shortest route, Phase II to upgrade through routes.
5.2.1.3	2. Tertiary roads	Upgrading about 1 200 km of tertiary road to link the region's 800 villages to the Department of Works and Energy's network, using mainly labour based methods.
5.2.3.3	3. Village water	Adaption of RIW program in NE region.
5.2.3.3	4. Low voltage distribution in 6 Towns	As programmed for Lusikisiki, Bizana, and Port St Johns.
5.2.3.3	5. NE ring - Tabankulu	Connect Tabankulu to NE ring network.
5.2.3.3	6. NE ring - Rural Centres	Connect Rural Centres to NE ring network.
5.2.3.3	7. Rural electrification	Project motivation needed, incorporating Tatu's trials at Nkanga.
5.2.3.3	8. Hydro-power	Project motivation for Mzimvubu scheme.
5.2.4.3	9. Telephone exchanges	Upgrade telephone service to remaining 6 towns.
5.2.4.3	10. Post Office	Upgrade Post Offices in remaining 7 towns.
5.2.4.3	11. Mobile Postal services	In support of Rural Centres.
5.2.4.3	12. Rural radio network	Project motivation on basis of Tatu's and ACAT's work to date.
5.2.5.3	13. Urban Development Plan	Preparation of a National Urban Development Plan to accommodate and provide infrastructure for the levels of urbanization envisaged in the White Paper and motivation 4.1.83.
5.2.5.3	14. Plans for each Town and the Regional Centre	Long term development plans (phased) to outline the future size and shape of each town, with detailed layouts (as needed) of areas for immediate development; also land use of commonage.
Tables 4.2 and 4.5	15. Plans for each Rural Centre	Organisational and spatial plan for each Rural Centre showing its phased development program.
5.2.5.3	16. Urban services for 6 towns	Project motivation for the provision of urban services in the remaining 6 towns.
5.5.2.3	17. Markets (towns)	Project motivation for the provision of markets in each of the region's towns.
5.5.2.3	18. Markets (Rural Centres)	Project motivation for the provision of market/bus stop/toilets at each Rural Centre.
5.3.1.3	19. New schools	Investigation into the need for new schools in areas completely underserved.
5.3.1.3	20. Classrooms and administration blocks	Project motivation for classrooms and administration blocks to meet post 1986 demand.
5.3.3.3	21. Urban development standards	Investigation to propose appropriate urban development and building standards for the NE region.
5.3.3.3	22. Housing for government officials	Project motivation for housing of Transkeian government officials in the NE region's towns and rural areas.
5.4.1.3	23. Maize projects	Project motivation(s) for commercial maize projects in the high potential agricultural belt, and the placing of land earmarked for sugar, under maize in the short term (5 - 8 years).
5.4.1.3	24. Tea estates	Evaluation of expansion plans.
5.4.1.3	25. Commonage production	Project motivation for intensive use of commonage land mainly for food production.
5.4.1.3	26. Demonstration farms and plots	Project motivation(s) to establish demonstration farms and plots.
5.4.1.3	27. Slaughter blocks	Project motivation to construct simple slaughter blocks at Towns and Rural Centres.
5.4.1.3	28. Saleyards	Project motivation to upgrade saleyards
5.4.2.3	29. Woodlots	Investigation into ways of meeting rural households' short term (5 years) needs for firewood.
5.5.1.3	30. Premises for small industries	In NE region towns not included in IDP project motivation (12.2.83)
5.6.1.3	31. National Park	Project motivation
5.7.3	32. Manpower for town and rural development	Investigation into the skills and training available in comparison with the skills needed by persons in key development posts in the NE region's towns and rural areas.
5.7.3	33. Budgetary support for key implementation organisations	Tatu, Transido, Tescor, Tracor, TDC, Tramincor etc; government departments operational in the NE region; non-governmental organisations; municipalities, Regional and Tribal authorities.

### Priorities

The projects set out in Table 11.1, 11.2 and 11.3 have been limited to high priority, physical inputs. Other projects, together with policy matters over which the Plan could have little influence, have been omitted from this document.

It becomes necessary, therefore, to distinguish between these high priority projects in order to identify which should be tackled first. There are several reasons for according projects top priority within the Plan:

- A - Projects that can be implemented almost at once by existing private or public sector organisations, thus by-passing the present shortage of trained manpower in key development positions. Included here are local organisations with proven implementation capacity such as TATU, Transido, Tracor, and Tescor; as well as EPIDU (to be run by an experienced private firm) and ACAT.
- B - Projects that will have considerable impact in improving the standards of living in the region.
- C - Projects that address critical needs in the region.
- D - Projects that will release some constraints on local, productive activities.
- E - Projects that can be financed largely from Transkei's internal resources.

Table 11.4 lists the most urgent set of projects and indicates the reasons for this choice.

### Project motivation

During the preparation of the NE region SDP, a number of externally induced factors (see Appendix IX) culminated in a decision by the Transkei government to take advantage of a regional decentralization package of offer by the RSA in the form of an application for project financing assistance for an "industrial development point" in East Pondoland.

Table 11.4 Projects with highest priority

Category	Projects	Reasons
<u>Rural</u>	1. Rural Centres in Nyanda and Umzimkulu	B, E; also to test response to Rural Centres
	2. Village water supply	A, B, E
	3. Rural electrification	A, B, C, E
	4. Tertiary roads	B, C, D
	5. Rural radio network	A, B, D, E
	6. Building classrooms	B
	7. Building clinics	B
<u>Urban</u>	8. Lusikisiki and Flagstaff	A, C, D; also to assess impact of upgrading towns
	9. Transido projects in Lusikisiki and Flagstaff	A, C, D, E
<u>Regional</u>	10. Magusheni - Lusikisiki - Port St Johns road	A, C, D
	11. Telephone exchange at Lusikisiki	A, C, D
	12. Electricity network to Flagstaff	A, C, D
<u>Agriculture</u>	13. Maize and staple food crop production	A, C
<u>Administration</u>	14. EPIDU	A, C, D and E providing other infrastructural projects are funded.
	15. Budget support for Tatu, Transido, Tescor and Tracor	A, C, D, E
	16. National urban development plan	A, E; also to provide a co-ordinated framework for urban development country wide.
	17. Industrial incentives and Transido loans	D

This particular project motivation broke new ground in a number of ways. Firstly, it was Transkei's largest and most comprehensive application for financial assistance to date; secondly, although initially submitted to the RSA Department of Foreign Affairs, it was transferred to the recently established Development Bank of Southern Africa (DBSA) as Transkei's first request to that organisation for project funding. In the third place, the NPC, in association with the consultants, devised a new format for writing up project applications. The NPC subsequently circulated to all departments a generalised format based on what became known as the "IDP project motivation". It is reproduced here as Appendix XIII. The main elements of the East Pondoland IDP project motivation are summarized below to illustrate both how such a project is to be presented to financing agencies, and the way in which the planning process adopted here (based on Chapter 5 and Figure 5.3) meshes into the DBSA's project cycle. It is important to stress that all components of this large project are integral parts of the NE region's SDP and will be found in the relevant sections of chapter 10 and in Tables 11.1 and 11.2.

The East Pondoland IDP project provides infrastructure necessary to stimulate the industrial development of East Pondoland. It is the key element in a broad based strategy aimed at exploiting the full development potential of the area. The project is geared to meeting the actual and potential market in East Pondoland, and to meeting the needs of its people as consumers and producers. It incorporates the following:

- a) Establishment of an industrial development point (IDP) at Mtonjeni to form the focal point of industrial, agricultural and service development in the region.
- b) Upgrading infrastructure in the towns of Bizana, Flagstaff and Lusikisiki to enable them to operate as effective service centres. This includes the provision of water, sewage disposal and internal roads.
- c) Regional infrastructure to link the IDP with other towns in the region and with the outside world. This includes the construction of a main road to link the IDP to Lusikisiki, Bizana and Southern Natal; upgrading five existing roads to complete the network; provision of electricity and telecommunications in the IDP and three main towns.
- d) A comprehensive set of incentives for industrialists together with industrial sites for large and small scale industries.
- e) Training facilities in support of the infrastructural work and industrial development.
- f) Executing agency to implement the project.

The project will be implemented over ten years starting in 1983/84 at a cost of R 180,77 million at 1982 prices. This represents a cost of R 207,89 at 1983/84 prices as shown in the budget outline in Table 11.5.

To conclude, plan documentation for the SDP comprising the material included in chapters 7 to 11 inclusive, with the latter two chapters devoting particular attention to implementation, was completed at the end of 1983. The subsequent two years have provided an opportunity to observe and reflect upon the way in which early implementation of the SDP actually took place. This will be the focus of our attention the next chapter.

Table 11.5 Budget outline for East Pondoland "industrial development point"  
1983-88

Category	R million (1982 prices) (1)
Roads	48,76
Electricity	13,38 (-5,0 = 8,38)
Telecommunications	7,56
Urban services	30,09
Construction management and infrastructure maintenance	0,50
Industry	6,83
Training	6,12
Housing	1,85
Administration	0,50
	115,59
Total	115,59
Less amount already secured	-5,00
	110,59
Project Finance requested	R 110,59 million (1982 prices)
	R 127,18 million (1983/4 prices)

Note 1. Detailed cost estimates for this project were worked out during the course of 1982. Therefore, allowance needs to be made for inflation in regard to individual cost items.

All too often the regional planner's role in the development process terminates on submission of the planning document. It has been our contention (see above), however, that the planner (be he a consultant or public officer) needs to become more involved in implementation of the plan if planning at regional scale is to be constructive and more effective than has generally been the case.<sup>(1)</sup> As a first step in this direction it is necessary to trace the progress of a plan in order to gauge its implementability and to gain an insight about the fields in which greater involvement by planners could pay dividends.

This chapter describes the intended process of implementation for the NE region SDP as perceived jointly by the consultants and the National Planning Committee. It then proceeds to chronicle the actual progress during the first two years after the plan was completed, namely December 1983 to December 1985. We shall discuss the way in which the plan was launched publicly; responses to the SDP by departments and agencies responsible for its implementation; the intended beneficiaries in the NE region; and the DBSA, which is envisaged as the principal funding agency. Finally, we shall comment on the progress (or lack thereof) in implementation of the administrative, physical and policy components of the plan. Against this background of intended versus actual implementation, we can assess what transpired, distinguishing three categories of influences: factors internal to Transkei and the NE region; external factors; and factors relating to the SDP itself. The implications of this evaluation will be discussed more fully in the final chapter.

#### Intended process of implementation

The National Planning Committee (NPC) viewed the SDP document primarily as a vehicle for stimulating the process of development in the NE region. The plan itself would provide direction and a basis for co-ordinating the efforts of those responsible for implementation at national and local levels. In this sense it was to be both a merger of vertical and horizontal functions and a sequential framework for investment in physical projects in the region by departments and agencies.

Secondly, the NPC envisaged the plan being used as a guide to departments, agencies and other development organisations (private as well as public), indicating suitable physical projects for motivation to various financing bodies. In the third place, the plan provided the NPC with a clear statement of how Transkei intended to translate national policies (as expressed in the Development Priorities White Paper)<sup>(2)</sup> into projects and priorities in the NE region. In this way the NPC envisaged the plan becoming an important component in Transkei's armoury when dealing with funding organisations such as the DBSA or South Africa's Department of Foreign Affairs, both of which require a comprehensive picture of how any one project relates to the wider development context.

The NPC accepted the responsibility for setting the next phase of the planning process in motion (see above page 349). This was to be done at two levels: departmental and political. During preparation of the plan, the consultants and NPC had engaged in extensive consultation with key officials in all departments and development agencies. In addition they held meetings with regional and tribal leaders in the districts as well as with relevant cabinet ministers to keep them informed about progress. On completion of the plan, the NPC circulated copies to all departments and agencies, thereby presenting them with a document to which all had contributed and, it was assumed, endorsed. In its covering letter, the NPC expressed the hope that departments/agencies would use the document for guidance in decisions regarding the location of investment on physical development in the NE region. Political support for the plan was to be achieved by submitting the document to the cabinet for approval and with this backing, disseminating information about it to decision makers in the region.

Implementation of the physical elements of the plan was to occur in a number of ways. Certain projects could be included on departmental budgets; while for others, the department/agency could apply (via the NPC and Department of Finance) to the DBSA or RSA Department of Foreign Affairs for project financing aid or for technical assistance. NGOs could apply for financial assistance from funds set up for that purpose, eg. the LIFT fund<sup>(3)</sup>. The Department of Commerce, Industry and Tourism, within which the NPC is based, also had funding available for rural development projects and assistance to certain development organisations such as ACAT and Zenzele.

On an administrative level, the NPC intended that projects would be implemented by the department or agency designated in the plan (see above chapters 10 and 11). In particular it was envisaged that the agencies established during the previous three years (such as Tracor, Transido, TATU, TMC) would play a leading role in project administration. Their efforts were to be supplemented, in regard to the major public works programme for East Pondoland, by the establishment of EPIDU (see above pages 314 - 318).

As far as policy changes were concerned, the NPC chose to play a less overt role. At their request, all major policy-related issues and proposals for the NE region were documented separately in a report for internal use of the NPC above. The NPC intended to follow up these policy recommendations at appropriate stages in whatever manner it deemed fit at the time. The reasoning behind this move was to separate issues on which there was general agreement (such as urgently needed physical infrastructure and projects encouraging local production) from issues that were either beyond the control of the NPC and even Transkei (such as influx control in RSA), or issues that had not yet been resolved at a political level within Transkei (e.g., land tenure changes, licensing regulations). To have included recommendations on all these matters in a single document would undoubtedly have resulted in deadlock. Therefore the NPC, adopting the principle of concentrating on strengths and working to lessen the impact of weaknesses,<sup>(4)</sup> decided to produce and circulate the SDP on a widespread basis in order to initiate short-term, positive action, while it simultaneously proceeded far more cautiously to pursue several very necessary policy changes without which full development of people and communities in the NE region would never be achieved.

Monitoring of the plan was to be carried out by a specific group, or sub-committee, to be set up under the auspices of the NPC. Information on the financing of all projects passes through the NPC in one of its roles: either that of preparing (or assisting in the preparation of) project aid applications, or in drawing up preliminary documentation of Transkei's capital and recurrent budget. As such the NPC is well placed to monitor projects across a broad front. The schedule for implementation (see Table 11.1) programmed development projects for the period 1983/84 to 1987/88.<sup>(5)</sup>

The NPC also envisaged a role for the planning consultants during the early years of implementation. They were to be engaged to assist the NPC (and departments or agencies if required), firstly, in the preparation of project

applications to funding agencies; and secondly, to participate on Transkei's behalf in negotiations with the funding organisations, thereby partly compensating for the shortage of technical staff in government departments and, indeed, in the NPC itself.

#### Actual progress 1984-85

In the event, implementation of the plan during 1984-85 followed a somewhat different course to that intended by the NPC and its consultants. The actual process will be analysed by discussing, firstly, the way in which the plan was set in motion and how it was viewed both by various persons and organisations involved in its implementation, and by intended beneficiaries of the plan itself. Secondly, we shall establish what progress has been made in terms of physical projects and the creation of the organisational capacity to administer the plan. Thereafter discussion will turn to attempts to monitor the plan, the role of consultants and finally to the lack of progress on policy changes.

#### Premature release of the IDP report

In some respects the plan had been released about midway during its course of preparation by the premature release and discussion of a supposedly confidential application from Transkei to the RSA government for the funding of an "industrial development point" in East Pondoland. This took place at a meeting of the recently established Regional Development Advisory Committee (RDAC) for Transkei's part of Region E<sup>(6)</sup> at Umzimkulu in May 1983. In retrospect, this meeting became an important watershed in the planning process. By way of background it is necessary to understand three processes which were operating in parallel but converged at the meeting. These related to the implementation of a political decision by Transkei's government regarding a proposed "industrial development point" in East Pondoland; to consultation in the planning of NE region; and to the RDAC. These will be discussed in turn.

(i) Transkei's political decision on the IDP. In response to the RSA's 1982 proposals for co-ordinated regional development via the establishment of a large number of growth points,<sup>(7)</sup> Transkei's government made certain decisions about an "industrial development point" in East Pondoland which had been designated: "to be identified"<sup>(8)</sup>. It was Transkei's view that this "industrial development point" should not be a replica of Butterworth which had

been developed during the 1970s on the basis of earlier industrial incentives from the RSA. Despite the number of jobs created there and the expenditure on physical infrastructure, Transkeians had derived little net benefit. Evaluation showed that the contribution from Transkei's coffers to Butterworth's development more or less equalled the total wages paid to Transkeian workers there. Most industrial concerns located in Butterworth were branches of metropolitan-based industries and their operation in Transkei was only viable on account of the incentives. Furthermore most of these firms imported their raw materials to Transkei and exported their final products to the large urban-based markets.(9)

Consequently Transkei did not want to repeat its Butterworth experience, nor did it believe that a sufficient number of medium and large-scale industries would be attracted to any point in East Pondoland on account of its remoteness, its minute markets, lack of raw materials and undeveloped infrastructure. In short, an East Pondoland "industrial development point" had little to offer industrialists in competition with other similarly designated locations (and "deconcentration points") with comparable incentives elsewhere in Region E(10). However, Transkei saw potential advantages in the RSA offer, and particularly in the stated intention that investment on infrastructure in support of an "industrial development point" should be for the economic development of the region as a whole(11). Transkei's government specifically the NPC in close liaison with the Prime Minister, East Pondoland-based cabinet ministers and secretaries-general or directors of key departments and agencies, therefore, took what was essentially a political decision(12) to identify and promote an "industrial development point" in East Pondoland that, by nature of its location and the activities that could be viable there, would maximize net benefit to Transkeians and the region as a whole.(13)

To this end consultants were appointed in September 1982 to identify what would be needed to stimulate manufacturing industry in East Pondoland; to identify suitable industries for an "industrial development point" there; to select the optimum location with a view to maximizing the number of people served; and to identify secondary industrial growth points. This commission was later extended to the preparation of a regional plan for north-east Transkei and the early production of the documentation needed to apply to the RSA for financial assistance for an "industrial development point" in East Pondoland. The latter was duly completed (as an integral part of the regional plan) with the final document being revised many times in close consultation with the NPC. Transkei submitted it officially to the RSA's Department of Foreign Affairs (at that time the primary funding agency for capital projects in Transkei) in April

1983. This document, which has become known as the "IDP report", was confidential in the same way that any government report is restricted to specified internal users until such time as some degree of certainty has been achieved about obtaining funding for the projects and the likelihood of its implementation. For this reason the IDP report was marked "confidential - not for distribution." It was in no way, as was later suggested by particular interest groups (which will be discussed below), an attempt to by-pass consultation with people in the region or to foist an unwanted project onto them.

(ii) Consultation. The second process which came to a head at the Umzimkulu meeting revolved around consultation. Procedures for consultation drawn up by the planning consultants and the NPC at the outset included:

- communication from the NPC to all departments and agencies informing them about the planning exercise and requesting their co-operation as well as participation in planning the region;
- regular liaison between key staff in government/agencies and the planning team (the first series of such meetings have taken place two years earlier during 1981 as a prelude to the preparation of the NE region statistical base);
- participation by personnel from key departments and agencies on the NPC's steering committee which met the planning team at regular intervals (about once a month on average);
- close, informal contact on a continuous basis between core members of the NPC and the planning team;
- several rounds of pre-arranged meetings between members of the planning team (usually accompanied by a NPC representative) and district-based officials, town councillors, staff and other interested persons in the region;
- meetings between the planning team and the three Regional Authorities in NE Transkei;
- ad hoc discussions involving members of the planning team, NPC and senior government officials or politicians regarding specific issues;
- and finally, once the RDAC started meeting regularly in 1983, the planning team attended their meetings.

This consultation process rested on the five main assumptions. Firstly, it was assumed that matters discussed with designated departmental/agency representatives would be reported back through the internal channels of communication to reach senior decision-taking staff; and that departments/

agencies would act in support of decisions or agreements reached at these meetings. Secondly, it was assumed that departments/agencies would send competent and responsible staff to these meetings and that such persons would have some knowledge about what had taken place at previous meetings. Conversely, it was assumed that those departments/agencies directly involved would in fact attend the critical meetings or at least make themselves acquainted with what had been discussed. Thirdly, it was assumed that the NPC was regarded throughout government as the central planning agency through which development and investment decisions were to be co-ordinated. Fourthly, the NPC and planning team assumed that the Regional Authorities (whose membership included all Tribal chiefs) would be an effective vehicle for transmitting information about the planning exercise, together with invitations to submit suggestions, to the people of the region at tribal level. Finally, the consultation process was based on the belief that planning in Transkei was a worthwhile exercise in the sense that government (at all levels) was accountable for the most part, and would generally abide by and attempt to implement the components of an accepted development plan.<sup>(14)</sup> In reality many of these assumptions were to prove invalid thereby diluting the effect of the consultation process. This aspect will be discussed further in Chapter 13.

Thus, at the time of the Umzimkulu meeting of the RDAC (its second general meeting), a fairly complex and interwoven process of consultation had been set in motion, with some components (such as the meetings of the planning team and departmental/agency staff, as well as discussions between the planners' field teams and local people, businessmen) having been in progress for almost two years.

(ii) The RDAC. The third process that explains the background to the Umzimkulu meeting concerns the RDAC itself. As part of the RSA's new regional development initiative, a number of Regional Development Associations (RDAs) were to be set up in order to provide an opportunity for interested persons and organisations within particular localities in each of the nine regions to express priorities for the development of their area. In RDAs were envisaged as being at the base of an hierarchical arrangement of more formally constituted committees in each of the eight regions.<sup>(15)</sup>

Transkei straddles two of the development regions (region D south of the Umzimvubu river and Region E to the north). This means that six of the nine magisterial districts in Transkei's NE region fall into Region E together with

four of the six districts that make up north-west Transkei.<sup>(16)</sup> Towards the end of 1983, Transkei's government established two Regional Development Associations for its area of regions D and E respectively, but named them Regional Development Advisory Committees (RDACs).<sup>(17)</sup> The Region E RDAC was launched at a meeting held at Qaukeni, the seat of East Pondoland Paramount Chief in January 1983. Its function was to act in an advisory capacity to the Department of Commerce, Industry and Tourism, and to liaise with the counterpart committees in Natal and KwaZulu.

The RDAC held its first general meeting at Bizana in March that year. Here it agreed to meet at monthly intervals at different centres throughout the region. Sub-committees were formed to handle agriculture, tourism, infrastructure and industry. Attendance at the meetings was open to any interested persons or organisations concerned with development in the region.

The activities of this RDAC were dominated from the outset by East Pondoland interests and more specifically by members of the Lusikisiki business community working closely with members of the East Pondoland tribal and political hierarchy. The dominance of this group, which was very much in evidence at the Umzimkulu meeting, has become entrenched and Lusikisiki members (including the chairman) regularly make up between 25 and 35 percent of the attendance.

Thus the fateful meeting of the RDAC at Umzimkulu in May 1983 occurred at a stage when Transkei had submitted an application for a substantial (R 207 million) and comprehensive project aimed at bringing development and productive opportunities to those parts of the NE region that held the greatest potential and exhibited the highest population densities.<sup>(18)</sup> At the same time planning of the region as a whole was well advanced. The so-called IDP project was the spearhead of the plan. It had been written up and submitted in advance of the full regional plan for tactical reasons. These included the NPC's intention to be near the front of the queue in its application for financial assistance. This was particularly valid as 49 industrial development points and 11 deconcentration points had been designated and were all seeking aid. Furthermore, the long delays had been experienced previously between the submission of a project and its evaluation.<sup>(19)</sup> The intention of the NPC and the planning team was to hold further consultations in the region when the overall plan was in a draft stage.

A fairly complex process of consultation had thus been underway for some time prior to the establishment of the RDAC. It was at this juncture that an over zealous member of the NPC (whose view of democratic government was that once a report had been completed it should immediately be made available to any interested parties) photocopied the IDP report and circulated it with the agenda about three days before the meeting.<sup>(20)</sup> Thus the plan was triggered off prematurely.

At the meeting, the consultants and two NPC members (excluding the chairman and senior economic planner) were given ample opportunity to present the IDP project and to explain it in the wider context of the NE region. However, the Lusikisiki group interpreted the nomination of Mtonjeni as the designated "industrial development point" as a rejection of Lusikisiki's potential and made their stand on this platform, pledging their total opposition to the IDP project and their determination to have the report changed in order to have Lusikisiki named as East Pondoland's "industrial development point". In the absence of documentation of equivalent detail to the IDP report at this stage, representatives of districts other than Bizana, Flagstaff and Lusikisiki were not convinced that the full regional plan would, in fact, include projects in their areas, and for this reason were inclined to support the Lusikisiki group.

Setting aside the rhetoric and emotion that surrounded discussions about the IDP not only at Umzimkulu but also at subsequent RDAC meetings (even towards the end of 1985), there was but a single issue in dispute, namely, the question of which town would be granted the right to the RSA's industrial incentives. On the face of it, this may seem a valid issue. However, the negative effect of incentives becoming available to one place at the expense of all others in the region had been anticipated and debated at length by the NPC and the planning team in the preparation of the IDP report. It was decided, in discussion with officials responsible for industrial promotion in the Department of Commerce, Industry and Tourism, that Transkei itself would make incentives available (equivalent to those of the the RSA) to a wide range of approved industries at any place in the NE region.<sup>(21)</sup> Although this was stated clearly in the IDP report and explained in detail by the Assistant Secretary responsible for Industry at the Umzimkulu and numerous subsequent meetings, the Lusikisiki group treated it as a hollow promise. What they were claiming, in effect, was that an undertaking of the RSA government had substance whereas that of the Transkei government was less certain. This issue of accountability as well as confidence in government and planning will be discussed below.

All other components of the IDP project were supported by the RDAC and the Lusikisiki group. The projects involved were substantial and incorporated the following:

- upgrading infrastructure in the towns of Bizana, Flagstaff and Lusikisiki to enable them to operate as effective service centres (including the provision of water, sewage disposal, internal roads together with sites for residential, industrial and other uses);
- regional infrastructure to link the towns in the region to adjoining towns and regions (including the upgrading of five existing main roads, development of a new road through the heart of the region's best agricultural land, provision of electricity and telecommunications in the three main towns);
- training facilities in support of the infrastructural work and industrial development; and
- establishment of an executing agency to implement the project.(22)

Close scrutiny of the IDP project's cost estimates(23) reveal that during the first phase (1983/4 to 1987/8) more than 99 percent of expenditure on urban infrastructure would be directed at Lusikisiki, Flagstaff and Bizana (R30,068 million at 1982/3 prices). And in the overall spatial structure of the region, Lusikisiki was designated as the Regional Centre and singled out for priority development (see above Tables 9.3 and 9.4).

But this did little to mollify the Lusikisiki group which persevered with its campaign to have Mtonjani replaced as East Pondoland's "industrial development point". In the face of strong pressure at all levels, Transkei's cabinet finally opted for a compromise towards the end of 1984 designating Mtonjani and Lusikisiki together with a 70 km-long belt joining the two as East Pondoland's "industrial development point". This has been accepted by the RSA government.(24)

Would the outcome have been materially different had the IDP report not been released for public debate in advance of the SDP for the whole region? Priorities in the SDP ensured that whenever urban development did commence in the region, Lusikisiki would receive first priority in any event. At that juncture, therefore, it is likely that Lusikisiki would have been better off irrespective of whether Mtonjani remained the IDP or whether Lusikisiki had originally been the only IDP. What could make a difference in the future will depend upon Transkei's ability to deliver the equivalent incentives in other

towns and places as promised. If Transkei succeeds then the Lusikisiki pressure group's efforts will have been to no avail other than to have wasted a lot of manpower and time which could have been put to more productive uses. But if Transkei fails to deliver the incentives, Lusikisiki's fears will have been substantiated and the town will in all probability derive more benefits from the RSA's incentives. Had Lusikisiki been designated the sole IDP at the outset, the potential benefits for development and infrastructure throughout East Pondoland (which at the time of writing appear quite feasible - see discussion below) would not have been even a possibility. For under this scenario the IDP project would have been limited to upgrading Lusikisiki's infrastructure and improving the road linking it to the RSA bitumen-surface road network. We have thus a classical conflict between the interests of a single place as opposed to those of the sub-region as a whole including that place. The roles adopted by the planners and local vested interest groups respectively were no different to what one would expect of such a trade-off situation. In the final analysis, the belt linking Mtonjani to Lusikisiki seems destined, in any event, to remain an underdeveloped anomaly on the region's records.

On the positive side, the energy with which the Lusikisiki group pursued its objectives augurs well for the future participation of the local business community in the development of the town and its hinterland.

#### Responses to the Spatial Development Plan

Towards the end of 1983 the Spatial Development Plan was formally launched by the NPC. This was done by circulating some 30 copies of the final draft to all departments and agencies with a request for comments. By February 1984 there had been virtually no response, so the NPC convened a meeting at which the consultants presented a synopsis of the SDP and answered the few questions posed. The meeting was well attended by departmental heads but there were some notable absentees such as representatives from the Department of Local Government and Land Tenure. On the basis of the favourable response at this meeting, the NPC authorised the printing of 100 copies of the SDP with the intention of circulating them among departments, agencies and senior officials in the region.(25)

During this period it has become clear that the departments do not regard the SDP as binding on their activities despite their participation in the planning process and their assistance in identifying projects. This situation seems to

reflect two attitudes both of which are widely prevalent in government. These are an apathy to planning and the view that the NPC is a relatively unimportant body. Together these attitudes are indicative of low levels of accountability in Transkeian government. But this was not the case among the agencies, for Transido, Tracor and TATU in particular have responded positively to the SDP and appear to be using it as a framework for their own plans and projects in the NE region. The SDP was submitted to cabinet in 1984 but by the end of 1985 had not yet been debated. The explanation for this does not indicate reservations about the plan but rather the relatively low priority attached to plans and planning at that level of government.

On account of the absence to date of political support for the plan and its not having been adequately circulated or explained at district level, the SDP has had little impact in the region itself (apart from members of the RDAC). It is thus most unlikely that communities at local level are even aware of its existence, far less the projects for which local motivation was envisaged, e.g., rural access roads, village water supply and rural electrification projects.(26)

In contrast the SDP was received more enthusiastically by the organisations that provide most of the funding for Transkei's capital projects, namely the RSA's Department of Foreign Affairs (DFA)(27) and the DBSA. On the basis of discussions with senior officials in both organisations(28) it is evident that the SDP succeeded in providing the quantified strategic focus together with a prioritized action programme of implementable projects which both organisations require as a framework for their investment decisions. The DFA tended to be more concerned about the absence of policy recommendations in the SDP, and it is clear that the NPC had not discussed the policy proposals for the NE (submitted as an internal report to the NPC - see p. 164 above and Appendix X) with the DFA. From a spatial point of view, the DFA was concerned that the NE region's 800 or so rural villages had no apparent economic base, yet infrastructural projects (access roads and spring protection) were being proposed for them. Was it not a waste of scarce funds to invest in villages doomed to extinction? In response it was argued that Transkei's policy was to improve the living conditions of the present residents(29) in the expectation that improved access and time saved through the provision of water would create opportunities for small-scale productive activities at village level.(30)

The DBSA's comments need to be viewed against the background of a new organisation establishing its own modus operandi. Towards the end of 1983, when the SDP was in the final stages of preparation, the DBSA had not yet come into operation. However, it was known to be using the World Bank project cycle<sup>(31)</sup> as a model. With this in mind the planning consultants and NPC tried to gear the SDP to a format that would be useful to the new bank. In this they were successful as borne out in the meetings with senior DBSA staff towards the end of 1984 and again in 1985. The Bank's official response to the plan, tabled at a meeting in Umtata on 28 November 1985, stated that "...in general the SDP is viewed as an extensive, well prepared development plan reflecting the needs, constraints and opportunities of the area. It also presents a picture of what development might very well be like over the longer term."<sup>(32)</sup>

Turning specifically to the IDP project (which brought together many of Transkei's priorities in the region), the Bank's response was that it was too comprehensive and over-ambitious. The Bank's delegation expressed their concern about Transkei's capacity to handle less complex projects. They were looking for evidence in practice of co-ordination in both planning and implementation on the part of Transkei's departments/agencies. The absence of such common purpose in Transkei government has been discussed above. Furthermore, the Bank remarked on Transkei's inability to meet its contribution towards moving projects through the cycle. Despite Transkei's having submitted 143 projects to the Bank (more than any other area) they were not progressing well, largely because of Transkei's lack of capacity to carry out its share of the work (such as clarifying items of information, responding to questions, arranging site visits, attending meetings) required to advance a project through the cycle from identification to implementation (see Appendix VI). Another difficulty from the Bank's point of view was that Transkei was lagging in its agreed contribution of 10 percent of the cost of projects.

The Bank quoted the proposed EPIDU as evidence of Transkei's inability to manage the infrastructural aspects of the IDP project. This interpretation is valid up to a point, but it leaves unanswered the question of how to expand Transkei's capacity to administer and implement projects. For EPIDU was conceived to fill this very gap as reference to its objectives and components (see above pp 315-6) will confirm. While accepting the Bank's justifiable concern about financing projects in what amounts to an organisational void in

Transkei, its rejection of EPIDU (or some smaller-scale variation) is difficult to understand. If DBSA is aiming to promote "development" in Transkei<sup>(33)</sup> (in the sense discussed in Chapter 2) one of the areas requiring most urgent attention is building up the organisational capacity to administer, implement and maintain projects. Thus the shelving of EPIDU may well turn out to be an opportunity lost.

The Bank's long delay in responding to the IDP project was also due to a mismatch between the form of the project and the prevailing stage in the evolution of DBSA's modus operandi. The project had been written up and submitted in an integrated, comprehensive form in the belief that DBSA's organisational framework would be geared to regions, with functional specialists operating in each regional team. As it turns out in practice, functional specialization prevailed during the project's first 18 months at the Bank which resulted in its overall perspective being overlooked.<sup>(34)</sup> During the second half of 1985 the Bank re-organised its internal structure in such a way that a regional team would first assess the strategic merits of any project in terms of its contribution to the overall development of the area. Then it would be referred to sectoral specialists (operating across all nine development regions in the RSA) for more detailed evaluation.

By the end of 1985 the Bank was thus able to explain to Transkei that it required clarification of the economic development strategy for East Pondoland, and, in particular, a resolution of the apparent conflict between the agricultural betterment policy of the department (which DBSA regards as unsuitable for the region) and Tracor's (more acceptable and realistic) policy focussing on commercial projects to complement initiatives in the traditional sector.<sup>(35)</sup> Once the Bank was satisfied that Transkei was committed to a workable strategy, components of the overall project would be referred to the relevant sectoral teams for appraisal.

The Bank's delegation went on to explain that it was also looking for programmes for each sub-sector (e.g., Transkei's priorities for the next year or two on a rolling schedule). The basis for this had been established in the Development Priorities White Paper and the policy sections of draft chapters of the five-year plan but, with the notable exception of the roads programme, had not been worked out for other sub-sectors. At a previous meeting, DBSA staff had also remarked on the need to introduce a pilot phase into large,

region-wide projects such as those to upgrade 1200 kms of rural access roads, or to improve the water supply in 800 villages. In these cases, the identification of a specific pilot stage would speed up the process of project appraisal and implementation. Finally the Bank's delegation pointed out that future projects would move through their part of the cycle more smoothly if they were submitted as sectoral components, e.g., urban infrastructure with priority for Lusikisiki.

To sum up this discussion about responses to the SDP, it appears that the plan document was readily understood by, and proved useful to, the more sophisticated and planning-oriented organisations which are already committed to long-range planning as a prerequisite to shorter-term investment decisions. Examples include Transido, Tracor, TATU, DBSA and DFA. Within Transkei few government departments undertake their own internal planning or have the capacity to use a planning document of this nature.

#### Progress on physical and administrative projects (1983/4 to 1984/5)

Implementation of physical projects in the region has been sluggish with the least progress being made in the rural and administration sectors. Following the format of Table 11.1 we shall report on those projects in which there has been some positive action since the SDP was produced.

##### Rural

Of the projects aimed specifically at improving the life chances of rural dwellers there has been no tangible progress in the following:

- rural centres with mobile services to act as periodic markets;
- rural electrification based on low cost photo-voltaic units;
- upgrading of tertiary roads to villages and secondary roads to designated rural centres;
- rural radio network; or
- provision of housing for rural based officials.

By the end of 1985 16 of the planned 18 residential clinics had been built together with some hospital renovations. Almost 800 classrooms (as well as 1615 pit latrines) out of a planned 1341 classrooms for the 1983/4 to 1985/6 period had been constructed at a cost of R8,78 million - some way short of the projected R24,62 million. Only two of the planned 376 administration blocks were built. Four projects on a country-wide scale are in the pipeline to provide rural villages with basic water supplies (RIWP); to set up small-scale village industry/marketing areas (VIMAs) at major villages and service centres which have developed around hospitals and educational institutions; to train

windmill keepers, rural builders, market gardeners and village artisans<sup>(36)</sup>; and to establish firewood and pole plantations. In all these cases, locations in the NE region could become part of the pilot phase of these projects. Among the NGOs, ACAT has been particularly active in extending its savings clubs and by the end of 1985, had established 217 in the NE region.

The concept of Rural Centres is receiving some attention from TATU, which is undertaking research to support the development of a pilot Rural Production and Marketing Centre (RPMC) at Baziya some 40 kms south-west of Umtata. Once this is under way TATU intends developing the prototype on a widespread basis throughout Transkei. Coupled with Transido's VIMAs and the emergence of a Rural Production and Marketing Action Group,<sup>(37)</sup> which also operates as the steering committee for the consultants on the Baziya pilot project<sup>(38)</sup>, these initiatives are likely to give effect to the concept of intermediate centres aimed at stimulating local production and marketing activities while at the same time providing a focal point for the delivery of services to the surrounding tribal area. It seems likely that VIMAs or RPMCs will be established at a number of the rural centre/periodic market locations designated in the SDP, but that this will be according to the respective programmes of Transido and TATU rather than the SDP.

Thus while there has been little by way of tangible rural projects to date, a lot of valuable preparatory, organisational work has been completed and the basis has been set up for a widespread approach to integrated rural development once the pilot stages of these projects have been completed. One may ask what the SDP has contributed to these country-wide initiatives in rural revitalization. On balance it can be said that the SDP has added weight to the movement for integrated rural development in Transkei in a number of ways. It has documented the living conditions in rural areas, thereby providing the statistical basis for motivating rural projects; and it has highlighted specific projects that will improve the provision of basic needs and increase the opportunities available to rural households. The SDP also integrated those projects with more conventional regional and urban-scale projects to establish a comprehensive plan for the development of one region; while within the NE, the plan identifies focal points at which pilot projects, of the type now being developed, can be tested. For it is only by undertaking projects that government will obtain the feedback to enable it to improve the implementation of future projects and provide a firmer basis for motivating finance for new projects.

### Urban

There has been some progress in the NE region's nine towns since the end of 1983. Most significant has been the highly successful establishment of Transido's depot for small industries at Lusikisiki. A similar depot is under construction in Mt Ayliff, depot sites have been secured in Flagstaff and Tabankulu; and small-industry premises are being constructed in Umzimkulu. Transido has also obtained funding for a project to establish market centres at various small towns throughout Transkei including all those in the NE region and at Mzamba.<sup>(39)</sup> Markets have been constructed by Transido at Mt Ayliff, Tabankulu, Libode and Port St Johns, while those at Bizana and Umzimkulu are in the DBSA project cycle. A project has also been submitted to DBSA for the upgrading of Mtumbane settlement in Port St Johns,<sup>(40)</sup> whose municipal water supply and sewage disposal systems are currently being improved with the construction of a dam. Water supplies to Ngqeleni and Libode are included in the first phase of a urban infrastructure project involving 25 towns, even though both rated low among regional priorities in the SDP.

The urgent need to prepare comprehensive structure plans for Lusikisiki (in particular), Flagstaff, Bizana and Port St Johns are currently high on the priority lists of both NPC and the Department of Local Government and Land Tenure. At the time of writing, however, no decisions have been taken to undertake these plans. Some ad hoc urban developments include the layout and partial servicing of 192 residential sites in Lusikisiki; 106 in Flagstaff, 102 in Bizana, 100 in Umzimkulu; the tarring of Tabankulu's main street and construction of its civic centre. Upto the end of 1985 there was no known progress in regard to education, health, telecommunications, electricity and government housing projects in the towns.

### Regional

Some progress has been made on all the regional-scale projects in the SDP. By far the most significant will be upgrading (to bitumen surface) the road from Magusheni to Lusikisiki (see Figure 10.1), the contract for which was awarded late in 1985. Other main road projects that are either being implemented or appear on the short-term roads programme, are Umtata - Port St Johns (implementation phase); while Lusikisiki - Port St Johns, Flagstaff - Mtonjeni and Mkambati - Redroad<sup>(41)</sup> are all in the preparation or appraisal phases of the DBSA cycle.

The Xalu dam regional water supply scheme upon which Lusikisiki's urban growth depends, is being appraised by the Bank; and the Umzimvubu basin water and hydro-electricity scheme has featured prominently in discussions between Transkei, DBSA and the RSA during the past year. Extension of the main electricity grid (66 kV) had reached Majola (on the eastern arm) and was approaching Tsolo (on its western arm) by the end of 1985. The RSA has completed a telecommunications study of the NE in preparation for its upgrading projects there.

In regard to tourism, a plan to control development in and around Mzamba has been completed<sup>(42)</sup>; the nature reserve at Third Beach, Port St Johns is in operation; while the Mkambati national park project has been changed from a tourism proposition to one of using existing facilities for educational purposes.<sup>(43)</sup>

### Agriculture

In 1985 Tracor produced a revised agricultural strategy for the NE region which is complementary to the SDP. Its main recommendations include inputs to the traditional sector such as increasing the effectiveness of the agricultural extension service; strengthening community organisations; re-establishment of a strong co-operative movement; provision of credit to traditional farmers; improved marketing facilities; and upgrading of livestock off-take. Commercial sector projects to be promoted or expanded were tea, sugar and maize.

