IN THE RURAL DEVELOPMENT CONTEXT:

A Comparative Study of the Ngwavuma and

Mapumulo Water Schemes

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Abstract

This dissertation investigates the approach and process employed to both water delivery and capacity building in two distinct KwaZulu-Natal schemes within Mapumulo and Ngwavuma - the Masibambisane Water Project and the Shemula Community Water Supply Scheme, respectively. The principal concern of the study is whether capacity building may proceed alongside service delivery.

The context of the study is established in exploring several theories of rural development, the role of power structures, the state and development agents, as well as the Reconstruction and Development Programme, in relation to rural development. Furthermore, the concept of capacity building is examined in terms of theory and practice in order to conceptually locate the schemes under consideration.

The central argument of the dissertation is that effective management of the delivery process, from investigatory work through to implementation and maintenance of the product, enables capacity building to proceed apace. The primary research conducted around the respective schemes offers support to the argument and further highlights the centrality of extensive community consultation and participation within the delivery process. It is further argued that capacity building is not simply a desirable, but essential component of community-based development initiatives, particularly where the role played by community members subsequent to project implementation is critical to the sustainability of the product. In addition, a comprehensive and grounded understanding of the development context and of the needs and aspirations of the beneficiary community are advanced as being indispensable in seeking to successfully deliver a service in a manner that is appropriate and sustainable.

Finally, the role of the state, funding institutions and delivery agent's within the rural development context may prove highly effective in facilitating fundamental positive changes in the quality of life experienced by rural people. However, it is argued that in order for such development to proceed, such agents need to adopt a self-critical approach and adapt their current policies, practice and perceptions in accordance with the constraints and opportunities of the development context.

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Preface

"Capacity building is a fundamental requirement for effective community participation. Not only does it allow its beneficiaries to be actively involved in the introduction of a water supply project, but also to initiate and direct further changes in their society. It is therefore a vital factor that, together with the use of appropriate technology, has a major influence on the sustainability of community water supply projects..."

Deverill (1994: 16)

The promise of 'real' development within South Africa has emerged within recent years with the stated commitment to the general upliftment of our country's people through responding to basic needs and building upon existing resources. The role of communities has been recognised as crucial in determining the manner in which such development is to proceed, such that space is now being opened for the active involvement of marginalised groupings in demanding redress and delivery of basic services in line with identified needs and aspirations. The challenge remains to secure an environment that is conducive to the realization of such promise and which does not allow for a reversion to rapid and inappropriate physical development at the expense of human resource development.

Declaration of originality

Except where explicitly indicated to the contrary, this study is the original work of the author. This dissertation has not been previously submitted in any form to any other University.