The East Pondoland (Mbambati) sugar project is central to development of the entire area. Tracor has done a substantial amount of lobbying on this project since the SDP was completed, but is facing strong opposition from the SA Sugar Association. In the Bank's terminology, this project is in the preparation and appraisal phase; Tracor is optimistic about it going ahead although not in the immediate future. As noted above (Pages 282 - 3, 333, 340 and Appendix X), the development of Mtonjeni as a small town is entirely dependent on this sugar project. In anticipation of this project, Tracor has completed sugar trials and undertaken other preparatory work in the area. Expansion of the North Pondoland (Mfolozi) sugar project from 550 ha to 4 000 ha (half of which would be for small holders) is the subject of negotiation between Transkei, DBSA and the S.A. Sugar Association. Tracor's maize schemes benefitted from a good growing season in 185. As far as can be ascertained, there has been no progress in regard to commonage production, irrigation schemes or livestock saleyards.

### Administration

Transkei's development agencies, notably Transido, Tracor and TATU, have made some progress in extending the country's capacity to implement and administer projects or programmes by means of internal training and expansion. To date, however, their efforts have not had any major impact on the administrative capacities of government departments. There has been no progress on the establishment of EPRDA or EPIDU; the rural development programme, assistance to municipalities, regional and tribal authorities; and as far as can be ascertained the offer of ad hoc industrial incentives in the NE, had not been taken up by the end of 1985.

### National scale-projects and programmes

There are a number of national-scale projects that will have a significant effect on development in the NE region. The most important among these concerns the NPC itself. Its relatively weak position within the Transkei governmental hierarchy has been noted above. Further evidence of this is its inability to follow through projects it has initiated. Two related examples emerge from this study. First is the failure to complete the series of regional statistical base studies initiated in 1982. Three of the four regions were researched during 1982-83 but a substantially different, less detailed and non-compatible approach was adopted for the south-western region. Second is the failure to incorporate these statistical bases into an integrated information system of the type proposed in Chapter 5 (see Figure 5.4) despite having access to the staff and computer soft- and hardware at University of Transkei's IMDS, which does a considerable amount of data collection and analysis for the NPC.

On the positive side, however, the NPC has attained a good record with financing agencies. It has made some progress in attempting to get departments to plan ahead, to submit project motivations according to an agreed format, and in establishing a basis, in the Development Priorities White Paper, whereby the DBSA and DFA can assess Transkei's project applications. Further regional plans have been prepared for the SW<sup>(44)</sup> and NW regions<sup>(45)</sup> while the SE region is programmed for 1986/87. In addition the NPC commissioned consultants to assist them in the preparation of project applications for tertiary roads, manpower training and rural service centres<sup>(46)</sup> towards the end of 1984; however, a year later it had not given the consultants sufficiently detailed terms of reference to enable them to start work.

At the end of 1985 the NPC continues to operate within the Department of Commerce, Industry and Tourism as an understaffed, fairly low-status group despite various attempts to transform it into a more effective planning

agency. The achievements to date of the present NPC are, nonetheless, commendable given the constraints under which it operates. However, if Transkei government is to take planning seriously, it will need to create a more effective planning agency than the present NPC.

Other national-scale projects that have a bearing on the NE region are a countrywide geo-chemical study to locate mineral deposits exploitable on a small scale; the establishment, towards the end of 1985, of a Marketing Board whose functions will be to assist in the marketing of all agricultural products in Transkei; and the preparation of a peri-urban study of greater Umtata as a prelude to a comprehensive structure plan for the city. Together with the national urbanization strategy (due to be commissioned in 1986), structure plans to guide the fairly rapid growth envisaged for Umtata and Butterworth<sup>(47)</sup> are important prerequisites without which the proposed urbanization strategy for the NE region towns will hang in a void.

#### East Pondoland IDP project

Reasons for the lack of progress with the project as a whole have been discussed above (pages 380 - 381) as have specific components within it, such as the Magusheni - Port St Johns road and small industries in Lusikisiki. The most important component of the IDP project is the proposed establishment of a sugar project and mill which would provide the economic rationale for the development of Mtonjeni as a service centre. There are currently three options in regard to the East Pondoland sugar project and a decision is expected by mid-1986.<sup>(48)</sup> Firstly, as originally intended, 8 000 ha can be planted under sugar cane (half on a small-holder basis) and a 50 000 ton mill set up at Mtonjeni. This will result in the creation of some 3 000 permanent and 2 000 temporary jobs by 1989 and a population in the order of 18 000 requiring urban facilities and services. This updated projection is within the order of magnitude envisaged in the SDP's target population used to estimate the costs of providing urban infrastructure (see above Table 9.3).

The second option is for a reduced area under sugar and three smaller mills of some 13 000 tons capacity each, located across the area; while the third possibility is that there will be no further sugar development in the region. The latter two options would, of course, negate the development of a substantial service centre at Mtonjeni, though not the need to provide a focal point for the 40 000 people presently living in the area. If Mtonjeni is not to be established, a periodic market/service centre at Holy Cross will become an urgent requirement.

The other important component of the IDP project is urban infrastructure in the towns of Lusikisiki, Flagstaff and Bizana. The Bank, while emphasising the need for Transkei to draw up a national urbanization strategy, accepts that sufficient information is already available from previous reports<sup>(49)</sup> to confirm that these towns will continue to occupy important roles in Transkei's future urban/settlement hierarchy. Accordingly it was agreed that projects to plan them comprehensively to accommodate future growth and to provide adequate infrastructure could proceed in advance of the urbanization strategy.

To sum up, although the targets set out in the SDP's schedule for implementation (Table 11.1) have not been achieved, there has been progress towards implementation of many of the projects set out there. At this stage it appears that the SDP is some way behind schedule but that all its components are still viable.

#### Progress on policy changes

It is most unlikely that more than a handful of people concerned with development and planning in the NE region have seen, far less read, the report on regional development policies<sup>(50)</sup> whose main recommendations are set out here in Appendix XI. Certainly there has been no reference to this report or to its recommendations in some 20 meetings with the NPC staff during the last two years, even though policy matters have often been raised at these meetings. The only policy change of substance for the region since late 1983 is the expansion of Transkeian ownership of all businesses. This emphasis on "parochial 'national' objectives in defending and promoting short-sighted economic policies"<sup>(51)</sup> will serve to retard development in the NE.

At this stage the initiative for policy change lies mainly with the RSA government. For example, with the impending relaxation of influx controls the RSA government is anxious to know the urbanization strategies and projections of areas such as Transkei. It is due to this pressure that Transkei is about to produce a national urbanization strategy rather than on account of the call for it in support of the NE region SDP or any realization within Transkei's government circles that it is a fundamental prerequisite to much of its planning.

The possibility of policy changes also depends to a great extent on the internal political climate. At present some progress is being made regarding land tenure but no details are available yet. The NPC does not play the major

role in either formulating or changing policy - this is carried out at a political level without necessarily much technical input or evaluation.<sup>(52)</sup> This is a very important consideration in understanding the potentials and constraints relating to development in Transkei.

### Conclusions

The slow progress in implementing the SDP during 1984 and 1985 may be interpreted by considering the interaction of three categories of influences: internal factors, external factors and the SDP itself.

Progress was undoubtedly retarded by the prevailing lack of administrative or political accountability within Transkei, allied to which is the widespread lack of commitment to planning. This accounts, to a large extent, for the weak position of the NPC and the difficulties experienced in generating an effective consultation process. When a serious shortage of trained, experienced manpower to administer and implement projects is superimposed on this situation, it is hardly surprising that progress has been slow. But what is encouraging is that, given these weaknesses in Transkei's internal governmental environment, there has been progress at all.

External influences were mainly induced by the DBSA. As discussed above, the SDP co-incided with the establishment of the Bank and our period of review (1984-85) with its own teething difficulties. Now that these have been resolved and it is clear to both the Bank and Transkei how projects are to be assessed, more rapid progress can be expected. Events of a political nature in the RSA during these two years have also had an impact on the SDP. Because certain political pressure groups in the RSA are still concerned with promoting an image of Transkei as an economically viable, independent state, the flow of funding to Transkei has remained steady in spite of the South African economy being in a severe recession. Transkei's internal economy has been sheltered to a certain extent, which means that at a time when cut backs would normally have taken place, Transkei has been able to proceed with its infrastructural programme, particularly in regard to construction of classrooms and clinics. Certainly Transkei's and the NE region's development has not been constrained by the lack of capital. Political events in the RSA are also serving to increase pressure on Transkei to implement the SDP in the NE region, particularly its urban components, and to embark on the preparation of similar plans for its other regions.

Finally we turn to factors relating to the SDP itself. Its suitability as a plan document for sophisticated agencies has been discussed above and recommendations in this regard will be made in the following chapter along with proposals for refinements in the planning process, specifically in the area of consultation.

Notes and References

1. Dunham (1978) op cit.
2. Development Priorities (1983) op cit.
3. Local initiative for Transkei (LIFT) fund was set up to encourage community-scale and other employment creation projects generally organised outside the ambit of departmental activities.
4. See pp. 62 - 3 and 104.
5. It is generally accepted that five years is the longest period for forecasting a capital works programme with any confidence; consequently it was intended that towards the end of this period the NPC would evaluate progress, updating the plan and extending the implementation programme in the light of experience gained during the first years of the plan's operation.
6. See Figure 4.1.
7. See above pp. 84 - 86.
8. South Africa (1982) op cit, p. 9.
9. For a comprehensive discussion see Clark R (1982a) "Strategic options for the development of manufacturing industries in Transkei"; Dewar et al (1984) op cit; and Haines R (1985) op cit.
10. For example, Pietermaritzburg, Hammarsdale, Tongaat-Compensation, or a place on the Natal south coast, probably Port Shepstone, Isithebe or Ezakheni.
11. South Africa (1982) op cit, p. 1.
12. This decision was not announced publicly before the release of the Development Priorities White Paper almost a year later.
13. Development Priorities (1983) op cit para 4.8.
14. Transkei government's lack of interest in planning and development was noted recently by Nkuhlu, their representative on the DBSA board. He reported that "unfortunately there is no evidence that the Government is committed to implementing the development strategy". See Nkuhlu (1985).
15. South Africa (1982) op cit.
16. Region E includes the NE region districts of Bizana, Maxesibeni, Tabankulu, Siphaxeni, Lusikisiki and Umzimkulu, together with the NW region districts of KwaBhaca, Maluti; Mt Fletcher and Qumbu. Its boundary follows the Umzimvubu - Tsitsa rivers.
17. Although we have used Transkei's terminology, its RDACs are, in fact, RDAs in the South African government's terminology.
18. See above pp. 365 - 367.

19. As it transpired an interval of over two and a half years elapsed before the DBSA met Transkei in formal session (28 November 1985) to convey its response to the IDP project.
20. This was done without the approval of the NPC or even the knowledge of its chairman and key members.
21. See above p. 340; also Osmond Lange Inc (1983c) op cit (IDP report) para 7.2 and Appendices B, D, G; and Osmond Lange Inc (1983d) op cit (SDP) p. 102.
22. Osmond Lange Inc (1983c) op cit (IDP report) para 1.3.
23. See above Tables 10.6, 11.1 and 11.5
24. It is anticipated that this most peculiar IDP will be listed in the next edition of the Manual. See South Africa (1982) op cit.
25. The lack of communication both between and within departments as well as the low priority attached to planning is well illustrated by an incident in April 1985. At a chance meeting between the author and the Director of Forestry, who together with his officials had been closely involved in the forestry aspects of the plan, the Director enquired about progress on the plan and when a document would be available. He was understandably piqued to learn that the NPC had supposedly sent copies of the SDP to his departmental Secretary over a year previously.
26. See above pp 294, 299 and 301 - 303.
27. RSA's Department of Foreign Affairs presently finances projects relating to social infrastructure (schools, hospitals, prisons, administration and government facilities), employment creation programmes and any other special projects not handled by the DBSA.
28. The author held discussions on the NE region SDP with senior staff at BDSA on November 1984 and 15 August 1985; and at DFA on 15 August 1985.
29. Development Priorities (1983) op cit paras. 2.2, 2.47 and 2.48.
30. Derman P J (1977, 1981) op cit; also Derman and Maasdorp (1981) op cit.
31. Braun W C (1978) "The Project Cycle". Finance and Development Vol. 15 No. 4 pp. 2 - 9.
32. Development Bank of Southern Africa (1985) "Economic development in North-Eastern Transkei" Report to facilitate discussions between Transkei and DBSA on a Development Strategy for North-eastern Transkei, p. 2.
33. Development Bank of Southern Africa (1984) "Role functions, strategy guidelines and criteria for development aid." Mimeo.
34. Discussions between Transkei and DBSA in Umtata on 28 November 1985.
35. Tracor (1985) op cit.

36. Motivation for TATU on-the-job training programme for rural self employment (1985).
37. The Rural Production and Marketing Action Group is an informally constituted committee which has been meeting at two monthly intervals since early 1985. It has three main functions : to act as a steering committee for the Baziya RPMC project; to liaise on the revitalization of Transkei's rural areas; and, wherever possible, to co-ordinate or rationalize respective activities in rural areas. Under the chairmanship of the Assistant Secretary responsible for rural development in the department of Commerce, Industry and Tourism, its members include representatives of the NPC, Transido, TATU, Tracor, the Department of Agriculture and Forestry, IMDS and the planning consultants for Baziya RPMC (Vandeverre, Apsey Robinson and Associates). Both in the individual persons who attend these meetings and in the range of issues discussed, this group is increasingly playing the role of a quasi national planning committee in regard to rural development.
38. The aim of this project is to develop a methodology for identifying the inputs for an effective prototype rural production and marketing centre, using the disused sawmill at Baziya as a test case. TATU, which has been the driving force behind the project, intends using the results to embark on a more widespread establishment of RPMC at tribal level throughout Transkei.
39. Correspondence between Transido and VARA (Vandeverre, Apsey Robinson and Associates) regarding the proposed location and sizes of these market centres, July 1985.
40. VARA (1985) Mtumbane: upgrading proposals." Report to Department of Local Government and Land Tenure, Umtata. The DBSA undertook a site visit as part of its appraisal process in January 1986.
41. The proposed new road from midway between Lusikisiki and Mkambati, to Mtonjeni and on to Mfolosi on the Bizana - Mzamba road (see Figure 10.1) has been termed "Redroad" because it traverses parts of the area occupied by the so called "red" or conservative, rural Xhosa. See Mayer P and I (1961) Townsmen or Tribesmen.
42. Prepared by Rosmarin, Kriek and Associates (1985) for the Department of Local Government and Land Tenure, Umtata.
43. DBSA (1985) op cit p. 11.
44. Prepared by Rural Development Services (viz. Hawkins Associates) (1983) for the NPC.
45. Currently being prepared by VARA for the NPC.
46. VARA were appointed in November 1984 but have yet to receive constructive terms of reference.
47. Development Priorities (1983) op cit para 2.49.
48. Report of Tracor's representative at meeting between Transkei and DBSA in Umtata on 28 November 1985.

49. See Robinson (1978) op cit; Hawkins Associates (1980) op cit; Osmond Lange Inc (1982, 1983a, b, c, d and e); as well as Development Priorities (1983) op cit paras 2.47 - 2.49.
50. Osmond Lange Inc (1983e) op cit; see also Appendix X.
51. Haines R (1985) op cit.
52. Streek B and Wickstead R (1981) Render unto Kaiser. A Transkei dossier chapters 7, 9, 10 and 11 illustrate the situation.

The aim of this thesis was to formulate and test an approach to the planning of peripheral regions in Southern Africa that would be both effective and relevant at local scale.(1) In the final chapter we shall appraise the study as a whole evaluating the SDP itself in terms of criteria established previously.(2) Thereafter the assessment will turn to the planning process, in the course of which we shall comment on the constraints upon, as well as the opportunities for, spatial planning in Transkei. On the basis of this dual evaluation (plan and process), we shall outline the lessons learned in order to identify how the proposed approach should be revised in the light of experience gained in north-eastern Transkei. Finally, conclusions will be drawn by reference to the hypotheses set out in the first chapter.(3)

### The Spatial Development Plan

The SDP for Transkei's NE region needs to be examined from two perspectives. In the first place, does it adhere to the characteristics of an effective spatial development plan? And in the second, what impact is it likely to have in the region? These issues will be discussed in turn.

#### Characteristics of an SDP

Based on the criteria discussed in Chapter 3, the NE region SDP can be assessed by posing six questions:

- Is the plan feasible, consistent and optional?
- Does it give clear directions for implementation?
- Does it operate as a merger between departments/agencies as well as between local and supra-regional interests?
- Does it contain targets and provisions for reducing poverty, unemployment and inequality?
- Does it focus upon, and offer solutions for, the particular spatial development problems of the NE region?
- Is this plan socially relevant at the local level?

(i) Is the plan feasible, consistent and optional? In financial terms, the SDP is feasible having been developed within the broad framework set out in the Development Strategy 1980-2000(4) and within the more precisely defined parameters of the White Paper on Development Priorities 1983-88,(5) assuming

of course that both these plans are themselves feasible. This is a reasonable assumption as both were prepared and debated at some length by professionals, administrators and political leaders responsible for planning and implementation, in addition to which both documents have been accepted by organisations such as the DBSA and DFA as a framework within which to provide loans and funding for projects in Transkei.(6)

None of the projects in the SDP require technologies beyond the present capabilities of organisations in Transkei or the RSA. The most complex would undoubtedly be the Umzimvubu basin hydro-electric scheme but South African firms have many years of experience in a number of similar projects throughout the sub-continent. Ironically it is the low or appropriate technology projects that will be more difficult to implement. The reasons are, firstly, the negative attitudes of engineers and financiers whose criteria are oriented primarily towards efficiency and profits rather than towards the wider economic benefits and job creation. Secondly, at a political level, appropriate technologies (which, for example, could result in the construction of a functional and easily maintained clinic at around a third of the normal cost) are viewed as "second best" and therefore unacceptable. During the last three years these attitudes are softening, particularly under the guidance of TATU whose argument that appropriate technologies can bridge the gap between currently feasible and desired standards is gaining momentum. In addition TATU has achieved notable successes in demonstrating prototypes such as village water supplies; rural access roads and bridges built by labour-based methods; construction of classrooms and clinics; and in setting up the organisational framework at community level for the implementation and maintenance of these projects.(7)

It is in the project administration field that the SDP's feasibility may be questioned.(8) The plan acknowledges full well Transkei's (and even more so the NE region's) lack of capacity in this area; yet to limit the provisions of a long-term plan to existing levels of implementation is negative and defeatist. Instead it may be argued that the SDP makes explicit provision for improving the region's capacity for implementing, administering and maintaining projects. This can be seen, for example, in the proposals to establish EPIDU which would train a local labour force (and encourage local contractors) and assist the presently defunct municipalities to establish an effective works and maintenance division(9). Other examples of a policy nature include the bolstering of the Regional Authorities by means of an administrative/technical

section<sup>(10)</sup>; the further in-service training of Town Clerks, District Commissioners and Magistrates;<sup>(11)</sup> the creation of a cadre of "out-reach" officers based at district level;<sup>(12)</sup> the re-orientation of Sigcau Teachers Training College to provide in-service courses in vocational subjects; and the upgrading of the NPC to an effective national planning agency.<sup>(13)</sup> Thus while the 1983 implementation capacity in Transkei and the NE region was undoubtedly inadequate to the challenges of the SDP projects, those projects themselves (supported by the policy recommendations) were designed to set in motion a programme making their administration feasible.

On the question of consistency, the SDP strikes a good balance between projects in all sectors, influenced obviously by Transkei's development goals as well as by the NE region's needs and potentials. Many of the projects are complementary, re-inforcing other projects at the same locality. Optimality is achieved in the sense that targets could not be raised. If the projects set out in the SDP (and its policy recommendations) can be realized and maintained over a period of some twenty years, a great deal will have been achieved towards development of the region and its people. The relatively low envisaged level of urbanization (by Third World standards) has been questioned, but viewing the region and, indeed, Transkei within its South African context, the proposed levels of urban growth are at the upper limits of what the region's economy will be able to sustain. Urbanization needs to be measured on a South African, rather than a Transkeian, scale. Thus, for example, the SDP projections<sup>(14)</sup> envisage a substantial out-migration to RSA cities over the 20-year planning period.

(ii) Does the SDP give clear directions for implementation? The SDP has been arranged and documented specifically to facilitate its implementation under the existing organisational structure in Transkei whose main characteristics are unlikely to alter much during the next five years. The proposals have all been translated into tangible projects, for each of which the anticipated cost, intended phasing and the department or agency responsible for its financing and administration, have been set out explicitly in Chapter 10. In addition, the schedule for implementation (Table 11.1) indicates the sequence in which projects are to be tackled and their duration, while in Appendix XI this information is re-tabulated on a sectoral basis, emphasising again who is to be responsible for implementation. The vast majority of those projects are to be financed through DBSA.<sup>(15)</sup>

(iii) Does the SDP operate as a merger between departments and between local and national interests? The planning process, running from establishment of the data base through plan formulation to implementation, is strongly cross-functional. This may be seen in its horizontal dimension by the integration of data relating to the activities of the full spectrum of departments, agencies and NGOs;(16) in the synthesis of the existing situation in the region;(17) in the spatial strategy;(18) and in various phases of implementation(19). In the vertical dimension, the primary research was firmly based at the local level. This is indicated, for example, in the adoption of administrative areas as the basic spatial unit for socio-economic data collection, in the surveys of the basic needs of rural and small town households, and in the surveys of rural traders and their customers.(20) On the basis of this scale of research it was possible to identify local-scale needs and priorities. At the macro scale, policy analysis began by examining Transkei's role in the political economy of Southern Africa and moved through Transkei's long and shorter-term development goals to the current programmes of each department and agency. The SDP thus acts as a merger at regional scale, integrating the activities of various organisations and translating national-scale goals into tangible projects for implementation at specific places at local scale.

(iv) Does the SDP contain targets and provisions for reducing poverty, unemployment and inequality? Both the Development Strategy 1980-2000 and its Development Priorities 1983-88, within whose framework the SDP was drawn up, set out specifically to indicate what steps needed to be taken to reduce poverty and inequality, and to generate employment in Transkei. The main goal of the Development Strategy was to provide "employment and incomes for the entire labour force"(21), or as re-iterated later, to achieve "the greatest possible increase in the earnings and social welfare of Transkei's overall labour force"; and it was resolved that "development should reach all sections of the labour force, i.e., people of all ages who are able and willing to work, those in paid employment, those self employed in towns or on the land and those looking for work".(22) The five-year programme for priorities in public expenditure (1983-88) gave particular attention to employment creation.(23) In both documents, explicit targets were set for employment and project expenditure in different sectors.(24)

The SDP, operating with complementary assumptions and within the ambit of these targets, translated the national (i.e. Transkei) projects to meet needs and potentials within the NE region. At the outset it established a framework of statistical indicators (summarized in Tables 7.45 and 7.46 above) which can be used to assess progress in the various dimensions of poverty, inequality and unemployment since the inception of the plan. The SDP comprises a series of inter-linked projects, the implementation of which can be expected to result in an improvement on those statistical indicators. These projects will result in the creation of jobs and thereby generate incomes in agriculture, local production, marketing, infrastructure and services. In addition, by improving access (both within the region generally and from individual villages to towns) and increasing the time available to members of rural households (e.g., by time savings in the collection of water and firewood), implementation of various components of the SDP should result in greater participation in small-scale productive activities at village and small town level. Furthermore, by providing the opportunity for households not directly involved (or interested) in farming to move into the towns,<sup>(25)</sup> it is anticipated that more income-earning opportunities (particularly in the informal sector) will come into being.

The SDP tackles inequality in both its spatial and social facets. Spatially its projects seek to redress a number of existing imbalances. Firstly, there is the lack of development of the NE region in relation to other similarly endowed areas in South Africa (and also in relation to other regions in Transkei). Secondly, there is the imbalance between expenditure on projects in and around Umtata (and to a lesser extent Butterworth) in comparison with the outlying districts (including those of the NE). Thirdly, within the region there is a substantial difference in the opportunities available to town residents in relation to those in remote villages. The SDP incorporates a balance between projects destined for towns and rural areas and between projects in different parts of the region. This can be seen, for example, in the phased schedule for the development of towns, rural centres and the upgrading of village facilities in Table 9.4 in Figures 9.4, 10.1 and 10.4, as well as the schedule for project implementation (Table 11.1) and the list of priorities (Table 11.4). Social equality is addressed by ensuring that the benefits arising from these projects and the opportunities created are more evenly distributed among socio-economic groups in the region. This will be discussed in greater detail later in this chapter. On consideration, therefore, the SDP can be said to make realistic provision for reducing poverty, unemployment and inequality in the region, and for measuring progress in these dimensions.

(v) Does it focus upon, and offer solutions for, the particular spatial development problems of the region? The SDP pays specific attention to the spatial problems of the region and this was dealt with at some length in Chapter 9. The entire planning process (see Figure 5.3) is geared towards the identification of spatial problems as decision areas on which the plan will concentrate. In the case of NE Transkei, accessibility and communications emerged as the overriding spatial problems, and these were manifested at several levels. In the context of daily life in a rural village, poor access to water and firewood resulted in at least one adult member of each household (usually the wife) devoting a large proportion of her time to assembling the inputs for basic survival, thus depriving the household of her potential productive effort for a large part of each day.<sup>(26)</sup>

These problems were addressed at different levels. At the intra-village scale, difficult access to water and firewood was tackled by the village water supply schemes and a substantially extended woodlots programme<sup>(27)</sup>. At the inter-village/town level, the access-related projects were the upgrading of tertiary roads as well as the proposed rural centres/periodic markets,<sup>(28)</sup> which were designed to bring a range of facilities and opportunities within walking distance of all villages on a bi-weekly or monthly basis. Access between these rural centres and towns was to be improved by the upgrading of secondary roads<sup>(29)</sup> while movement between towns, through and beyond the region was to be facilitated by the improved (and extended) main road network.

Communication at the village scale relates mainly to the need to receive or send messages to people at some distance (often in the event of some emergency at family level). This need was tackled by the proposed rural radio network<sup>(30)</sup> and, indirectly, by improved access roads. At the inter-town and regional scale, the upgrading of the telephone system will greatly improve communications.

The question of access also manifests itself in the non-spatial sense of opportunities, and this was particularly so in the case of limited access to land by village residents. In order to cope with this problem and to encourage urbanization, the SDP proposed the provision of a substantial number of affordable residential erven in the region's towns<sup>(31)</sup> to provide the chance of an alternative lifestyle to people who are presently living in rural areas but who have neither interest nor appetite for farming. This would apply to many of the families of the region's 132 000 migrant workers. Spatial equity has also been achieved via a balance of projects among the nine districts.

Following the principle that an area should not be neglected even if it is poorly endowed,<sup>(32)</sup> the SDP and its programming have endeavoured to spread certain projects equally among the districts on the basis of relative population size.<sup>(33)</sup> Such projects include: village water supplies; rural access road improvements; small-scale rural electricity projects; rural radio network; classrooms and clinics; markets and premises for small industries in towns; and the upgrading of all the towns during the first ten years of the planning period.

(vi) Is the plan socially relevant at the local scale? In order to assess the social equity of the SDP, a typology of nine social groups in Transkei has been drawn up. These are the political elite; entrepreneurs; civil servants (officials, teachers, health workers); and expatriates who together constitute the more wealthy groups or "bourgeoisie".<sup>(34)</sup> The poorer groups comprise urban wage earners; the urban poor; farmers; rural dwellers; and the rural landless.<sup>(35)</sup> Table 13.1 describes the main characteristics of each group and offers a tentative approximation of the relative size of each as well as a comparison with classifications of social groups in Transkei by Southall and in selected African countries by Fair. All nine groups are found in the NE region although there are proportionally fewer civil servants and expatriates (most of whom are based in Umtata). The range of projects in the SDP caters for the needs of all groups to some degree or other.

This typology of social groups provides the basis for evaluating the impact of the SDP in the next section. Suffice to say at this stage that the SDP is potentially socially relevant with its explicit emphasis on projects designed to increase opportunities and improve basic living conditions for the majority of the region's people who are based in the rural areas. Whether the plan actually improves the quality of living and increases the opportunities at local level will depend upon the effective implementation of those projects.

In conclusion the SDP conforms well to the general characteristics one would expect of a spatial development plan. We now turn to an analysis of its anticipated impact in the NE region.

Table 13.1 Social groups in Transkei

Social group	Characteristics	Relative size(1)	Southall's groups(2)	Fair's groups(3)	
Wealthier groups	A. Political elite	Throughout Transkei; wield political power; usually large land holders; often with major business interests.	Less than 1%	1	-
	B. Entrepreneurs	Throughout Transkei; range from small-scale businessmen and those with substantial business interests sometimes extending beyond Transkei; includes private sector professionals; some overlap with group A.	Less than 1%	4	4
	C. Civil servants	Mainly based in Umtata although some are dispersed throughout the small towns and districts; generally better educated, earning medium to high salaries (mostly within the top income quintile); many retain their rural base; some classified as internal migrants; some overlap with group H.	20%	2,3	4
	D. Expatriates	Few in number but influential in financial and technical decision-making; well educated; mainly based in Umtata, Butterworth; usually on contract or secondment from RSA.	Less than 1%	-	-
Poorer groups	E. Urban wage-earners	In large and small towns; employed by group B entrepreneurs; lack the security of group C civil servants; fairly small numbers; retain rural links thus sometimes classified as internal migrants.	3%	-	4
	F. Urban poor	Part of rural-urban drift throughout Southern Africa; usually individual members rather than complete households attracted to towns (especially Umtata) in search of opportunities to improve on rural living conditions (see groups H and I); engaged in informal sector activities or unemployed	8%	-	2
	G. Farmers	Few in number; active farmers who have access to arable land; often have capital from other sources behind them (e.g. from family or business); include small holder farmers assisted by Tracor or estate schemes; also includes "illegal" dagga farmers.(4)	2%	-	3
	H. Rural dwellers	Large numbers; have rights to arable land but do not farm actively; rely on migrant (external and internal) remittances; often have household members in towns in RSA and Transkei seeking work (group F) or in wage jobs (group C and E).	50%	-	1
	I. Rural landless	Increasing numbers; have only residential plots in tribal areas; depend on internal and external migrants as in group H; overlap with groups C, E and F.	15%	-	1

Notes:

1. In the absence of detailed research into Transkei's social groups these tentative estimates have been made to give some indication of the relative size (though not influence) of each group. As such it suggests an order of magnitude rather than a precise estimate.
2. Southall (1982) pp 172-201, distinguishes a Transkeian bourgeoisie comprising 1. Political elite (chiefs and politicians) 2. Bureaucrats 3. Teachers 4. Traders and businessmen.
3. Fair (1985a) pp. 1 - 2, identifies four main social groups in African societies: 1. Poor farmers and subsistence producers 2. Urban poor and informal sector 3. Farmers 4. Employees in full-time, modern sector wage jobs.
4. Although the dagga trade is recognised as highly lucrative, most profits appear to accrue to the middle-men rather than to those who grow it. See Streek and Wickstead (1981) pp. 245-254.

### Impact in the region

The rationale for undertaking planning in the north-east is to bring development to the region and its people - the term development being taken to refer to a process which makes people in general better off by increasing their command over goods and services and by increasing the choices open to them. Although the SDP itself will not achieve this, the document is intended as a means to the desired end. The specific purpose of the SDP is, therefore, to provide a co-ordinated framework for the implementation of a series of development projects. At this stage, two years after completion of the plan document, it is still too early to make an evaluation of the success or otherwise of the SDP. In the previous chapter we reviewed the progress to date and reached the conclusion that preparatory organisational work is progressing but that implementation is behind schedule.

What can be done here is to examine the components of the SDP to assess the extent to which its provisions can be expected (at full implementation) to bring development to the region in a spatially and socially equitable fashion. The spatial distribution of projects has been dealt with at some length in Chapter 9 (see Table 9.4), Table 11.4 and this is shown graphically in Figures 9.4, 10.1, 10.2, 10.3 and 10.4.

An attempt to assess the distribution of anticipated benefits among social groups is shown in Table 13.2 which sets out a matrix. The vertical axis contains a summarized list of the SDP's projects and an indication of the amount to be spent on each within the first five years of the planning period. The horizontal axis lists the social groups identified in Table 13.1. Each cell of the matrix identifies the main beneficiaries, other or potential beneficiaries, or groups expected to suffer disbenefits as a result of a particular type of project. Our discussion will examine the expected impact of the SDP from the perspective of each social group.

The political elite, a very small but highly influential group, stand to benefit from regional and urban projects, in addition to which they are likely to derive gains from the successful establishment of EPRDA and EPIDU. Entrepreneurs are also a small group but they have a vital role to play in encouraging productive and marketing activities in the region. They are likely to benefit from the establishment of periodic markets/rural centres and from improved accessibility in rural areas. As many of the entrepreneurs are based in the region's small towns, urban projects will be to their liking as will the

Table 13.2 Evaluation of the SDP

Physical components of the SDP <sup>(1)</sup>	Proposed Investment (R million) 1983/4-87/8 <sup>(2)</sup>	Recipient social groups in NE region <sup>(3)</sup> (based on Table 13.1)								
		A	B	C	D	E	F	G	H	I
<b>Rural</b>										
Rural centres/periodic markets	0,968		●	●		○		●	●	●
Village water supply	4,224							●	●	●
Rural electrification				●				●	●	●
Tertiary roads to villages	3,9		●			○		●	●	●
Secondary roads to rural centres	n.a <sup>(4)</sup>		●	●	●	○		●	●	●
Rural radio network	0,3		●	●	●			●	●	●
Schools	27,47			●				●	●	●
Residential clinics	4,66			●				●	●	●
Rural hospitals	1,9		●	●				●	●	●
Housing for rural based officials	n.a <sup>(4)</sup>		●							
<b>Urban</b>										
Towns infrastructure and sites	42,23 <sup>(5)</sup>	●	●	●		●	●		●	●
Power - low voltage distribution	0,55		●	●	●	●	●			
Telephone exchanges	8,987	●	●	●	●	●	●		●	●
Post offices	0,11		●	●	○	●	●			
Markets	1,921		●		○	●	●	●	●	○
Small industry premises/depots	8,47 <sup>(6)</sup>		●		○	○	○		○	○
Hospitals/community health centres	7,175		●		○	●	●	○	○	○
Technical/vocational training	3,32 <sup>(6)</sup>		●		○	●	●			
Teacher training	0,62			●						
Schools	n.a <sup>(7)</sup>					●	●		○	○
Housing for officials in district towns	n.a <sup>(4)</sup>		○	●		○	○			
Agric. production on commonages						●	●	●		
<b>Regional</b>										
Main roads	48,756 <sup>(6)</sup>	●	●	●	●	●	●	●	●	●
Power : urban network	9,25	●	●	●	●	●	●			
Hydro-electric	n.a <sup>(4)</sup>	○	○	○	●	●	●			
Telecom. micro-wave radio network	2,216	●	●	●	●	●	●		●	●
Tourism : resorts, parks, reserves	0,1	●	●	●	●	○	○	○		
Mtonjeni IDP	0,025		●		●	●	○		○	○
Industrial incentives elsewhere in NE	n.a <sup>(4)</sup>		●			○	○		○	○
<b>Agriculture</b>										
Maize schemes/storage/milling	8,826						○	●	●	●
Sugar	14,3 <sup>(8)</sup>		●		●	○	○	○	○	○
Tea	n.a <sup>(4)</sup>		●		●	○	○	○	○	○
Irrigation schemes	0,186							●	●	●
Livestock : saleyards, slaughter blocks	0,084		●					●	●	●
Demonstration farms/plots	n.a <sup>(4)</sup>							●	●	●
Forestry : plantations/woodlots	9,0		●			○	○	●	●	●
<b>Administration</b>										
EPRDA/EPTDU	1,0 <sup>(6)</sup>	○	○	●	○	○	○	○	○	○
Support for agencies, NGOs	4,097		●	●	○	○	○	○	○	○

Notes

- Indicates the main beneficiaries, ○ shows indirect (or potential) beneficiaries, while X denotes groups which will incur disbenefits.
- 1. See Chapter 10 and Table 11.1 and Appendix XII for details.
- 2. At 1983/4 prices. See Table 11.1.
- 3. A - Political elite, B - Entrepreneurs, C - Civil servants (based in the NE region towns or in rural areas), D - Expatriates based in the region and tourists, E - Urban wage-earners, F - Urban poor, G Farmers, H - Rural dwellers, I - Rural landless. See Table 13.1.
- 4. Costs not available.
- 5. R30,068 million of this at 1982/3 prices.
- 6. 1982/3 prices.
- 7. Included in rural schools projects.
- 8. Excluding R50,0 million proposed sugar mill (85 ton) construction of which is programmed to commence in 1987/88.

proposed improvements in regional-scale infrastructure, and certain agricultural projects. Improved governmental services will also be to their advantage. It is expected (and hoped) that implementation of the SDP will lead to a marked increase in the region's complement of entrepreneurs.

Civil servants constitute one of the larger groups even in the NE region. Including officials, teachers and health workers, members of this group are relatively well off. As Southall remarks, "in a society where jobs are scarce and where the level of payment is generally low, appointees to official positions occupy an economically privileged position."<sup>(36)</sup> Those based at rural hospitals, clinics and schools will benefit from most rural projects and improvements in regional infrastructure, while those in the towns will be in a position to take advantage of improvements to urban infrastructure as well as the provision of sites and housing. All civil servants stand to benefit from an upgraded administration. Expatriates constitute a very small group in the region and are mainly associated with infrastructural projects, commercial agriculture or tourism. They would benefit mainly from an increase in the number of jobs requiring technical and managerial skills, from better regional infrastructure, and possibly from some urban projects and EPIDU.

Urban wage earners are those employed by the entrepreneurs and often retain close ties to their rural homes, which would make them indirect beneficiaries of any rural projects. But it is the urban and regional infrastructural projects and the jobs these generate that would benefit members of this group. Indirectly they stand to gain from any projects that promote entrepreneurs. If the SDP projects are all implemented, the number of urban wage earners in the region is expected to show a substantial increase.

Many of the urban poor in Transkei are found in and around Umtata and Butterworth, having left their rural homes in search of job opportunities. Nonetheless they are also found in the region's small towns and will benefit from urban projects, and less directly, from work opportunities in regional infrastructure and agriculture.

Farmers stand to gain from all the rural and agricultural projects. Certain regional and urban projects (markets, commonage production) and regional infrastructural projects (roads, power, telecommunications) will also be to their advantage.

Rural dwellers and the rural landless are the largest social groups in the region and it was primarily for their needs that the set of rural projects was designed. They will also benefit from some of the urban and regional-scale projects. What is most significant is that the rural projects, which require a relatively small capital investment (R21 million excluding classrooms), would improve the life chances of a substantial proportion of the region's people.

Disbenefits will be incurred by all the poorer groups if the full range of projects, particularly those in the rural sector, are not implemented.

This coarse-grained analysis has given an indication of who is likely to benefit from implementation of the SDP. Not only the largest groups (rural dwellers and landless) but also the most productive groups (entrepreneurs, farmers and urban wage earners) appear to be well catered for.

### The planning process

The planning process, which incorporates not only the preparation of the SDP document, but also initiated a sequence of consultation and participation by those who will be responsible for implementing components of the plan and the future recipients of benefits or disbenefits arising from its implementation, has been described at length in Chapter 5 and summarized diagrammatically in Figure 5.3. We shall now assess the extent to which this approach was followed in the planning of Transkei's NE region.

#### Plan-making process (See Figure 5.3)

Phase I, during which the parameters influencing the context within which development and planning can take place in the specific region, followed the model closely (Chapter 6) as did Phase II, the framework for strategic analysis (Chapter 7). The long-term scenarios of Phase III were undertaken in two stages, the first being carried out for Transkei as a peripheral region in the South African context (Chapter 6) and the second relating to the NE region and its long-term future within the political and space economies of both Transkei and the RSA (Chapter 8). Strategic constraints and the implications of the scenarios were discussed in Chapter 8 along with the identification of the decision areas for attention in the plan.

The proposed sequence of Phase IV was not followed in the preparation of this SDP, for at the end of Phase III, both the NPC and the planning team assumed that an integrated regional plan embracing policy as well as physical proposals was the appropriate form of documentation. Accordingly the plan document had advanced to a final draft in this form before the NPC decided to separate the physical/spatial components from the policy recommendations. On reflection this was a pragmatic decision given the NPC's determination that implementation proceed at the earliest possible time. Had the plan appeared as an integrated (policy and physical) document, it would undoubtedly have run into opposition from many quarters (both political and departmental) because it would have touched upon a number of policy issues not yet resolved at Transkei level.(37) The futility of attempting to pre-empt policy matters from the regional scale is borne out by the failure of successive efforts to produce even a national five year plan for Transkei between 1979 and 1985(38). Thus the division of the plan into physical (SDP) and policy components was a shrewd tactical move by the NPC. The separation of these facets (in terms of documentation though by no means in process) may well prove an equally useful tactic in other regions of Southern Africa where many important policy issues remain unresolved.

In Chapters 9 and 10 the spatial and physical components of the plan were formulated and evaluated as intended in Phase IV, while policy proposals were written up in a separate report (included here as Appendix XI). The schedule for the implementation and monitoring programme (Chapters 11 and 12) followed the model closely.

#### Consultation process

During both phases III and IV, the planning team engaged in consultation across a broad front with officials in departments and agencies as well as individuals and public officials based in the region. However, these consultations were usually of an informal nature, and it was this aspect of the early consultation process that later led to difficulties and claims (notably by the RDAC after it came into being) that the planners and NPC had not consulted the future "users". The planning team did not keep formal records (e.g., minutes) of the numerous meetings that took place. Although notes on such meetings were retained in their files, there was no formally agreed record of what had been discussed or accepted. Nor was there a co-ordinated list of the

persons present at various meetings (once again the record was limited to notes in the planners' files). As discussed in the previous chapter, the planners also assumed that a certain degree of intra-organisational accountability existed. In retrospect this proved to be an over-optimistic assumption, and there were many occasions when senior staff who did not attend the meeting were not even informed that a meeting had taken place, let alone what was discussed. In the region almost complete lack of vertical accountability persists. Even though officials and representatives at district, tribal and town level were involved in discussions about the plan, information was not passed down the line to lower echelons or to communities at the local level. There was also a lack of continuity in the consultation process as successive meetings in both Umtata and in the region were often attended by different (and frequently unbriefed) persons. Thus while the planners believed they had engaged in extensive and adequate consultation, the persons and organisations being consulted did not always see it that way.

An important perspective on the consultation process in Transkei and the NE region (which is likely to apply widely throughout peripheral regions in South Africa) relates to its novelty. The environment within which development and planning were being undertaken here is not particularly amenable to effective consultation (which requires certain levels of confidence and skills on both sides). For several generations these people and organisations have not been consulted in a meaningful way; at best they have been informed what is to happen to them, or in their area. Even in the public sector, evidence of this is to be found in the lack of foresight and planning beyond the current annual budget, as well as on apathy (if not outright fear) of projecting needs and intentions as far as five years ahead. During the course of this century, the people of Transkei have experienced steadily diminishing control over events and decisions affecting their lives. And in recent decades the spatial policies of the RSA government have cut their opportunities even further.<sup>(39)</sup> It is hardly surprising, therefore, that the people of Transkei (be they presently in the roles of implementers or users) lack confidence that planning and development will be to their benefit.

For these reasons the implicit approach to consultation adopted in the preparation of the SDP turned out to be inadequate. Could all the problems have been anticipated in advance? In retrospect it is easy to retrace the

course of events and to identify the warning signs. But at the time the situation was far less clear, nor was there much in the way of literature dealing with consultation in the peripheral regions of South Africa. A fair amount has been written on the subject in Botswana<sup>(40)</sup> and, to a lesser extent, Zimbabwe, but in both cases the developmental context differs substantially from that of Transkei. As far as can be ascertained no previous comprehensive planning at regional scale in South Africa has attempted even the degree of consultation achieved in the NE exercise. Lessons gained from this experience will be discussed in the following sub-section.

### Lessons from experience of planning in north-east Transkei

The practice of planning results in a learning cycle for all the participants, and this has certainly been the case in our research which has spanned an era of doctrine review in regional planning.<sup>(41)</sup> In this section we shall focus attention on the main lessons learned by the planners from the experience of planning in the NE region and indicate how the proposed regional planning process, described in Chapter 5 and Figure 5.3, should be amended in response to these lessons. These issues fall into four categories : consultation; plan documentation; the DBSA; and decision areas requiring particular attention.

#### Consultation

Five main changes need to be introduced in the light of the NE region experience. Firstly, the entire consultation exercise should become a more explicit and deliberate set of actions aimed at drawing both implementers and users into the planning process from an early stage and keeping them involved through implementation. The steps whereby this can be achieved in terms of the model are outlined in Figure 13.1, which is an amended version of the original model described in Chapter 5 and Figure 5.3. This does not represent a material departure from that originally intended<sup>(42)</sup> or actually undertaken in the NE study, but rather a shift in emphasis whereby consultation becomes more deliberate and exerts a stronger influence on the pace at which the plan making process advances.

The fundamental principle introduced here is that plan formulation should not proceed in advance of the parallel sequence of consultations. Undoubtedly this will slow down the plan making process but our argument is that the slower pace is the

more appropriate one. If consultation cannot proceed rapidly, it would be naive to imagine that implementation can move at the same rate. And if it is the intention of planners and client (here the NPC and Transkei government) to plan simultaneously from top down and bottom up, and to involve the future recipients of the plan in its implementation, as is in fact the case, then it is essential that the plan formulation and the consultation processes proceed in parallel, inevitably moving at the pace of the slower of the two.

Secondly, the regional and tribal authorities, who were selected as the main bodies with whom consultation was to take place in the region itself, proved to be ineffective at channelling information either horizontally or vertically. Instead, a broader-based approach should be followed with the co-ordinating function being vested in the magistrate of each district. At the initiative of the NPC and planning team, the magistrate would be asked to convene a public meeting of headmen, tribal chiefs, members of parliament, municipal councillors, the town clerk, government officials based in the district, NGOs and any other interested persons. At this meeting (one to be held in each district throughout the region) the NPC and the planning team would explain the purpose of the planning exercise and invite contributions in regard to projects needed in their local areas. Such contributions could either be made during the discussion period at the meeting, or on a simple questionnaire (printed in both Xhosa and English) handed out after the meeting. Those present would be requested to discuss the issues raised at the meeting with their constituents and colleagues. Inputs would to be collected by the magistrate and given to the planners (or sent to them directly) within about six weeks. It is felt that this period allows sufficient time for initial discussions and feedback at local level. During this period, it is envisaged that the planning team would be working in the field assembling the data base, and thereby be in a position to establish a network of contacts at the local scale.

A written record of the main points raised at each meeting, together with the names of those who attended, should be drawn up by the planning team and retained on the NPC's files for reference. Similar public meetings, which are to be held at later stages in the planning process, will be discussed below. The reasoning behind this revised approach to consultation in the region is to transfer some of the responsibility for horizontal and vertical co-ordination

within each district jointly to the planning team, the NPC and the magistrate (one of whose main functions is co-ordination). A second intention is to ensure that the NPC takes a strong public stand in the planning process - a necessary step if it is to become an effective central planning agency. This approach is likely to result in a more successful means of communicating information about planning and obtaining participation of people and organisations in the region. The validity of this contention can only be tested in practice.(43)

Thirdly, the consultation process with departments and agencies needs to be focussed more precisely and organised in a more formal manner. In the case of the NE (and for reasons of protocol) the planning team communicated mainly with the head of each department. In many cases he proved to be either overburdened with administrative work or uncommitted to planning. The revised approach involves the NPC writing to, but following up in a face-to-face meeting with, each departmental head. At this meeting he would be informed about the regional planning exercise and introduced to the planning team (usually consultants); the department's participation by means of providing information and suggesting projects would be requested; and, most important of all, he would be asked to nominate a senior person on his staff with whom the planning team could liaise. These persons then become the key links in the horizontal liaison chain. By being party to their selection the NPC will usually be able to ensure that a suitable person is chosen, thereby paving the way for effective communication both within the department and with the planners.

As in the case of district meetings, minutes (or more precisely, a written record of those present and the main points discussed) of all meetings would be kept by the planning team for submission to the NPC at monthly progress meetings.

The fourth change relates to meetings between the NPC (effectively the client) and the consultant planning team. In the case of the NE, it was assumed that the NPC should take the initiative in convening meetings. Accordingly, it established a steering committee of some ten persons representing the NPC itself as well as several departments or agencies whose role was regarded as critical in the planning process. In addition the NPC convened several larger meetings to which most departments or agencies were invited. These were not

always accorded the same importance by the departments as by the NPC, as evidenced by junior or uninterested persons representing the department (if it sent a representative at all). The outcome was inevitably poor communication and a low degree of accountability. Meetings with the somewhat bulky steering committee proved difficult to arrange and were not always well attended. No formal minutes were kept and this predictably fostered misunderstandings. The length of time between meetings often made it necessary for the planning team to consult individual members of the NPC, depending on whoever was available when a problem arose. This proved unsatisfactory for both parties.

The modus operandi of the NPC and planning team can be streamlined and made more effective by establishing, at the outset, a system of regular monthly meetings between a small steering committee and the planning team, and by transferring the responsibility for keeping minutes and for arranging most other meetings to the planning team. In this way the key members of the NPC can be kept fully conversant with progress. Regular meetings also obviate the need for many decisions being taken outside meetings and, when such a decision was taken, it would be reported and become part of the record of the next meeting. Shifting responsibility for the production of minutes to the consultants is an important step because of the NPC's very limited capacity. The mundane but nonetheless critical task of taking minutes, having them typed and distributed before the next meeting is, at present, beyond the capability of the NPC, given its other responsibilities. Yet without this simple procedure accountability will be weak at the centre of the planning process.

Another aspect of the revised approach is to minimize the number of multi-departmental/agency meetings. Instead, the planning team (accompanied if necessary by an NPC member) should meet departments or agencies individually (or in small groups if appropriate), thereby ensuring that the meeting takes place with the designated person in that organisation and that the intended information is conveyed or obtained without delay. Although more time consuming, this direct, personal approach is expected to result in more effective liaison between the planning team and the departments/agencies which will be responsible for implementation.

The fifth revision in the consultation process revolves around the nature of documentation produced. While this is to be discussed further on in this chapter, one aspect concerns consultation. The final draft of the NE region

SDP was presented to government departments and agencies for comment at the conclusion of a lengthy period (over 12 months) of plan formulation and informal consultations. This document represented the outcome of a series of meetings with the NPC steering committee at which successive versions of the document were discussed and revised into what the NPC was satisfied with as its plan for the NE region. On the one hand, this presented difficulties for the departments/agencies because, in many cases, a long period had elapsed between their last formal meeting with the planners and the appearance of the draft SDP. On the other hand, the presentation of the document as a final draft endorsed by the NPC created the impression that it was a fait accompli and that there was no real opportunity for further input.

In order to overcome these problems, documentation should be split into two reports which become the foci of an extended and reasonably drawn out consultation process at departmental and district levels. The first report, which may be termed the "Strategic focus", would cover Phases I, II and III of the planning process (see Figures 5.3 and 13.1) and constitute the planners' assessment of the main issues to be addressed in the plan. It should indicate the results of the first round of district consultations, the procedures for which were discussed above, and it should list the current projects of each implementation organisation active in the region.

This document should be formally presented, firstly, to each department, agency or NGO involved, with a request for amendments, comments and proposed projects; and secondly, to each district magistrate (several copies) with the request that he circulate it to persons likely to read it and convene a report back meeting with the planners to receive both responses from that district and suggestions for projects.

It is to be anticipated that this consultation process will stretch over several months. It will culminate in revisions to the document, the contents of which should, by this stage, be common knowledge among the departments and agencies concerned as well as the better educated and more technically minded leaders at district level.

During this period Phase IV (plan formulation and evaluation) can proceed. The output, termed "Strategy and projects", will summarize the proposed strategy for the region together with the specific projects whereby it will be put into

effect. As before, this document will become the basis for the next round of consultations. It is expected that more definite responses will be forthcoming at this stage, for participants generally find it easier to relate to specific proposals than to an open-ended request for proposals. Once consensus has been reached on this second document, its revised contents can be collated with its counterpart into a final draft SDP about whose acceptability the NPC and planning team can feel confident.

Given the shortage of capable staff, the NPC (and central planning authorities in similar situations) will remain dependent on its consultants to take their report a step further and to revise what in a First World context would be termed a "consultants report", into the government's plan — a task usually carried out by the planning agency's staff, using the consultants recommendations. This extended role of the consultant is necessary if the planning process is not to grind to a halt at the report stage.

#### Plan documentation

On the whole, the format used in the NE region SDP proved effective and well suited to the needs of those organisations which will be involved in financing and implementing its projects. However, on the basis of observing the SDP in use for two years and because of changes in the internal organisation and approach of the DBSA which has emerged as the principal financing agency for developmental projects in Transkei, several refinements can be introduced.

Firstly, the economic development strategy for the region needs to be set out concisely but explicitly. This would strengthen the sectoral base of the SDP and would complement the spatial strategy. In the NE region SDP, the economic strategy was spelled out sector by sector (see Chapter 10) but not drawn together at any point. Secondly, the SDP schedule for implementation (Table 11.1) needs to be given a sharper focus in the form of an action programme to indicate the combination of projects that need to be tackled first. In the NE region SDP this was the intention behind the designation of priorities, shown here as Table 11.4. However, in the light of current DBSA terminology, the material contained in Chapter 11 should rather be titled "action programme".

Thirdly, the format of some tables needs to be adjusted to reflect the current stage of a project in the DBSA's cycle (see Appendix VI) and to accord with the Bank's definition of sectors. These may seem trivial changes, yet inconsistencies of this order result in unnecessary delays in an already slow-moving project evaluation process.

Fourthly, a clearer distinction needs to be drawn between projects under way (or those in a department or agency's budget for that year) and proposed future projects. In this way departments particularly can be encouraged to think beyond the immediate future and to see the potential continuity between current projects and those proposed (in some cases at the planners' initiative) for future implementation.

The fifth change needed in the documentation of the SDP is the introduction of an identified pilot phase for all large-scale or region-wide projects such as upgrading rural access roads, or improving village water supplies. In this way the Bank is likely to be more amenable to financing the somewhat unconventional projects (as most of the rural sector projects are viewed) required in a region like north-eastern Transkei. This revised approach is based on discussions with senior staff at the Bank and is currently proving an effective tactic in practice.

Sixthly, the process is more important than the plan. Therefore, the output of the SDP needs to be viewed increasingly as a series of project motivations rather than as an end product. In this way the process of appraisal and implementation in regard to projects about which agreement has been reached, can proceed without delay while consultations about others continue. This concept is implicit in Phase V of the planning process described in Chapter 10 and Figures 5.3 and 13.3.

Finally, a very much simplified version of the SDP needs to be produced in order to convey its provisions to a wider range of people at local level in the region whose reading levels, experience, opportunities and skills render the present SDP report incomprehensible. This is an important step if the region's people are to become more involved in the planning process and its implementation. Examples of the style and approach to this supplementary plan document include the Environmental and Development Agency's "Peoples workbook" and Botswana's Self Help Housing Association's booklet on procedures for upgrading houses in Gaborone's Naledi informal settlement.<sup>(44)</sup>

#### The Development Bank of Southern Africa (DBSA)

With the increasingly important role played by the Bank in evaluating and financing development projects in Transkei, it will be necessary, as has been suggested above, to adapt the planning process to slot into approach and organisation of the Bank. This will not be difficult for the Bank's stated approach<sup>(45)</sup> is compatible with the objectives and processes advocated in this thesis and tested in NE Transkei.

Towards the end of 1985, the DBSA revised its internal organisation for project evaluation. The Bank is organised in matrix form with one set of teams to assess project applications on a sectoral basis, and another to deal with each region (according to the demarcation of nine development regions in South Africa). Late in 1985 the DBSA started a process of responding to Transkei's project applications by naming the evaluation team. It is too early to be able to assess exactly how the revised organisational system will work in practice, but the tactic of working closely with the Bank (as has been the practice of Transkei's NPC) will undoubtedly be beneficial in streamlining the comprehensive process of project evaluation which is becoming a pre-requisite for the financing of almost any physical development project in Southern Africa.

#### Decision-areas requiring particular attention

It would be incomplete to conclude this discussion without drawing attention to a number of important topics or decision areas that require particular attention.

From an administrative point of view the two matters needing attention in Transkei are the preparation of the terms of reference for planning consultants and the relative weakness of the NPC. Unless consultants are briefed very precisely and at some depth, much of the potential value of their efforts will be lost. However, this requires experience, skill and time on the part of the commissioning body. All these attributes are in drastically short supply as far as the NPC is concerned (which results in its being able to run very few major projects at any one time) and the same crisis pertains (often to a greater degree) in other organisations concerned with development and planning in Transkei. As discussed above, this is not the NPC's only weak area. It also lacks a real power base in government, being housed in a department responsible for specified executive functions (commerce, industry, tourism) rather than in one primarily concerned with management and co-ordination type of activities. The NPC is also severely understaffed, lacking even a telephone receptionist to take messages. Until its role as the central planning agency is established and it is given effective teeth, both in staffing and implementation terms, not only will its role be limited but development planning in Transkei will also remain ineffective.

On the plan formulation side, new ground needs to be broken in the search for appropriate techniques. Many of the sophisticated spatial techniques developed particularly by geographers during the late 1960s and early 1970s, and embraced

enthusiastically by regional planners, are useful in situations where a good data base is available. But even then those techniques need to be simplified and adapted substantially to meet the developmental context in contemporary Africa including such peripheral regions as Transkei. In these regions, where the basic issues of survival, jobs and access to basic facilities dominate, regional planners will need to rely less on economic or spatial analysis and concentrate their efforts more on how plans and projects are to be implemented. Here is the challenge for regional planners concerned about ways of improving the present living conditions and increasing the opportunities open to people living in peripheral areas. And increasingly it is an aspect neglected by most so-called development oriented professionals - planners included.

In South Africa progress in this field is being led by a small number of anthropologists with current experience in the practice of rural and community development.(46) From their research it will be necessary to develop bridging systems of effective administration to fill the void created by the increasingly ineffective tribal system and the western models of public administration. This, in turn, draws attention to the urgent need for vocational and in-service training, particularly of persons who presently occupy administrative and technical positions in Transkei's government.

At the same time it is important to remember that unless policy changes take place, within both Transkei and the RSA, the development of regions such as the NE will remain a lost cause and the funds invested there will fail to have a rejuvenating effect, be they devoted to productive activities or basic services and infrastructure. Such changes are beyond the scope of a spatial development plan, but the SDP's relevance will wane in the absence of parallel policy changes that address structural causes of underdevelopment.

### Conclusions

This research set out to investigate how spatial planning could contribute to solving the problems encountered in the peripheral regions of Southern Africa. It has been undertaken at a time when conventional regional planning doctrine was under attack from several quarters and the very relevance of planning at regional scale was being questioned. This state of flux in regional planning doctrine and practice has provided an opportune setting to establish a methodology embracing the most relevant components of the debate and to apply it in a Third World environment.

Our conclusions are that spatial planning has a role to play in increasing the productive capacities and improving the living conditions of people in peripheral regions. However, this role is constrained both by the structural dimensions of underdevelopment in these areas which spatial planning cannot resolve, and by the extent to which planners are able to remain involved in the development process. We have ventured into the latter field, taking the first steps beyond what might conventionally be regarded as the end product of a spatial plan (Chapter 9). This involved translating the spatial and sectoral policies into specific, implementable projects; co-ordinating them into a schedule for implementation; and linking them into the DBSA project cycle. Projects that emerge from the cycle will be ready for implementation in a physical and organisational sense at local scale in the region.

Although the spatial planner may have designed these projects to achieve certain spatial, economic or social effects, he is generally excluded from their implementation in the field. Unless he becomes involved at this stage of the development process and is in a position to modify a project as contextual circumstances dictate, and to monitor the actual impact of his projects, he will be unable either to ensure that projects have the desired effect, or to learn from experience of implementation. The role of spatial planners in this field has yet to be explored.

Many of the recommendations in this chapter regarding improvements to the proposed planning methodology relate to administrative and organisational aspects. It is apparant that more attention needs to be paid to consultation, communication and community liaison than to the technical side of planning. Thus planners need not only to return to the fields of procedural and substantive theory to bolster their doctrine, but they also need to adopt the approach of McGee's "dirty boots brigade". This requires that planners remain involved in a co-ordinating role with both the suppliers (i.e., departments, agencies, DBSA, etc.) and the end users of the plan from initial field research through plan formulation to implementation. For this is the only way that spatial planning as a discipline (and spatial planners as professionals) can become socially relevant at the local scale.

Notes and References

1. See above p. 5.
2. See above pp. 61 - 63.
3. See above pp. 6 - 8.
4. See above pp. 143 - 147.
5. See above pp. 156 - 157 and Chapter 10.
6. One aspect of the urbanization strategy set out in the Development Priorities document, relating to the creation of some 90 "rural nodes" each with a resident population of 5 000 people by the year 2001, has been widely criticized. In the SDP our response is to start by establishing rural centres or markets on a periodic basis at locations of already proven centrality in order to assess the local demand for a centre of a more permanent nature at some stage in the future.
7. TATU's mission is to prove beyond reasonable doubt that a particular development approach is in the interests of the people and Government of Transkei. Its role is thus that of an initiator for what in the end needs to become massive development campaigns. "More development for less costs" sums up TATU's aim and philosophy. The range of projects in which TATU is currently engaged embodies clinic and classroom construction; self-help housing using a variety of experimental building techniques; spring protection; domestic water supply and small-scale (1 ha) irrigation; labour-based road construction; building a foot bridge across the Umzimvubu; homestead-scale agriculture; manufacture of commonly used products like net wire, tanks, ox carts and furniture; outreach, training and media projects. See TATU (1986) Progress Report.
8. For example DBSA's response to EPIDU. See pp. 380 - 382.
9. See above pp. 314 - 318.
10. See above p. 348; also Appendix X paras. 14.1 and 14.2. and 14.2.
11. See above p. 348 and Appendix X para. 12.11.
12. See Appendix X para. 14.1.
13. See above p. 322 and Appendix X para. 12.5.
14. See above pp. 225 - 229 and 259.
15. In a similar planning exercise undertaken subsequent to this research, the equivalent table to that in Appendix XI has been extended to indicate for each project the source of funding and the current stage in the project cycle.
16. See, for example, Appendix VII Figures 7.1 and 7.2.
17. See Chapter 8 for a synthesis of the main issues.

18. See Chapter 9.
19. See Chapters 10 and 11.
20. See Chapter 7.
21. Development Strategy (1978) op cit para 1.
22. Development Priorities (1983) op cit para 2.2.
23. Ibid, para 1.4.
24. See Table 6.1, p. 148; also Development Strategy, Tables 6.2 and 6.3; and Development Priorities, paras 2.7, 2.12 and Table 5.
25. See above pp. 260 - 261 and 265 - 266.
26. See above pp. 209 - 212.
27. See above pp. 299 and 336 - 337.
28. See above pp. 273 - 276, 294 - 296, 341 - 343.
29. See above pp. 294, 297.
30. See above p. 308.
31. See above pp. 328 - 329.
32. Friedmann (1974) op cit p. 18.
33. See above p. 285 and Table 11.1.
34. Southall R J (1977) "The beneficiaries of Transkeian 'independence'" Journal of Modern African Studies Vol 15 No 1 pp. 1-23; also Southall R J (1982) South Africa's Transkei. The political economy of an 'independent' bantustan, pp. 172-201.
35. Southey C (1981) "Land tenure in Transkei" Report to the National Planning Committee; also Fair T J D (1985a) pp. 1 - 2.
36. Southall (1977) op cit p. 11.
37. Proposals in regard to many of these policy issues are set out in Appendix X.
38. Since 1979 Transkei's five year plan has been "in the course of preparation". During 1983 several draft chapters appeared but there has been little progress since then.
39. See above Chapter 4.
40. See for example, Botswana's District Planning Handbook (compiled by J Wheeler) and the Communal Area Planning and Development report (compiled by S Lawry) which sets the planning, implementation and monitoring processes at both levels indicating the role and scope of consultation at each stage.

41. See above Chapter 2.
42. See above pp. 123 - 124.
43. This approach is currently being used in the planning of Transkei's north-west region, but it is too early to evaluate the results.
44. Environmental and Development Agency (1981) People's Workbook; also Botswana's Self Help Housing Agency (1978) "Family Molefi's housing problems and how they were solved."
45. DBSA (1984) op cit; also Appendix VI.
46. See for example, the work of Derman and Poultney op cit.

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## TRANSKEI : LIST OF PROJECT MOTIVATIONS 1983-1984

SECTOR	PROJECT	MOTIVATION
<u>Infrastructure</u>		
Roads	Transportation: road construction of national, main and secondary roads and bridges 1983/84 to 1987/88	11.1 of 1983/84
Water	Rural development: Rural Initiative Water Programme	3.1 of 1983/84
Power	Electricity transmission and distribution	9.1 of 1984/85
Telecommunications	Communications: development of Post and Telecommunications services	10.2 of 1983/84
Urban services	Urban infrastructure: provision of general facilities in 23 towns	4.1 of 1983/84
<u>Social Services</u>		
<u>Education</u>	Education: Primary and Junior Secondary schools	1.1 of 1983/84
	Education: Senior Secondary schools - general facilities and classrooms	1.2 of 1983/84
	Education: Teacher Training - general facilities	1.3 of 1983/84
	Education: Furniture and equipment - schools and teacher training colleges	1.4 of 1983/84
	Education: Adult Education	1.5 of 1983/84
Health	Health: Community Clinics	2.1 of 1983/84
	Health: Hospitals - major works provision of minimum level of facilities	2.2 of 1983/84
<u>Productive activities</u>		
<u>Agriculture</u>	Maize production	5.1 of 1982/83
	Minor irrigation schemes	5.13 of 1982/83
	East Pondoland Sugar project	5.1 of 1983/84
Forestry	Firewood and pole plantations	6.1 of 1983/84
	Forestry and Nature Conservation development of Nature Reserves	6.3 of 1983/84
Industry	Manufacturing: small industries	12.1 of 1983/84
	East Pondoland Industrial Development Point	12.2 of 1983/84
Mining	Mining: development of geological resources	19.1 of 1983/84
<u>Administration</u>		
Administration	General Administration: key development personnel	17.1 of 1983/84

## APPENDICES

## APPENDIX I     SCENARIO WRITING

The essence of scenario writing is to explore a range of alternative futures in order to identify the strategic discussions that will be required both to avert undesired future state and to achieve the type of future that is preferred. The technique of writing scenario for regional planning embodies a number of distinct characteristics. By nature, it is long range, broad, tentative and divergent; while its methodology involves a sequence of logical deductions based on sets of consistent assumptions.

The methodology involves five stages.<sup>(1)</sup>

(i) Macro-environment. At the outset it is necessary to identify exogenous and endogenous influences on the region in question. This is illustrated diagrammatically in Table 14.1 for a hypothetical region in Southern Africa.

(ii) Scenario solution. Within the ambit of awareness of likely exogenous and endogenous influences, the next step is to identify the most significant components of future change. The interaction of these components generates a range of scenarios from which several can be selected for further development. Table 14.2 presents an example of how two such components (economic growth rate and degree of planning intervention) can be used to create scenarios.

(iii) Scenario development. Once three or four scenarios have been selected, each needs to be developed more fully. This involves, firstly, writing up, in a systematic way, the main thrust of the scenario and the assumptions upon which it is based. Secondly, the implications of each scenario need to be worked out in respect of the most important sectors. Table 14.3 shows how the scenario derived in Table 14.2 can be developed using a matrix. This stage involves brainstorming and logical deduction on the basis of assumptions considered feasible for the particular scenario. In this way the sectoral aspects of each scenario are established.

(iv) Spatial implications. As the spatial component is an important consideration in regional planning, the next step is to explore the spatial implications of each scenario developed in the previous stage. Once again this requires a series of deductions based on feasible assumptions. In both stages (iii) and (iv) it is essential to ensure that the set of assumptions built up are internally consistent for that scenario. Typical sub-headings around which the spatial implications may be structured are shown in Table 14.3.

(vi) Evaluation. Finally, after scenarios have been fully written up in their sectoral and spatial dimensions, each needs to be evaluated according to its overall impact on the future of the region and the implications then spelled out for the main decision areas.

Notes and References

1. This methodology was developed by the author for teaching purposes in the Department of Town and Regional Planning at the University of Natal, based on unpublished working papers of both the "Europe 2000" planning team and the Central London Planning Conference (see M Allan et al, 1974) as well as W Kennet's The Futures of Europe (1976). In the South African context, the most prominent example of scenario writing is that of Patricios (1978) in his paper on "Cities in the 21st Century." The methodology outlined in this Appendix was used by the author to examine alternative spatial strategies for Transkei (see Robins and Robinson (1978) op cit) and to assess the spatial implications of Transkei's Development Strategy 1980 - 2000 (See Robinson (1978) op cit).

Table 14.1    Macro-environmental scan

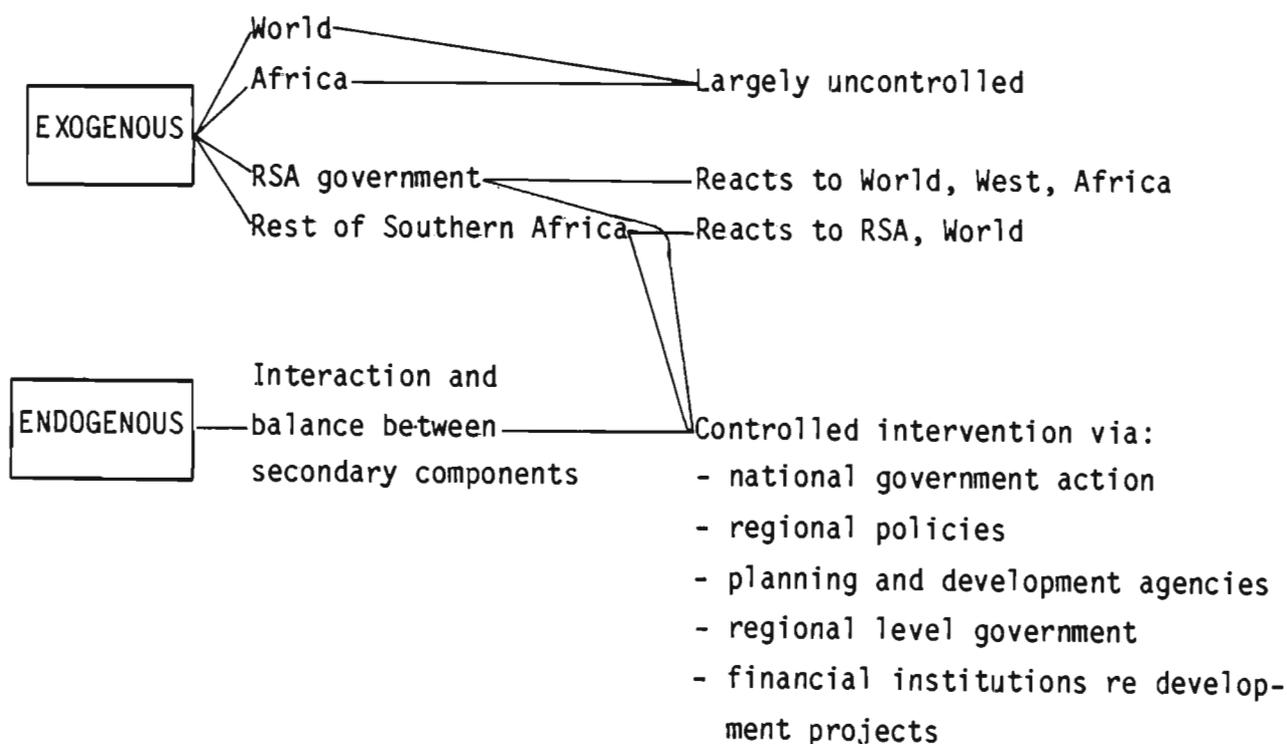


Table 14.2 Scenario selection

	Fast growth	G <sub>1</sub> Slow growth	G <sub>2</sub> Current growth	G <sub>3</sub> Decline
P <sub>1</sub> More planning	1	G <sub>1</sub> P <sub>1</sub>	3	G <sub>3</sub> P <sub>1</sub>
P <sub>2</sub> Current planning	1	2	G <sub>2</sub> P <sub>2</sub>	5
P <sub>3</sub> Less planning	1	G <sub>1</sub> P <sub>3</sub>	4	5

- NOTES :
1. In view of current predictions, it was considered unlikely that there would be fast growth within the time span of the review.
  2. This possible scenario was dropped from review to permit a more distinct differentiation between G<sub>1</sub>P<sub>1</sub> and G<sub>1</sub>P<sub>3</sub>.
  3. Aspects of this proposed scenario were incorporated in G<sub>2</sub>P<sub>2</sub>.
  4. This situation was considered extremely unlikely as was eliminated from active review at an early stage.
  5. In view of the past trends regarding planning control it was thought unlikely that these two approaches to planning would be employed in a situation of strong economic decline.

Table 14.3 Scenario development

Scenario Component	G2 P2	G1 P1	G1 P3	G3 P1
Industry (large , medium scale)				
Industry (small scale)				
Housing demand				
Housing supply				
Physical infrastructure				
Shopping				
Public transport				
Private transport				
Social Welfare				
Natural resources				
etc				
Spatial form				
Location of employment				
Settlement pattern				
Investment priorities				
etc				

APPENDIX II    HOUSEHOLD SURVEYS FOR BASIC NEEDS PLANNING

(An earlier version of this Appendix was published in the Journal for Regional Planning 12, November 1980 pp 12 - 20.)

The recent shift in thinking about the aim of development has resulted in data requirements that are not satisfied by existing statistical systems. One of the proposed ways of filling this gap is by means of suitably designed home-interview surveys.(1)

In that the quality of a plan is constrained by the quality of data upon which it is based, this Appendix will focus on the design and conduct of household surveys to obtain the data needed for basic needs planning. It draws upon research experience gained by the author in preparing an upgrading plan for an informal settlement near Port St Johns and from association with the design of home interview surveys carried out in similar situations by postgraduate students.(2) While it is recognised that a household survey must be precisely tailored to the local context and to the purpose for which it is being undertaken, this paper seeks to establish a common core that can be used as a basis for surveys in a variety of situations.

Basic needs

During the 1970s a new paradigm of development began to emerge. It was one which "gradually realized that development involves much more than merely raising income per head, and that what should be aimed at is the reduction of poverty, unemployment and inequality".(3) According to this approach "one of the explicit goals of development planning should be the satisfaction of an absolute level of basic needs".(4) The term 'basic needs' refers here to minimum requirements that are essential for decent human existence and include items of private consumption such as adequate nutritional intake, shelter and clothing together with access to community services like clean drinking water, sanitation, public transport, health and education facilities. Implicit in the basic needs concept is participation in local decision-making along with the right to hold a productive job and other means of attaining basic needs.(5)

In an operational sense, 'basic needs' can be summarised as minimum requirements of an individual or household for the following items:

1. Shelter
2. Nutrition
3. Clothing
4. Water and sanitation
5. Health
6. Education
7. Transport
8. Participation<sup>(6)</sup>

A strategy for 'basic needs' type development in any community depends in the first place, upon establishing the extent to which these basic commodities and services are available. Next, the existing levels have to be related to resources available within the community. Thereafter a set of targets can be drawn up to represent "the minimum acceptable level of access to specific basic goods and services that will be considered to be tolerable by a stated target date."<sup>(7)</sup> Finally, actual policy packages can be drawn up "to implement the production and delivery of these goods and services to the people for whom they are intended within the planning period."<sup>(8)</sup>

One of the critical pre-requisites for drafting such a strategy, is a sound data base. This will identify the current levels of basic need provision in relation to the resource base; it will inform both the target setting and policy design stages; and it can become the foundation for subsequent implementation. Yet "available statistics in most developing countries are still far from adequate for the purposes of basic-needs planning."<sup>(9)</sup> This is not surprising because the statistical systems in most developing countries are 'conditioned by the prevailing thinking about development' and began to take shape at a time when "the problem of development was seen as essentially an economic one calling, in particular, for a rapid rate of growth of income per head."<sup>(10)</sup>

On the basis of research undertaken for the International Labour Organisation, a strong case has been made for the use of appropriately designed household surveys to obtain data in the form required for basic-needs planning. What is important, however, is not merely collecting suitable data, but organising it in cross tabulations to highlight the relationships that are fundamental to a basic needs strategy. By way of example these include the relation between such basic needs as nutrition, health, education and income; and between access to productive assets, the extent of (un)employment and average wages as explanations of poverty.<sup>(11)</sup>

### Questionnaire design

All household surveys use questionnaires and there are several reasons for making some general comments about their design. Questionnaires provide the channels through which planners obtain certain types of data. Their critical role suggests that careful attention would be devoted to design and conduct. Yet this is not always the case, and particularly so in South Africa. Many questionnaires in current use reflect poor design, are conducted insensitively and are inadequately analysed.

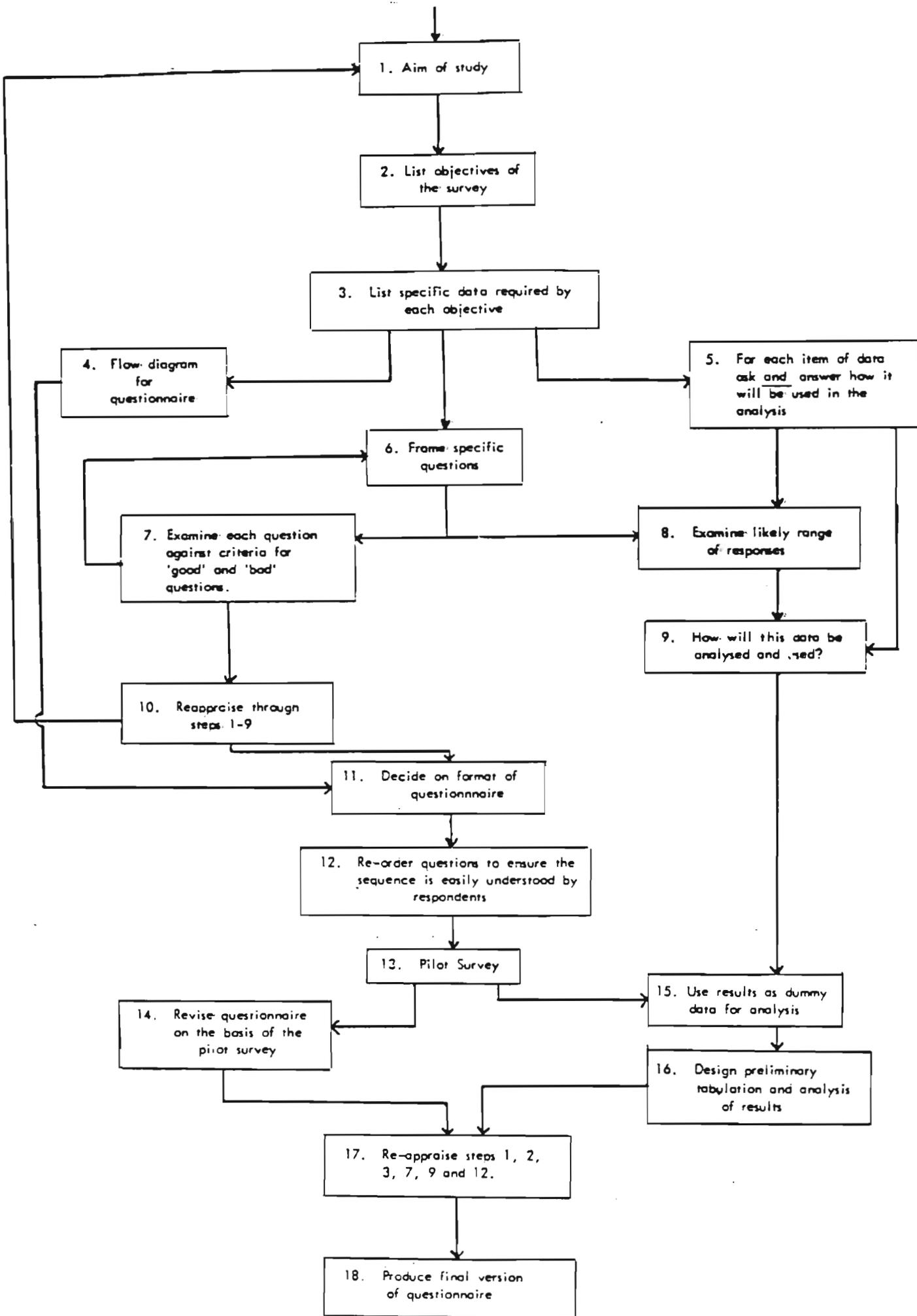
This arises where insufficient attention is paid to the fundamentals of questionnaire design and in situations when the task of household surveys is fobbed off "to the Sociologists because they know about questionnaires". A further problem lies in the household survey being seen as a separate entity - something apart from other data upon which planning is based. Whereas in reality, the household survey forms an integral part of overall data collection, which should itself be the responsibility of the planners who require the data. In addition, with careful organisation, the household survey can become a means of achieving local participation at an early stage in the planning process, and in this way it can become a vehicle for implementation at a later stage.

Table 15.1 describes the sequence of operations in the design of any questionnaire.<sup>(12)</sup> It is intended as a set of guidelines to assist planners to avoid some of the common pitfalls of questionnaire design. The first stage determines the specific direction of the questionnaire which will vary depending on whether the purpose of the study is to upgrade a peri-urban community, or to plan an agricultural betterment scheme or to undertake an urban renewal project, etc. The remaining steps are self-explanatory and will be referred to within the specific context described below.

#### Household surveys for basic-needs planning

In order to show how the arguments outlined above can be applied, a typical situation will be considered. The brief for a plan to upgrade a rural or peri-urban settlement could be set out as follows:

Table 15.1 Questionnaire design



1. To draw up a set of planning proposals to improve the quality of life for the residents of \_\_\_\_\_. These proposals should be guided by the dual principles of meeting the priority needs as perceived by the community; and of economic feasibility for both the residents and local authority.
2. To provide a phased schedule and guidelines for immediate implementation of the plan.
3. To manage the implementation of the plan after its acceptance by the community and the local authority.

One of the early tasks in tackling such a brief is to set up a data base.(13)  
This will involve several types of survey;

- a site survey to establish physical and functional data;
- a home interview survey coupled with an observer checklist to determine household characteristics, attitudes and living conditions;
- a survey of local wages and commodity prices to assess minimum living levels.

The next step in designing these surveys is to list the objectives and then the data required to satisfy each objective. In this case the objectives might be:

1. To identify the physical and functional characteristics of the site.
2. To determine the population, its demographic, employment and income characteristics.
3. To establish how, and to what extent, basic needs are met.
4. To assess the degree of satisfaction with existing conditions and the priorities for improvements.
5. To determine local wages and commodity prices.

The specific data required for each of these objectives are listed in Table 15.2.

Procedures for physical-functional site analysis are a well documented aspect of the practice of physical planning and require no elaboration here;(14) nor do the methods of estimating minimum standards of living.(15) Instead this paper will focus on the design and conduct of the household questionnaire (objectives 2, 3 and 4).