Abbreviations

ABE - Adult Basic Education

ANC - African National Congress

CSIR - Council for Scientific and Industrial Research

DDA - Department of Development Aid

DMA - Durban Metropolitan Area

DWA - Department of Water Affairs

IDT - Independent Development Trust

IFP - Inkatha Freedom Party

INR - Institute of Natural Resources

IRD - Integrated Rural Development

ISER - Institute of Social and Economic Research

JSB - Joint Services Board

KDA - KwaZulu Department of Agriculture

KFC - KwaZulu Finance and Investment Corporation

KNDA - KwaZulu-Natal Department of Agriculture

MXA - McIntosh Xaba and Associates

NPWP - National Public Works Programme

PSC - Amanzi Trust Project Steering Committee

RCF - Regional Consultative Forum

RDP - Reconstruction and Development Programme

SCWSS - Shemula Community Water Supply Scheme

TMC - Technical Management Sub-committee

TSC - Training Sub-committee

VARA - Vandeverre Apsey Robinson and Associates

VKE - Van Niekerk Kleyn and Edwards

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Chapter One

General Introduction

1.1. Introduction

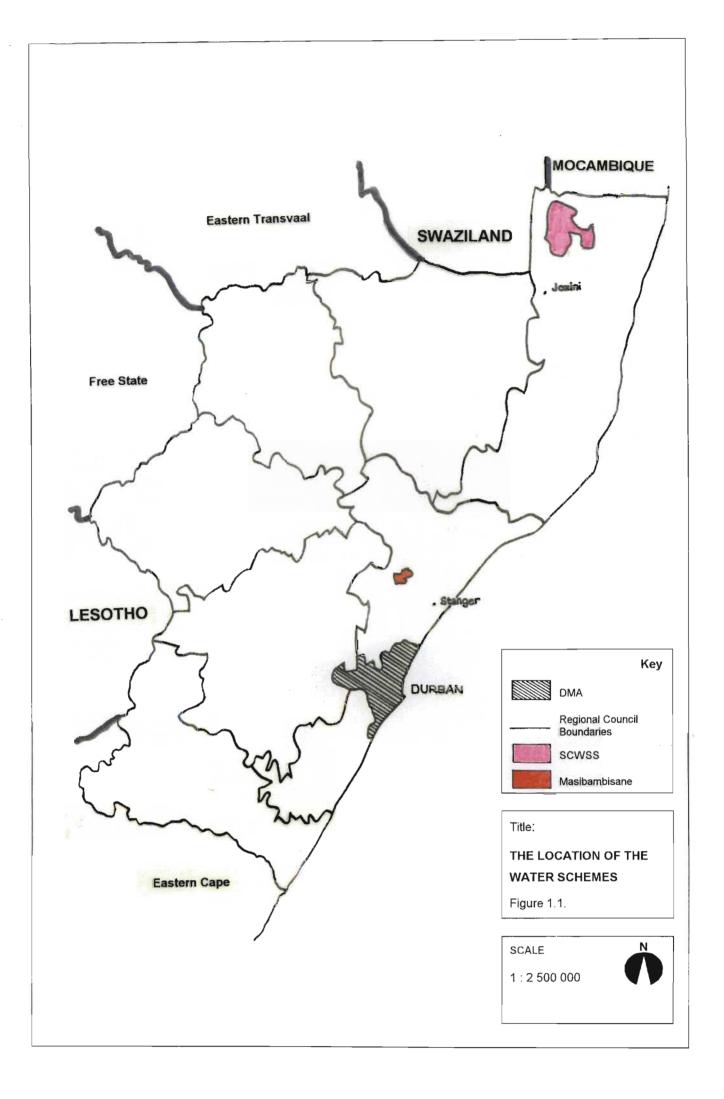
This dissertation is broadly concerned with the process of capacity building in the delivery of basic services to rural populations, and focuses on two separate water delivery schemes taking place in Ngwavuma, a remote rural district in northern KwaZulu-Natal, and in Mapumulo, a rural district inland from the north cost town of Stanger, respectively. (See Figure 1.1.). A comparative analysis of the delivery processes in these areas is undertaken to ascertain whether the approaches and policies of the various development institutions involved, from technical service delivery and funding to project management, enable the process of capacity building to proceed apace.

1.2. Problem Statement

The research problem is defined in terms of the Government's commitment to meeting basic needs (such as water) in rural areas while further prioritising job creation, consultation with, and empowerment of, the concerned communities. In addition, the question of whether these objectives are achievable within the current context, which demands rapid and cost-effective delivery, is explored.

A comparative study of the Shemula Community Water Supply Scheme (Ngwavuma) and the Masibambisane Water Project (Mapumulo) provides contextual evidence to address the viability of capacity building alongside effective delivery (See Figure 1.1.). The projects were selected on the basis that they are KwaZulu-Natal initiatives of vastly different scales, taking place within distinctive physical environments with particular delivery constraints. Further, both projects are aimed not only at providing a source of potable water but at empowering the respective communities, in terms of fostering a sense of ownership and developing the necessary skills to plan, implement and maintain the projects. Finally, the decision-making, funding and delivery institutions involved, together with their respective approaches to the delivery and capacity building processes, differ.

Within the ambit of the research problem, the study seeks to explore the primary hypothesis that effective management of the delivery process would enable capacity building to proceed apace. A subsidiary hypothesis is that if effective community consultation and



capacity building is not proceeding alongside delivery in these projects, a lesser focus on delivery at the bureaucratic level would enable an increase in effective community participation and capacity building.