Table 15.2 Data required for basic needs planning in a rural or peri-urban settlement

Objective	Subject	Data required	Source (1)
1. To identify the physical and functional characteristics of the site	Physical data	Climate, rainfall, winds Geology, land form, soils Slopes, orientation Hydrography Vegetation	S S S S S
	Functional data	Sub-regional context General land uses, layout and sub-divisions Roads and footpaths Main surface water drainage Water supply, storage and reticulation Electricity supply, street lighting, telephones Sanitation facilities and refuse collection	S S S S S S S
2. To determine the present population, its demographic employment and income characteristics	Settlement pattern	Number of houses/plots Plot sizes and use Spatial distribution	Air photo/S S/Ho* Air photo/S
	Population	Household size Household structure Age-sex breakdown Fertility and mortality rates Migration patterns	Hq Hq Hq Clinic & Hq Hq
	Activity	Employment breakdown Employment: place, firm, occupation Skills and experience in previous employment Unemployment: amount, type and duration	Hq* Hq Hq Hq
	Income	Formal employment ) Informal activities ) for head and other Contributions ) members of the household In kind )	Hq/L Hq Hq Hq
3. To establish how and to what extent basic needs are met by each household	Shelter	Tenure and rent House types, sizes and use of rooms Construction method; source and cost of materials Age and condition of houses; extensions Occupancy patterns (density, number of households, tenants)	Hq Ho* Hq/Ho Hq/Ho Hq
	Food	Simple diet Sources (home grown, shops) Cooking and lighting facilities Expenditure on food and cooking Income from sale of crops and animals Cost of basic foods Nutritional intake	Hq Hq* Hq Hq* Hq* Hq/L Clinic/Hq/Ho
	Clothing	Source Expenditure Income from sale, repairs Local cost of basic clothing	Hq Hq/L Hq Hq/L
	Water and sanitation	Water sources for drinking and washing (river, reservoir, taps, individual tanks) Reliability Cost Distance to nearest source Daily household consumption Toilet facilities Refuse disposal	S/Hq/Ho Hq Hq S/Hq/Ho Hq/Ho Hq Hq
	Health	Primary health care facilities Distance Cost of service	S/L S/Hq Hq/L
	Education	Education facilities available for children and adults Literacy and highest level of education Number attending school (to level reached) Orientation of education Distance to schools Cost of education, books	S/L/Hq Hq Hq L S/Hq Hq/L
	Transport	Movement patterns (journey to work, shop, school, clinic, etc.) Modes of transport (car, cycle ownership) Public transport (destinations, frequency, cost) Use of public transport Expenditure on transport	S/Hq/Ho Hq/Ho Hq/Hq/L Hq Hq
	Participation in decision-making	Administrative and institutional context (national, and local) Attitude of 'higher' authorities to the community Standards, codes and procedures Community leaders - role and influence Community organisations and committees (powers, functions and role within administrative framework) Role of groups within the community (church, school, co-operative, women's organisations, etc.) Extent of individual participation Constraints and opportunities for increased local participation	L L/Hq L Hq Hq/L Hq/L Hq Hq/L
4. To assess the degree of satisfaction with existing conditions and the priorities for improvements	Degree of satisfaction	'Good' and 'bad' aspects of living in ----- Housing preference and security of tenure Satisfaction with facilities (water, sanitation, etc.)	Hq* Hq* Hq
	Priorities	List most important needs in order of priority Preparedness to pay for certain improvements	Hq* Hq
5. To determine local wages and commodity prices	Wages	Average local wages for main occupation types	L
	Commodity prices for components of the Minimum Living Level (15)	Food ) Clothing ) Fuel and Light ) Washing and cleaning materials ) Accommodation ) This list is Transport ) disaggregated Medical expenses ) into specific Education ) items Replacement of household equipment ) Taxes )	L L L L L L L L L

Notes of data: S=Site survey Hq=Household survey questionnaire Ho=Household survey observer checklist L=Locality survey indicates that the actual questions are discussed in the text.

The underlying aim of a home survey is to provide a channel for contact between the planning team and the community. Whether this is achieved in practice depends on the questionnaire being appropriate to the local situation and on the manner in which the survey is conducted.

It would be tedious and unnecessary to frame actual questions for the entire list of data to be obtained from the household survey (see Figure 2). Instead several reasonably successful innovations and unusual aspects have been selected for discussion. The questions themselves reflect the outcome of steps 6 - 9 in Figure 15.1.

(i) Activity breakdown. This question seeks data about household size, composition and the principal activity of each member of the household. It is designed in the form of a table which enables the interviewer to unravel large and complex households relatively easily. (Table 15.3)<sup>(16)</sup> It should follow the question: "How many people live with you in your home(s)?" This provides a check to ensure that the entire household is recorded in the activity breakdown. Important features of this table are, on the one hand, the arrangement of household members according to their relationship to the head, and on the other, the distinctions within both 'economically active' and 'dependant' categories.

(ii) Employment. Again the data are recorded directly onto a table and establish the relation of each employed person to the household head. (Table 15.4)<sup>(17)</sup>

(iii) Nutrition. (Table 15.5.) In this case a series of 'closed' questions is used to identify each household's sources of food and their consumption patterns. Indirectly these questions also provide information about the overall nutrition intake of the community. Data relating to expenditure on food were not always reliable. Apart from those households working to a fixed budget, many responses suggested that households spent as much as they had on food. Question 24 relates exclusively to the Port St Johns context where some residents caught fish, mussels, etc. both for their own consumption as well as to sell to tourists, local hotels and resorts.

Table 15.3. Household composition and activity breakdown

Relationship to head of household	Sex	Age	Economically Active			Economically Inactive					
			Employed	Un-employed	Work seekers	Household Duties	Pre School	At School	Retired person	Pensioner	Unspecified
Head	M	50	X								
Wife	F	45			X						
Son	M	23	X								
Son	M	15						X			

Table 15.4. Persons in employment

Relationship to head of household	Present occupation	Name of Firm/Employer	Place of Work	Type of Transport		
				To work	From work	How long in this job (years)
Head	Sweeper	Magistrate's office	Town	Bus	Lift	3
Son	Shop assistant	Supermarket	Town	Walk	Walk	1

Table 15.5. Nutrition

22. Do you grow any crops?  
No Why not?.....  
Yes What do you grow?.....  
.....  
Do you sell any crops?.....Name them.....  
.....  
Where do you sell them?.....

23. Do you keep any animals for eating?  
No Why not?.....  
Yes What do you keep?.....  
How many?.....  
Do you sell them?.....Which?.....  
Where?.....

24. Do you get food from the sea?  
No Why not?.....  
Yes What do you get?.....  
Do you sell any?.....What?.....  
Where?.....

25. What food do you buy from shops?  
Fresh food    Groceries    Meat  
Other (specify).....  
Where?.....

26. How much money do you spend on buying food each month?.....

27. How much of all your food is  
grown here?.....  
from the sea?.....  
bought from the shops?.....

Use code: 1 = Most    2 = more than half    3 - about half  
4 = Less than half    5 = very little

Note: Question numbers relate to the Port St Johns Survey (May 1980)

(iv) Satisfaction with existing conditions. (Table 15.6) These questions are 'open ended' to encourage a wide range and depth of response about the degree of satisfaction with the housing situation and with living conditions in general. It is followed by a 'closed' question requiring household heads to make a choice between a range of housing types. Interpretation of responses to this question should take into account that household heads might not all have had experience of the range of options. This question was also designed to test the hypothesis that most households would prefer to remain in their existing settlement outside the town.

Table 15.6. Satisfaction with existing conditions

46.	Are you satisfied with your present housing?
	Yes
	No Why not?.....
47.	What are the 'good' things about living in _____?.....
	.....
48.	What are the 'bad' things about living here? .....
	.....
49.	What things could be put right?.....
	.....
50.	Who could do this?.....
52.	Do you know of any committees to help people with their problems?
	No
	Yes Which committees?.....Who belongs?.....
	.....
54.	Taking all things into account, what sort of housing do you think would suit you best in the future?
	Live here in this house
	Live here but with improvements
	Live in Port St Johns in a house completely built by the municipality
	Live in Port St Johns on a serviced site (road, water, electricity) and build your own house.
	Live in Port St Johns in a house partly built by the municipality but with your being allowed to build extra rooms
	Other specify

On the whole these questions yielded good quality data as well as detailed information, often throwing light on other aspects of local community life such as the degree of influence of various local personalities and committees; levels of despondency or optimism; and the possibility of generating 'self-help' solutions to problems.

(v) Priorities for improvements. (Table 15.7) This question was a successful means of establishing priorities and the range of improvements desired. In particular it helped to distinguish between lower order priorities - the top priority is often clear but it is difficult to rank the second, third and fourth. One danger is that of interviewers prompting or suggesting typical improvements thereby giving a bias to the responses.

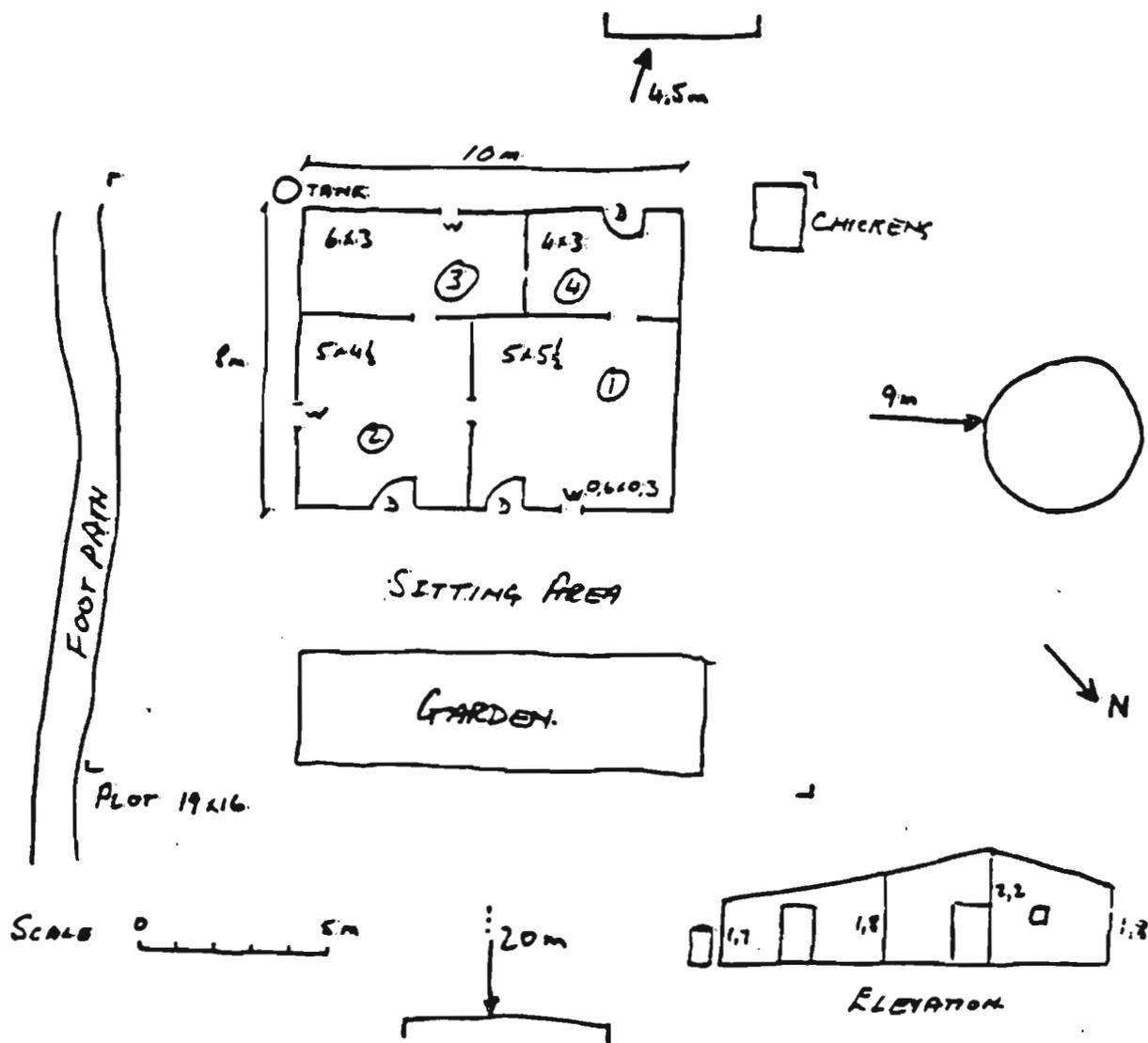
Table 15.7. Priorities for improvement

5. What do you consider your most important housing needs? e.g. water, laid out streets, security of tenure, etc. (Give order of priority: 1,2,3 etc.)	
<u>Needs</u>	<u>Priority</u>
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

(vi) Observer Checklist. The combination of an 'observer checklist' with a household questionnaire is a useful device for surveys undertaken in support of planning the physical environment. They have been used with success in several situations.<sup>(18)</sup> An observer checklist supplements the questionnaire by recording site data relating to the use of resources and space at a micro level. The observer's task is to draw a sketch plan (Table 15.8) of the plot and house, noting in particular, the following:

- a) Plot dimensions.
- b) Position of nearest footpath/road and distance to adjacent plots/houses.
- c) An elevation of the house showing the pitch of the roof and heights.
- d) A plan of the house with outside dimensions; all doors, windows (with sizes), inside openings and verandah; and internal arrangement of rooms.
- e) Extension to original house.
- f) Materials used in construction: walls, roof, floor, ceilings, doors, and windows.
- g) Other information about the use of the plot e.g. water tanks, fowl run, pigsty, vegetable garden, outside sitting areas.

Table 15.8 Observer sketch plan



The checklist and diagrams are to be read in conjunction with a set of questions aimed at finding out the number of households living in each house (or on the plot, whichever is the more appropriate unit for analysis) and how internal space is used. (Table 15.9).

Table 15.9. Use of internal space

14. Does more than one family stay in the house?

Yes                      No

15. If 'Yes'

Code as on plan	Numbers of rooms occupied by each family	Number of persons in each family
A	3 rooms 1 2 3	6
B	1 room 4	2
C		

16. Room schedule

Room no as on plan	Use of each room						Other use specify	Sleeping arrangement						Total for each room	Number of beds in each room
	Sleeping	Cooking	Washing	Sitting	Eating	Bathing		Head	Wife	Other adults		Children			
										Male	Female	Male	Female		
1	X	X		X	X						1			1	1
2	X							1	1			1		3	1
3	X											1	1	2	1
4	X			X	X						2			2	2

(vii) Pilot survey. Finally, it should be borne in mind that a pilot survey (Figure 14.1 step 13) plays a crucial role in questionnaire design. Its importance cannot be overemphasized. Few pilot surveys, if any, fail to reveal some errors, gaps or overlaps in the questionnaire. But over and above its 'trial run' aspects, a pilot survey, which should always be conducted in loco, gives the planner an early insight into the community. This facilitates subtle adjustments in the questionnaire to make it more appropriate to the local situation.

#### Conduct of the survey

Standard methods of conducting surveys and interviews are well documented,<sup>(19)</sup> but discussion about the operational decisions required when conducting surveys in a rural situation are less readily available.

The fundamental principle of conducting a household survey is that it must be done with the consent of whatever authority(ies) operate in the area and, equally important, with the support and understanding of the community. The first stage, therefore, is to obtain the active support (rather than merely the approval) of the local authority, of the community leaders and of the tribal chief. Through them a meeting should be arranged at which the planning team and interviewers can be introduced to the residents. This meeting provides an opportunity for the planners and the local leadership to explain why the survey is being undertaken, what it will require from the residents and what it will achieve. At this point in particular, but throughout the survey, it is important not to raise expectations to levels that will not be realized. The meeting serves a dual role in providing the residents with a chance to question the planners as well as local leaders and officials. Meetings at which all three groups are not represented are unlikely to achieve the desired results.

Preparation along these lines is essential if channels of communication are to be established between the community and the planning team. Without it any survey, no matter how well designed, will be doomed, at best, to superficial, incomplete and biased data. Since planning is limited by the quality of the data upon which it is based, this principle of consent and co-operation is of profound significance.

The next aspect to be considered is the choice of interviewers. Here the key principle is that interviewers should be acceptable to the community or, preferably, be a member of that community. This overcomes the problem of local language or dialect differences, but it requires that the interviewers have a good command of written and spoken English or Afrikaans to translate the questions and fill in the questionnaire form. It may be useful to have the questionnaire translated into the local language. In these situations the planners must check to ensure that the translated version has neither picked up nuances of meaning not in the original, nor lost the particular emphasis in certain questions.

An alternative approach is for planners to work in conjunction with a local resident acting as an interpreter. This arrangement has the advantage of imposing less stringent language demands. In either case, detailed briefing sessions will be needed to ensure that the interviewer/interpreter is fully conversant with the questions and has been given the opportunity to think over and discuss with the planners, likely difficulties and misunderstandings that could arise. A useful first step in such briefing sessions is to conduct the full survey using the interviewer/interpreter as the respondent in his/her home.

The planner-interpreter team has a number of distinct advantages such as exposing planners to a range of actual living conditions in the community, thereby increasing their understanding of the local situation and enabling them to make a multitude of observations that an inexperienced layman would not record. It also enables the planner to play the role of observer and to complete the checklist and site sketches accurately. This avoids the difficult task of either finding an observer with the necessary drawing and measuring skills or training someone. Furthermore this arrangement gives the residents' increased contact with the planners as well as gives them the opportunity to ask questions or express opinions they might not have ventured at the community meeting. Overall it facilitates participation but at the same time, imposes time and manpower demands on the planning team. To a certain extent the size of the survey will influence the extent to which planners can themselves become fully involved in conducting the survey. But it is essential for planners to be actively involved in at least some household interviews and the planner-local counterpart principle provides such an opportunity.

The matter of the size of the survey raises the question of whether to interview a sample or to obtain data for the entire community. It has been argued that a sample survey should be set up in the first instance and that data for the remaining households be collected later.<sup>(20)</sup> This can work provided the planners are eventually able to complete a full survey (a task which may not even be feasible in a large and fast growing settlement); or if implementation includes monitoring a flow of data from all households. An alternative approach is to start by making a quick survey of the entire settlement to establish the number of houses (as a field check of air-photographs) and to make a preliminary population count. This involves every household to a limited extent and avoids detailed interviewing of more than a carefully selected sample would require.

A related issue is which member of the household should answer the questions. Wherever possible home interviews of this nature should be conducted with the household head. However, this is not always possible and a reasonable compromise is, with the head's consent, to complete part of the survey with other members of the household and cover remaining questions with the head when he is at home or possibly at his place of employment.

This issue is closely linked with the length of the questionnaire. Even acting on the principle of keeping it as short as possible,<sup>(21)</sup> a comprehensive questionnaire for basic needs planning is likely to require some time to answer in full. Planners should be aware of the time imposition of home interview surveys, particularly in communities where household heads travel long distances to work and where there is no electric lighting at night. A solution appears to be in splitting the questionnaire and dealing with part only, in the first visit; and the remainder on second or even third visits.<sup>(22)</sup> This has particular merits in facilitating closer rapport between interviewers and respondents; in providing an opportunity to check back on data that is not clear; and in avoiding a common problem of a questionnaire becoming tedious with consequent loss of detail and accuracy. This approach will however, have design implications. (See Figure 14.1, step 12).

Finally there is a problem relating to different perceptions of time and cost. From the planners' viewpoint the objective is often to collect data as quickly as possible and to keep household survey costs to a minimum. To people of a rural village, the meaning and value of time is likely to be markedly

different from that of planners from the cities. And it may be unreasonable to expect rural households to attach much importance to "getting the survey done within a week", or whatever time has been allocated. The planners' operational approach tends to be short-term and as such often overlooks social costs. To a community the ultimate costs of being presented with an inappropriate or unusable plan, as could well result from a poor data base, are far in excess of the planners' savings by rushing the home interview survey.

It is incumbent upon planners to consider both the short and long term implications of their actions. And in the last resort one of the roles of the professional planner is to seek a balance between minimising costs for his immediate client - (usually a public authority or private developer) and maximising benefits for his ultimate clients (the people who will live in whatever environment is created).

### Conclusions

Planning directed at the provision of basic needs imposes data requirements that are not satisfied by most existing statistical systems. A practical way of assembling such data is by means of a household survey. This Appendix has described the type of survey required to obtain basic needs data in a typical South African context, and it has discussed some of the operational problems likely to be encountered. As such its relevance is twofold. Firstly, household surveys initiated with a view to planning for improved levels of basic needs can open new channels for two-way contact between small communities and planners operating at regional or national levels. At present both groups have great difficulty in establishing this type of communication.

Secondly, if a basic needs approach is, in fact, appropriate in Southern Africa,<sup>(23)</sup> and if it is to be given widespread attention, then household surveys of the type discussed here will have to be carried out in a wide variety of rural, peri-urban and urban situations. For it is these surveys alone that can provide the broad data base and understanding of the day to day needs and problems of individual communities. And these are important elements of the conceptual framework that will be required if planners and policy makers are to give effect to planning for basic needs.

Notes and References

1. Radwan S and Alfthan T (1978) 'Household surveys for basic needs: some issues'. International Labour Review. Vol. 117 No.2 pp 197-210.
2. A'Beare D R - surveys in two urbanizing settlements in KwaZulu; Gwagwa N N - surveys in rural villages in Umzimkulu, All three research projects have been carried out during 1980 for the Department of Town and Regional Planning, University of Natal, Durban.
3. Radwan and Alfthan op cit. p 198.
4. Ibid.
5. More detailed explanation of the basic needs approach can be found in: International Labour Organisation (1976). Employment, growth and basic needs; a one world problem; (1977) The basic needs approach to development; (1977) A basic needs strategy for Africa; Lisk F (1977) "Conventional development strategies and basic needs fulfilment". International Labour Review; Vol. 116 No. 2 pp. 175-191; and Natrass J (1979) 'Southern African economic development and the Basic Needs Development Studies Southern Africa', Vol. 2 No. 1 pp. 58-65.
6. Radwan and Alfthan op cit p. 198
7. Natrass op cit. p. 61
8. Ibid.
9. Radwan and Alfthan op cit. p. 197
10. Ibid.
11. Ibid pp. 200-207
12. Social and Community Planning Research (1972) 'Questionnaire design manual'.
13. Further details of undertaking 'upgrading' projects are discussed in: Shanakland Cox Partnership (1977) Third World Urban Housing; and Van Nostrand J C (1979) "An outline of the Naledi squatter upgrading project - Gaborone, Botswana". Mimeo.
14. See for example Lynch K (1971) Site Planning; also Shankland Cox Partnership op cit. Chapters 5 and 7.
15. See for example Ellison P, Maasdorp G and Pillay N (197?) The Poverty-datum line debate in South Africa: an appraisal; Potgieter J F (1974) The household subsistence level in the major urban centres of the RSA - Oct. 1974; Stopforth P (1975) Minimum living levels among Black employed in a textile processing industry in Natal.
16. Based on a question used by Stopforth P and Haarhoff E J (1979) Profile of a spontaneous urban settlement near Durban.
17. Ibid.

18. Shankland Cox Partnership op cit. Chapter 5; Haarhoff, E J (1979) "Spontaneous housing in Malukazi: a physical study".
19. See for example Cherry, G E and Burton, T E (1970) Social Research Techniques for Planners; Moser C A and Kalton G (1971) Survey Methods in social investigation.
20. Shankland Cox Partnership (1977) op cit. Chapter 5.
21. In establishing criteria for including or excluding questions, the guiding principle should be more stringent than whether the question will contribute to the survey. Instead it is necessary to ask whether exclusion will leave serious gaps in the data base.
22. P J Derman - Dept. of African Studies, University of Natal - personal communication about interviewing techniques used in Swaziland.
23. This has been argued convincingly by Nattrass (1979) op cit.

APPENDIX III SURVEY OF RURAL TRADERS AND CUSTOMERS

A. RURAL TRADERS' QUESTIONNAIRE

QUESTIONNAIRE NO.

- 1. Name of Business/Firm .....
- 2. Name of Owner/s .....
- 3. Type of Business.....
- 4. Location of Business (Admin. Area/Town/Dist.).....

5. TYPE OF LICENCE/S HELD	COST/ANNUM	TIME HELD
.....	.....	.....
.....	.....	.....
.....	.....	.....

- 6. How long have you been operating here ?.....
- 7. What experience, qualifications and education, do you have?.....

8. Do you have any other businesses? .....

YES	NO
-----	----

- 9. If yes, where are they located? (Admin.Area/Town/Dist.) .....
- 10. What similar businesses to yours operate in this administrative area? .....
- 11. How far are they from you?.....
- 12. Where do your customers mostly come from? (Admin.Areas/Town/District) .....
- 13. How far do they have to travel to get to you?.....









APPENDIX IV      RURAL ROAD CLASSIFICATION

The Department of Works will usually have a road classification system which it uses for the maintenance of all roads, but this does not relate to the condition or standard of the roads at any given time. In order to assemble some information on road standards and conditions, the consultants undertook a small road survey with the following aims:

- to establish the general condition of roads in the region;
- to establish a hierarchy of roads surveyed; and
- to establish which roads may not be passable in the wet season.

The survey was undertaken by one person so that data collected could be standardized. It was limited to observation of non-technical data while actually travelling on the roads during March-June 1983. Figure 16.1 summarizes the information gathered for all the roads covered in the survey.

Road lengths varied considerably from 4 km to longer 71 km stretches with an average length of 23 km. Lengths were kept to a minimum wherever possible because road and surface conditions and widths varied considerably. Nearly 33% of the roads surveyed were single lane (i.e. for cars to pass, both had to move off the road or onto the verge). Road surfaces were classified as either gravel (67%) or unmade dirt (33%). Virtually all the roads surveyed had rough surfaces with potholes and corrugations throughout; in many cases patches of rock protruded through the surface. Another problem, especially on the steeper roads in the mountains, is parallel and lateral erosion due to poor drainage.

There are four types of river crossings:

- two lane concrete bridges;
- single lane concrete bridges;
- concrete pipe culverts; and
- fords.

Culverts are mainly used for crossing over dongas, seasonal streams and small gulleys. Of the roads surveyed, 17% had fords; these roads are probably impassable during, or after storms, or prolonged rainy periods.

Figure 16.1 Summary of Road Grading Survey

Road/Link	Works & Energy Road Number	No. of lanes	Length (m)	Time Taken (min.)	Surface Condition	Terrain		Type	Surface				Type of River Crossing			
						General	Patches		Sandy/Loose	Stoney	Rocky	Clay	Concrete 2 Lane	Concrete 1 Lane	Culvert	Ford
R 58 to Herschel	605	2	12	20	Dry	Flat	-	Gravel	X				4	1		
Herschel to Sterkspruit	605	2	21	40	Dry	Rolling	-	Gravel	X				6	3		
Sterkspruit to Mlamli Hospital	606	2	11	20	Dry	Hilly	Sharp bends	Gravel	X	X				4	1	
Mlamli Hospital to Majuba Nek	606	2	7	10	Dry	Mount-ainous	Sharp bends erosion	Gravel				5		5		
Majuba Nek to Tinindini	606	2	8	10	Dry	Mount-ainous	Blind corners sharp bends	Gravel		X	X		3	1	7	
to Lundine Nek turn-off	606/610	1	11	20	Dry	Mount-ainous	Sharp bends erosion	Gravel	X	X		1		Mume-rous	5	
Lundine Nek T/O to Barkley East T/O	610	2	27	45	Dry	Mount-ainous	Bad cambers sharp bends erosion	Unmade	X	X		3	2	Mume-rous	1	
Maclear to Mt Fletcher	19	2	63	75	Dry	Hilly Mount-ainous	Bad cambers sharp bends erosion	Gravel	X	X	X	7		Mume-rous		
Mt Fletcher to Matatiele	19	2	71	90	Dry	Rolling		Gravel Tar	X	X	X	13	5	Mume-rous		
Teolo to Upper Mjika turn-off	213	1	17	30	Dry	Rolling	Very rough	Unmade		X	X				3	3
Upper Mjika turn-off to Mjika Clinic	213	1	4	10	Dry	Rolling	Sharp bends erosion	Unmade	X	X	X		1			
Mjika Clinic to Engcobo/Umtata Road	215/27	1	22	31	Dry	Rolling	Sharp bends erosion	Unmade		X	X			2	3	1

Source: Osmond Lange Inc. Road grading Survey (1983)

The number and type of vehicles encountered during the survey were also noted. But it is felt that these figures are not a representative sample, and so they are excluded from the summary.

From the survey one may conclude that a relatively small percentage of the roads would, even under very wet conditions, become impassable. These are roads that have fords at river crossing and a few of the unmade dirt roads which have large stretches of clay surface. The major problem with the rural roads seems to be one of maintenance.

In addition to the roads shown in the classified road network, there are numerous roads that do not fall under the Department of Works but are the responsibility of the Tribal Authorities. This situation causes difficulties because the Tribal Authorities lack the funds, staff and equipment to repair and maintain their roads. The result is that these important feeder roads, which link the villages to the main road network are for the most part no more than potholed, eroded, unsurfaced tracks, frequently impassable after rain. Consequently, many of the bus companies refuse to use these roads, because of increased operating costs. This means that many villagers have to walk several kilometers to the nearest bus stop, which is usually where the tribal road meets the government road.

APPENDIX V ANALYSIS OF INTERCONNECTED DECISION AREAS (AIDA)

The AIDA technique is used to identify and evaluate all the compatible sets of solutions to a design or planning problem. At a basic level, the methodology involves four steps.

(i) Identification of decision areas and, within each, the feasible options. For example, the type of shopping facility required for an imaginary small town might involve the following :

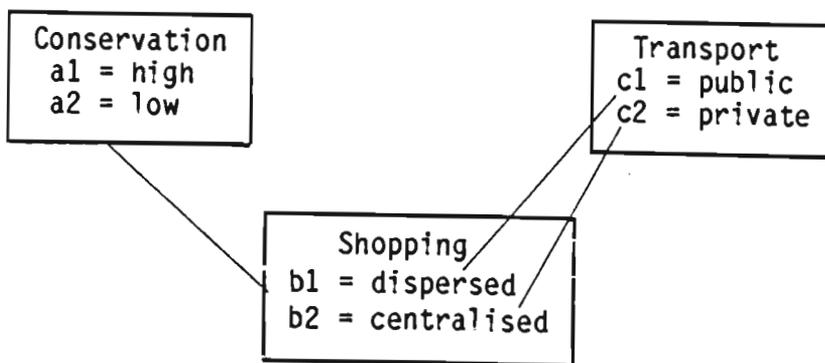
<u>Decision areas</u>	<u>Feasible options</u>
a Priority for conservation	a1 = high priority    a2 = low priority
b Shopping pattern	b1 = dispersed        b2 = centralised
c Emphasis in transport investment	c1 = public            c2 = private.

(ii) Indication of incompatible options (option bars) by means of either an interaction matrix or option graph.

Interaction matrix

Options	1 = compatible	a1	a2	b1	b2	c1	c2
Conservation	a1 high a2 low			1 0	1 1	1 1	1 1
Shopping	b1 dispersed b2 centralised					0 1	1 0
Transport	c1 public c2 private						

Option graph



(ii) List of compatible options (policy sets). In the case of our example :

a1	b1	c1	X not compatible
a1	b1	c2	compatible option A
a1	b2	c1	compatible option B
a1	b2	c2	X
a2	b1	c1	X
a2	b1	c2	X
a2	b2	c1	compatible option C
a2	b2	c2	X

Thus three compatible policy sets emerge for further evaluation.

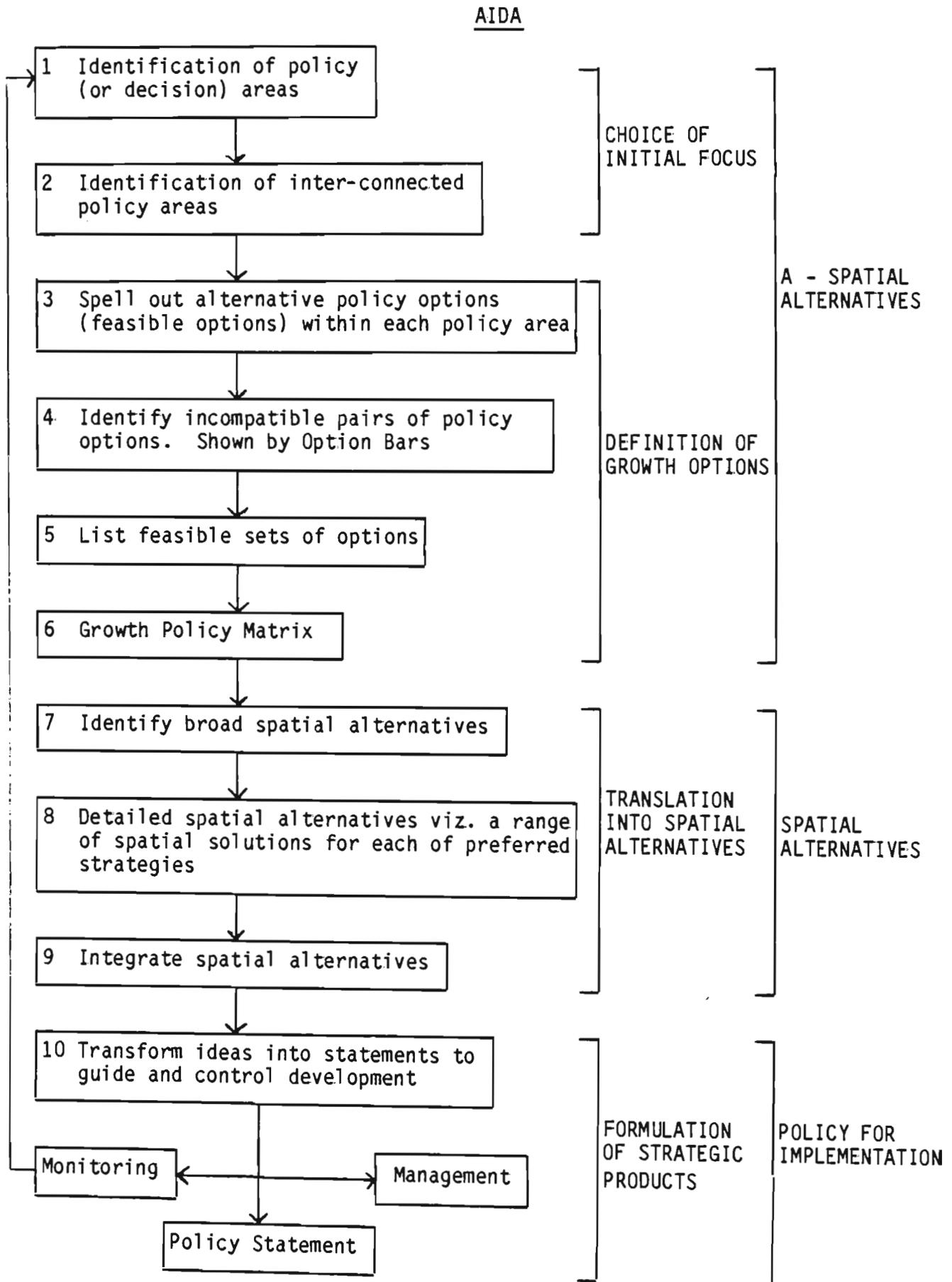
(iv) Evaluation involving a variety of criteria (not only cost) is then undertaken to find the policy set that best satisfies the objectives of the particular problem.

More complex applications have been developed by planning researchers involved at the regional and sub-regional scale. Table 17.1 illustrates the sequence of operations involved in using AIDA to generate and evaluate sectoral and spatial policies.

Table 17.1 Analysis of interconnected decision areas AIDA)

See overleaf.

Table 17.1 Analysis of interconnected decision areas (AIDA)



Source Bather et al (1976)

APPENDIX VI

TYPICAL PROJECT CYCLE

The systematic process of evaluating, planning, implementing and monitoring projects, known as the project cycle, provides a framework for the relationship between a financial institution and its client. The project cycle adopted by the Department Bank of Southern Africa (based on that of the World Bank) of Southern Africa has six phases : identification, preparation, appraisal, negotiation, implementation and evaluation.

Identification Phase

Development projects accorded high priority in terms of the development strategy for a region or a state within a region are identified during the development planning process by the responsible agencies in their particular states. DBSA stands ready to advise or assist in this process when requested. On receipt of a project application through the designated agency of the state involved, the Programme and Project can be regarded as a 'bankable' project in terms of DBSA's policy guidelines. Such a report, furthermore, spells out the basic principles and guidelines to be applied during the later phases of the project. On accepting the first phase of a project, the Bank nominates a project team to act on its behalf and establish a close working relationship with the borrower's responsible project agent.

Preparation Phase

The ideal is that a project application be made to the Bank in the early identification stage and that the planning of the project takes place during the preparation phase, in close consultation with the Bank's project team. Responsibility for the preparation work lies with the borrower, but the project team stands ready to assist and advise wherever necessary. If the borrower is not in a position to finance fully the expenditure required during the preparation stage, DBSA can be approached for technical assistance. During this phase the project team builds up a 'project ledger' with all the necessary data on the project and the region concerned, to enable it to do a thorough appraisal of the project. At the beginning of this stage, the possible loan finance for the project is included in the lending programme, without however committing DBSA at this stage. The project is therefore "in the pipeline".

### Appraisal Phase

The appraisal phase is initiated by the project team when the preparation of the project has advanced to the point at which the input data necessary for the appraisal process become available. The appraisal report reviews particularly the following aspects:

#### Economic Appraisal:

The most important consideration is the envisaged development impact of the project, determined by a cost-benefit approach. Special attention is given to the effective contribution of the project towards the development goals and objectives spelled out in the development strategy.

#### Technical appraisal:

All technical aspects are appraised to ensure the technical viability of the project. Appropriate standards also received special attention, to ensure the cost-effectiveness of the project.

#### Institutional Appraisal:

This refers mainly to the capacity of the responsible institution to implement and manage the project. The need for training or obtaining specific expertise by such an institution is of special importance.

#### Financial Appraisal:

The total financing required is determined - that is, all the expenditure necessary to make the project viable. Possible sources of finance are investigated, and a financial proposal is made which includes a recommendation on the loan finance to be made available by the Bank and spells out other sources of finance. The financial proposal also includes the financial programming of the project during implementation and the effect of this on DBSA's lending programme. During financial appraisal attention is also given to the financial credit worthiness of the borrower and the guarantor.

### Negotiation Phase

The appraisal report is considered by the Bank's Management Committee and Board of Directors, and negotiations then take place with the borrower on the loan offered and the agreements to be entered into.

### Implementation Phase

After the conclusion of the loan agreement and guarantee agreements, where appropriate, the borrower is responsible for initiating tender procedures and appointing contractors. During the process of procuring goods and services, close consultation takes place with the project team, and in certain instances DBSA approval must be obtained. During implementation the project team is responsible for monitoring the process, and plays an active supporting role in resolving issues that might arise.

### Evaluation Phase

After a project had been fully implemented and the loan fully disbursed, the project team is responsible for evaluating the foregoing phases to determine whether the objectives as originally established have been effectively met. This evaluation takes place in close consultation with the borrower, and valuable lessons are learned and experience gained.

Source: Development Bank of Southern Africa (1984)

APPENDIX VII    DISTRIBUTION OF POPULATION AND FACILITIES (BIZANA)

Development planning is concerned with "people - where they live and how they satisfy their day-to-day needs; their activities - social, cultural, religious, economic and governmental; and land and its natural resources; and the manner in which land is owned and used."<sup>(1)</sup> This appendix is concerned, firstly, with the distribution of population<sup>(2)</sup> for it is the settlement pattern that provides the basis for assessing the spatial distribution of facilities and services. Secondly we shall discuss the distribution of services and facilities before setting out sample tabulations for the district of Bizana.

Rural settlement pattern

This section concentrates on rural settlement patterns (traditional and consolidated villages); it describes the sources and reliability of data; explains assumptions and decisions made in tabulating the data; and comments on the actual data contained in the tables and the map.

Data sources

Table 18.1 lists all currently available data pertaining to rural settlement in Bizana. This has been built up from three main sources - the 1980 population census, calculations of the extent of each Administrative Area, and records of the Department of Agriculture and Forestry. A further normally important source is air photography. The entire country was flown during 1982 but air photos were not available at the time of this study (mid 1982). Consequently it has not been possible to describe the micro-settlement pattern within each Administrative area. This is not regarded as a major problem for settlement planning at the macro scale, but air photos are essential for detailed planning of specific settlements.

The only 1980 population census data available for the study were preliminary, uncorrected totals (male and female) for each Administrative Area. As such this data should be treated with certain reservations. They probably represent an under-enumeration of the region's population but the extent can only be gauged after detailed analysis of the age-sex structure at micro-level, after

in situ checks,<sup>(3)</sup> and after sample testing using house counts from air photos and occupancy rates from field surveys. In one particular situation where the consultants had the opportunity to match a set of air photos with an Administrative Area in which a household survey had recently been conducted, it appears that the census total is only 71 percent of the expected total (based on house counts and local occupancy rate). However this should not be taken as a basis for generalisation before extensive and systematic tests have been carried out.

In tracing records of the extent of each Administrative Area, the consultants found several anomalies. There were three conflicting lists of areas (ha) each emanating from a different official source.<sup>(4)</sup> Accordingly and in discussion with the officials concerned, it was agreed that the consultants undertake an independent calculation of the extent of each Administrative Area in order to ensure consistency for the present study. The areas listed in Table 18.2 and used to calculate population density, were measured using the 1:50 000 topo-cadastral series as a base. Figure 7.1 (in a folder at the back of the report) shows the population density mapped by Administrative Areas, numbered according to Tables 18.2.

All other data included in the tables are based on records from the Department of Agriculture and Forestry.

#### Tabulations

Each table in the series (only one reproduced here) describes the settlement pattern by Administrative Area for a magisterial district eg., 3.1 Bizana, 3.2 Libode ... 3.9 Umzimvubu. It records the number and name of each Area together with its population, area and density. For those Administrative Areas in which consolidation has taken place, details of the headman, resettlement date, water source are listed along with the numbers and sizes of residential and agricultural plots. Areas for which the latter data is not listed still exhibit traditional village settlement patterns. Totals are for rural areas only and should be combined with those of the district town (at the foot of each table) to give the overall district totals.

There are some gaps in these tabulations reflecting missing data in the primary source. In particular, some aspects of the settlement data for Umzimkulu district are incomplete owing to uncertainty about the precise boundaries of

Administrative Areas and farms that have been incorporated into Transkei. In keeping with the principle of exposing rather than covering the data problem these anomalies are shown where they occur.

c) Comments

To a large extent the Tables are self explanatory, but certain significant points are worth noting. Firstly, the administrative areas are small in size and radii of 3 - 4 km fairly common. Table 18.1 gives an indication of the approximate radius in km corresponding to typical areas in hectares. Secondly, the distribution of population densities is slightly skewed. Although the mean gross density is 58 person/km<sup>2</sup>, the median value lies in the 61-70 persons/km<sup>2</sup> range as shown in Figure 7.1. Here the density classes were selected to give a more or less even spread. Thirdly, a substantial concentration of higher densities is found in the district of Bizana, Lusikisiki and Siphqeni. Throughout the region, the district towns tend to be surrounded by high density zones. The relatively lower town densities are explained by their having fairly large commonage areas but few residential opportunities. Fourthly, the policy of consolidating traditional villages into planned "betterment scheme" settlements has been implemented at an uneven rate. Of those areas that have been consolidated, 28 percent were carried out before 1962, 56 percent between 1962 and 1971 and only 16 percent since 1972. In other words, the allocation of central government funds and services for rural residential infrastructure has fallen sharply during the last decade.