A number of assumptions and arguments underpin this hypothesis, including that capacity building is an essential, and desirable, component of service delivery in these projects, since the service, once in place, will require ongoing maintenance and operation of water points, as well as management of payments for this service by the respective communities. Moreover, community involvement, as a component of capacity building, is regarded as requisite at all levels of the delivery process if the needs of the community are to be satisfied. Finally, it is argued that the process of meeting this basic need is commensurate with its delivery, in the sense that the actual process, including consultation and capacity building, is as crucial to the development initiative as the ultimate end-delivery. The latter argument serves to highlight a central objective of any capacity building process - to develop the necessary skills, knowledge, organisational strength and ability within the community to identify, and act upon, their present and future needs and problems.

It is noted that the process of delivering basic services is variable and may take the form of once-off delivery projects, whereby an identified or perceived need is met in a short period of time with little or no follow up taking place on the part of those institutions involved. By contrast, an effective approach to service delivery is argued to be one which moves away from such 'zipper' projects and takes part in capacity building to allow for the development of empowered, self-sufficient communities. In this context, two processes may be identified as being in operation, that of delivery and that of capacity building. Further, the desired delivery process is argued to be that which meets a need identified by the community, and in a manner that is deemed necessary and desirable, through consultation rather than through imposition. Finally, it is argued that while capacity building is not a spontaneous or 'natural' feature of the service delivery process, it is both possible and essential to the process of development.

1.3. Research Questions

Essentially, the policies of powerful decision-making establishments - development institutions, the state and donor organisations - and their respective approaches to the delivery of basic needs will be examined against the question of the capacity building. Furthermore, a primary concern of the research is whether the institutions active in the actual delivery process are

similarly active in the process of consultation and capacity building, where the RDP states that: "Consultation with communities is essential in the provision of water" (1994: 30).

A further question to be explored and extrapolated through the research process is whether the proposed public works programme of the RDP can be effectively achieved and replicated nationally. This question is to be assessed against the stated aim of maximising "the involvement of women and youth in the poorest rural households and most deprived regions to create assets such as water supply, sanitation and clinics" (ANC 1994:19).

Subsidiary questions include those seeking to define what capacity building means within the rural service delivery context and what the effects of increased community control, in terms of rapid and cost-effective delivery, would be on the process. Finally, questions concerning whether these projects can be managed such that they fulfil the RDP's objectives are raised and further whether the processes followed are replicable, if successful.

1.4. Research context

Under the new dispensation a significant shift in development policy and intervention is expected, whereby rural areas are emerging significantly onto the national and provincial agendas. Within this broad context, particularly at the provincial level, the government's Reconstruction and Development Programme (RDP) provides a rudimentary guide as to what rural development entails and forms the basis from which development programmes are likely to emanate.

The government has committed itself to the establishment of an integrated and sustainable rural development policy and clearly articulates the need to address the 'serious bottleneck' in terms of the "capacity to implement development programmes in rural areas" (RDP White Paper: 51). The topic selected for research falls within the framework of rural development, with a particular focus on the mechanisms proposed for its achievement. Moreover, the topic centres upon the question of water delivery within rural areas, where problems experienced by the rural population with regard to this service are frequently noted. This statement may be more fully appreciated in the context of a study conducted in rural Transkei by the Development Bank of Southern Africa in 1986, where water problems ranked highest of all problems with basic needs fulfilment, by more than 12.0%, adversely affecting more than 80.0% of households interviewed in terms of such aspects as: its inadequacy (20.1%); distance from the household (14.4%) and its dirty and unprotected nature (22.2%). (Muller

1987:25-6). In addition, in a study conducted by Sapsford (1995) on rural land reform, it was found that subsistence households in the Mhlatuze Valley, Zululand, prioritised water provision above other services and additional land.