Table 18.1    Radii of typical administrative areas

<u>Area (ha)</u>	<u>Radius (km)</u>	<u>Area (ha)</u>	<u>Radius (km)</u>
1 500	2,2	7 500	4,9
3 000	3,1	9 000	5,4
4 500	3,8	10 500	5,8
6 000	4,4	12 000	6,2

## Distribution of services and facilities

Against a background of the region's settlement pattern, this section examines the spatial distribution of the activities in which rural people engage on a regular basis. As before, Administrative Area is taken as the basic spatial unit for describing the spatial distribution of rural commercial activities, education and health facilities, and opportunities for communications. Data sources and the research method are outlined, followed by an explanation of decisions and assumptions underlying the presentation of data in tabular and map form; finally some conclusions are drawn as to the interpretation of the data.

### Data sources and research method

At the outset, data relating to all shops and commercial licences, industries and other economic activities; postal and telephone facilities, schools, teachers, pupils and classrooms; hospitals, clinics; and public transport were obtained from the relevant central government departments. These data were collated by Administrative Area to produce a record card for each Area on which was listed all the facilities and activities that occur there. The next stage involved field checking. Field teams visited every Administrative Area to confirm data on the cards, to include data about additional activities observed in the field eg. informal sector manufacturers, and to list the main commodities stocked by each shop. In addition, the location of each facility was plotted on a 1:50 000 map. Finally the data was checked and collated into tables. The output of this process is a series of tables recording different categories of data by District and Administrative Area.

Tables 18.3 presents an overview of the Activities that are found in each Administrative Area; and Table 18.4 gives a regional summary. This pattern is repeated for other services. Thus Tables 18.5 to 4.20 lists all Shops and indicate what licences are held and the range of goods stocked, while Table 18.6 presents a regional summary. Table 18.7 sets out Commercial Ratios, relating the occurrence of General Dealers and other shops to population at Administrative Area level; and 18.8 the regional summary. table 18.9 shows the distribution of Education facilities (schools, pupils, teachers, and classrooms) for each Administrative Area; and 18.10 the summary.

The location of all the activities listed in these tables is shown on the map (Figure 7.2). Activities that appeared on official lists but could not be found in the field have been excluded from the map along with those activities concentrated in the nine district towns.

### Activities Tables (18.3 and 18.4)

#### General

- (i) Administrative Areas are listed vertically; the "Others" at the bottom of this column refers to activities that appeared in one or other official source but could not be located in any of the Administrative Areas.
- (ii) The symbol "X" is used to denote that an activity exists but the number of occurrences is unknown eg. where an Administrative Area has a telephone service but the precise number of telephones is not certain.
- (iii) These tables contain data for rural areas only.

#### Commercial

- (i) Informal refers here to cottage and home industries. Included are such activities as beadwork, basket making and reed processing, dress making, handwork and handcrafts, shebeens.
- (ii) There is a great deal more informal sector activity than was picked up in the surveys. Therefore the occurrences listed here represent a minimum level.
- (iii) Speculators deal in livestock.
- (iv) The column headed "Other" includes two types of activity.
  - Industries, mainly small scale, service industries and in many cases operating informally. These include blacksmiths, brickmakers, butchers, bush mechanics and scrap dealers, carpenters, metal workers, poultry farming, pottery, plumbers, pole creosoting repairs to shoes, stoves, watches and radios, wig makers, and water tank makers. As noted above the survey only came across a fraction of the full complement of these activities.
  - Commercial activities that did not fall conveniently into other categories, eg. bottlestores, boarding houses and bungalows, hide peddlers, tractor hiring, wholesalers and wood dealers.

### Education

- (i) This section lists the number of schools by type:  
JP = Junior Primary ie. sub A to std 2  
SP = Senior Primary ie. sub A to std 5  
JS = Junior Secondary ie. sub A to std 7  
SS = Senior Secondary ie. std 8 to std 10.

### Health

- (i) M Clinic refers to Mobile Clinics operated from the Hospitals under optimal conditions each Mobile Clinic station is visited once in two weeks.
- (ii) Res Clinic refers to Residential or permanent clinics which are staffed on a full-time basis.
- (iii) G.P. = General Practitioner.

### Other

- (i) Labour recruitment officers are generally located in the towns.
- (ii) An "X" under Bus Service means that the Area is served by a bus service but in most cases this service operates several times per week rather than on a daily basis.
- (iii) The column marked Community refers to such activities as agricultural extension services, community gardens, forest warden, plantation depot, police and womens organisations.

### Shops Tables (18.5 and 18.6)

- (i) These tables list and name every shop found in the Administrative Area, indicating its main licence as well as any other licences held. The Total includes all licences.
- (ii) Other licences refers to a boarding house licence.
- (iii) The columns headed Goods refer to the range of commodities stocked by each shop.
- (iv) Other goods include coffins, fence poles, poultry, radios, saddlery, tractors, water tanks and wood.
- (v) "District" at the bottom of the list of Administrative Areas refers to licenced shops that appeared on the official lists but could not be found in the field.

Commercial ratio Tables (18.7 and 18.8)

- (i) General Dealers includes shops licenced as Traders.
- (ii) The number of functions refers to those licenced and listed in Tables 4.11 to 4.19. For example in Bizana, Administrative Area no. 1 Isikelo has 5 General Dealers and 2 Traders who, together, are licenced to carry out 21 functions. Other shops in the Area are licenced for a further 13 functions.

Education Tables (18.9 and 18.10)

- (i) JP = Junior Primary ie. sub A to std 2  
SP = Senior Primary ie. sub A to std 5  
JS = Junior Secondary ie. sub A to std 7  
SS = Senior Secondary ie. std 8 to std 10  
Special refers to Trade and Technical schools and Training Colleges.
- (ii) Schools located in towns are included at the foot of each table.

Interpretation

All that can be said at this stage about interpretation of these data is that it should be done within the broad context of Transkei's Development Strategy. However, any assessment of which Areas are well provided and which are poorly served would be incomplete without the complementary material contained in the next three chapters of the Statistical base report (Osmond Lange Inc 1982 op cit). Thereafter, and within the framework of a regional plan, targets and standards can be set to achieve minimal acceptable levels of service provision for all settlements in the hierarchy.

Notes and References

1. Robinson P S (1981) "The contribution of planning to development" Transkei Development Review Vol 1 No 1 p 40.
2. The spatial distribution of activities is fully described in Osmond Lange Inc. (1982) op cit chapter 4 while land and its use have been discussed more briefly in chapter 2. More detailed discussion may be found in Southey (land tenure). Hawkins Associates (land use) and Woods and van Schoor (land use) listed in the Bibliography.
3. Transkei's 1980 census data is being processed by the RSA Department of Statistics. Neither disaggregated data nor testing for correction were available before the end of 1982, when the report was submitted.

4. One was the Department of Agriculture and Forestry, which had a list showing only Administrative Areas where consolidation has taken place. The other lists (with complete coverage) were from Department of Commerce, Industry and Tourism and from the RSA's Department of Bantu Administration and Development dating from a study conducted in 1975. There are substantial inconsistencies between the three sources and measurement of a random 10 percent sample of Administration Areas failed to resolve this. It was then decided to recalculate the areas.

Table 18.2 Settlement - Bizana

Administrative Area		Population 1980	Area ha.	Density pop/km <sup>2</sup>	Headman	Resettlement date	Water Source	Residential Plots		Agricultural Plots	
No.	Name							No.	Size (m)	No.	Size (m)
1	Isikelo	10 856	14 717	74	N Tandabantu S Gazvla M Sigwinta	June 1973  Jan 1975		1 427	46 x 46	328	200 x 100
2	Enkamtolo	3 776	7 512	50				593	46 x 46		
3	Esikumbeni	3 971	4 557	87				1 427	46 x 46		
4	Isilamgwe	2 797	5 277	53							
5	Amantsangase	1 616	2 125	76							
6	Amangutyama	9 658	10 758	90							
7	Entsimbini	6 497	9 075	72							
8	Emonti	7 676	9 460	81							
9	Amandengane	3 306	4 117	80							
10	Amandela	971	2 705	36	S Ndunge	March 1981		611	46 x 46		
11	Izinini	1 475	2 865	51							
12	Izisele	2 139	3 832	56							
13	Intshamatilo	1 986	1 502	132	M Mvetshi	March 1970		654	46 x 46		
14	Amanikwe	3 093	4 342	71							
15	Abetshawe	2 399	3 122	77							
16	Imizizi	14 027	20 650	68							
17	Umyaka	3 155	5 220	60							
18	Hlolweni	3 524	7 440	47							
19	Etyeni	2 919	3 600	81							
20	Umkolora	5 233	7 555	69							
21	Amadiba	12 455	16 555	75							
22	Amapisi	5 024	5 282	95	P Spencer	1967		262	46 x 46		
23	Amakanyayo	4 615	7 592	61							
24	Umgungundlovo	5 258	13 955	68							
25	Ntshangase	4 292									
	Greenville Mission	295									
	Rural total	123 013	166 692	74				4 974		589	
	Bizana	1 276	2 100	61							

Table 18.3 Activities - Bizana

No.	Administrative Area Name	Population 1980	Commercial											Education					Health				Communications			Institutions			Other						
			Butcher	Cafe	Fresh Prod.	Gen. Dealer	Lawyer	Miller	Patent Med.	Infl. Subs	Informal	Speculator	Other	Total	J.P.	S.P.	J.J.	S.S.	Special	Total	M. Clinic	Res. Clinic	G.P.	Hospital	P. Office	P.O. Agency	Tel Service	Mission	Convent	Church	Labour Rec.	Bus Service	Community		
1	Isikelo	10 856	2	5	4	7	3	1	3									10	4	2													X	X	
2	Enkantolo	3 776	1	1	2	5		1	2				X	1	X			6							1	X						X			
3	Esikumbeni	3 971		2	2	4			1	2				1	X			2	1						2	X					X	X			
4	Izilangwe	2 797	1		2	3				2	2		X		X			4	1																
5	Amantshangase	1 616		1	1	2			2	1	1		X	1	X			7	1						2										
6	Amangutyana	9 658		1	4	6			4	4			X	1	X			20	2						2	X	1		1						
7	Entsimbini	6 497		3	2	5			2	2					X			14	1						2		1		1			X			
8	Emonti	7 676		1	1	1			1	1			X	1	X			6	4													X			
9	Amondengane	3 306			4	6			4	4					X			18	1	1					4				1			X			
10	Amandela	971		2	1	2			1	1					X			7	1													X			
11	Izinini	1 475			1	1			1	1			X		X			4	1	1					1							X			
12	Izisele	2 139			1	1			1	1			X		X			4	1	1					1							X	X		
13	Intshamantilo	1 986		1	1	2			1	1			X	1	X			8	2						1							X			
14	Amanikwe	3 093			2	2			1	2					X			7	1	2					1				1			X			
15	Abatshawe	2 399			1	1			1	1					X			4	1						1							X	X		
16	Imizizi	14 027		3	3	6	1	2	3	3					X			23							2	X						X			
17	Umyaka	3 155	2	2	3	3			3	3					X			14	1						3							X			
18	Hlolweni	3 524	2	2	3	4			3	3					X			17	3						2							X			
19	Etyeni	2 919	1	1	1	2			1	1			X		X			7														X			
20	Umkolora	5 233	1		2	3			3	2			X	1	X			12	2	1					1							X			
21	Amadiba	12 455	1	3	7	9			2	7	7			1	X			37	1	4	2	1			7							X			
22	Amampisi	5 024	1	1	3	3			1	3	3		X		X			15	3	3					3							X			
23	Amakanyayo	4 615	2	2	3	3			1	3	3		X		X			17	2	1	1				3							X			
24	Umgungundlovu	5 258		2	3	5			1	3	3				X			17							1	X		2				X			
25	Ntshangase	4 292	1	3	3	4			1	3	3			2	X			20	1						3							X			
	Others					9							2				11								1		1								
	Total	123 013	15	34	60	99	4	11	58	56			17				354	10	21	39	4				74	34	4		1		49	3	6		

Table 18.4 Activities - Regional Summary

Magisterial District	Rural Pop.	Commercial											Total	Education					Total	Health				Communications			Institutions			Other			
		Butcher	Cafe	Fresh Prod.	Gen. Dealer	Hawker	Miller	Patent Med.	Infl. Subs.	Informal	Speculator	Other		J.P.	S.P.	J.S.	S.S.	Special		M. Clinic	Res. Clinic	G.P.	Hospital	P. Office	P.O. Agency	Tel. Service	Mission	Convent	Church	Labour Rec.	Bus Service	Community	
Bizana	123 013	15	34	60	99	4	11	58	56	X	17	X	354	10	21	39	4			74	34	4		1		49	X	3		6		X	X
Libode	72 735	9	33	31	67	X	11	41	16	X	10	X	218	18	26	34	3	2		83	9	10		1		36	X	5		30		X	X
Lusikisiki	150 046	7	62	53	150	14	6	78	83	X	13	X	466	3	39	47	3			92	14	6		1		68	X			1		X	X
Maxesibeni	45 168	5	10	26	43	X	2	26	26	X		X	138	8	14	31	2			55	3	5		1	23	X			9		X	X	
Nqeleni	92 497	7	24	20	65	20	11	45	16	X	5	X	213	3	47	38	1			89	15	9		2	1	34	X	3		19		X	X
Siphagani	75 022	13	26	32	89	16	6	52		X	14	X	248	10	20	41	1			72	13	2		1	46	X	1		6		X	X	
Tabankulu	77 362	5	41	49	64	14	6	45	39	X	17	X	280	13	49	34	2			98	17	4	6			40	X	2		11		X	X
Umzimkulu	100 537	10	13	64	125	X	10	66	59	X		X	347	12	26	49	3	1		91	26	7		1	1	50	X	2		15		X	X
Umzimvubu	37 396	1	5	18	29	X	7	27	23	X		X	110	8	9	16	1			34	9	3		1		25	X	1		9		X	X
N.E. Region	773 776	72	248	353	731	68 <sup>+</sup>	70	438	318		76		2314	85	251	329	20	3		688	140	50	6	8	4	371		17		106			

Table 18.5 Shops - Bizana

Administrative Area		Main Licence	Shop Name	Licences										Goods													
No.	Name			Butcher	Cafe	Fresh Prod.	Infl. Subs	Miller	Pat. Med.	Speculator	P.O. Agency	Other	Total	Clothing	Farm Equip.	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol	Tobacco	Bicycle	Other	Total	
1	Isikelo	General Dealer	Hilltop									1													1		
		General Dealer	Jabavu	X		X	X		X		X		6	X		X		X					X			12	
		General Dealer	Mbobeni		X								2													2	
		General Dealer	Nomlacu			X	X		X		X		5	X		X			X				X			10	
		General Dealer	Nonkqubela										1													1	
		Trader	Mmangweni										1													1	
		Trader	Mdibi			X	X		X		X		5	X	X	X		X	X		X		X	X			13
		Cafe	Zamukuvuka										1														1
		Cafe	Eyethu										1														1
		Eating House	Isikelo										1														1
		Eating House	Mt. Zion										1														1
		Speculator	J. Zituta										1														1
		Speculator	A. Radebe										1														1
		Speculator	M.R. Nzala										1														1
		Butcher	Gundrift										1														1
		Fresh Produce	Kayalethu										1														1
		Hawker	E. Lungu										1														1
Hawker	K. Sigidi										1														1		
Hawker	S.V. Mtshema										1														1		
Miller	Umtamvuna										1														1		
2	Enkantolo	Trader	Masivelane									1													1		
		Trader	Aarkeville									1														1	
		Speculator	D. Ntshuntshi									1														1	
		General Dealer	Ntlamvukazi			X	X		X			4	X		X			X		X		X				9	
		General Dealer	Damela	X		X	X	X	X		X		7	X	X	X	X	X	X	X	X		X	X			17
		Cafe	Nkontsweni			X	X		X		X		5	X		X		X	X		X		X				11
3	Esikumbeni	Trader	Mlomo									1													1		
		Trader	Zenzele									1														1	
		Trader	Farnagason			X	X				X		4		X								X				7
		Trader	Themba-ihle			X	X		X		X		5	X	X	X		X	X		X		X				12
		Speculator	J.L. Dandala									1														1	
		Cafe										1														1	
4	Izilangwe	General Dealer	Ntlamvukazi			X	X		X		X		5	X	X	X	X	X		X		X	X			15	
		General Dealer	Taleni									1														1	
		Trader	Qobo	X		X	X		X		X		6	X		X	X	X	X		X					13	

Table 18.5 Shops - Bizana / contd.

No.	Name	Administrative Area	Main Licence	Shop Name	Licences								Total	Goods											Total	
					Butcher	Cafe	Fresh Prod.	Infl. Subs	Miller	Pat. Med.	Speculator	P.O. Agency		Other	Clothing	Farm Equip.	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol	Tobacco		Bicycle
5	Amantshangase		General Dealer	Highview			X	X		X	X		5	X	X	X	X	X		X	X			14		
			General Dealer	Zenzele										1											1	
			Eating House	Jerusalem										1												1
			Speculator	J. Mpetshwa										1												1
6	Amangutyano		General Dealer	Adams			X	X		X	X		5	X	X	X		X	X		X	X		13		
			General Dealer	Kwa - Cele										1											1	
			General Dealer	Mpetsheni			X	X		X	X			4	X	X	X		X	X		X	X		12	
			Trader	Mbangweni			X	X		X	X	X		5	X	X	X		X	X		X	X		13	
			Trader	Kwa - Cele										1												1
			Cafe	Zamafuthi										1												1
			Speculator	N. Mgdikizela										1												1
7	Entsimbini		General Dealer	Mzingisi		X	X		X	X		5	X	X	X	X	X		X		X		14			
			General Dealer	Ndlovu			X	X		X	X		5	X		X		X		X				10		
			Trader	Diamond										1											1	
			Trader	Mazingi's		X								2											2	
			Speculator	M. Dumani										1											1	
			Cafe	Ntsimbini										1											1	
8	Emonti		General Dealer	Emonti			X	X		X		4	X	X	X		X	X			X		10			
			Cafe	Pakamani									1												1	
			Speculator	V. Langasiki									1												1	
9	Amondengane		General Dealer	Spes. Bona			X	X		X	X		5	X	X	X	X	X		X		X	X	14		
			Trader	Ngogo			X	X		X	X		5	X		X	X	X			X			10		
			Trader	Linqelethu			X	X		X	X		5	X		X	X	X			X			10		
			Trader	Zamani									1												1	
			General Dealer	Bantileni			X	X		X	X		5	X	X	X		X	X			X			11	
			Trader	Elukanyisweni									1												1	
10	Amandela		General Dealer	Bayedwa			X	X		X	X		5	X	X	X		X		X		X		11		
			General Dealer	Sizabonke		X							2												2	
			Cafe										1												1	
11	Izinini		General Dealer	Izinini			X	X		X	X		5	X	X	X	X	X		X		X		13		
12	Izisele		General Dealer	Tsawana			X	X		X	X		5	X	X	X		X	X		X		X		12	

Table 18.5 Shops - Bizana / contd.

No.	Administrative Area	Name	Main Licence	Shop Name	Licences								Total	Goods											Total			
					Butcher	Cafe	Fresh Prod.	Infl. Subs	Miller	Pat. Med.	Speculator	P.O. Agency		Other	Clothing	Farm Equip.	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol	Tobacco		Bicycle	Other	
13	Intshamantilo	Trader Trader Cafe Miller	Mhlanga Mdantsane Kwa-Mcebi S.B.Ndimeni										1												1			
																											11	
																												1
																												1
14	Amanikwe	General Dealer Trader	Ntsingizi Kayamandi									5													10			
																											7	
15	Abetshawe	General Dealer	Lindokuhle									4													6			
16	Imizizi	General Dealer General Dealer General Dealer General Dealer Trader Trader Cafe Eating House Speculator Speculator Bawker Miller Miller	Lugwijini Redoubt Tyilira Kumbula Mabula Macbdana Kwa-Nomzamo Masakane M. Mangqukela T.N. Momoza C. Madiba Vungwana Mcedisi										1												1			
																											16	
																												1
																												13
																												6
																												1
																												1
																												1
																												1
																												1
																												1
				17	Umyaka	General Dealer Trader Trader	Ntangani Gijimi Zizamele										5											
																										15		
																											9	
18	Hlolweni	Trader Trader Cafe Cafe General Dealer General Dealer	Cwaka Patekile Landelani Zamokwakhe Hlolweni										6												15			
																										9		
																											1	
																											1	
																												9
19	Etyeni	General Dealer Eating House General Dealer	Kwanyana Masiza Greenville										1												1			
																										1		
																											15	

Table 18.5 Shops - Bizana / contd.

Administrative Area		Main Licence	Shop Name	Licences										Goods													
No.	Name			Butcher	Cafe	Fresh Prod.	Infl. Subs	Miller	Pat. Med.	Speculator	U.O. Agency	Other	Total	Clothing	Farm Equip.	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol	Tobacco	Bicycle	Other	Total	
20	Umkolofa	Trader	Ekonwabenj			X			X		X	4			X							X		XX	9		
		Trader	Mbambela	X		X	X		X		X	5	X		X	X	X	X		X		X				13	
		Speculator General Dealer	H. Tshangela Ntlozelo				X		X			3	X	X	X	X	X	X		X			X			11	
21	Amadiba	General Dealer	Amadiba			X	X		X		X	5	X	X	X		X	X		X		X	X		13		
		General Dealer	Gumzana									1														1	
		General Dealer	Mngungu			X	X		X		X	5	X	X	X		X	X					X	X	XX	14	
		General Dealer	Mahaha									1														1	
		General Dealer	Mntondela			X	X	X	X		X	6	X	X	X	X	X	X		X			X	X	X	16	
		Trader	Mtayise	X		X	X		X		X	6	X	X	X	X	X	X		X			X	X		15	
		Trader	Vumani			X	X		X		X	5	X	X	X		X	X		X			X	X		13	
		Cafe	Jabula									1															1
		Cafe	Mgungundlovu									1															1
		Cafe	Kwa-Gedeni									1															1
22	Amampisi	Speculator	W. Jevu								1														1		
		Miller	Baleni								1															1	
		General Dealer	Makwantini			X	X		X		X	5	X	X	X		X	X		X		X	X	XX		15	
		General Dealer	Tembalihle			X	X		X		X	5	X		X		X	X				X				10	
		General Dealer	Zangotshe			X	X		X		X	5	X	X	X		X	X		X			X	X		13	
23	Amakanyayo	General Dealer	Zindela	X		X	X		X		X	6	X		X	X	X		X			X		X	14		
		General Dealer	Mpisi			X	X	X	X		X	6	X		X		X	X		X		X	X	X		14	
		General Dealer	Pumla			X	X	X	X		X	1			X		X	X		X			X			1	
		Eating House										1														1	
24	Umgungundlovu	General Dealer	Gugulethu	X		X	X		X		X	6	X	X	X	X	X		X			X		X	15		
		Trader	Ntabezulu	X		X	X		X		X	6	X		X	X	X		X			X		XX	15		
		Cafe	Zamokwake									1														1	
		Cafe										1														1	
24	Umgungundlovu	General Dealer	Kanyayo			X	X	X	X		X	6	X	X	X	X	X		X			X	X		15		
		General Dealer	Xolobeni		X	X	X		X			5	X		X			X		X						10	
		General Dealer	Hambakahle									1														1	
24	Umgungundlovu	General Dealer	Ezikumba								1														1		
		General Dealer	Mzamba			X	X	X	X			5	X		X			X		X		X	X	X		14	
24	Umgungundlovu	General Dealer	Masincedane			X	X		X		X	5	X	X	X		X		X		X				13		

Table 18.5 Shops - Bizana / contd.

Administrative Area		Main Licence	Shop Name	Licences										Goods												
No.	Name			Butcher	Cafe	Fresh Prod.	Infl. Subs	Miller	Pat. Med.	Speculator	P.O. Agency	Other	Total	Clothing	Farm Equip.	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol	Tobacco	Bicycle	Other	Total
25	Ntshangase	General Dealer	Magusheni	X		X	X	X	X		X		7	X	X	X	X	X		X		X	X	X	17	
		Trader	Nkomanzi		X								2												2	
		Trader	Tandabantu			X	X		X		X		5	X		X							X		X	9
		Eating House	Esikoveni										1													1
		Eating House	Smodel										1													1
		General Dealer	Ft. Donald			X	X		X		X		5	X	X	X		X	X		X	X	X			13
		Speculator	T. Curnick										1													1
		Speculator	D. Lumbo										1													1
		Bottle Store	Magusheni										1													1
District		General Dealer	Izimini									1														
		General Dealer	Esikaneni										1													
		General Dealer	Kwa-Mayela										1													
		General Dealer	Madabana										1													
		General Dealer	Good Hope										1													
		General Dealer	Ammansi										1													
		General Dealer	Khanya										1													
		General Dealer	Linge										1													
		General Dealer	Tywar										1													
		Speculator	M. Matiyose										1													
Speculator	T. Gexo										1															
Total		154		14	8	60	60	7	59		50		413	55	36	59	19	46	57	1	47	2	80	27	15	830

Table 18.6 Shops - Regional summary

Magisterial District	No. of Shops	Licences																Goods											Total			
		Boarding House	Bottle Store	Brickmaker	Butcher	Cafe	Eating House	Fresh Produce	Garage	General Dealer	Hawker	Inflam. Subst.	Miller	Patent Medicines	P.O. Agency	Speculator	Stone Crusher	Trader	Other licences	Clothing	Farm Equipment	Food	Furniture	Hardware	House Goods	Livestock	Material	Petrol		Tobacco	Bicycle	Other
Bizana	154		1		15	27	8	61		64	4	60	12	59	50	17		34		55	36	59	19	46	57	1	47	2	60	27	15	836
Libode	102				8	30	4	32	2	67	2	17	13	42	24	13				15	14	20	9	14	17	1	12		20	7	7	390
Lusikisiki	243			3	7	40	18	51		78	14	83	6	86	68	14	1	78		74	33	110	26	55	79	1	84	2	99		2	1112
Maxesibeni	54				5	10		26		41		27	2	26	23			3	1	27	16	26	12	18	25	8	24		26	2	14	362
Nqeleni	112				7	13	10	20		66	20	16	11	45	32	4		3		20	9	26	2	13	18		17	1	26	2	1	382
Siphqeni	149				13	11	15	32		89	16	42	8	52	46	13				39	21	66	11	27	49		48	2	62		1	663
Tabankulu	125				5	39	2	49		64	14	44	6	50	40	15				45	30	50	20	33	45	9	43	1	50	10	7	671
Unzimkulu	166	1	1		10	16		65		137		59	13	70	45	1				54	24	63	11	33	57	1	47	1	63	9	3	784
Unzimubu	38				1	3	2	19		34		23	8	30	25				2	22	10	25	11	16	21		20	2	25	2	2	303
N.E. Region	1143	1	2	3	71	189	59	355	2	640	70	371	79	460	353	77	1	115	6	351	193	445	121	255	368	21	342	11	431	59	52	5503

Table 18.7 Commercial Ratios - Bizana

Administrative Area		Population 1980	General Dealers			Other Shops			Total		
No.	Name		No.	No/1000 Pop.	No. of functions	No.	No/1000 Pop.	No. of functions	No. of Shops	Shops/1000 Pop.	No. of functions
1	Isikelo	10 856	7	0,64	21	13	1,20	13	20	1,84	34
2	Enkantolo	3 776	5	1,32	18	2	0,53	2	7	1,85	20
3	Esikumbeni	3 971	4	1,01	11	3	0,76	3	7	1,76	14
4	Izilangue	2 797	3	1,07	12				3	1,07	12
5	Amantshangase	1 616	2	1,24	6	2	1,24	2	4	2,48	8
6	Amangutyana	9 658	6	0,62	20	2	0,21	2	8	0,83	22
7	Entsimbini	6 497	5	0,77	15	2	0,31	2	7	1,08	17
8	Emonti	7 676	1	0,13	4	2	0,26	2	3	0,39	6
9	Amondengane	3 306	6	1,81	22				6	1,81	22
10	Amandela	971	2	2,06	7	1	1,03	1	3	3,09	8
11	Izinini	1 475	1	0,68	5				1	0,68	5
12	Izisele	2 139	1	0,47	5				1	0,47	5
13	Intshamantilo	1 986	2	1,01	6	2	1,01	2	4	2,02	8
14	Amanikwe	3 093	2	0,65	8				2	0,65	8
15	Abatshawe	2 399	1	0,42	4				1	0,42	4
16	Imizizi	14 027	6	0,43	20	7	0,50	7	13	0,93	27
17	Umyaka	3 155	3	0,95	17				3	0,95	17
18	Blolweni	3 524	4	1,13	17	2	0,57	2	6	1,70	19
19	Etyeni	2 919	2	0,69	7	1	0,34	1	3	1,03	8
20	Umkolora	5 233	3	0,57	11	1	0,19	1	4	0,76	12
21	Amadiba	12 455	9	0,72	39	5	0,40	5	14	1,12	44
22	Amampisi	5 024	3	0,60	17	1	0,20	1	4	0,80	18
23	Amakanyayo	4 615	3	0,65	13	2	0,43	2	5	1,08	15
24	Umgungundlovo	5 258	5	0,95	17	1	0,19	1	6	1,14	18
25	Ntshangase Greenville Mission	4 292 295	4	0,93	19	5	1,17	5	9	2,10	24
	Others		9		9	2		2	11		11
	Total	123 013	99	0,81	350	56	0,45	56	155	1,26	406

**Table 18.8 Commercial Ratios - Regional Summary**

Magisterial District	Rural Pop.	General Dealers			Other shops			Total		
		No.	No/100 Pop.	No. of functions	No.	No/1000 Pop.	No. of functions	No. of shops	Shops/100 Pop.	No. of functions
Bizana	123 013	99	0,81	350	56	0,45	56	155	1,26	406
Libode	72 735	67	0,92	169	36	0,49	60	103	1,42	229
Lusikisiki	150 046	156	1,04	429	91	0,61	111	247	1,65	540
Maxesibeni	45 168	39	0,86	143	10	0,22	17	49	1,08	160
Ngqeleni	92 497	66	0,71	227	46	0,50	48	112	1,21	275
Siphaqeni	75 022	89	1,19	264	60	0,80	70	149	1,99	334
Tabankulu	77 362	64	0,83	266	61	0,79	62	125	1,62	328
Umzimkulu	100 537	138	1,37	373	29	0,29	44	167	1,66	417
Umzimvubu	37 396	29	0,77	125	4	0,11	8	33	0,88	133
N. E. Region	773 776	747	0,97	2346	393	0,51	476	1140	1,47	2822

Table 18.9 Education - Bizana

Administrative Area		Popula- tion	Junior Primary			Senior Primary			Junior Secondary			Senior Secondary			Total							
No.	Name		No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms				
1	Isikelo	10 856	3	612	11	11	2	629	10	10	4	1 960	38	35	1	347	13	13	10	3 548	72	69
2	Enkantolo	3 776	2	372	7	8	1	190	3	4	3	934	21	21					6	1 496	31	33
3	Esikumbeni	3 971									2	1 093	24	25					2	1 093	24	25
4	Izilandwe	2 797	1	46	1	1					3	927	18	18					4	973	19	19
5	Amantshangase	1 616																				
6	Amangutyana	9 658	1	214	3	3					2	1 448	24	14	1	408	11	6	4	2 070	38	23
7	Entsimbini	6 497	1	73	2	3	1	308	4	4	2	811	21	18					4	1 192	27	25
8	Emonti	7 676						2	505	6	9	2	1 159	21	18				4	1 664	29	27
9	Amandengane	3 306						1	412	5	6								1	412	5	6
10	Amandela	971									1	455	10	9					1	455	10	9
11	Izinini	1 475									1	505	12	12					1	505	12	12
12	Izisele	2 139					1	277	4	4									1	277	4	4
13	Intshamatilo	1 986					2	677	16	17									2	677	16	17
14	Amanikwe	3 093									1	600	10	11					1	600	10	11
15	Abetshawe	2 399									1	489	9	10					1	489	9	10
16	Imizizi	14 027					1	466	6	7	5	2 759	49	42					6	3 225	55	49
17	Umyaka	3 155					1	374	4	5									1	374	4	5
18	Blolweni	3 524					2	662	8	10	1	377	6	6					3	999	14	16
19	Etyeni	2 919									1	241	10	7	1	655	12	8	2	896	22	15
20	Umkolora	5 233									2	960	20	16					2	960	20	16
21	Amadiba	12 455	1	156	3	3	4	1 204	18	20	2	962	19	18	1	672	11	9	8	2 994	51	50
22	Amampisi	5 024					1	366	5	6	2	591	12	12					3	957	17	18
23	Amakanyayo	4 615					1	145	3	3	1	504	9	9					2	649	12	12
24	Umgungundlovo	5 258																				
25	Ntshangase	4 292	1	207	3	4	1	232	2	5	3	1 126	22	20					5	1 565	27	29
	Greenville Mission	295																	1	578	12	12
	Bizana	1 276									1	578	12	12								
	Other		1	207	2	3	7	1 844	27	30	5	2 478	43	37					13	4 529	72	70
	TOTAL	124 289	11	1 887	32	36	28	8 291	123	140	45	20 957	410	370	4	2 082	47	36	88	33 217	612	582

**Table 18.10 Education - Regional Summary**

Magisterial District	Rural pop.	Junior Primary School				Senior Primary				Junior Secondary				Senior Secondary				Total			
		No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms
Bizana	123 013	11	1 887	32	38	28	8 291	123	140	45	20 957	410	370	4	2 082	47	36	88	33 217	612	582
Libode	72 735	18	2 501	45	47	27	4 905	93	94	35	14 355	315	283	4	1 328	48	34	84	23 089	501	458
Lusikisiki	150 046	6	769	14	13	51	12 423	198	213	51	23 125	463	414	3	1 659	45	33	111	37 976	720	673
Maxesibeni	45 168	9	1 202	23	26	14	2 936	57	61	32	10 344	266	254	2	1 238	33	24	57	15 720	379	365
Ngqeleni	92 497	3	198	5	5	47	9 129	164	171	38	14 162	307	286	2	1 220	40	28	90	24 709	516	490
Siphaqeni	75 022	11	1 348	19	24	21	3 959	68	66	42	17 532	373	339	2	1 087	35	30	76	23 926	495	459
Tabankulu	77 362	13	1 421	29	35	49	8 029	140	172	35	13 146	294	300	3	816	29	23	100	23 412	492	530
Umzimkulu	100 537	25	1 994	40	49	37	7 506	133	142	54	23 611	465	441	5	1 775	63	39	121	34 886	701	671
Umzimvubu	37 396	9	1 136	24	23	8	1 432	27	28	19	5 856	153	141	1	599	14	8	37	9 023	218	200
N.E.Region	773 776	105	12 456	231	258	282	58 610	1003	1 087	351	143 088	3 046	2 828	26	11 804	354	255	764	224 958	4 634	4 428

FIG 7.1 POPULATION DENSITY BIZANA

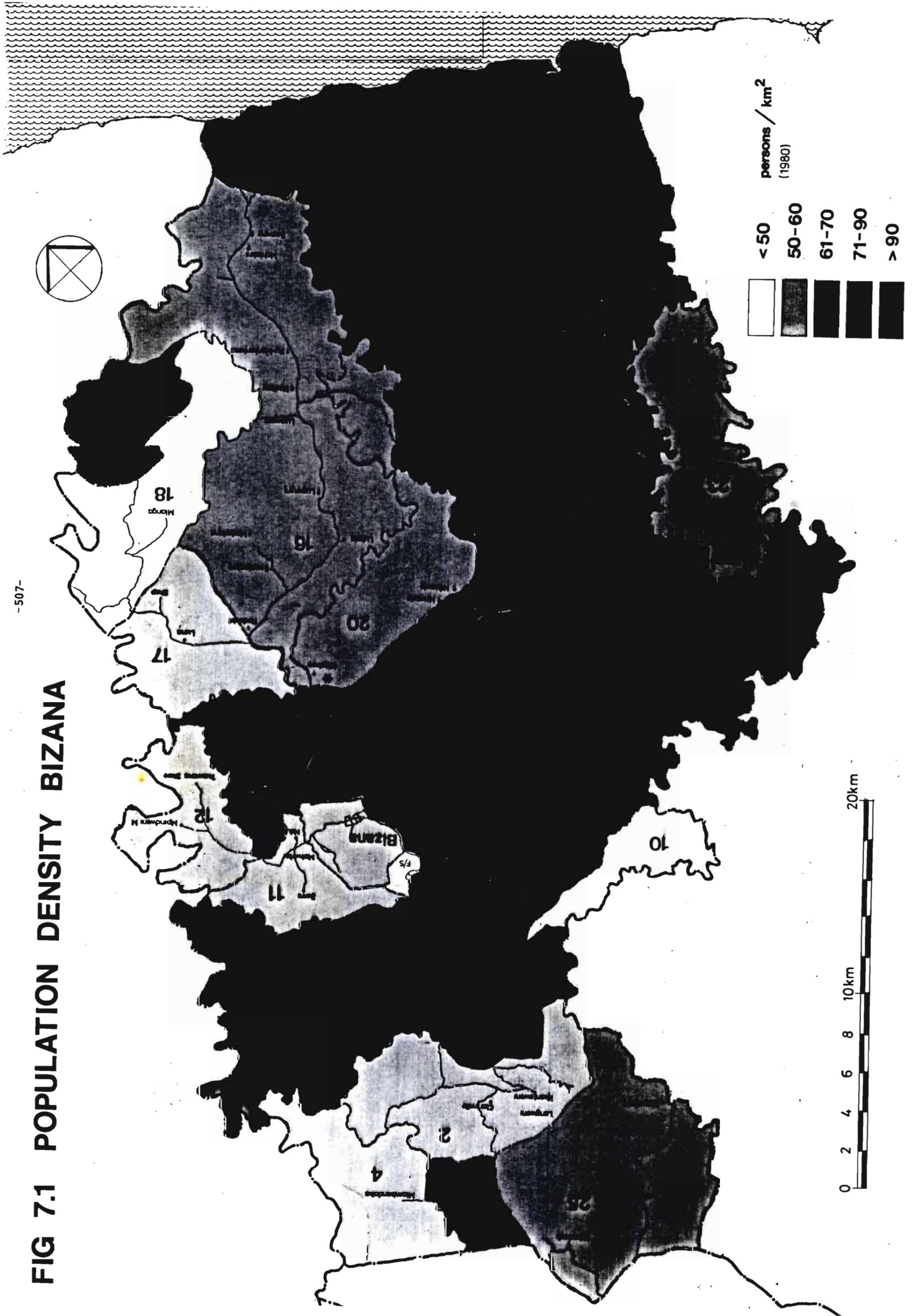
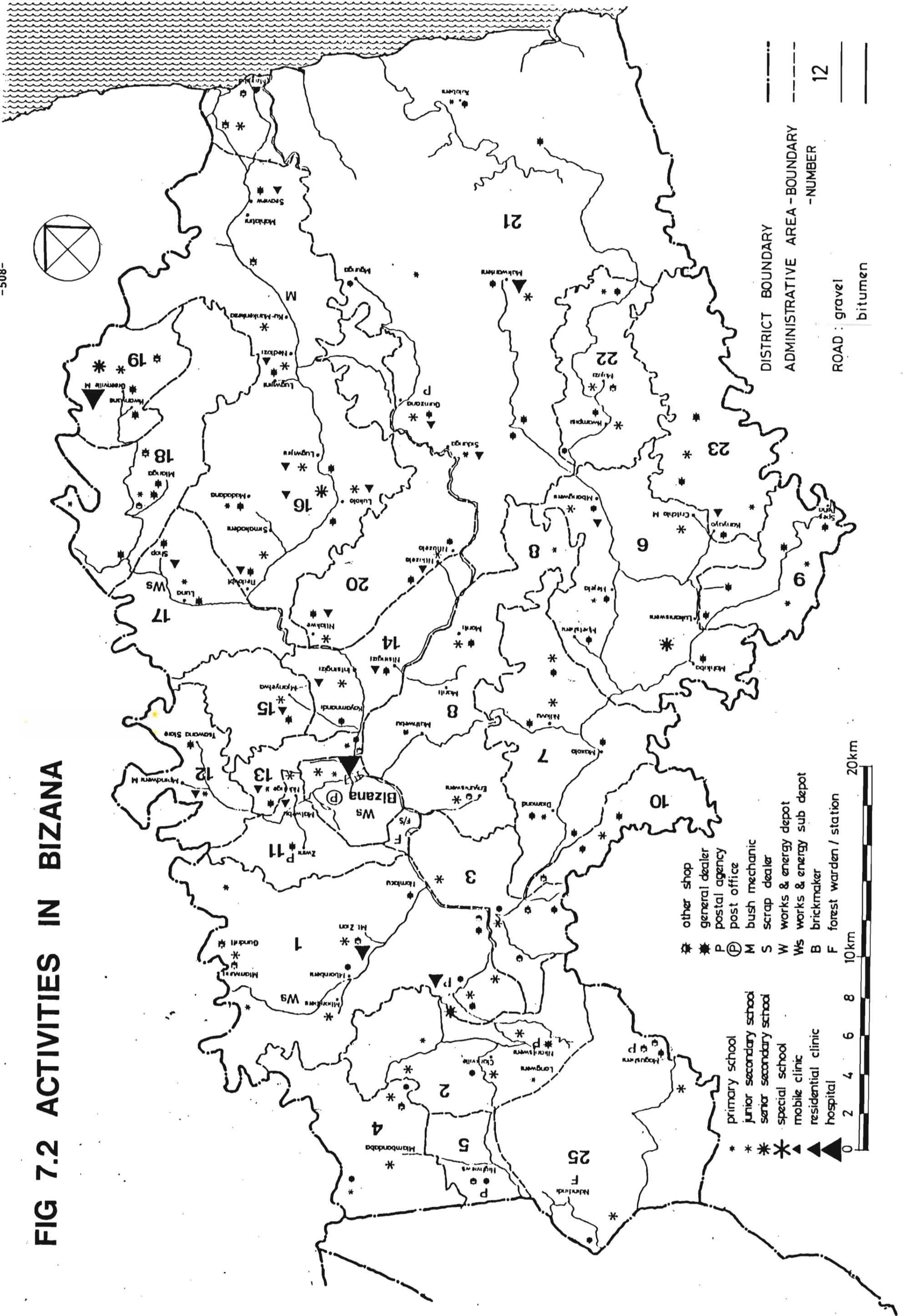


FIG 7.2 ACTIVITIES IN BIZANA



- \* primary school
- \* junior secondary school
- \* senior secondary school
- \* special school
- \* mobile clinic
- \* residential clinic
- \* hospital
- ▲ other shop
- ▲ general dealer
- ▲ postal agency
- ▲ post office
- ▲ bush mechanic
- ▲ scrap dealer
- ▲ W works & energy depot
- ▲ Ws works & energy sub depot
- ▲ B brickmaker
- ▲ F forest warden / station

DISTRICT BOUNDARY  
 ADMINISTRATIVE AREA - BOUNDARY  
 ROAD : gravel  
 bitumen

APPENDIX VIII

N E REGION : STATISTICAL TABLES

(with reference to Chapter 7)

**Table 7.1 Regional and Tribal Authorities**

<u>REGIONAL AUTHORITY</u> (Seat)	<u>MAGISTERIAL DISTRICT</u>	<u>TRIBAL AUTHORITY (Seat)</u>
NYANDA WESTERN PONDOLAND (Libode)	LIBODE	1 MPALESWENI (Mbalisweni)
		2 MIIHLANGA (Mbuleleni)
		3 SIMANZI (Makhotyana)
	NGQELENI	4 KONJWAYO (Mjoza)
		5 MCEBENI (Zindumeni)
		6 MCUMBE (Nqanda A)
		7 MTAKATYE (Mpondomiseni)
		8 NGQUBUSINI (Dumasi)
		9 MANZAMHLOPIE (Machibe)
	UMZIMVUBU (Port St Johns)	10 MVUMELWANO (Swazini)
		11 NDLUZULA (Gomolo)
QAUKENI EASTERN PONDOLAND (Qaukeni)	BIZANA	1 AMANDIBA (Madiba)
		2 AMANDELA (Amandela)
		3 AMANDENGANE (Amandengane)
		4 AMANGUTYANE (Mangutyane)
		5 AMANTSHANGASE (Amanthangase)
		6 AMAMPISI (Mampisi)
		7 IMIZIZI (Mazizi)
		8 ISEKELO (Isekelo)
		9 NTSIAMATE (Ntshamate)
	10 AMAKWALO (Ntontela)	
	LUSIKISIKI	11 AMANTLANE (Amanthlane)
		12 BOMVINI (Bomvini)
		13 EMTWENI (Ntafufu)
		14 GUNYENI (Nqobozana)
		15 NTSIAYELO (Mshayelo)
		16 QAUKENI (Qaukeni)
		17 TAWENI (Fleyi)
	MAXESIBENI (Mt. Ayliff)	18 AMAZIZI (Luwaca)
		19 IHLIBI (Rode)
		20 XESIBE (Lubaleko)
		21 BALA (Bala)
		22 MXOPO (Mxopo)
	SIPHIAQENI (Flagstaff)	23 NDIMAKUDE (Ndimakude)
		24 NITLEZI (Ntlezi)
		25 SIPHIAQENI (Siphiaqeni)
		26 XOPOZO (Xopozo)
		27 AMACWERA (Isilindini)
		28 AMANCI (Mbangweni)
		29 LWANDLOLUBOMVU (Cuba)
UMZIMKULU (Umzimkulu)	UMZIMKULU	1 FODO (Gagwini)
		2 JONGILIZWE (Mambulwani)
		3 LADAMU (Mbumbulwana)
		4 MABANDA (Intsikeni)
		5 MALENGWE (Malenge)
		6 MBUMBANE (Readsdale)
		7 MVOLOZI (Ethembeni)
		8 SANDILE (Rietvlei)
		9 SILAHLA (Cablane)
		10 ZWELETIJU (Dumakudi)

- Notes :**
1. Details of the administrative areas within each Magisterial district are listed in Appendix VII
  2. Towns take the Magisterial district name except where indicated.
  3. See Figure 7.3.

**Source:** Departments of the Prime Minister, Agriculture, Interior and Local Government records.

# TRANSKEI N. E. REGION

# REGIONAL AND TRIBAL AUTHORITIES

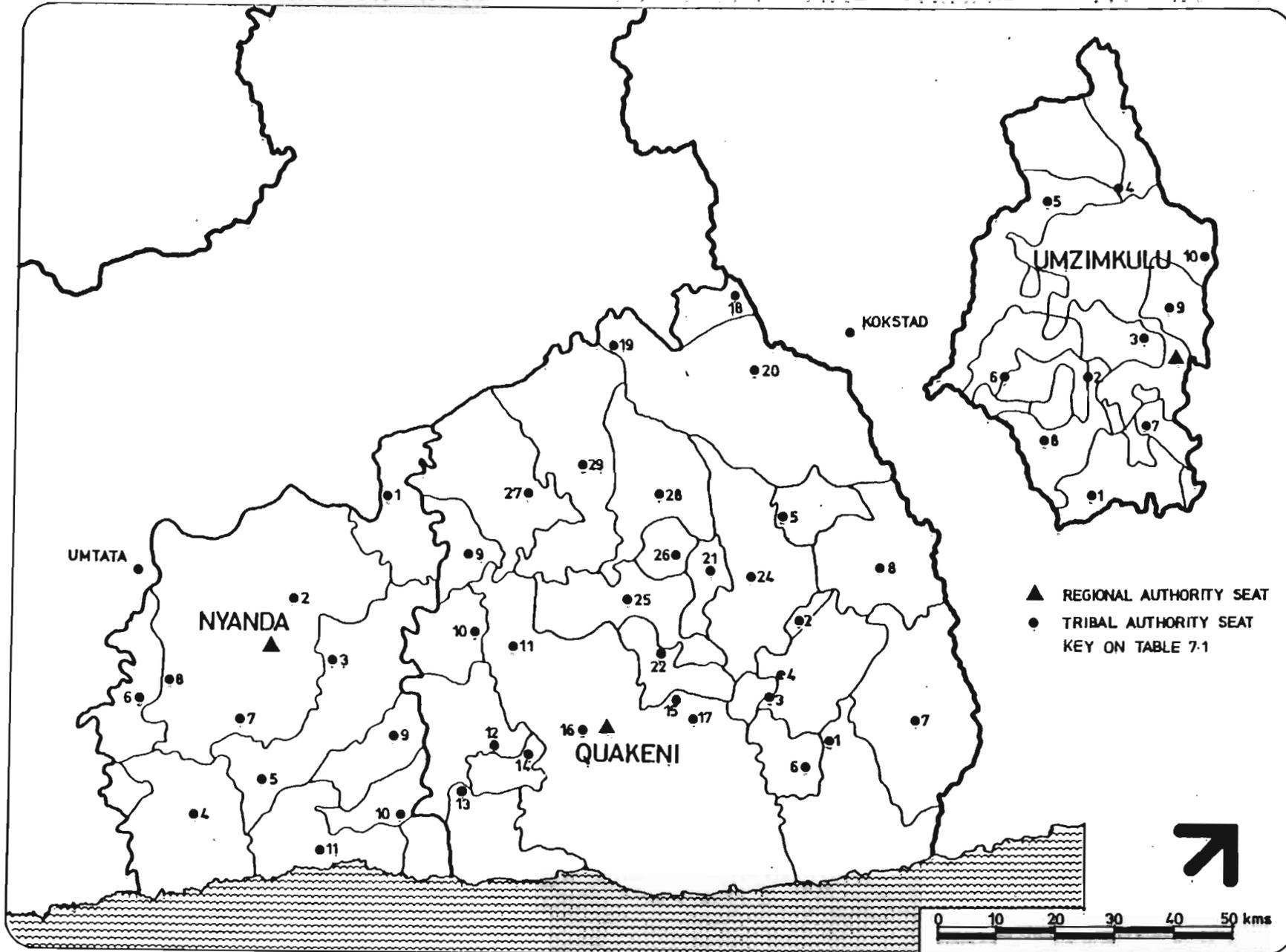


FIG 7-3

Table 7.2 Population by district 1960-1980

Magisterial district	1960 Census			1970 Census				1980 Census				1982 Estimated Total (2)
	Rural	Town	Total	Rural	Migrant	Town	Total	Rural	Migrant	Town	Total	
	Bizanz	67 035	725	67 760	82 760	16 272	1 710	100 756	99 614	23 399	1 276	
Libofe	48 523	441	48 964	51 590	8 208	615	60 413	64 352	8 383	705	73 440	80 300
Luskisikl	91 907	845	92 752	112 175	15 768	1 174	129 117	133 946	16 104	1 188	151 238	171 621
Maxesibent	22 558	656	23 214	33 431	6 144	1 396	40 971	38 893	6 275	1 400	46 648	54 458
Ngrjeloni	62 340	399	62 739	69 280	9 480	683	79 443	82 815	9 682	649	93 146	105 595
Siphant	52 830	625	53 455	56 745	9 336	755	66 836	66 496	9 535	906	77 017	88 838
Tafankulu	58 380	614	58 994	60 474	8 664	742	69 850	68 463	8 849	977	78 289	92 844
Umzimkulu	66 018	998	67 016	75 860	10 824	3 504	90 188	89 482	11 055	4 371	104 908	119 877
Umzimvubu	28 179	1 169	29 348	29 979	3 912	1 817	35 708	33 397	3 995	2 885	40 277	48 127
NE Region	497 770	6 472	504 242	572 278	88 608	12 396	673 282	677 458	97 277	14 517	789 252	895 584
Transkel	1 540 131	37 166	1 577 297	1 910 144	240 000	61 733	2 211 877	2 184 410	345 116	115 796	2 645 322	2 803 877

Sources: RSA 1960 Population Census Report Vol. 7 No. 1, Table 1.

RSA 1970 Population Census Report 02-05-10, Table 2.

Republic of Transkel (1978), The Development Strategy 1980-2000, Table 1.1.

Robinson P S (1978) Spatial Implications of a Development Strategy for Transkel 1980-2000, Table 4.

Thomas W II (1982) Socio-economic development in Transkel, Tables 2 and 3.

Notes: 1. Including Rietvllei and Ibbisi.

2. Based on an assumed overall growth rate of 2.4% p.a. since 1970. See Thomas W II (1982) pp 16-18 and Table 1.

Table 7.3 Population Distribution (1983)

Magisterial District	Population (1) (1983 estimates)	Labour Force (1)	Migrants (2) (all)
Bizana	153 075	51 810	24 260
Libode	90 675	30 690	14 370
Lusikisiki	187 200	63 360	29 668
Maxesibeni	57 525	19 470	9 117
Ngqeleni	115 050	38 940	18 233
Siphaqeni	95 550	32 340	15 143
Tabankulu	96 525	32 670	15 297
Umzimkulu	129 675	43 890	20 551
Umzinvubu	49 725	16 830	7 880
NE Region	975 000	330 000	154 519
Transkei	3 250 000	1 100 000	515 064

Sources :1. Based on figures quoted in Development Priorities and Public Sector Spending 1983-1988 .

2. Wakelin P M (1983) Migrant labour in Transkei.

Notes : 1. It was assumed that as the NE region contains 30% of Transkei's population that it also contains the same proportion of its total labour force and migrant labourers.

2. Breakdown of the labour force and migrants per Magisterial District is based on the percentage of the total NE population residing in each district. District populations were calculated on the proportional breakdown of people per district from the 1980 census. It was assumed that although the official 1980 census figures were low, the percentage of under-enumeration per Magisterial district was constant.

Table 7.5 Migrants: area of work (1982)

Area	% All External Migrants	% External Males	% External Females
Transvaal	58,29	61,22	36,27
Western Cape	14,36	14,59	12,75
Orange Free State	10,05	10,97	3,43
Natal	8,80	6,00	28,92
Eastern Cape	7,36	6,27	16,18
Northern Cape	0,60	0,61	0,49
Namibia	0,30	0,14	1,47
Swaziland	0,24	0,20	0,49
<b>Total (External)</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>
Town	% All Internal Migrants	% Internal Males	% Internal Females
Umtata	41,30	44,00	35,48
Butterworth	10,58	13,00	5,38
Bizana	4,44	4,50	4,30
Mt Ayliff	3,75	2,00	7,53
Umzimkulu	3,07	1,00	7,53
Maluti	3,07	3,50	2,15
Cofimvaba	3,07	3,50	2,15
KwaBhaca	3,07	3,50	2,15
Idutywa	2,73	2,00	4,30
Engcobo	2,73	2,50	3,23
Remaining 18 Small Towns	22,19	20,50	25,80
<b>Total (Internal)</b>	<b>100,00</b>	<b>100,00</b>	<b>100,00</b>

Source: Wakelin P M (1983) Migrant labour in Transkei, Tables 2.1 and 2.2.

Table 7.4 Migrant workers (1982)

Category	%	Estimated number of migrants	
		Transkei (2)	north-east (3)
External male	74.54	383 929	115 179
External female	10.78	55 524	16 657
Internal male	10.03	51 660	15 498
Internal female	4.65	23 951	7 485
Total	100.00	515 064	154 519

Source :  
1. Wakelin P M  
(1983) Migrant  
labour in Transkei  
p 5,

- Notes:
1. Obtained from IMDS survey
  2. Calculated assuming 10% of migrants are at home at any one time.
  3. Estimated on the assumption that the region has . . . of Transkei's population and therefore of its migrants.

Table 7.6 Employment Distribution (1978)

Magisterial district	No. of wage jobs (1978)	% of all wage jobs in Transkei	Households per wage job
Bizana	3 066	2,2	7,2
Libode	2 114	1,5	6,4
Lusikisiki	9 059	6,5	3,1
Maxesibeni	2 653	1,9	3,3
Ngqeleni	2 713	1,9	6,4
Siphaceni	2 244	1,6	6,6
Tabankulu	2 136	1,5	7,1
Umzimkulu	7 322	5,2	2,6
Umzimvubu	2 289	1,6	3,1
N E Region	33 596	24,0	4,3
Transkei	140 000	100,0	3,0

Source: 1. Hawkins Associates (1980) Table 15.3

Table 7.7 Income Distribution by District (1979)

Magisterial district	Income					
	Poorest 80% of sample pop.				Total sample population.	
	Actual popul %	Cumul. income % (3)	Per capita income(R)	Rank (4)	Per capita income(R)	Rank (4)
Bizana	80	55	191	A	276	A
Libodé	82	45	95	D	174	C
Lusikisiki	80	50	114	C	178	C
Maxesibeni	82	58	135	B	192	B
Ngqeleni	80	52	99	D	153	D
Siphaqeni	82	55	122	B	184	B
Tabankulu	81	54	100	C	150	D
Umzimkulu	81	53	173	A	264	A
Umzimvubu	83	54	105	C	161	C
NE Region	81	53	130	-	191	-
Transkei	78	46	115	-	194	-

Sources : R G Barry (1982) based upon BMR (1980) report tables 1, 2, 3, 4, 1.1, 1.2, 1.3, 18.1, 18.2, 18.3 and computations by Dept. of Commerce, Industry and Tourism.

Notes :

1. Cumulative income levels taken as those where cumulative population is closest to the poorest 80%.
2. Rank is determined on a national basis. A = top 7 districts, B = next 7 etc.

**Table 7.8 Household Income Distribution (1982)**

High income households	% total income earned (1)	Low income households	% of total income earned (2)
Top 1%	9,50	Bottom 50%	10,62
Top 5%	25,37	Bottom 21%	2,23
Top 11%	43,84	Bottom 5%	0,18
Top 20%	59,76		

Source: IMDS Income and expenditure survey, 1982.

Notes: 1. Towns and rural areas.  
2. These figures include migrant remittances.

**Table 7.9 Source of household income (Rural)**

Income group (R/annum)	% total households	Wages	Pensions	Migrant remittances	Household production (1)	Total
Under 500	25,00	10,65	19,39	67,05	2,91	100,00
501- 1000	25,00	12,10	14,30	71,10	2,50	100,00
1001- 1500	13,00	15,36	17,11	65,75	1,78	100,00
1501- 2000	7,00	25,52	21,40	48,08	4,00	100,00
2001- 3000	7,00	37,67	13,89	46,17	2,27	100,00
3001- 4000	6,00	74,40	4,24	19,85	1,51	100,00
4001- 5000	5,00	80,56	4,24	13,25	1,95	100,00
5001-10000	7,00	69,90	4,43	22,95	2,72	100,00
Over 10000	3,00	83,00	8,16	6,08	2,76	100,00
Total	100,00					

Source: IMDS Income and expenditure survey 1982.

Note: 1. Household production figures only include money earned from the sale of household products and not what is consumed by the household.

Table 7.10 Remittance contribution to household income

Household Income Range Rand per annum	% of Households	Remittance as a % of Household Income
Under 200	2,61	94,3
201 - 300	6,12	82,4
301 - 400	5,28	95,4
401 - 500	8,79	91,5
501 - 600	9,33	89,3
601 - 700	4,05	83,5
701 - 800	8,24	93,2
801 - 900	5,08	84,0
901 - 1 000	5,01	90,6
1 001 - 1 100	3,84	70,5
1 101 - 1 200	7,56	85,2
1 201 - 1 300	1,92	66,1
1 301 - 1 700	7,07	62,1
1 701 - 2 000	4,74	65,9
2 101 - 2 500	3,84	74,9
2 500 - 2 900	1,92	59,5
2 901 - 3 900	4,50	46,1
3 901 - 5 000	3,36	33,7
Over 5 000	6,64	36,0
Total	100,00	

Source: Wakelin P M - (1983) Migrant labour in Transkei Table 3.3.

Table 7.11    Remittances per annum

Income Range R's	% All Migrants	% External Migrants	% Internal Migrants
1 - 100	2,73	2,74	2,26
101 - 200	9,33	9,95	6,79
201 - 300	14,44	14,33	12,67
301 - 400	10,64	10,38	13,12
401 - 500	12,08	11,97	11,76
501 - 600	11,24	11,72	9,50
601 - 700	3,88	4,01	3,62
701 - 800	9,77	10,51	5,43
801 - 900	4,37	4,39	4,52
901 - 1 000	3,98	4,27	1,81
1 001 - 1 100	1,64	1,78	0,90
1 101 - 1 200	7,26	7,39	6,36
1 201 - 1 300	0,27	0,32	0,00
1 301 - 1 400	0,38	0,45	0,00
1 401 - 1 500	1,15	0,96	2,26
1 501 - 1 600	0,22	0,13	0,90
1 601 - 1 700	0,55	0,45	1,36
1 701 - 1 800	0,82	0,57	1,81
1 801 - 1 900	0,00	0,00	0,00
1 901 - 2 000	0,44	0,38	0,90
2 001 - 2 500	2,46	2,29	3,17
2 501 - 3 000	1,31	0,32	4,07
3 001 - 5 000	1,04	0,69	6,79
Total	100,00	100,00	100,00
% of Migrants Not Remitting	8,1	8,2	14,9

Source:    Wakelin P M (1983) Migrant labour in Transkei Table 3.2.

Table 7.12 Transkei aggregate consumer expenditure (1982)

Items	Rural Households			Urban Households			Total R million p.a.
	Average per H/H	Aggregate p.a.	%	Average per H/H	Aggregate p.a.	%	
.1 Grain products	R 242	R 115,15 mill.	13,0	R 301	R 10,54 mill.	5,7	R 125,69 mill.
.2 Meat	141	66,27	7,5	436	15,26	8,2	81,53
.3 Fish	0	3,76	0,4	19	0,67	0,4	4,43
.4 Fats	29	13,63	1,5	40	1,60	0,9	15,23
.5 Milk, eggs	42	19,74	2,2	02	2,07	1,5	22,61
.6 Vegetables	155	72,05	8,2	244	0,54	4,6	81,39
.7 Fruits, nuts	26	12,22	1,4	62	2,17	1,2	14,39
.8 Sugar products	61	20,67	3,2	64	2,24	1,2	30,91
.9 Non-alc. beverages	74	34,70	3,9	133	4,66	2,5	39,44
.10 Baby foods	16	7,52	0,8	34	1,19	0,6	8,71
.11 Other food	21	9,07	1,1	36	1,26	0,7	11,13
ALL FOOD	(818)	R 304,46 mill.	(43,3)	(1 459)	R 51,07 mill.	(27,5)	(435,53)
.1 Alcoholic beverages	30	14,10	1,6	165	5,70	3,1	19,80
.2 Cigarettes	17	7,99	0,9	55	1,93	1,0	9,92
1.1 Male clothing	54	25,30	2,9	181	6,34	3,4	31,72
1.2 Female clothing	96	45,12	5,1	263	9,21	4,9	54,33
2 Housing	109	51,23	5,0	790	27,93	15,0	79,16
3 Fuel/light	105	49,35	5,6	177	6,20	3,3	55,55
4 Public transport	59	27,73	3,1	125	4,30	2,4	32,11
5.1 Private transport	85	39,95	4,5	493	17,26	9,3	57,21
5.2 Fuel	18	8,46	0,9	121	4,24	2,3	12,70
6 Medical expenditure	16	7,52	0,8	37	1,30	0,7	8,82
7 Education	34	15,90	1,6	81	2,84	1,5	18,74
8 Insurance etc	34	15,90	1,6	198	6,93	3,7	22,83
9 Recreation, holiday	16	7,52	0,8	33	1,16	0,6	8,68
10 Furniture, household equipment	223	104,81	11,8	750	26,25	14,1	131,06
11 Washing, cleaning material	47	22,09	2,5	105	3,68	2,0	25,77
12 Cosmetics, pat. med.	70	32,90	3,7	140	4,90	2,6	37,80
13 Telephone, Postage Communication	3	1,41	0,2	16	0,56	0,3	1,97
14 Reading material	12	5,64	0,6	30	1,05	0,6	6,69
15 Funeral, church	19	8,93	1,0	44	1,54	0,8	10,47
16 Other	20	9,40	1,1	40	1,40	0,7	10,80
TOTAL	R 1 085	R 885,95 mill.	100,0%	R 5 311	R185,89 mill.	100,0%	R1 071,84 mill.

Source: Institute for Management and Development Studies, Income and Expenditure Survey (1982)

Table 7.13 Administrative and spatial structure

Traditional Administration System

Territorial Aspect	Government roles and recruitment
Area occupied by chiefdom: cluster	Paramount Chief (H)
Chiefdom	Chief (H) Councillors (A)
District (Umkhala)	Sub-chief (A/H) (Inkosi) Councillors (A)
Ward (Isithile)	Wardhead (A/H) (Isiduna) Councillors
Neighbourhood	
Homestead	Homestead Head Homestead Member

Source: Hammond Tooke W O (1975) Table 4

Key: H : Hereditary recruitment  
A : Appointed recruitment  
— : Positionally legitimated authority  
— : Consensually legitimated authority

B Bureaucratic System

Territorial Aspect	Government Roles and Recruitment		
	Bureaucratic (appointive)	Traditional (hereditary)	Elective
Transkeian Territories	Chief Magistrate		( C. M. as chairman; Magistrates as members) Bunga councillors
District	Magistrate (J)	Chief (J) (with council)	(M. chairman of District Council)
Location	Headman (J)	Headman (J) (with council)	.
Neighbourhood		Sub-headman (appointed by headman) (with council)	.
Homestead		Homestead Head	.
		Homestead Member	.

Source: Hammond Tooke W O (1975) Table 5.

Key: J : Officially recognized Judicial powers  
— : Consensually legitimated authority  
..... : Persuasion  
— : Positionally legitimated authority

C Bantu Authorities System

Territorial Aspect	Governments Roles and Recruitment		
	Bureaucratic (A)	Tribal (H)	Elective
"Self-Governing" Transkei	Cabinet and Civil Service Head		Members of Legislative Assembly
Regional Authority Area		Head of Regional Authority (H/A)	
District Authority Area	Magistrate	Head of District Authority (H/A)	
Tribal Authority Area		Chief (H)	
Locations		Headman (H)	
Neighbourhood		Sub-headman (A)	
Homesteads		Homestead head	
		Homestead member	

Source: Hammond-Tooke W O (1975) Table 14.

Key: H : Hereditary recruitment  
A : Appointive recruitment  
— : Consensually legitimated authority  
— : Positionally legitimated authority

**Table 7.14 Urban-rural population distribution (1980)**

Magisterial District	1980 Census		
	Rural (1)	Town	Total
Bizana	123 013	1 276	124 289
Libode	72 735	705	73 440
Lusikisiki	150 050	1 188	151 238
Maxesibeni (Mt Ayliff)	45 163	1 480	46 643
Ngqeleni	92 497	649	93 146
Siphaqeni (Fiagstaff)	76 031	986	77 017
Tabankulu	77 312	977	78 289
Umzimkulu	100 537	4 371 (2)	104 908
Umzimvubu (Port St Johns)	37 396	2 835	40 231
NE Region	774 739	14 517	789 256
Transkei	2 529 526	115 796	2 645 322

Source Osmond Lange Inc (1982) Table 2.5

- Notes
1. Rural totals include migrant workers who almost exclusively live in rural areas.
  2. Including Rietvlei and Ibisi.
  3. Figures listed here are from the uncorrected 1980 census.

**Table 7.15 District areas and population (1980)**

Magisterial District	Total Area (km <sup>2</sup> )	% of region's total area	Total population	% of region's total population
Bizana	1 974	14,4	124 289	15,7
Libode	1 372	10,0	73 440	9,3
Lusikisiki	2 089	15,3	151 238	19,2
Maxesibeni	934	6,8	46 643	5,9
Ngqeleni	1 409	10,3	93 146	11,8
Siphaqeni	1 047	7,7	77 017	9,8
Tabankulu	1 494	10,9	78 289	9,9
Umzimkulu	2 699	19,7	104 908	13,3
Umzimvubu	653	4,9	40 231	5,1
NE Region	13 671	100,0	789 256	100,0

Source : 1. Thomas W H (1982) Socio-economic development in Transkei, Table 2 and 3.

2. Department of Agriculture and Forestry, Annual Report

**Table 7.16 Rural Population densities (1980)**

Magisterial District	% of Admin. areas where resettlement has been	
	Accepted & planned (1)	Implemented (2)
Bizana	24	20
Libode	100	100
Lusikisiki	45	30
Maxesibeni	79	79
Ngqeleni	70	61
Siphaqeni	31	31
Tabankulu	79	76
Umzimkulu	75	57
Umzimvubu	100	100
N E Region	65	53
Transkei	80	not available

Source:

Department of Agriculture and Forestry.

Notes:

1. June 1980. Figures quoted in Hawkins Associates (1980)

**Table 7.17 Resettlement by district**

Magisterial district	Number of persons per sq. km.		
	Lowest	Highest	Average
Bizana	36	132	74
Libode	29	119	55
Lusikisiki	15	173	61
Maxesibeni	22	104	49
Ngqeleni	43	148	67
Siphaqeni	32	101	69
Tabankulu	22	137	55
Umzimkulu	5	146	43
Umzimvubu	43	111	72
NE Region	5	173	58
Transkei	Data not yet available		

Source: Based on 1980 Census (uncorrected) population statistics and areas measured by Osmond, Lange Inc. from 1:50 000 topo-cadastral maps. See discussion of this p 33

**Table 7.18** Size of rural villages

Approximate number of households per cluster	Traditional	%	Betterment	%	Total	%
20 - 30	158	58.5	181	34.3	339	42.5
31 - 50	73	27.0	174	33.0	247	31.0
51 - 70	32	11.9	67	12.7	99	12.4
71 - 100	7	2.6	61	11.6	68	8.5
101 - 150	-	-	34	6.5	34	4.3
151+	-	-	10	1.9	10	1.3
<b>Total</b>	<b>270</b>	<b>100.0</b>	<b>527</b>	<b>100.0</b>	<b>797</b>	<b>100.0</b>

Source Air photo analysis (1983)

**Table 7.19** Access to rural villages

Magisterial District	No. of Administrative Areas examined	Settlements			No. on Department of Works and Energy maintained roads	No. of feeder roads	Total length of feeder roads (km)
		Traditional	Consolidated	Total			
Bizana	24	50	27	77	31	46	103
Libode	27	22	75	97	22	75	155
Lusikisiki	45	44	47	91	20	71	134
Maxesibeni	25	8	61	69	11	58	123
Ngqeleni	48	45	73	118	18	100	195
Siphaqeni	24	52	50	102	33	69	136
Tabankulu	26	20	73	93	33	60	143
Umzimkulu	59	29	71	100	51	49	121
Umzinvubu	16	-	50	50	17	33	62
<b>Totals</b>	<b>294</b>	<b>270</b>	<b>527</b>	<b>797</b>	<b>236</b>	<b>561</b>	<b>1 172</b>

Source: Air photo analysis (1983)

Table 7.20 Weighted scores for functional analysis

Activity(1)	Score(2)	Frequency
Telephone connections	0,03	] More than one per administrative area
General dealer	0,05	
Primary school	0,06	
Postal agency	0,09	
Jun. Sec. school	0,10	
Cafe	0,15	
Tribal auth. seat	0,69	] One per 5 to 7 administrative areas
Agric. ext. officer	0,70	
Resid. clinic	0,72	
Personal services(3)	0,93	
Mission	0,95	
Sen. Sec. school	1,27	] One per 10 to 20 administrative areas
Govt. depts	1,51	
Recruiting depots	1,72	
Garage	2,13	
Wholesaler	2,27	
Post office	2,78	
Accommodation	2,78	
Airfield	3,57	] One per 35+ administrative areas, or approx. one per district
Sawmill	3,57	
Hospital	4,17	
Police station	4,55	
Magistrate	4,76	
Municipality	4,76	
Doctor (private)	5,00	
Tertiary/special educ.	5,56	
Bank	7,69	

- Notes
1. Based on data collected for the NE, NW and SE regions. See Osmond Lange (1982-83) op cit.
  2. Score (weighted average)  $W_a = \frac{100}{N_a}$  where  $N_a$  = the total amount of occurrence of each activity. See Sutcliffe and Horton (1983)
  3. Personal services includes accountants, attorneys, insurance, funeral services, photographers, hairdressers etc.

**Table 7.21 Hierarchy of towns and central places (1983)**

Rank	Centre	Score	Rank	Centre	Score
1	Port St John's	1 069	19	Misty Mount	37
2	Lusikisiki	985	20	Rode	30
3	Flagstaff	838	21	Malenge	28
4	Bizana	695	22	Magusheni	26
5	Umzimkulu	635	23	Lourdes	25
6	Mt Ayliff	606	24	Mvonti	25
7	Tabankulu	401	25	Greenville Mission	24
8	Ngqeleni	354	26	Nkantweni	19
9	Libode	319	27	Canzibe	19
10	Rietvlei	135	28	Buntingville	18
11	Mfundisweni	65	29	Tina Falls	17
12	Glengarry	64	30	Old Bunting	16
13	Riverside	58	31	Umngazi Mouth	16
14	Majola	57	32	Isilimela	16
15	Magwa	53	33	Tombo	16
16	Ntlaza Mission	53	34	Palmerton Mission	16
17	Ibisi	51	35	Singisi	16
18	Holy Cross	46	36	Mzamba	16
			37	Nkanga	14
			38	Gillespie Mission	14
			39	Bambisana	13
			40	Isilindini (Sipetu)	12

Source: Functional analysis (1983)

Note 1. Centres have been grouped using the nearest neighbour analysis technique.

**Table 7.22 Effective service areas (1983)**

Town Name	Population within 15 kms
<u>District Towns</u>	
Bizana	33 595
Flagstaff	27 958
Libode	21 198
Lusikisiki	40 103
Ngqeleni	17 791
Mt Ayliff	16 800
Port St John's	5 800
Tabankulu	20 359
Umzimkulu	13 626

<u>Towns outside region</u>	
Harding	6 569
Kokstad	7 049
Umtata	14 051
<b>Total</b>	<b>224 899</b>

Source: Service area analysis (1983) and the 1980 Census.

Note: 1) The 15 km radius was calculated by taking a 13 km distance along the classified roads serving the town and then 2 km on either side of the road. The basis for this assumption was the air photograph analysis (1983) which showed that most villages are located within 2 km of a classified road.

2) Where an administrative area was traversed by the 15 km radius, the total population of the area was included into the service population.

Table 7.23 Towns: Physical Infrastructure  
(key on next page)

Town Name	Number of lots							Water			Road linkages				Public Transport			Electricity				Sewage Disposal		
	Residential	Business	Admin.	Vacant	Other uses	Total area subdivided	% of subdivided area	Source	Supply Capacity	Regulation	Roads to other towns	Town/Centre	Distance (km)	Grade	Bus routes and destinations	Buses per day	Passes	Source	Capacity	Connection	Cost/unit	Type of system	Capacity	Connections
Hizana	63	26	16	47	6	11,4	5,0	S/R	A	Yes	G	Port Edward	28	M	Rural Areas	6	Yes	G		T	n.a.	S,T	-	X, R, C
									270kl		T/G	Kokstad	80	M,N	Port Shepstone			G				P	-	R
											G	Flagstaff	61	M	Harding			G				W	-	H
											G	Harding	40	M	Kokstad									
Flagstaff	47	35	16	15	3	90,0	7,0	D/R	2000kl	Yes	G	Luikieiki	43	M	Rural areas	9	Yes	G	-	P	n.a.	P	V.few	T
									230kl		G	Hizana	61	M	S.A.R.	5						B	Most	T
											G	Mogusheni	34	M								W		G, P
											G	Tabankulu	52	M	Luikieiki	2								
Ilbode	40	17	14	23	4	50,0	1,6	R/D	A	Yes	T	Intata	27	N	Intata		Yes	G		P	n.a.	B		T
											G	Port St Johns	66	N	Port St Johns	2								
											G	Nyqeleni	23	S										
											G	Tomko	45	N										
Luikieiki	68	36	11	32	7	90,0	4,6	R	S	Yes	G/T	Intata	126	M,N	Kokstad	2	Yes	G	A	R	27c	P	-	Most lots
											G	Flagstaff	45	M	Port St Johns	4				C, R	32c	S,T	-	Very few
											G	Port St Johns	31	M	Rural Areas	12								
											G	Holy Cross	37	S	Flagstaff	2								
Mount Ayliff	96	10	8	35	4	99,0	5,2	R	A	Yes	T	Kokstad	40	M	Imzinkulu	20	Yes	G	-	P	n.a.	S,T		R
											T	Mt Frere	45	N	Rural areas			G	-	H	n.a.	C		G, A
											T	Imzinkulu	115	M	Kokstad			G	-	G	n.a.			
											G	Mfuleni	23	S										
											G	Hizana	02	M,H										
Mogeleni	26	15	5	19	9	50,6	3,2	R	A	Yes	G	Intata	30	M	Rural areas		Yes	G	-	P	n.a.	B	-	T
											G	Ilbode	23	S	Ilbode							P	-	P
											G	Port St Johns	71	S,M	Intata									
Port St Johns	124	41	21	95	14	107,4	1,1	R	L	Yes	G	Ilbode	66	N	Kokstad	2	Yes	G	L	R	20c	S,T	-	T
											G	Luikieiki	43	M	Intata	2		G	L	C	21c	P		
											G	Tomko	21	N	Durban	1				G	55c			
											G	Majola	30	S	Port Shepstone	1								
												Mt Frere	2											
												Luikieiki	2											

Table 7.23 Towns: Physical Infrastructure (continued)

Town Name	No. of lots							Water			Road linkages				Transport			Electricity				Sewage Disposal		
	Residential	Business	Admin.	Vacant	Other uses	Total area subdivided	% of developed area	Source	Supply Capacity	Retreatment System	Roads to other towns	Town/Centre	Distance (km)	Grade	Bus Routes and destination	Buses per day	Taxis	Source	Capacity	Connection	Cost/unit	Type of System	Capacity	Connections
Tabankulu	64	19	10	17	3	10,15	5,0	R	I	Yes	G	Flagstaff	52	B	Rural areas	16	Yes	G	-	P	n.a.	B	-	T
											G/T	Ht Ayliff	29	M,N	Flagstaff			G	-	A	n.a.	-	-	
											G/T	Ht Frere	51	M,N	Mount Ayliff			G	-	G	-	-		
Maziakulu	136	15	14	51	4	116,7	12,0	S,R	A	Yes	T	Kokstad	86	N	Rural areas		Yes	E	S	T	0,0c	B,P,C	S	
											T	P.H.B.	109	N	Kokstad									
											T	Harding	59	N	Port Shepstone									
											T	Rietvlei	30	N										
											T	Ibisi	20	N										

Key to Table 7.2 Towns - Infrastructure

1. Water

a) Source:

B - Borehole  
D - Dam  
R - Reservoir  
S - Spring

b) Capacity:

A - Adequate  
L - Not adequate  
S - Surplus

2. Road Linkages

a) Road to other towns

D - Dirt  
G - Gravel  
T - Tar

b) Grade

N - National  
M - Main  
S - Secondary

3. Electricity

a) Source:

E - Escom  
G - Generator  
T - Tescor

c) Connections:

A - Hotel  
C - Commercial  
G - Govt offices  
H - Hospital

b) Capacity:

A - Adequate  
L - Not adequate  
S - Surplus

P - Private

R - Residents  
T - Whole Town

4. Sewage Disposal

a) Type of system

B - Bucket  
C - Conservancy  
P - Pit latrine

S - Soak pit  
W - Waterborne

b) Capacity

A - Adequate  
L - Not adequate  
S - Surplus

c) Connections

A - Hotel  
C - Commercial  
G - Govt offices  
P - Private  
R - Residential  
T - Whole town

H - Hospital

Source: Based on data contained in Rosmarin, Els and Taylor Structure Plans

**Table 7.24 Components of an Acceptable Living Environment**

Type of need to be satisfied	Specific element	Quantitative/Qualitative conditions
Physical	1) Shelter  2) Utility Services (i) water  (ii) roads/footpaths  (iii) sanitation  (iv) fuel  (v) communication  3) Food  4) Safety  5) Expansion  6) Access	<ul style="list-style-type: none"> <li>- the adoption of standards within urban areas which facilitate the building of a range of dwelling units which are affordable to the local residents;</li> <li>- access to land in the rural areas (traditional and consolidated locations) for the erection of homesteads;</li> <li>- one plot/erf per homestead.</li> <li>- minimum of 20ℓ/day/person of clean drinking water;</li> <li>- maximum of a 15 minute walk to a water supply;</li> <li>- reticulated water supply within the district towns;</li> <li>- sufficient water supply for agricultural, building and industrial purposes.</li> <li>- provision of vehicular access routes between the towns, rural centres and villages;</li> <li>- provision of internal access routes/footpaths within each cluster of activity.</li> <li>- appropriate sanitation facilities with standards being determined by relief, soils, geological and density parameters;</li> <li>- refuse service in high density areas.</li> <li>- access to woodlots for rural residents;</li> <li>- provision of electricity to the towns and rural centres/hospitals for cooking and heating.</li> <li>- access to post, telegraph and telephone facilities</li> <li>- access to adequately sized agricultural plots in the rural areas;</li> <li>- access to shops for both urban and rural residents.</li> <li>- safety from fire, flooding etc.</li> <li>- provision for physical expansion of activities in an orderly and efficient manner.</li> <li>- daily return access to higher order settlements for goods and services.</li> </ul>
Social	1) Social Services (i) education  (ii) health  (iii) commercial  (iv) ceremonial  (v) recreation	<ul style="list-style-type: none"> <li>- access to primary education at an acceptable walking distance</li> <li>- access to at least a mobile clinic stop at an acceptable walking distance.</li> <li>- walking access to a minimum of one shop for the provision of goods and supplies not capable of being provided for by the household.</li> <li>- provision of a ceremonial/non-secular facility for religious and/or social gatherings at points of maximum accessibility</li> <li>- provision of recreation facilities i.e. sports fields in all towns and at rural centres.</li> </ul>
Economic	1) Employment	<ul style="list-style-type: none"> <li>- access to employment and economic opportunities;</li> <li>- access to resources required for self-employment and production</li> </ul>
Administration/Legal	1) Administrative system  2) Law and Order  3) Tenure	<ul style="list-style-type: none"> <li>- establishment of community organisations and administrative systems for effectively administering the villages, rural centres and towns.</li> <li>- the maintenance of law and order through a just and fair legal and policing system.</li> <li>- providing security of tenure in an appropriate and acceptable manner.</li> </ul>

Table 7.25 Housing stock

House type	% housing stock
A. Traditional round hut - thatched	64.6
B. Traditional square hut - thatched	9.5
C. Traditional square hut - iron roof	22.8
D. Modern construction	3.1
Total	100.0

Table 7.26 Housing mix and occupancy

No of structures per household	% households	Housing mix	%	Average household size
1	10.4	A only	41.2	5.7
2	20.3	C only	9.3	5.2
3	29.7	A+B	11.0	6.8
4	17.0	A+C	24.2	8.0
5	10.5	A+D	2.2	
6	6.1	B+D	2.2	
7	3.3	A B+C	3.3	
8+	2.7	Other	5.5	
Total	100.0	Total	100.0	

Average number of structures (buildings) per household = 3,5  
 Average occupancy per structure = 1,9 persons

**Table 7.27 Rural shops in the NE Region**

Magisterial District	No. Of Shops	Licences															Goods										Total					
		Boarding House	Bottle Store	Brickmaker	Butcher	Cafe	Eating House	Fresh Produce	Garage	General Dealer	Hawker	Inflam. Subst.	Miller	Patent Medicines	P.O. Agency	Speculator	Stone Crusher	Trader	Other licences	Clothing	Farm Equipment	Food	Furniture	Hardware	House Goods	Livestock		Material	Petrol	Tobacco	Bicycle	Other
Bizana	154		1		15	27	8	61		64	4	60	12	59	50	17		34		55	36	59	19	46	57	1	47	2	60	27	15	836
Libode	102				8	30	4	32	2	67	2	17	13	42	24	13				15	14	20	9	14	17	1	12		20	7	7	390
Lusikisiki	243			3	7	40	18	51		78	14	83	6	86	68	14	1	78		74	33	110	26	55	79	1	84	2	99		2	1112
Maxesibeni	54				5	10		26		41		27	2	26	23			3	1	27	16	26	12	18	25	8	24		26	2	14	362
Nggeleni	112				7	13	10	20		66	20	16	11	45	32	4			3	20	9	26	2	13	18		17	1	26	2	1	382
Siphageni	149				13	11	15	32		89	16	42	8	52	46	13				39	21	66	11	27	49		48	2	62		1	663
Tabankulu	125				5	39	2	49		64	14	44	6	50	40	15				45	30	50	20	33	45	9	43	1	50	10	7	671
Unzimkulu	166	1	1		10	16		65		137		59	13	70	45	1				54	24	63	11	33	57	1	47	1	63	9	3	784
Unzimvubu	38				1	3	2	19		34		23	8	30	25				2	22	10	25	11	16	21		20	2	25	2	2	303
N.E. Region	1143	1	2	3	71	189	59	355	2	640	70	371	79	460	353	77	1	115	6	351	193	445	121	255	368	21	342	11	431	59	52	5503

Source: Osmond Lange (1982) Table 4.20.