The relevance of such research within the current context emerges as being one of the primary reasons for the selection of this topic, as does the shortage and effective demand expected for research on the subject of rural development, particularly on the meeting of such basic needs as water provision and on the empowerment of rural dwellers. In addition, increased reference to capacity building within the rural development context prompts an exploration into how this may be most effectively achieved, as well as into means of monitoring this aspect of development. As such, this study represents an attempt to assess the effectiveness of capacity building within a particular sphere of rural development, based upon exploratory research and employing a research instrument developed by the author. Further motivation for the selection of this topic includes a personal interest in rural development, augmented by a desire to conduct primary research and to move away from urban-focused research.

1.5. Methodology

The preliminary step in the comparative case-study methodology involves secondary sourcing of relevant information, particularly background information required to gain an understanding of the context and operation of: various government and delivery institutions involved in rural development; water management and the water delivery process; capacity building; and social impact assessments. Further, information required in gaining some insight into the various theoretical frameworks concerning capacity building which guide these institutions and processes is sourced at this initial phase in the research process. Material used includes: newspaper articles; workshop proceedings; internal documentation and promotional material; and various other published secondary sources. The results of this phase of the research process are recorded principally in the literature review component of the dissertation.

Secondly, in assessing the differences and similarities in approach and comprehension of the delivery and capacity building processes various interviews have been conducted with people involved in these processes. These interviews involved informal, open-ended schedules amongst agents involved in capacity building and delivery institutions, including: Elroy Africa of Seneque Maughan-Brown.SWK; and Peter Sapsford of McIntosh Xaba and Associates (MXA) and contract worker for the Institute of Social and Economic Research (ISER). (Refer to Appendix I).

Further interviews have been conducted in seeking to focus the study on the two water schemes and to gain deeper insight into the research problem amongst those directly engaged in the respective projects, including the relevant decision-makers and key players (refer to Appendix I). The latter interviews have been conducted on the basis of an open-ended interview schedule, which arose principally from a limited understanding of the various roles and responsibilities of the agents involved in the respective schemes. The design of the interview schedule was such that it would enable a greater insight into the question of capacity building and the extent of community involvement, as well as into the approach adopted for both processes of delivery and capacity building.

In addition to interviews conducted amongst members of the community committees and steering committee of Mapumulo and Ngwavuma, respectively, a predominantly pre-coded, structured interview schedule was employed to gather data from members of the local, beneficiary communities (See Appendix II). The sample was informally stratified according to age and sex, whereby the author requested that the field-workers interview a range of people, where possible. The questionnaire arose partly from an exploration of the key concepts, translated into dimensions and indicators, which have been incorporated for assessment into the questionnaire and was further informed by a limited understanding of the respective schemes and the extent of community involvement in their execution. The design of the schedule was such that it would reveal: demographic information; areas of greatest need with respect to access to services; perceptions by the community of their representative structures and of the project itself in terms of the processes of delivery and capacity building. This survey enabled a greater insight into the effectiveness of the consultation and capacity building processes through offering an indication of the information flow, the general awareness and extent of participation of the local recipient communities.

This stage of the research process involved several steps. First, the pilot questionnaire was workshopped with three individuals with experience in the field of rural research, and adjustments were made on the basis of this feedback. Second, the refined questionnaire was translated into Zulu. Third, an aerial random sample was used in determining which households would be included in the survey. Fourth, three local people from Mapumulo were selected by the Management Committee, and four local people from Ngwavuma were selected by the local training officer to be employed as field workers, to conduct the interviews. These field-workers then underwent a short (four hour) training and briefing session made possible through the assistance of a professional project manager with experience in rural research.

Sixth, the field workers worked for two days in gathering information from the community members, resulting in a total 50 and 61 questionnaires being completed for Mapumulo and Ngwavuma, respectively. This was followed by a debriefing session to enable clarity on certain aspects of the survey. Thereafter, the completed questionnaires were assessed for anomalies. Consequent upon this assessment, three questionnaires for the Ngwavuma study were partly discarded, on the basis of inconsistencies between the two samples. Finally, the data gathered from the part-coded, part open-ended schedule was captured and analysed.

Several problems arose in the process of conducting the primary research. These are discussed within chapters five (5.1.1.) and six (6.1.1.), which are devoted to examining the respective schemes.