**Table 7.28 Commercial ratios in the NE Region**

Magisterial District	Rural Pop.	General Dealers			Other shops			Total		
		No.	No/100 Pop.	No. of functions	No.	No/1000 Pop.	No. of functions	No. of shops	Shops/100 Pop.	No. of functions
Bizana	123 013	99	0,81	350	56	0,45	56	154	1,26	406
Libode	72 735	67	0,92	169	36	0,49	60	102	1,42	229
Lusikisiki	150 046	156	1,04	429	91	0,61	111	243	1,65	540
Maxesibeni	45 168	39	0,86	143	10	0,22	17	54	1,08	160
Ngqeleni	92 497	66	0,71	227	46	0,50	48	112	1,21	275
Siphaqeni	75 022	89	1,19	264	60	0,80	70	149	1,99	334
Tabankulu	77 362	64	0,83	266	61	0,79	62	125	1,62	328
Umzimkulu	100 537	138	1,37	373	29	0,29	44	166	1,66	417
Umzimvubu	37 396	29	0,77	125	4	0,11	8	38	0,88	133
N.E.Region	773 776	747	0,97	2346	393	0,51	476	1143	1,47	2822

Source: Osmond Lange (1982) Table 4.30

Table 7.29 Items purchased most frequently

Rank	Product/weight	% Customers	Rank	Product/weight	% Customers
1	Brown bread (loaf)	27,1	14=	Mealiemeal (12,5kg)	4,1
2	Brown bread ( $\frac{1}{2}$ loaf)	13,9	14=	Brown bread ( $\frac{1}{4}$ loaf)	4,1
3	Sugar (1kg)	9,0	14=	Tobacco (25kg)	4,1
4	Sweets	8,2	14=	Toothpaste etc	4,1
5=	Sugar (500g)	7,4	14=	Groceries - general	4,1
5=	Fresh produce	7,4	19=	Cigarettes (pkt 20)	3,3
7=	Milk (500ml)	6,6	19=	Sugar (12,5kg)	3,3
7=	Matches	6,6	19=	Flour (1kg)	3,3
9=	Sour milk (bottle)	5,7	19=	Paraffin (750ml)	3,3
9=	Beans (200g)	5,7	19=	Paraffin (1l)	3,3
9=	Tea (50g)	5,7	19=	Nespray (250g)	3,3
9=	Soap powder (150g)	5,7	19=	Soap (bar)	3,3
13	Sugar (2,5kg)	4,9			

Table 7.30 Problems faced by rural traders

Nature of problem	%
None	32,1
Financial	35,7
Vandalism/burglary	16,1
Delivery delays	7,1
Customer access	5,4
Competition	3,6
<b>Total</b>	<b>100,0</b>

Table 7.31 Turnover in rural shops

Amount/Month	%
Up to R1 000	27,4
1 001 - 2 000	11,0
2 001 - 3 000	15,1
3 001 - 5 000	15,1
5 001 - 7 000	12,3
7 001 - 10 000	5,5
10 001 - 20 000	9,5
20 001 - 60 000	4,1
<b>Total</b>	<b>100,0</b>

**Table 7.32 Towns - Businesses**

Town Name	Population		Commercial Activities and Functions ie functions available																		Other											
	Town	District	Baker	Bookshop	Bottle Store	Butcher	Cafe	Clothing	Fresh Produce	Furniture	Garage	General Dealer	Hardware	Hawker	Miller	Patent Med.	Photo Studio	Speculator	Undertaker	Wholesaler	Other*	Total	Abattoir	Accomodation	Attorney	Bank	Brickmaker	Insurance	Industry**	Other	Total	Total
Bizana	1 276	124 289	1	1	1	2	5	1	3	1	3	11		X	1	5	5	3		5	1	49		2	2			1	2	1	10	59
Flagstaff	975	75 997	1	1	2	1	4	8	3	3	3	19	2	X	1	5	1		1	2		57		1		2		5	1	9	66	
Libode	705	73 440				1	2			1	6			X								11		1	1	1				5	16	
Lusikisiki	1 188	151 234	1	1	2	1	4	10	1	2	3	15	2	X	1	3	1		1	3	2	53		1	3	1	1	1	4	4	15	68
Mt Ayliff	1 480	46 648				1	4		8	2	10			X		8	2			1		50		1	1	1		8	1	12	62	
Nqgelani	649	93 146			1	1	3	1		1	7			X	1	1	1			1	2	21		1	2		1		4	4	25	
Port St Johns	2 885	40 281	3	1	3	1	6	4	6	1	3	18	2	X		2	1			3	6	59		8	1	2		1	5	2	19	78
Tabankulu	977	78 339			1	1	3	1		3	11	1		X	1	10	1	2			7	42		1	1	1		1	1	5	47	
Umzimkulu	1 575	104 908	1	1	1	1	5			2	15			X		8	2		2	3	43		3	1	3		2	4	13	56		

Source: Osmond Lange (1982) Table 7.3

\*Other includes:  
carpenter; cartage; cobbler;  
dry cleaner; gift shop;  
hairdresser; radio and watch  
repairs; radio station

\*\* Industry includes:  
builder; co-operatives; cartage  
containers; tea estates; nursery;  
plantation; pottery; saw mill;  
sugar refinery; tank maker

Table 7.34 Hospitals and clinics

District	Hospital	Beds	Bed/Capita	Residential Clinics	Residential Clinics/capita
Bizana	Greenville	183	1:291	5	1:24 857
	St Patricks	243			
Libode				7	1:10 491
Lusikisiki	Bambisana	138	1:475	7	1:21 605
	St Elizabeths	86			
	Mkambati	232			
Maxesibeni	Mt Ayliff	87	1:536	4	1:11 668
Ngqeleni	Canzibe	142	1:231	6	1:15 524
	St Barnabas	261			
Siphaqeni	Holy Cross	352	1:218	3	1:25 672
Tabankulu	Sipetu	147	1:532	4	1:19 592
Umzimkulu	Rietvlei	245	1:129	9	1:11 656
	St Margarets	58			
	Umzimkulu	504			
Umzimvubu	Isimilela	115	1:356	2	1:20 138

Source: Transkei Department of Health. Five Year Plan. Table 3.

Notes and References

1. Transkei Department of Health (1983) Five Year Plan 1983/84-1987/89 Section 2.2.

Table 7.35 Distribution of schools by district

Magisterial district	Number of schools <sup>(1)</sup>						Schools per 100 000 pop (2)	School pupils as a % of pop aged 5-16	Level of education		
	JP	SP	JS	SS	Voc	Total			% literate (1970)	% pass Std 6 (1970)	% mud classroom (all school)
Bizana	11	28	45	5		89	71	65	14	4	31
Libode	18	27	35	3		83	114	81	16	4	35
Lusikisiki	6	51	51	4	1	113	73	59	13	4	38
Maxesibeni	9	14	32	2		57	122	92	25	7	52
Ngqeleni	3	47	38	2		90	97	67	17	5	37
Siphaqeni	11	21	42	3		77	99	72	16	4	42
Tabankulu	13	49	35	3		100	128	77	16	4	47
Umzimkulu	25	37	54	4	1	121	114	79	27	7	24
Umzimvubu	9	8	19	1		37	92	68	12	3	55
NE Region	105	282	351	27	2	767	97	73	11	5	40
Transkei	Data not yet available							83	22	7	32

Source: Osmond Lange (1982) Table 2.17 and Tables 4.31-4.39.

- Notes: 1. JP = Junior Primary; SP = Senior Primary; JS = Junior Secondary  
SS = Senior Secondary; Voc. = Vocational. Most SP schools include JP classes as well.
2. 1980 population census (uncorrected) data.

Table 7.37 School Enrolment: 1970 and 1980

Magisterial District	% of school-age population enrolled		% of pupils in secondary school		Total enrolment	
	1970	1980	1970	1980	Male 1980	Female 1980
Bizana	51	59	3	17	14 520	17 052
Libode	65	71	5	22	10 662	11 979
Lusikisiki	45	57	6	19	16 781	19 189
Maxesibeni	80	87	5	18	8 374	9 347
Ngqeleni	55	59	5	19	10 818	12 254
Siphaqeni	61	68	5	17	10 290	11 830
Tabankulu	59	70	4	15	11 476	12 174
Umzimkulu	72	68	4	21	14 923	16 559
Umzimvubu	54	60	3	18	4 753	5 364
NE Region	Data not yet available				102 597	115 748
Transkei	67	74	5	21	346 411	386 747

Source: Draft Five Year Plan Education Table 3.3

Table 7.36 Education - Regional Summary

Magisterial District	Rural pop.	Junior Primary School				Senior Primary				Junior Secondary				Senior Secondary				Total			
		No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms	No.	Pupils	Teachers	Class rooms
Bizana	123 013	11	1 887	32	38	28	8 291	123	140	45	20 957	410	370	5	2 082	47	36	88	33 217	612	582
Libode	72 735	18	2 501	45	47	27	4 905	93	94	35	14 355	315	283	3	1 328	48	34	84	23 089	501	458
Lusikisiki	150 046	6	769	14	13	51	12 423	198	213	51	23 125	463	414	4	1 659	45	33	111	37 976	720	673
Maxesibeni	45 168	9	1 202	23	26	14	2 936	57	61	32	10 344	266	254	2	1 238	33	24	57	15 720	379	365
Nqgeleni	92 497	3	198	5	5	47	9 129	164	171	38	14 162	307	286	2	1 220	40	28	90	24 709	516	490
Siphaqeni	75 022	11	1 348	19	24	21	3 959	68	66	42	17 532	373	339	3	1 087	35	30	76	23 926	495	459
Tabankulu	77 362	13	1 421	29	35	49	8 029	140	172	35	13 146	294	300	3	816	29	23	100	23 412	492	530
Umzimkulu	100 537	25	1 994	40	49	37	7 506	133	142	54	23 611	465	441	4	1 775	63	39	121	34 886	701	671
Umzimvubu	37 396	9	1 136	24	23	8	1 432	27	28	19	5 856	153	141	1	599	14	8	37	9 023	218	200
N.E. Region	773 776	105	12 456	231	258	282	58 610	1003	1 087	351	143 088	3 046	2 828	27	11 804	354	255	765	224 958	4 634	4 428

Source: Osmond Lange (1982) Table 4.40 (updated for senior secondary schools)

Table 7.38 Provision of Schools per capita

Magisterial District	Population	No. of Primary schools	Population per Primary school	No. of Junior secondary schools	Population per Junior secondary school	No. of Senior secondary schools	Population per Senior secondary school
Bizana	123 013	39	3 154	45	2 734	5	24 603
Libode	72 735	45	1 616	35	2 078	3	24 245
Lusikisiki	150 046	57	2 632	51	2 942	4	37 512
Maxesibeni	45 168	23	1 964	32	1 412	2	22 584
Ngqeleni	92 497	50	1 850	38	2 434	2	46 249
Siphaqeni	75 022	32	2 344	42	1 786	3	25 007
Tabankulu	77 362	62	1 248	35	2 210	3	25 787
Umzimkulu	100 537	62	1 622	54	1 862	4	25 134
Umzimvubu	37 396	17	2 200	19	1 968	1	37 396
NE Region	773 776	387	2 000	351	2 204	27	28 658

Source: Table 2.12.2 Education - Regional Summary

Table 7.39 Service populations for senior secondary schools

Magisterial District/ Administrative Area No.	Name of School	Actual Population served	Population within 10 km a.t.c.f. (1)
Bizana	1 Marelane	28 000	20 000
	6 Ngalonkulu	24 000	28 000
	16 Lukolo	46 000	25 000
	19 Greenville	8 000	10 000
	21 Baleni	20 000	19 000
Libode	10 Nyangilizwe	7 000	6 000
	12 Upper Corana	23 000	19 000
	13 Victor Poto	31 000	17 000
Lusikisiki	5 Ndaliso	35 000	23 000
	20 Palmerton	49 000	26 000
	24 Mqikela	63 000	24 000
	28 Botha Sigcau	12 000	13 000
Maxesibeni	11 Jojo	32 000	23 000
	25 Rode	20 000	9 000
Ngqeleni	2 Ndamase	42 000	15 000
	12 Chief H Bokleni	45 000	21 000
Siphaqeni	Langa	25 000	18 000
	2 Sigcau	15 000	14 000
	3 Mfundisweni	38 000	22 000
Tabankulu	3 Mnceba	18 000	12 000
	7 Dumsi	33 000	18 000
	18 Ntsikayezwe	20 000	9 000
Umzimkulu	Clydesdale	30 000	16 000
	6 Engwaqa	29 000	12 000
	23 Rietvlei	29 000	16 000
	38 Lourdes	17 000	9 000
Umzimvubu	4 Mthweni	50 000	26 000
	Total	789 000	470 000

Note: 1) a.t.c.f. refers to "as the crow flies" and therefore relates to a straight line distance;

2) populations have been rounded to the nearest thousand;

3) where two senior secondary schools are located within 20 km of each other, their 20 km service areas overlap and hence, the actual population served by each school is less than the population residing within this 10 km radius.

Table 7.33 Private vehicle ownership (1980)

Magisterial District	Motor Cars	Mini-buses and commercial vehicles	Total	Vehicles /1000 populations	No. of households per vehicle <sup>(1)</sup>
Bizana	63	100	163	1,3	135
Libode	54	68	122	1,7	111
Lusikisiki	61	131	192	1,3	147
Mascesibeni	21	77	98	2,1	90
Ngqeleni	21	67	88	0,9	196
Siphaqeni	48	85	133	1,7	111
Tabankulu	42	76	118	1,5	129
Umzimkulu	57	131	188	1,8	101
Umzimvubu	69	137	206	5,1	35
NE Region	436	872	1 308	1,7	122
Transkei	2 693	3 280	5 973	2,3	71

Source: Department of Commerce, Industry and Tourism

Table 7.40 Administrative structure

Territorial unit	Authority	Senior official	Department responsible
Region	Regional authority	Paramount Chief	Prime Minister's department
District	Various authorities	District Commissioner	Interior
Tribal area	Tribal authority	Chief/Headman	Prime Minister's department
Administration area	Inkundla/ Imbizo	Headman	Prime Minister's department
Commonage	Municipality	Town Clerk	Local Government and Land Tenure

Table 7.41 Water sources and collection

Source	% households	Reported trip time to nearest water point	% households	No. of trips per day	% households
River	36.1	up to 15 mins.	23.8	1	5.2
Spring	16.7	16 - 30	22.7	2	26.4
Borehole	37.2	31 - 45	23.2	3	32.2
Standpipe	10.0	46 - 60	27.0	4	15.5
Total	100.0	over 60	3.3	5	12.6
		Total	100.0	6	5.2
				7+	2.9
				Total	100.0

Average trip length = 32 mins.

Average no. of trips/day = 3.3

Average time spent fetching water each day =  $1\frac{3}{4}$  hours

Table 7.42 Fuel sources and Expenditure

Fuel type	Cooking % h/holds	Lighting % h/holds	Monthly expenditure (1981)	% h/holds
Wood	59.9		less than 2.00	11.8
Paraffin	5.5	29.3	R2.00 - R5.99	32.0
Wood + paraffin	17.0		R6.00 - R9.99	32.7
Wood + paraffin + gas	11.0		R6.00 - R9.99	32.7
Wood + dung	6.6		R10.00 - R14.99	8.5
Candles		37.0	R15.00 - R19.99	6.5
Candles + paraffin		33.7	R20.00 +	8.5
Total	100.0	100.0	Total	100.0

Average monthly expenditure = R7.70 / household

Table 7.43 Distribution of Boreholes

Magisterial District	Operational boreholes	Admin. Areas served	% of Admin. Areas served
Bizana	20	8	32%
Libode	40	22	76%
Lusikisiki	36	16	34%
Maxesibeni	33	18	64%
Ngqeleni	17	11	23%
Siphaqeni	17	7	27%
Tabankulu	17	10	34%
Umzimkulu	22	16	37%
Umzimvubu	16	10	63%
NE Region	218	118	41%

Table 7.44 Agricultural Extension Officers

Magisterial District	No. of Agric. Ext. officers	Pop/Extension Officer
Bizana	3	41 430
Libode	9	8 160
Lusikisiki	7	21 600
Maxesibeni	7	6 660
Ngqeleni	10	9 310
Siphaqeni	6	12 840
Tabankulu	6	12 050
Umzimkulu	14	7 490
Umzimvubu	6	6 710
NE Region	68	11 610

Table 7.45 Basic needs indicators in NE Region - 1980/81

Item	Indicators
Employment	* 18% of households have no one in wage jobs
Unemployment	* up to 19%
Income	* 71% of households had annual incomes less than R1 100 (1980)
	* Per capita income (mean of R131 pa in 1980)
Housing	* 65% live in traditional round huts with thatch roofs
Household size	* 6,6 persons
Occupancy	* Average occupancy per structure = 1,9 persons
Food:	* No households fully self-sufficient
	* 63% of households produce some maize and 33% some vegetables
	* of these few are self-sufficient in either maize or vegetables for more than 6 months of the year
	* 42% of households have no cattle
Shopping	* 41% of households shop daily, 44% weekly
	* Average no. of items purchased per trip is two
	* Median trip expenditure = R1.20 (1980)
Water:	* Over 50% of households depend on a river or spring
	* Per capita consumption: 10,8 litres/day
	* On average $1\frac{3}{4}$ hours a day devoted to water collection and associated activities
Sanitation	* 70% of households have no facilities; the remainder have pit latrines
Fuel	* Wood for cooking; paraffin and candles for lighting
Health	* 3,9 residential clinics per 100 000 people
Education	* 45% of adults have no more than Std 3
	* 65% of adults probably not effectively literate
Agricultural Extension Officers	* 1 per 18 700 people in NE region

Source: Osmond Lange Inc (1982) Chapter 5. Surveys were undertaken at six rural villages in the NE region (sample size 200 households) during 1980/81.

**Table 7.46 Intra-regional comparative statistics**

Variables	Indicator	Worst off Magisterial District	Indicator	Best off Magisterial District
<b>Settlement</b>				
average population density (1980)	74 p/km <sup>2</sup>	Bizana	43 p/km <sup>2</sup>	Umzimkulu
% population within 15 km of town (1980)	19%	Ngqeleni	36%	Maxesibeni, Siphagani
<b>Economic Activity</b>				
private licenced industry (1982)	2	Ngqeleni	28	Umzimkulu
transido assisted industries (1982)	1	Maxesibeni, Umzimkulu, Tabankulu	55	Libode (1)
maize production (bags/capita) (1980)	0,5	Maxesibeni	2,6	Libode
timber plantations	100 ha	Maxesibeni	20 900 ha	Umzimkulu
households per wage job (1980)	2,6	Umzimkulu	7,2	Bizana
% of wage jobs in Transkei (1980)	1,5%	Tabankulu, Libode	6,5%	Lusikisiki
per capital income (1980)	R150	Tabankulu	R276	Bizana
<b>Services</b>				
shops per 1000/pop (1980)	0,88	Umzimvubu	1,99	Siphagani
hospital beds/capita (1983)	1,1	Umzimkulu	1,5	Maxesibeni, Tabankulu
residential clinics/capita (1983)	1:25 700	Siphagani	1:10 500	Libode
schools per 1000/pop (1980)	71	Bizana	128	Tabankulu
% admin. area served by operating borehole	23%	Ngqeleni	76%	Libode
<b>Access</b>				
bitumen road length km/1000 people	0,27 km	Bizana, Lusikisiki, Siphagani, Tabankulu	0,72 km	Maxesibeni - Umzimkulu
% villages on classified roads	15%	Maxesibeni, Ngqeleni	51%	Umzimkulu
vehicles per 1000 pop.	0,9	Ngqeleni	5,1	Umzimvubu

**Source :** Osmond Lange (1982)  
Summary of tables appearing in text

**Note:** 1. See section 2.7.2 Industry.

**Table 7.47 Towns: Activities and Facilities**

Town Name	Population 1980		Administration								Health			Tele-Communi.		Education					Community				Other			
	Town	District	Municipality	Magistrate	Police Station	Goal	Departments					Hospital	Clinic	Private Doctor	Post office	Telephones	Junior Primary	Senior Primary	Junior Secondary	Senior Secondary	Special School	Mission	Church	Town Hall	Other**	Development Corporation	Recruitment	Bus Rank
							Education	Health	Agriculture	Interior	Works and Energy																	
Blzana	1 276	124 289	X	X	X	X	X		X			F	X	X	X	X	X	X	X	X	1					4	X	
Flagstaff	975	75 997	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	3					3	X	
Libode	705	73 440	X	X	X	X	X	X	X			WESP	X	X	X	X	X	X	X	X	1			PF		3	X	
Lusikisiki	1 188	151 234	X	X	X	X	X	X	X			IG,F	X		X	X	X	X	X	X	4			TDC	5	X		
Mount Ayliff	1 400	46 640	X	X	X	X	X	X	X				X		X	X	X	X	X	X	1	X			2	X		
Ngqeleni	649	93 146	X	X	X	X	X	X	X			IG,W		X	X	X	X	X	X	X	4				2	X		
Port St Johns	2 085	40 281	X	X	X	X	X	X	X			Fin,M		X	X	X	X	X	X	X	3	X	M,S		3	X		
Tabankulu	977	78 339	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	3			TDC	2	X		
Umzimkulu	1 575	104 908	X	X	X	X	X	X	X			F,FA	X		X	X	X	X	X	X					2	X		
<b>Small Centres</b>		<b>Admin Area:</b>																										
Glen Gary		1 036												X	X	X	X	X	X		1							
Holy Cross		4 456												X	X	X	X	X	X		1							
Ibisi	1 166												X	X	X	X	X	X	X		1	X						
Lourdes																												
Magusheni		4 292												X	X	X	X	X	X		1							
Majola		2 595												X	X	X	X	X	X									
Malenge		077												X	X	X	X	X	X									
Mfundisweni		4 720												X	X	X	X	X	X	X								
Nkantweni		3 776												X	X	X	X	X	X		2					X		
Rietvllei	1 630	1 835	X		X								X	X	X	X	X	X	X		2					X	X	
Riverside		3 565												X	X	X	X	X	X							X	X	
Tombo		2 768												X	X	X	X	X	X							X	X	

Source: Field surveys 1982

\*Other includes:

- F - Forester
- FA - Foreign Affairs
- Fin - Finance
- IG - Local Govt and Land Tenure
- M - Military
- R - Railways
- SB - School Board
- W - Welfare office

\*\*Other includes:

- M - Museum
- PF - Public toilets
- S - Sports field

Table 7.48 Town Households: Income and Expenditure

Income		Expenditure			
Component	%	Component	%	Component	%
Wages	63,1	Groceries / Food	30,0	Public transport	2,6
Pensions	4,6	Clothing	6,6	Private transport	3,9
Remittances	4,9	Education	5,5	Fuel and light	9,5
Make/sell	2,7	Housing	6,9	Medical	4,3
Profit (own business)	24,7	Insurance	10,3	Furniture	6,2
		Savings	14,2		
Total	100,0			Total	100,0

Notes:

1. Based on survey in one town only; component breakdown and expenditure data from other survey incomplete.
2. Mean household monthly income = R326 ; median = R300 (1982 prices)
3. Mean household monthly expenditure = R275 ; median = R214 (1982 prices)

APPENDIX IX    MTONJENI

The term "industrial development point" is one used by the RSA to indicate places at which certain industrial incentives may be obtained as part of the "Good Hope" Plan announced in 1981. In the latter document, East Pondoland was named, together with other places in the RSA and the TBVC states, as a sub-region in which an "industrial development point" should be located.

In order to avail itself of the advantages arising from the South African industrial incentives, Transkei government decided to locate the East Pondoland industrial development point in the vicinity of Mtonjeni and has used the South African terminology to motivate project finance for infrastructure in support of its development. The so-called "industrial development point project", which is an integral part of the Plan for the NE region, was formulated in such a way as to maximize development of the region as a whole and to promote the social and economic benefits over as wide an area as possible.

The proposed development of Mtonjeni is not along the lines of South African industrial growth points like Sasolburg and Richards Bay - for large industries will not be attracted to East Pondoland - nor is it similar to Butterworth, whose industries produce mainly for the South African metropolitan markets. Instead, Mtonjeni is conceived with a view to the development of the NE region itself.

The key industry around which it will be based is a proposed sugar mill and most of the economic activity likely to occur there will be ancillary to this mill and to other agricultural production in the surrounding areas of high potential (See Figure 10.4). It is envisaged that, in due course, Mtonjeni will develop into a small town, catering mainly for the needs of people working on the sugar mill, the sugarcane estates and in a relatively limited number of fairly small-scale service industries producing goods for the local, Transkeian market. As such, Mtonjeni will have residential areas (for a range of income groups), shopping, health, educational, communications, administrative and recreational facilities in addition to sites and premises for industries. At the same time it will act as a "service centre" for many thousands of people living in the area beyond daily walking distance of the adjacent towns, (Lusikisiki, Flagstaff and Bizana).

The precise location and extent of Mtonjeni has yet to be defined. It is programmed to be developed during the 1987/8 - 92/3 period in parallel with the proposed maize, sugarcane and sugar mill development in the immediate vicinity. Mtonjeni can be expected to grow fairly slowly to become a town of possibly some 10 000 - 15 000 people by the turn of the century. (The late 1985 estimate, assuming full development, is 3 000 permanent, 2 000 seasonal jobs involving a population of some 18 000 people). By way of comparison, the surrounding towns are expected to grow to some 25 000 - 30 000 (Flagstaff and Bizana) and 40 000 - 50 000 (Lusikisiki) over the same period.

While Mtonjeni has been selected as the IDP with a view to maximizing development throughout the whole East Pondoland region, this is not to say that the other existing towns have been overlooked. In fact, close scrutiny of the IDP proposal (12.2 of 1983/4) will show that during the period 1983/4 to 1987/8, more than 99 percent of the expenditure on urban infrastructure will be directed at Lusikisiki, Flagstaff and Bizana (R30 068 million).

The following sections of this Appendix are extracts from the project justification section of Transkei's project motivation 12.2.83/4 (East Pondoland's Industrial Development Point) and deal with spatial, technical, economic and social aspects.

#### Spatial rationale

East Pondoland is the south-eastern part of Region E as defined in the 1982 agreement on Regional Development between the RSA and TBVC states. Within Region E there are four types of industrial areas. These are located as follows:

##### I. Metropolitan Area

RSA - Durban/Pinetown

##### II Deconcentration Points

RSA - Pietermaritzburg; Tongaat; and a point south of Durban still to be determined.

KwaZulu - Imbali/Swartkops/Edendale; and two points still to be determined.

### III Industrial Development Points

RSA - Ladysmith; Newcastle; Richards Bay/Empangeni; and a point in southern Natal.

Transkei - a point in Eastern Pondoland, Mtonjani.

KwaZulu - Isithebe; Ulundi; Ezakeni; Mandini/Osizweni; a point near Richards Bay; and a point in southern KwaZulu.

### IV Other Industrial Points

RSA - where concessions have previously been granted but are not included above.

Transkei - not designated.

KwaZulu - not designated.

The purpose of setting up an Industrial Development Point in East Pondoland is to promote the long-term economic development of the area as a whole, particularly those parts with the highest potential for agricultural production. East Pondoland's industrial development point will not be merely a place with the necessary infrastructure and administrative services where people can put up factories and avail themselves of cheap labour and of the financial inducements offered. Rather, it will also serve as a manufacturing, service, marketing, communications, financial, and indeed cultural centre for East Pondoland as a whole.

The choice was between one of the existing small towns - Lusikisiki or Flagstaff, the others being too much on the fringes of the area - or a new centre centrally located with respect to the areas of highest agricultural potential and population density. The advantages of choosing an existing centre is that there is already some infrastructure in external communications and urban services. However, in Lusikisiki and Flagstaff, as well as in the other towns, existing infrastructure is already quite inadequate even for present needs.

If one looks to the creation of a centre and the related infrastructure in roads, electricity, telecommunications and urban services to meet the long-term needs for the economic development of East Pondoland, a more logical choice of location would be a new centre somewhere halfway between Lusikisiki and Bizana. A few miles inland from the coast, stretching for 75 km from Lusikisiki to the Mtamvuma river, there is a 15 km-wide belt of high

agricultural potential. It comprises some 100 000 ha of which 55 000 ha are arable and suitable for industrial crop farming. (Figure 10.4).

Transkei has decided to locate the East Pondoland Industrial Development Point at Mtonjeni in order to be accessible to the greatest number of people, to serve the region's agricultural potential, and to have the maximum impact on development.

The Mtonjeni service centre will be central to East Pondoland's areas of high agricultural potential; it will be surrounded on three sides by areas with high population densities; and it will be about equi-distant from Lusikisiki, Flagstaff and Bizana, thereby completing the network of nodes from which economic activities and services could be provided for the surrounding rural areas. This centre will be close to the proposed site for a sugar mill. It is also Transkei's government's intention to establish a military headquarters at Mtonjeni. The land itself at Mtonjeni is flat and presents no significant constraints to development.

One outcome of the decision to establish a service centre at Mtonjeni will be to strengthen the existing spatial structure. The resulting hierarchy in East Pondoland will be:

Major Town : Lusikisiki

Market Towns : Flagstaff, Bizana, Tabankulu, Mt Ayliff and Mtonjeni.

Rural Centres/

Nodes : To be designated as part of the North-East Regional Plan.

A second outcome will be to provide a Service Centre for some 40 000 people who are under-supplied at present. For these people a centre at Mtonjeni will be closer than any of the existing towns. Furthermore, local resources can be used to generate agricultural development to provide inputs for industries at the IDP e.g. for grain milling.

#### Technical justification

Transkei has conducted a range of physical, socio-economic and engineering studies which have direct bearing on the planning and feasibility of the present project. These include :

- (i) Hawkins Associates (1980) "The physical and spatial basis for Transkei's first five year development plan".
- (ii) Hawkins, Hawkins and Osborne (1976) "Port Edward - Lusikisiki: Coastal Alternative road: Preliminary Report".

- (iii) Institute for Management and Development Studies, (University of Transkei) (1982) "Survey of Income and Expenditure".
- (iv) Ninham Shand Inc (1982-83) "Report on infrastructure and urban services in East Pondoland". Input to the north-east Regional Plan.
- (v) Osmond Lange Inc (1982) "Statistical base for planning service centres in Transkei's north-east region."
- (vi) Osmond Lange Inc (1983 in progress) "Statistical base for planning service centres in Transkei's north-west region".
- (vii) Osmond Lange Inc (1983 in progress) "Regional Plan for north-east Transkei (incorporating East Pondoland industrial development point)".

#### Economic justification

This project provides the basis for the income and employment generating sectors of economy in East Pondoland. In particular, it facilitates production of food and manufactured consumer goods for the East Pondoland, Transkei and other nearby markets through the creation of the necessary rural and urban infrastructure and the upgrading of the local labour force. The new IDP and existing small towns in the region will be put into the position of being able to function effectively as economic, social and administrative centres for East Pondoland.

Consumer expenditure in East Pondoland was about R200 million in 1982. Production of food in East Pondoland to provide the bulk of the present consumption of the population (which would be perfectly feasible), would provide full-time employment on the land for some 40 000 families. The production of manufactured consumer goods to supply half the present purchases of the local population in East Pondoland would result in the creation of 6 000 - 7 000 jobs in manufacturing, assuming an annual output of R2 000 per worker. The creation of employment and income at this scale would, of course, generate additional employment and incomes in the construction, transport, services and commercial sectors of the economy.

The project will also increase the range of choices that people will be able to make about themselves and their way of life. The potential growth in income and savings will enable individuals to establish themselves (or their children) in business or small manufacturing enterprises in East Pondoland to service the local market.

Social benefits

Infrastructure established will provide better services by way of water, electricity, telecommunications, roads and residential sites to the residents of the towns. At the same time the project will result in better access to commercial, administrative and social services for the surrounding rural populations.

The project will also increase the range of choices that people will be able to make about themselves and their way of life. The potential growth in income and savings will enable individuals to establish themselves (or their children) in business or small manufacturing enterprises in East Pondoland to serve the local market.

APPENDIX X SUMMARY OF POLICY PROPOSALS FOR THE NORTH-EAST REGION

Arising from the issues discussed in Chapter 8 (pages 237 - 255), this Appendix contains a summary of the policy proposals that were submitted to the NPC as a separate but complementary document to the SDP (See Osmond Lange Inc (1983e) op cit, chapter 7). There are obviously some areas of overlap (for example some aspects of the settlement and infrastructure proposals) but this is inevitable because the physical projects of the SDP in fact emanate from the policy proposals set out here.

The Appendix has been written in formal report style with numbered paragraphs to facilitate cross referencing. Headings correspond to those of Chapter 7.

1. SETTLEMENT

- 1.1 Encourage urbanization and balanced regional development.
- 1.2 Organise the future settlement pattern around a hierarchy of centres designated as part of a national plan for urban development incorporating;  
Regional Centres - major town in each region  
District Towns - places of some significance at which periodic clustering of services can be organised  
Villages - existing consolidated and traditional villages.
- 1.3 The main functions, physical infrastructure and private sector activities for which provision should be made at each level of centre are listed in Table 9.1.
- 1.4 The proposed settlement hierarchy for the NE region is set out in Table 9.2.
- 1.5 It is proposed that the following three streams of action be implemented simultaneously during years 1 - 5.
  - a) Provision of physical infrastructure in the Regional Centre and 8 District Towns to cope with the immediate shortfall and some anticipated population growth. Cost estimates have been prepared for the following target populations:

		<u>Target population</u> (years 1 - 5)
Regional Centre	Lusikisiki	10 000
District Town	Bizana	5 000
	Flagstaff	4 000
	Libode	2 000
	Mt Ayliff	3 000
	Ngqeleni	2 000
	Port St Johns	4 000
	Tabankulu	4 000
	Umzimkulu	6 000

- b) Provision of basic infrastructure (access road and water source) to Villages. It is proposed that funds made available for this be allocated between Magisterial Districts in proportion to their rural populations. Within each District, priority is to be given to the most needy villages, identified after consultation through the District Development Officers. (see 4.2 below).
- c) Organisation of periodic convergence of services at Rural Nodes designated for establishment during years 1 - 5. The range of services is listed in Table 9.1 (in the main text).

1.6 A two year Pilot project is proposed in order to launch the first phase of these proposals. The remainder to be implemented during years 3 to 5.

Pilot project:

Regional Centre : Lusikisiki  
Towns : Flagstaff and Umzimkulu  
Nodes : Canzibe, Holy Cross, Isilindini (Sipitu), Mjola, Malenge, Makwanteni  
Villages : 6 to be selected covering all Regional Authorities.

### 1.7 Betterment planning

- a) Betterment planning, as practised to date, be suspended and replaced by upgrading of village activities as indicated in b) and c).
- b) Existing villages: upgrade basic infrastructure as part of the programme in 1.5 b).

- c) Future planning of rural settlements and surrounding areas to be undertaken at the request of the local community and according to guidelines set out to ensure greater flexibility, more local participation in planning, as well as larger allocation of arable land to bona fide farmers.

## 2. NATURAL RESOURCES

### 2.1 Land

- a) Establish a Land Capability Analysis Unit (LCAU) under the auspices of the Department of Agriculture and Forestry to provide comprehensive land capability and soil analysis, as required, in important fields of development such as: estate agriculture, town commonages, proposed national parks and nature reserves, community based timber plantations on tribal land, maize belts scheme, and infrastructure (roads).
- b) Land tenure In order to tentatively facilitate productive change it proposed that the following land tenure arrangements be introduced on a pilot project basis.
  - (i) The introduction of freehold farming land around the market towns and rural nodes, without disturbing existing settlement arrangements.
  - (ii) The introduction of a different approach to betterment planning (see 1.7) ensuring sufficiently large arable lots for bona fide rural producers.
  - (iii) The introduction of extensive afforestation on tribal land, with proper provision for the needs of the community (both in terms of sufficient/improved grazing and a share in profits).
  - (iv) The provision of sufficient freehold residential plots in towns to accommodate the target populations described in 1.5.

### 2.2 Water

See proposals for Regional and Domestic infrastructure (2.8 below).

## 2.3 Coast

- a) Tourism - see proposals listed in 2.7 below.
- b) Coastal waters. It is proposed that the RSA Department of Fisheries be requested to investigate the coastal waters and develop proposals and procedures for protections and exploitation of resources.

## 2.4 Minerals

The newly established Transkei Mining Corporation to:

- (i) delineate an "exploitation free zone" along the length of the region's coastline;
- (ii) investigate the feasibility of developing the agricultural and industrial lime deposits near Port St Johns for proposed agricultural and infrastructural development;
- (iii) investigate and delineate appropriately located deposits of crusher material for use in construction of proposed roads.

## 3. AGRICULTURE

### 3.1 a) Traditional Agriculture

- (i) Increase the number of Extension Officers.
- (ii) Upgrade salary structure and scales to the same level as Teaching profession.
- (iii) Provide staff housing at district towns and the long term target of housing in each Administrative Area.
- (iv) Provide transport, at one vehicle per two extension officers.
- (v) Develop extension committees at level of each Administrative Area.
- (vi) Department of Agriculture and Forestry to become agents for procuring and providing seed and fertilizer to bona fida growers/producers only - a subsidised service. Not to be supplied to middle men.
- (vii) Tracor expand capacity to allocate credit to approved individuals (delivered with training, from District Towns and Nodes).
- (viii) ACAT be commissioned to act as marketing agents in towns and rural nodes.
- (ix) Continue subsidisation and development of Maize Belt Scheme - Land Capability Unit to assist.
- (x) Establish demonstration farms at selected rural nodes and towns (in the different agro-ecological areas) at Big Mngazi (iL), Lusikisiki (2L) Marubeni (3M) and Bizana (2M).

- (xi) Upgrade effective cattle sale yards at Zura Drift, Glengarry, Lourdes, Ntafufu and Unkunzimbini.
- (xii) Introduce mobile buying service for areas with no sales facilities.
- (xiii) Develop feedlots on Tracor Maize Projects land with sufficient residues; allow contractual fattening and special sales.
- (xiv) Close down unhygienic regional abattoir at Lusikisiki and introduce slaughtering blocks at District Towns and Rural Nodes. Promote abattoir in Umtata.

### 3.2 Commercial Agriculture

#### a) Freehold Agriculture.

- (i) Development of proper procedures to ensure that capable and creditworthy individuals or organisations take over freehold farms in Umzimvubu and Umzimkulu.
- (ii) Develop methods to encourage large-scale production on "undivided share" farm units in Umzimkulu.
- (iii) Extend training and credit to commercial farmers, e.g., medium-scale chicken producers, "undivided share" farmers.

#### b) Commonage Production

- (i) Initiate special projects on the town commonage, e.g., dairying by tracor.
- (ii) By providing funds, encourage entrepreneurs from RSA to develop portions of town commonages for food production. Develop agricultural infrastructure and allow Transkeians to take over once long leases ( $\pm$  10 years) expires.

#### c) Estate production

- (i) The expansion of maize production at :
  - the phormium tenax plantations (being phased out)
  - the available land adjacent Magwa Tea Plantations  $\pm$ 700 ha.
  - the land that may eventually be put to sugarcane.
- (ii) The development of sugar production at sites outlined in Chapter 7.
- (iii) The development of beef production at Port St Johns ( $\pm$ 7 km up river).
- (iv) Further Tracor maize projects.

### 3.3 Forestry

#### a) Plantations

- Expand production at suitable sites (presently motivated)
- Expand production on Tribal land, with community share of profits.
- Ensure timber supplies to Transkeian millers.

#### b) Training

- Forestry Training school be established at Umzimkulu.

#### c) Woodlots

- Promote smaller woodlots, better distribution across districts.

### 3.4 Nature Conservation

New department to have active role in assisting development of proposed national park.

## 4. RURAL DEVELOPMENT

- 4.1 Establish a Transkei Rural Development Foundation headed by an experienced administrator. Its main function will be to manage applications put forward by District Project Officers; to initiate cross-departmental support; and to co-ordinate funding.
- 4.2 Create posts, appoint and establish 9 District Project Officers to investigate local development needs; to initiate development projects; to co-ordinate departmental activities at District level around projects; co-ordinating the implementation of projects.
- 4.3 Once Project Officers have been established, appoint Local Development Officers to assist the Project Officers to be based in rural areas and be responsible for implementing and maintaining projects in a number of Administrative Areas.
- 4.4 Initiate a research function directed at the social needs and circumstances of rural people who come under the ambit of any development programme, particularly the large maize and sugar schemes run by Tracor.
- 4.5 Encourage the expansion of ACAT and Zanzele activities in the region.

## 5. INDUSTRY

- 5.1 Establish an industrial development point (as agreed by the RSA and TVBC states) at Mtonjeni where the proposed sugar mill will be the major industry.
- 5.2 Establish industrial centres in the region's 9 towns, with first priority being given to Lusikisiki, Bizana, Flagstaff and Umzimkulu.
- 5.3 At these places industrial sites will be made available, premises constructed for small industries and Transido depots established to provide financial assistance, purchasing, marketing, training and advisory service.
- 5.4 Encourage industries manufacturing for the local market.
- 5.5 Encourage and develop capacities of local industrialists - either Transkeian or permanent residents.
- 5.6 Promote as many small-scale industries as possible.
- 5.7 Incentives to be made available on an ad hoc basis to approved industries based on local resources and located throughout the region.
- 5.8 Industrial development to be promoted by:
  - TDC: role to enable enterprises to become operational;
  - Transido: role to assist small-scale industries.
- 5.9 Contracts be set up for government departments to purchase furniture from local manufacturers.

## 6. COMMERCE

- 6.1 Remove distance regulation to allow businesses to locate freely throughout the region, subject to their premises being a minimum of 15 m off major roads and 10 m off other roads.
- 6.2 Remove means test (viz. minimum capital requirements) as a prerequisite for granting trading licences.

- 6.3 Simplify the procedure of granting a business licence to one where the only approval required is by the District Commissioner, who grants the licence, collects the fee and forwards a copy of his records to the Department of Commerce. No other criteria to be used for evaluating applications except a police clearance certificate. Any applications with regional implications to be handled by Department of Commerce.
- 6.4 No building regulations for business premises except in Towns and areas under approved plans. In towns, building regulations to be revised with a view to stimulating commercial and business activity.
- 6.5 Establish an organisation similar in aims and operations to Transido, to assist small businesses and informal sector traders. This organisation to have depots in the NE region's towns, initially at Lusikisiki.
- 6.6 Provide a market and premises for small traders and businesses in each of the region's Towns; and as demand occurs, at certain Rural Nodes.
- 6.7 TDC to promote Transkeians in wholesaling and retailing operations, particularly in respect to locally produced goods.
- 6.8 TDC to investigate ways of protecting local entrepreneurs and producers against competition from large-scale RSA enterprises.
- 6.9 The Department of Commerce to ensure that the major RSA chain stores and wholesalers not be permitted to establish in the region, thereby endangering local, smaller traders.
- 6.10 Existing outside wholesalers to run training programmes as part of their contract agreements.
- 6.11 TDC's Misty Mount training organisation to adapt courses and provide them on a short term basis in the NE region's Towns, through local Chambers of Commerce, and later at Nodes. This is to increase access for rural businesses whose proprietors often cannot be away for any length of time. These courses to be conducted in Town halls and in the Community buildings to be constructed at each Node as local demand occurs.

## 7. TOURISM AND RECREATION

- 7.1 A National Park to be established stretching from the Umtamvuna to Poenskop, with a hiking trail and overnight facilities. It will include cottages for the public at Msikaba and Mboyti. Similar bungalows/rest camps to be established at Mgazana and Tshani/Mdumbi, to be administered under the same authority.
- 7.2 Existing cottages at Port Governor, Goss Point, Lupatana and Mkpande to be used as rest camps for the two hiking trails, unless present leaseholders take up leases under the proposed new terms set out in 7.5
- 7.3 The Natal Parks Board to be commissioned (for 10 years) to manage the Central Parks body, to train staff, and manage the National Park Zone. In this regard the Natal Parks Board would act as agents for the TDC, Department of Forestry (Nature Conservation) and Qaukeni Regional Authority which would all be incorporated into the management structure. Particular attention is to be paid to the employment of people now resident within the Park Zone.
- 7.4 Conservation reserves to be set up at Mgazana, Hluleka/Mtakatye, Umtata Mouth, Tshani/Mdumbi; and the planned reserve at Mt Thesiger re-instated.
- 7.5 Holiday resorts to be limited to 4 points along the NE coast:
- (i) Mzamba, where
    - future resort and hotel development to be undertaken along ecologically sound lines;
    - any future proposals to be evaluated in the light of an Environmental Impact Analysis undertaken by Transkei's Development of Commerce, Industry and Tourism;
    - the geographical extent of further development be restricted to a radius of approximately 3 km of the Umtamvuma bridge - to be designated precisely in an Action Area plan.
    - This Plan to make provision for a comprehensively serviced settlement for present and future employees at Mzamba.
  - (ii) Port St Johns
  - (iii) Umngazi Mouth
  - (iv) Umtata Mouth.

- 7.6 Certain existing cottages will need to be demolished for public access and new development as part of the National Park and Conservation resort areas. Other cottages in designated "second order" places to be subject to the following new conditions:
- (i) Existing leaseholders may take out a new base at a cost of R800 p.a. for 15 years, provided cottages are upgraded to a minimum standard and maintenance.
  - (ii) If existing leaseholders do not take up this option, or if they default on requirements, their cottages may be taken over as overnight camps for people using the hiking trail.
- 7.7 Upgrade infrastructure and facilities at Port St Johns to meet the needs of its residential and peak season populations. Action should be taken urgently to resolve the problems at the river mouth and First beach. An investigation be undertaken into the feasibility of building a small craft marina at or near the town.
- 8.7 Sportsfields to be constructed at each of the region's towns.

## 8. INFRASTRUCTURE

### Regional

- 8.1 Main roads to be upgraded.
- Magusheni - Flagstaff - Lusikisiki - Port St Johns.
  - IDP (Mtonjeni) to Lusikisiki and southern Natal.
  - Umtata - Port St Johns.
  - Flagstaff - Holy Cross - Mtonjeni.
  - Umzimkulu to rural area (along road 53).
  - Lusikisiki - Mkambati.
- 8.2 Roads to link the proposed Rural Nodes (first phase) to the main road network need to be upgraded.
- 8.3 Water
- Tracor to discuss potential irrigation and dam sites in the region with District Development Officers in order to initiate consultation with affected communities prior to selecting the most suitable sites for motivation and funding.

8.4 Electricity network to be extended first to the region's Towns, next to the Rural Nodes and then to Secondary Schools and Residential Clinics.

8.5 Telecommunications network to be extended to meet present and projected needs of the Towns; and to provide improved services to the Rural Nodes, Residential Clinics and Secondary Schools.

8.6 Air Transport

- a) Existing airstrips to be regularly maintained.
- b) A weekly air service to operate with single day return flights from:
  - Umtata - Mt Ayliff - Umzimkulu - Bizana.
  - Umtata - Port St Johns - Lusikisiki - Flagstaff.

8.7 Hydropower

The proposed hydro-electric scheme on the Umzimvubu to supply inexpensive electricity to Transkei and for export to the RSA should be pursued actively.

8.8 Urban infrastructure

Provision to be made in all the Towns for

- long-term growth plans )
- water )
- sewage disposal ) to meet uses of
- internal roads ) target (5 year)
- services residential plots ) populations.
- sites for commercial, industrial )
- and public uses )

8.9 Implementation

An organisation is needed to manage and undertake the infrastructural works proposed in 8.1 to 8.6 and 8.8. This will be undertaken by a new East Pondoland Infrastructure Development Unit (EPIDU), which will be established with a site office in the region for ten years. EPIDU will be run as a private concern, responsible to an Advisory Board comprising representatives of Transkei's key development departments. Its objectives are set out in the IDP report. EPIDU will serve as a model for possible similar units in other parts of the region.

#### 8.10 Village water supplies

- a) Establish water supply committees across tribal authorities and administrative areas so that local people involved in defining own water needs and potentials. Committees supplied with finance and technical assistance from central government agencies (i.e. TATU) in order to implement specific projects.
- b) Planned investigation and development of ground water resources - boreholes to areas presently unserved.
- c) Investigations into technical and cost effectiveness of supplying water to villages by means of small weirs/rivers with storage reservoirs and gravity fed pumps.
- d) Promote large, reticulated water supply schemes extending across districts such as present Libode Scheme and planned Kwa Bacha and Lusikisiki schemes.

#### 8.11 Sanitation

Department of Health in conjunction with Health Inspectors to contract out to local builders the construction of pit latrines.

#### 8.12 Fuel

Smaller woodlots to be established, distributed across districts. This will require greater co-ordination and more staff than the proposal to establish one large woodlot per district. However, benefits and savings to the end consumer outweighs the advantages of reduced administration.

### 9. HOUSING

- 9.1 Encourage the building of new houses in towns, and designated future urban areas, for the full range of income groups so as to ensure that no one is forced to live in unauthorised settlements.
- 9.2 Adopt appropriate standards for urban development.
- 9.3 Introduce site and service schemes in all the region's existing towns with appropriate controls to ensure that the requirements of low income households are met.
- 9.4 Prepare comprehensive development plans for each town, to include land uses in the commonage and to make provision in terms of land allocation for the projected population increases over the next 10 years.

- 9.5 Prepare outline development plans for the designated nodes as a framework for making decisions about the use of land for periodic activities and to examine options for future land needs around the node.
- 9.6 Housing for expatriates on large agricultural estates to be located in or adjacent to existing residential areas in order to incorporate them at a later date; and to economise on the provision of infrastructure. An acceptable quality of environment needs to be provided for permanent local staff.
- 9.7 Provide houses for government officials posted to the region's towns and rural areas. Funds for this purpose should be allocated by Magisterial District on the basis of population, and houses allocated to:
- District Development Officers;
  - Agricultural extension officers;
  - Staff at Residential Clinics;
  - Teachers at rural schools;
  - Administrative staff in towns.
- 9.8 Establish a national Housing Corporation to finance low-income housing throughout Transkei; funds allocated regionally on basis of district populations.
- 9.9 Establish a housing implementation agency on a pilot basis to administer the new housing proposed for the towns of the NE region. The aim of this agency would be to co-ordinate the site activities at each housing project area, and train staff to take over maintenance and replace the agency as co-ordinators over time. This agency could be commissioned to private organisations along the same lines as EPIDU.
- 9.10 Government's role in provision of housing to be one of making opportunities for people to house themselves in enabling legislation; removal of barriers; planning and design; staff to run Housing Corporation and the implementation agency.

## 10. TRANSPORT AND COMMUNICATIONS

- 10.1 Establish full Post Offices in all the NE region's towns.
- 10.2 Establish a mobile Post Office facility with money order and telegraph facilities to serve the Rural Nodes.
- 10.3 Upgrade the telephone exchanges in the region's towns and increase staffing to provide an extended night service.
- 10.4 Set up radio linkages for emergency messages to cover initially all Police Stations, Hospitals and Residential Clinics; later extend to Senior Secondary Schools.
- 10.5 Initiate a regional maintenance service for all government vehicles. It is proposed that Transkei government construct 3 or 4 depots in the region and enter into contracts ( $\pm 5$  years) with separate outside garage operators to staff, operate and undertake training at these depots. Each depot will serve 2 or 3 magisterial districts. Contracts will be renewable subject to the service provided; but in the long term should be awarded to Transkeian operators.

## 11. HEALTH SERVICES

- 11.1 Provide Health Centres at Port St Johns, Flagstaff and Tabankulu to fulfill a role intermediate between Hospitals and Residential Clinics.
- 11.2 Provide Residential Clinics in areas presently underserved:
- |            |   |           |    |
|------------|---|-----------|----|
| Bizana     | 6 | Ngqeleni  | 2  |
| Libode     | 3 | Siphaqeni | 4  |
| Lusikisiki | 5 | Tabankulu | 3  |
| Maxesibeni | 2 | Umzimkulu | 2  |
| Umzimvubu  | - |           |    |
|            |   | Total     | 27 |
- 11.3 Upgrade facilities at existing Residential Clinics including the provision of staff housing.

- 11.4 Upgrade facilities at the region's Hospitals, particularly with respect to equipment, wards, laundry facilities, housing, vehicles, maintenance and communications.
- 11.5 Arrange for Mobile Clinics to be present at Rural Nodes lacking other health services.
- 11.6 Increase the number of nurses and nurse-aids being trained at Hospitals in the region.
- 11.7 Make provision for increased numbers of Health Assistants and Health Inspectors available for community work.
- 11.8 Increase the number of vehicles available at each Hospital and improve their maintenance through the programme described in 10.5.
- 11.9 Establish radio communication between Residential Clinics and Hospitals on one hand, and between these Hospitals and Umtata General Hospital on the other.
- 11.10 TDC's helicopter service and the Defence Force aircraft to be made available to transfer emergency cases from the NE region to Umtata Hospital.
- 11.11 An investigation and pilot project to be set up to examine the possible role of Village Health Workers in the overall health care service.
- 11.12 Promotion of sensitive co-operation of traditional medicine healers with Residential and Mobile Clinic activities.

## 12. EDUCATION

- 12.1 Primary schools (junior and higher combined)
  - a) In order to achieve a standard of 1 teacher/classroom to 70 pupils within 5 years, 75 additional teachers and 50 new classrooms are required in the ± 30 most needy Administrative Areas of the region. In addition 13 new Primary Schools are required for areas presently un- or under-served.
  - b) Emphasis needs to be placed on teaching basic skills viz. literacy, English and Arithmetic, as a grounding for tertiary and vocational training.

### 12.2 Junior Secondary schools

- a) In order to reach a standard of 1 teacher/classroom to 65 pupils within 5 years, 18 more teachers and 56 more classrooms will be needed in the NE region. A further 13 new schools are also required for un- or under-served areas.
- b) Increased emphasis needs to be given to vocational training such as woodwork and domestic science.

### 12.3 Senior Secondary schools

- a) In order to achieve a teacher/classroom to pupil rate of 1:55 within 5 years, 3 teachers and 15 classrooms are required, as well as 3 or 4 new schools at Umzimkulu, Bizana, Canzibe and/or Bambisana.
- b) Provision to be made for adequate boarding facilities and electricity at Senior Secondary Schools.
- c) More emphasis on vocational subjects is needed.

### 12.4 Technical training

- a) Upgrade Lusikisiki vocational school from 120 - 350 students.
- b) New Technical Training Institute at Mtonjeni (alternatively Flagstaff if sugar project does not take place within 5 years). For both the focus should be on :
  - tuition - covering several skills - i.e. builder capable to construct building from foundation to roof.
  - tuition applicable to both traditional and modern building practices.
  - practical input to courses with students involved in development projects.
  - students taught business skills so they can become self-employed and not just employees.
- c) EPIDU undertake training within its projects.

### 12.5 Teachers Training

- a) Upgrade the Teachers Training College at Flagstaff; convert portion into centre for retraining teachers in practical and technical subjects.
- b) New college of education at Flagstaff to
  - share facilities with existing TTC;
  - co-ordinate administration of teachers training in the NE region;
  - develop Education as a major element of Flagstaff's functional base.

### 12.6 Correspondence College

- a) Establish a Transkei Correspondence College under Umtata Technical College with a depot initially at Flagstaff and later in other Towns.
- b) Cassette tapes for relevant courses available on request especially to schools providing night courses.
- c) Investigations into providing radio broadcasts to supplement correspondence by Department of Education.

### 12.7 University of Transkei

- a) IMDS to expand in-service training courses for civil servants and bring courses into district towns.
- b) Unitra to introduce practical and technical aspects into its teachers degree.

### 12.8 Training for small-scale entrepreneurs

- a) Establish facilities for on-job training of staff at depots of the Transido type organisation for small businesses.
- b) Increase TDC's training at Misty Mount - bring courses to district centres.

### 12.9 Accommodation for teachers

- a) Department of Education to build houses for teaching staff.

12.10 Multiple use of facilities

- a) Allow schools to be used after hours by community or training courses etc.
- b) Where special facilities are used (i.e. domestic science room) a small fee to cover maintenance and cost of the equipment will be required.

12.11 Training of civil servants

A staff Training College to be established in Umtata to train acivil servants for posts in Umtata and the regions. In due course this College can take over the in-service training function presently being carried out by IMDS.

13. COMMUNITY SERVICES

- 13.1 A Transkei Adult Education Programme (TEAP) to be established as a branch of the proposed Transkei Correspondence College (see 12.6) in the NE region. TEAP is specifically directed at adults and early school leavers in rural areas and small towns. TEAP to be set up as an autonomous unit, finally responsible to Secretary of Education, and based in Umtata, but with a regional centre in Flagstaff.
- 13.2 Increase the pension to an agreed subsistence level and thereafter peg them to a cost of living increase. This could be a valid target group for certain Drought Relief funds.
- 13.3 Pensions to be paid monthly, at more widespread destination points to co-incide wherever possible with the location and timing of the Rural Nodes.
- 13.4 A community building to be constructed at each Rural Node for meetings, training courses and other community activities.

14. ADMINISTRATIVE SERVICES

- 14.1 District Project Officers to be established in each district (see 4.2) with responsibilities to include project identification and co-ordination.
- 14.2 A trained administrator to be seconded to each Regional Authority as an "ombudsman" to assist with all administrative matters affecting that authority.
- 14.3 In-service training courses for civil servants and a Staff Training College to be set up (see 12.11).
- 14.4 An investigation to be undertaken into the existing administrative structures in the NE region with a view to resolving overlaps, gaps and generally enabling the administrative system to become more streamlined.

## APPENDIX XI Physical Projects by Sector (Table 11.2)

Sector	Project Name	Description	Estimated Cost (Rmillion)	Phasing	Responsibility (Department/ Implementation)	Transkei Project reference and priority	NE Plan Reference
<b>INFRASTRUCTURE</b>							
<b>1. Roads</b>	<b>1.1 Main Roads</b>	1.1.1 Tar Lusikisiki - Flagstaff - Magusheni (77 km) (Road 61)	9,155*	84/5-86/7	W&E/EPIDU	11.1.83:b	5.2.1.3
		1.1.2 Tar Lusikisiki - Port St Johns (38 km) (Road 61)	6,827*	84/5-86/7	W&E/EPIDU	11.1.83:b	5.2.1.3
		1.1.3 Tar and construct road from Lusikisiki via Mtonjeni to Mfolozi (83 km) and from Redoubt to Mpunzi Drift (14 km)	32,774*	84/5-89/90	W&E/EPIDU	11.1.83:b	5.2.1.3
		1.1.4 Tar Flagstaff - Holy Cross - Mtonjeni (54 km) (Road 23)	7,707*	88/9-90/91	W&E/EPIDU	11.1.83:b	5.2.1.3
		1.1.5 Tar Lusikisiki - Mkambati (22 km) (Road 24)	2,697*	88/9-89/90	W&E/EPIDU	11.1.83:b	5.2.1.3
		1.1.6 Tar Umtata - Port St Johns		in progress	W&E		5.2.1.3
	<b>1.2 Secondary Roads</b>	1.2.1 Maintenance of shortest route from Rural Centres to Main roads ( km)		84/5-87/8	W&E/EPIDU	-	5.2.1.3
		1.2.2 Upgrade through routes linking Rural Centres to Towns and Main roads ( km)		88/9-92/3	W&E/EPIDU	-	5.2.1.3
	<b>1.3 Tertiary Roads</b>	1.3.1 Upgrade 1 200 km of Tertiary Roads	3,9	84/5-87/8	W&E/EPIDU	-	5.2.1.3
<b>2. Water</b>	<b>2.1 Village Water supply</b>	2.1.1 Water supply to 800 villages	4,224	84/5-87/8	Agric or CIT/TATU or EPIDU	3.1.83:b	5.2.2.3
<b>3. Power</b>	<b>3.1 Urban network</b>	3.1.1 Umtata - Majola - Lusikisiki (Magwa) Port St Johns	5,12	83/4	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.2 Lusikisiki/Magwa - Flagstaff	0,90	84/5	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.3 Libode - Mount Nicholas Mission - Misty Mount - Mafini	0,19	86/7	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.4 Transkei Defence Force Base in Port St Johns	0,12	86/7	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.5 Second Beach Cottages, Port St Johns	0,07	86/7	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.6 NE region ring	7,97	84/5	W&E/Tescor	6.2.83(draft)	5.2.3.3
		3.1.7 Low voltage municipal distribution to Lusikisiki, Port St Johns, Bizana	0,55	85/6	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.8 Low voltage distribution to remaining 6 towns (as in 3.1.7)		88/9-92/3	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.9 Connect Tabankulu to NE ring		86/7	W&E/Tescor	6.2.83 (draft)	5.2.3.3
		3.1.10 Connect rural centres to NE ring		88/9-92/3	W&E/Tescor	-	5.2.3.3

Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (Rmillion)	Phasing	Responsibility (Department/ Implementation)	Transkei project reference and priority	NE Pan Reference
<u>Infrastructure</u> contd.							
<u>3. Power</u>	3.2 Rural electrification	3.2.1 Provision of photovoltaic units at clinics, schools and villages (1000 points at R5000 unit)	5,0	84/5-87/8	W&E/TATU	-	5.2.3.3
	3.3 Hydro-electric power	3.3.1 Investigations into Mzimvubu hydro-electric scheme		84/5	W&E/NPC	-	5.2.3.3
<u>4. Telecommunications</u>	4.1 Telephone exchanges	4.1.1 1000 line exchange at Lusikisiki to serve Bizana, Flagstaff and Mtonjeni	5,150	85/6-86/7	P&T/P&T	10.2.83:b	5.2.4.3
		4.1.2 500 line exchange at Umzimkulu	3,837	87/8	P&T/P&T	10.2.83:b	5.2.4.3
		4.1.3 Upgrade and extend exchanges at remaining towns		88/9	P&T/P&T		5.2.4.3
	4.2 Microwave Radio network	4.2.1 Microwave radio link up between Umtata - Lusikisiki - Mzamba then Bizana - Flagstaff - Mtonjeni to Lusikisiki	2,216	84/5	P&T/P&T	10.2.83:b	5.2.4.3
	4.3 Post Offices	4.3.1 Upgrade existing postal facilities at Lusikisiki and Flagstaff	0,11	84/5	P&T/P&T	10.2.83:b	5.2.4.3
		4.3.2 Improve postal facilities at remaining 7 towns		87/8	P&T/P&T	-	5.2.4.3
		4.3.3 Provide mobile postal service with money order/ telegraph facilities to Rural Centres		84/5	P&T/P&T	-	5.2.4.3
	4.4 Rural Radio Network	4.4.1 Develop radio network between Rural Centres, Police stations, hospitals, residential clinics, and senior secondary schools	0,3	84/5	CIT/TATU and ACAT	-	5.2.4.3

Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (R million)	Phasing	Responsibility (Department/Implementation)	Transkei project reference and priority	NE Plan Reference
5. <u>Urban Services/Infrastructure</u>	5.1 Lusikisiki	5.1.1 Provision of water sewage, and roads	I 10,299* II 10,398*	84/5-88/9 89/90-92/3	LG&LT/EPIDU	4.1.83:	5.2.5.3
		5.1.2 Planning, design, contract administration	I 1,415* II 1,120*	84/5-87/8 89/90-92/3			
		5.1.3 Market	0,213	84/5			
	5.2 Flagstaff	5.2.1 Provision of water, sewage and roads	I 6,354* II 15,032*	84/5-87/8 88/9-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.2.2 Planning, design contract administration and site costs	I 0,997* II 1,597*	84/5-87/8 88/9-92/3			
		5.2.3 Market	0,213	84/5			
	5.3 Bizana	5.3.1 Provision of water, sewage and roads	I 9,767* II 8,216*	85/6-88/9 89/90-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.3.2 Planning, design, contract administration and site costs	I 1,236 II 0,929	84/5-88/9 89/90-92/3			
		5.3.3 Market	0,213	85/6			
	5.4 Umzimkulu	5.4.1 Provision of water, sewage and roads	I 2,770 II 2,562	85/86-87/8 88/9-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.4.2 Planning, design, contract administration and site costs	I 0,428 II 0,376	85/6-87/8 88/9-92/3			
		5.4.3 Market	0,213	85/6			
	5.5 Port St Johns	5.5.1 Provision of water, sewage and roads	I 1,710 II 1,508	85/6-87/8 88/9-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.5.2 Planning, design contract administration and site costs	I 0,230 II 0,238	85/6-87/8 88/9-92/3			
		5.5.3 Market	0,213	85/6			
	5.6 Tabankulu	5.6.1 Provision of water, sewage and roads	I 1,395 II 4,035	86/7-88/9 89/90-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.6.2 Planning, design contract administration and site costs	I 0,238 II 0,444	86/7-88/9 89/90-92/3			
		5.6.3 Market	0,213	86/7			
	5.7 Mt Ayliff	5.7.1 Provision of water, sewage and roads	I 3,120 II 3,346	86/7-88/9 89/90-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.7.2 Planning, design contract administration and site costs	I 0,389 II 0,392	86/7-88/9 89/90-92/3			
		5.7.3 Market	0,213	86/7			
	5.8 Libode	5.8.1 Provision of water, sewage and roads	I 1,155 II 1,023	87/8-88/9 89/90-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.8.2 Planning, design contract administration and site costs	I 0,204 II 0,134	87/8-88/9 89/90-92/3			
		5.8.3 Market	0,213	87/8			

Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (R million)	Phasing	Responsibility (Department/Implementation)	Transkei project reference and priority	NE Plan Reference
5. <u>Urban Services/ Infrastructure</u>	5.9 Ngqeleni	5.9.1 Provision of water, sewage and roads	I 0,434 II 2,302	87/8-88/9 89/90-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.9.2 Planning, design contract administration and site costs	I 0,089 II 0,275	87/8-88/9 89/90-92/3			
		5.9.2 Market	0,213				
	5.10 Mtonjeni	5.10.1 Provision of water, sewage and roads	I - II 9,482*	87/8-92/3	L.G/EPIDU	4.1.83:	5.2.5.3
		5.10.2 Planning, design contract administration and site costs	I 0,025* II 1,150*	84/5 87/8-92/3			
		5.10.3 Market	0,213				
6. <u>Construction and maintenance</u>	6.1 EPIDU	6.1.1 Planning administration and construction of infrastructural projects; and training local personnel and small contractors	0,5*	83/4-92/3	EPRDA/NPC	12.2.83	5.2.6.3
<u>SOCIAL SERVICES</u>							
7. Education	7.1 Primary and Junior Secondary School Classrooms	7.1.1 Build 218 classrooms and 108 administration blocks	6,82	83/4	Educ/W&E/TATU	1.1.83:a/b	5.3.1.3
		7.1.2 Build 391 classrooms and 111 administration blocks	8,03	84/5	Educ/W&E/TATU	1.1.83:a/b	5.3.1.3
		7.1.3 Build 431 classrooms and 157 administration blocks	9,41	85/6	Educ/W&E/TATU	1.1.83:a/b	5.3.1.3
	7.2 Senior Secondary School Classrooms	7.2.1 Build 60 classrooms	0,96	83/4	Educ/W&E/TATU	1.2.83:b	5.3.1.3
		7.2.2 Build 72 classrooms	1,15	84/5	Educ/W&E/TATU	1.2.83:b	5.3.1.3
		7.2.3 Build 69 classrooms	1,10	85/6	Educ/W&E/TATU	1.2.83:b	5.3.1.3
	7.3 Lusikisiki Vocational School	7.3.1 Upgrade capacity from 120 to 350 pupils Operating cost	2,20 * 1,12 *	84/5-86/7 84/5-87/8	Educ/W&E/TATU	12.2.83:	5.3.1.3
	7.4 Technical Training Facility	8.4.1 Build new facility at Mtonjeni	4,0 *	88/9-90/91	Educ/W&E/TATU	12.2.83:	5.3.1.3
	7.5 Teachers Training College	7.5.1 Improve existing facilities at Sigcau Teachers Training College	0,62	84/5-85/6	Educ/W&E	1.3.83:a/b	5.3.1.3

Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (Rmillion)	Phasing	Responsibility (Department/Implementation)	Transkei project reference and priority	NE Plan Reference	
8. <u>Health</u>	8.1 Residential Clinics	8.1.1 Build 24 residential clinics	2,76	83/4-86/7	Health/W&E/TATU	2.1.83:a/b	5.3.2.3	
	8.2 Community Health Centres	8.2.1 Health Centres at Port St Johns, Tabankulu and Flagstaff	4,125	85/6-87/8	Health/W&E/TATU	2.1.83:a	5.3.2.3	
	8.3 District Hospitals	8.3.1 Upgrade existing district hospitals	4,95	83/4-87/8	Health/W&E/TATU	2.2.83:a/b	5.3.2.3	
9. <u>Housing</u>	9.1 Urban	9.1.1 Provision of urban residential plots for varying income groups; housing projects (ie sites and service contract) at - Lusikisiki, Flagstaff  - Bizana, Umzimkulu, Port St Johns  - Tabankulu, Mt Ayliff  - Libode, Ngqeleni Mfonjeni	Included under Urban Services					
				84/5		12.2.83		
				85/6	LG& LT/EPIDU			
				86/7			5.3.3.3	
	9.2 Government Housing (Towns)	9.2.1 Provision of housing for urban government officials - Lusikisiki, Flagstaff  - Bizana, Umzimkulu, Port St Johns  - Tabankulu, Mt Ayliff  - Libode, Ngqeleni Mtonjeni	1,295	84/5		12.2.83	5.3.3.3	
			1,650	85/6		-		
			1,100	86/7		-		
9.3 Government Housing (Rural)	9.3.1 Provision of housing for government officials in rural areas	1,065	87/8		-			
				LG& LT/EPIDU	-	5.3.3.3		
<u>ECONOMIC AND PRODUCTIVE ACTIVITIES</u>								
10. <u>Agriculture and Forestry</u>	Maize	10.1 Tracor Maize Schemes	10.1.1 Expansion of existing schemes (Mngazi Valley, Umzimkulu, Lusikisiki, Bizana, Flagstaff Libode, Mkambati	2,637	83/4	Agric/Tracor	5.1.	5.4.1.3
				0,604	84/5	Agric/Magwa		5.4.1.3
Contd. /10.3								

Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (R million)	Phasing	Responsibility (Department/ Implementation)	Transkei project reference and priority	NE Plan Reference
10. <u>Agriculture and Forestry</u> contd.	10.3 New Maize Schemes	10.3.1 Establish 2000 ha of Maize between Mntentu and Msikala rivers	1,73	84/5-86/7	Agric/Tracor		5.4.1.3
		10.3.2 Plant the 700 ha presently under phormium tenax to maize	0,56	84/5-88/9	Agric/Tracor		5.4.1.3
	10.4 Maize Handling Project	10.4.1 Adapt phormium tenax factory to maize drying, storage and milling facility		86/7-87/8	Agric/Tracor		5.4.1.3
	<u>Sugar</u>						
	10.5 Mkambati	10.5.1 Plant 8000 ha to sugar	10,0 *	87/8-93/4	Agric/Tracor	no number 83/4	5.4.1.3
		10.5.2 Construct 85 ton Sugar mill	50,0 *	87/8-90/91	Agric/Priv. co	83/4	
	10.6 Mfolozi	10.6.1 Expand present scheme from 550 ha to 4000 ha		84/5-89/90	Agric/	83/4	5.4.1.3
	<u>Tea</u>						
	10.7 Magwa Estate	10.7.1 Expand tea estate by 400 ha		84/5	Agric/TTC		5.4.1.3
	10.8 Majola Estate				Agric/TTC		5.4.1.3
	<u>Other</u>						
	10.9 42 ha Irrigation projects	10.9.1 Establish 7 x 42 ha irrigation schemes at Mandlovini, Big Umgazi, Intsimbini Mfulamhle, Nyosana, and Dutyini	0,186	84/5	Agric/Tracor	5.1.3.82	5.4.1.3
10.10 Commonage production	10.10.1 Establish intensive agricultural schemes on commonage land		84/5-87/8	Agric/Tracor		5.4.1.3	
10.11 Demonstration Farms and Plots	10.11.1 Establish demonstration farms at Bizana, Big Mngazi, Lusikisiki, and Maxesibeni		85/86-86/7	Agric/Tracor	-	5.4.1.3	
	10.11.2 Develop smaller demonstration plots at each Rural Centre		86/7-87/8	Agric/Tracor	-	5.4.1.3	
10.12 Slaughter Blocks	10.12.1 Provision of simple and clean slaughter blocks at the Regional Centre, Towns and designated Rural Centres	0,084	84/5-86/7	Agric/ Tatu/ Tracor		5.4.1.3	

Contd. /10.13

## Physical Projects by Sector contd.

Sector	Project Name	Description	Estimated Cost (R million)	Phasing	Responsibility (Department/ Implementation)	Transkei project reference and priority	NE Plan Reference	
11. <u>Industry</u>	10.13 Saleyards	10.13.1 Upgrade saleyards at Xura Drift, Glengarry Lourdes, Ntafufu and Nkunzimbini		84/5-86/7	Agric/Agric		5.4.1.3	
	<u>Forestry</u>							
	10.14 Firewood and Pole plantation	10.14.1 Planting of 18 000 additional hectares to firewood and Pine and Eucalyptus	9,0	84/5-88/9	Agric/Agric	No number 1983 draft	5.4.2.3	
	11.1 Incentives Programme	11.1.1 Provide financial incentives to industries locating in the NE region		83/4-92/3	CIT/CIT	12.2.83	5.5.1.2	
	11.2 Industrial Sites and Premises	11.2.1 Construct Industrial sites at: - Bizana, Flag-Flagstaff, Lusikisiki - Mtonjeni - and in the long term Libode, Mt Ayliff, Ngqeleni, Port St Johns, Tabankulu and Umzimkulu		Under urban services	83/4-87/8	CIT/Transido	12.2.83	5.5.1.3
					87/8-92/3		12.2.83	5.5.1.3
								5.5.1.3
12. <u>Commerce</u>	11.3 Transido Depot Project	11.3.1 Build and staff Transido depots at Flagstaff, Lusikisiki - Mtonjeni	0,9* 0,45*	84/5 87/8-92/3		12.2.83 12.2.83	5.5.1.3 5.5.1.3	
	11.4 Transido Loans Project		3,20*	83/4-92/3	CIT/Transido	12.2.83	5.5.1.3	
	12.1 Urban Commercial sites	12.1.1 Increase number of commercial sites in each town		Under urban services	84/5-92/3	CIT/Transido or EPIDU		5.5.2.3
	12.2 Town - Markets	12.2.1 Establish a market place in each town		1,92	84/5-92/3	CIT/TATU or EPIDU		5.5.2.3
	12.3 Rural Centre Markets	12.2.1 Provide commercial sites and market places in designated Rural Centres in - Nyanda and Umzimkulu - East Pondoland			84/5	CIT/TATU or EPIDU		
					85/6			5.5.2.3

Physical Projects by Sector contd. -578-

Sector	Project Name	Description	Estimated Cost (Rmillion)	Phasing	Responsibility (Department/ Implementation)	Transkei project reference and priority	NE Plan Reference
13. <u>Tourism</u>	13.1 Mzamba	13.1.1 Plan to control proposed private sector developments		83/4	LG/LT	In progress	5.6.1.3
	13.2 National Park	13.2.1 Project motivation for a National Park		84/5	Agric	-	5.6.1.3
	13.3 Port St Johns	13.3.1 Development of tourist potential to be included in overall planning of Port St Johns		85/6	LG & LT/EPIDU	-	5.6.1.3
	13.4 Nature Reserves	13.4.1 Establish nature reserves at Third Beach, Port St Johns and Mtamvuma	0,1	84/5	Agric	6.3.83	5.6.1.3
14. <u>Mining</u>	14.1 Mining Development Project	14.1.1 Establish Tramincor		83/4	CIT/Tramincor	19.1.83	5.6.2.3
<u>ADMINISTRATION AND IMPLEMENTATION</u>							
15. <u>Co-ordination</u>	15.1 National Planning Agency (NPA)	15.1.1 NPA to initiate implementation of the Plan by liaison with various department and agencies negotiating project finance and organising budgetary support for projects		83/4 -92/3	NPA		5.7.3
	15.2 EPRDA	15.2.1 EPRDA to be established in a phased basis to co-ordinate the activities of government departments in the execution of projects described in this Plan	0,5*	83/4 -92/3	NPA/EPRDA		5.7.3
16. <u>Implementation</u>	16.1 EPIDU	16.1.1 Establish EPIDU to manage and undertake urban, regional and certain rural infrastructural projects	0,5*	83/4 -92/3	NPA/EPIDU	12.2.83	5.2.5.3
	16.2 Parastatal organisations	16.2.1 Tatu, Transido, Tescor, Tracor, TDC, Tramincor etc to undertake project as indicated		83/4	NPA		5.7.3
	16.3 Government departments	16.3.1 Projects presently undertaken by government departments remain their responsibility		83/4	NPA		5.7.3
	16.4 Non-government organisations	16.4.1 Support for organisations such as ACAT, Zenzele etc		83/4	CIT/CIT		5.7.3
	16.5 Industrial incentives	16.5.1 Incentives to resource based industries in the NE region		83/4	CIT/CIT		5.7.3
		16.5.2 Transido loans	3,2*	83/4 -92/3	CIT/Transido		5.7.3

## APPENDIX XII CAPITAL AND DEVELOPMENT PROJECT PREPARATION

This memorandum, based on the IDP project motivation, was circulated to all departments and agencies by the NPC in mid 1983 as a guideline for the preparation of projects for capital financing by the government directly or through submission to the RSA or other bodies. The National Planning Committee recognizes that not all projects are similar in nature. Yet, it is important that motivation documents follow a similar format for ease of comparison and thoroughness of preparation.

Not all of the sections will be relevant to each proposed project and in some cases the departments may not have knowledge or expertise in a certain matter (for example, the relationship to other development projects). These sections should be left out and will be prepared by the National Planning Committee.

For explanation of this guideline or assistance with project preparation please contact the Chairman of the National Planning Committee located within the Department of Commerce, Industry and Tourism.

### Project Proposal Structure

Each project proposal should contain the following sections (excluding section which have no bearing on the project):

1. Title Page
2. Summary
3. Budget Outline
4. Purpose
5. Contribution to Development Objectives
6. Relationship to other Development Projects
7. Background
8. Policy
9. Project Description
10. Project Administration
11. Project Justification
  - Spatial
  - Technical
  - Economic
  - Social Benefits
12. Project Cost Estimates

For ease of preparation each section should begin with a new page. The text should be clear and concise written in simple and direct language.

As a general rule proposals for less than one million Rand should be approximately 4 to 8 pages in length with larger requests accorded greater length as needed. Extensive background material, technical data, extracts or relevant chapters from the development plan should be attached as appendices. In many cases maps (including simple sketch maps) would be useful to enable people outside Transkei to understand the project.

### Title Page

This page should include the name of the project, the name of the department preparing the request, the name of the person who has prepared the proposal and the name and date of the department or individuals who have approved the project for submission.

### Summary

The summary should state very clearly what the project is about, what work will be undertaken and what will result from the project. Usually it should be one page in length, two at the most.

The summary is the most important section of the proposal in that this is all that senior officials, cabinet ministers or senior officials of the Southern African Development Bank will read. Therefore, this section should give one a clear and concise picture of the project in a nutshell.

### Budget Outline

Show the costs of the project including recurrent (non capital) costs where relevant and costs which will be covered from external sources as well as any funds which have already been approved for the project. The Budget Outline should not detail the various sources of finance but simply identify all costs to be incurred for the proposed project.

All costs should be shown in current Rand. Do not make assumptions about the future value of the South African Rand. These assumptions will be made by the National Planning Committee (NPC). If your project requires that inflation rates be projected then check with the NPC.

### Purpose

The purpose should state very briefly and as specifically as possible what the project is intended to achieve.

### Contribution to Development Objectives

What contribution will the project make to the development objectives which have been set out in the development plan for the particular sector which the project addresses? If the writer is unclear on this then this section should be left for the NPC to write.

### Relationship to Other Development Projects

How does the project fit in with other projects in the development programme in the same sector, in related sectors or geographic area? If the writer is unclear about this then leave this section for the NPC to write.

### Background

What is the present situation in this sector of the economy in relation to the project? What has been done so far by the government or other agencies which is relevant to the project?

### Policy

What are the specific policy statements of the government which are relevant to the project? For example, if the industrial incentives apply to the project, how then will this effect the project?

If, on the other hand, the project requires that certain policies be adopted or implemented, then these should be clearly set out. Such policies might include for instance, pricing structures, market restrictions, etc.

### Project Description

Set out clearly and specifically what the project is going to accomplish and how it is to operate including staffing, training and project sequencing. Where? When? How?

Time line charts which identify each activity or step to be completed in sequence are particularly useful for understanding how a project will actually work, especially for complex projects which will be implemented over a number of years.

### Project Administration

What agency or department will be responsible for carrying out the project? This section can be very brief if an existing agency or department with which people are familiar is implementing the project. In the case of a new or a little known agency then there should be a description of the agency's experience and capacity to undertake the project.

If more than one department is going to be involved in the implementation of the project, then the responsibilities of each department should be clearly set out.

If not adequately described under Project Description, the administrative plan itself should be set out in this section including project evaluation criteria and administrative steps to ensure project success.

### Project Justification

#### Spatial :

What are the spatial implications of the project? Why is the project located in a particular place and what effect will it have on the physical pattern of settlement and infrastructure development?

#### Technical :

What work has been carried out and by whom to determine the technical feasibility of the project? Attach as appendices relevant consultant or department reports in this regard.

If the proposal differs from recommendations or conclusions contained in these reports, then this should be justified.

#### Economic :

What are the benefits of the project to the Transkei economy? What employment, incomes, public sector revenues, etc. will this project create in this economy directly and indirectly through stimulating further activity related to the project?

#### Social Benefits :

What are the social benefits, if any, which will result from the project, other than those measured in terms of increased labour and other incomes? Who will benefit, which section of the population, how many and in what ways?

### Project Cost Estimates

In this section show the detailed estimated costs of the project including capital and recurrent costs and those costs that are to be financed from external and internal sources including already incurred expenses.

In many cases fairly rough figures are adequate to initiate financial negotiations and detailed financial planning should only commence once there has been preliminary indication that financing is likely to be available.

If the department preparing the proposal has initiated financial discussions, then these should be indicated. In other cases the department will have little involvement to arranging finance and this should be left for the NPC.

### General

It is recognized that there is to a certain extent overlap between several of the divisions of the project write up structure. It is not intended that the writer should have to repeat large sections of the proposal. Rather, the intention is to look at the project from several different perspectives. For example, whilst the development objectives are normally government policies it is not intended that the "Policy" section should repeat the information stated in the "Contribution to Development Objectives" section. Rather, the "Policy" section should highlight any specific policy requirements or implications against the general background of the "Contribution the Development Objectives".