The final step in the overall research process is that of integration and evaluation, whereby data gathered through the primary research process, including both interview and survey data, is analysed according to pre-determined indicators (see chapter three), and in view of qualitative information gleaned at earlier stages in the research process through general interviews and secondary research. The results of this final step are incorporated within the latter part of this study.

1.6. Outline of the study

Chapter two outlines the conceptual framework of this study and explores those theories of rural development with particular views on community participation and empowerment. The chapter further explores the relationship between structures of power and rural development, including the state and traditional authorities as well as institutions concerned with finance, service delivery and community development. Finally, the Reconstruction and Development Programme is critically examined in terms of its position and objectives for rural development.

Chapter three seeks to operationalise the variables which arise within the dissertation topic itself. The key concepts that are employed in the study, including effective management, the delivery process, and capacity building, will be articulated. To enable clarity in terms of focussing the study and identifying key components which need to be explored, particularly in progressing further into the research process, the working definitions of these concepts have been augmented with 'dimensions' and 'indicators'. The chapter is further concerned with conceptualising and hence arriving at an operational definition of capacity building in the rural development context. An exploration of the debate that persists around development and

capacity building will set the stage for further examination of capacity building in terms of delivery, the RDP and in terms of its limits and possibilities.

Chapter four draws upon national and international lessons of the capacity building and development experience to further inform the conceptual framework of the study. Such experiences include the IDT site and service (capital subsidy) scheme, nationally, and the Million Houses Programme (Sri Lanka) and FUNDASAL Housing Programme (El Salvador), internationally.

Chapters two, three and four form the contextual and theoretical basis for the case studies that follow. Chapters five and six examine the respective case studies, by outlining the projects in terms of their scope, the management structure that is employed, and the development process that is adhered to. Chapter seven consists of the comparative analysis of these respective projects and entails a comparison of the following aspects: the policies of the various organisations involved in the projects; the project management structures; the community structures; and the respective development processes. The question of capacity building within the two projects is then explored in terms of community participation, the sustainability of community organisations developed through the delivery process, and in terms of relationship between capacity building and the concrete delivery of water. In addition, problems militating against capacity building within these projects is examined, as is the question of replicability, where the projects, or aspects thereof, have been successful.

Chapter eight concludes the dissertation by drawing upon the relevant literature and the case studies in the formulation of a summative argument together with recommendations for similar projects where capacity building is aimed at alongside the delivery of a basic need.

<u>Chapter Two</u> Conceptual Framework

2.1. Introduction

The following chapter seeks to set the context in terms of rural development theory and structures of power, as related to rural development. Various approaches are briefly outlined with a view to gaining a deeper insight into problems and opportunities presented in the development process as well as to promote a greater understanding of attempts to overcome such problems while taking advantage of opportunities.

Some attention is focused upon organisations and institutions that have traditionally played a role in attempting to satisfy basic needs as well as upon those which are intended to fulfil this objective under the new dispensation. Furthermore, the stated objectives of the Government's Reconstruction and Development Programme in terms of rural development are examined.

2.2. Theories of rural development

There are a considerable number of theoretical approaches towards rural development which have persisted largely since the 1970s in response to problems experienced within, and articulated by, rural communities and an increased perception of the need to direct attention towards development in rural areas. While some approaches do overlap to some extent and may share some basic principles and objectives, such as community participation, they do offer somewhat different perspectives both on the reasons for problems being experienced in the rural context and on what rural development should entail.

Not all of the approaches which are explored below are exclusively located within the rural development context, but may be noted as being more typically applied to this development arena, and further as sharing a common orientation towards community participation in development. The following approaches are touched upon below: community development; integrated rural development; people-driven development; last first approach; basic needs approaches; and sustainable development.

2.2.1. Community development

Community development tends to be regarded as "an umbrella term for all kinds of development a the local level" (Kotze and Swanepoel 1983: 1), however, as a 'method' of

planned change it is noted as having a number of common traits, which include the following: it is value centred and normative; optimistic and humanistic; anticipatory and oriented towards socio-economic goals; it is concerned with the total human milieu and the total environment; stresses the use of intervention through group and collective efforts; is aimed at participation in its broadest sense; it views the community as a holistic and integrated network or system; and it is concerned with the on-going management of change (Blakely 1979, cited in Kotze and Swanepoel 1983: 1-2).

Community development, as an independent approach toward development that may be set apart from all other approaches, is further characterised by Kotze and Swanepoel (1983) as follows: the underlying philosophy is that local people not only have the right but the responsibility to choose their own development objectives and to make their own decisions; it is concerned with changing the local situation with a view to improving conditions in the community; it embodies the belief that lasting progress can only be achieved through the development of local understanding, local initiative, and local self-help, with as much local participation as possible; it places emphasis on the balanced development of all the resources, physical and human, in the community or area under consideration; and assumes that outside resources including counselling and technical assistance must be available to local community situations (2-3).

While the understanding and application of community development varies internationally, there are a number of commonalities, where community participation is a central principle, and where "it always has a theoretical basis which is translated to work in a concrete situation" (Lund 1987:2). "At the very least, community development is about deliberate, purposive intervention in social change. As such, community development programmes have social theories which lead to a set of methods and strategies, mediated by their social policy objectives" (ibid.:1).

2.2.2. Integrated rural development

While integrated rural development (IRD) is generally argued to have entered the development debate in the 1980s, Weitz, writing in 1979, argues that the IRD approach was conceived of some 20 years earlier, and attempted to be applied in practice in various isolated parts of the world. However, it is further noted that this concept is widely and loosely applied to various, and sometimes conflicting, approaches to rural development. IRD, or 'self-reliant development', represents a heightened interest in the development of rural areas which has

arisen in response to problems such as rural unemployment and population growth; rural-urban migration and income differentials (Coetzee and Ligthelm 1987: 185-6), as well as in response to past failures in the field of rural development. What was increasingly recognised was that since rural poverty is characteristically multi-faceted, manifesting itself in a range of dimensions (such as in economic, health, education, political, cultural and social terms), strategies aimed at the alleviation of rural poverty must also be multi-faceted.

Kotze and Swanepoel (1983) state that integrated rural development (IRD) "can be seen as an integration of development, economically, socially, politically and culturally as well as an integration of efforts by all government and development institutions and of the local population to bring this about. It is therefore an integration of objectives as well as an integration of efforts" (11). IRD seeks to enable effective rural development, where this may be defined as "improving the living standards of the mass of the low-income population residing in rural areas and making their development self-sustaining" (Lele 1975:20). Further, IRD tends to draw upon the involvement of central government and to be of a significant scale and scope. It typically involves a number of community development projects and is characterised as operating in a manner which is comprised of both top-down and bottom-up approaches.

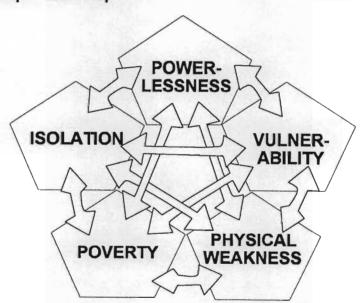
Beukes (1983, quoted in Coetzee and Ligthelm 1987: 185) notes that IRD comprises the following goals: economic - satisfying the most urgent needs; technical - the use of appropriate technology; ecological - not exceeding either the inner (national) nor outer (global) limits set by available resources; social - participation of the local population; political - an appropriate political and institutional framework for development; and cultural - underlying motives of the development process and values and norms are to be considered.

IRD emphasises 'total development', referring to "a comprehensive and integrated approach, recognising the interplay of forces...(where) the focus of development is people and their needs" (Coetzee and Ligthelm 1987:183). Further aspects of include: the development of human resources - as part of an essentially basic needs or development from below approach; the choice of appropriate technology (unless sophisticated technology is the only viable alternative); recognition of the importance of urban development and urbanisation; and development from within (endogenous or self-reliant development). (lbid.:182-7). As such, IRD does not completely invalidate the modern sector, but recognises that it has a role to play in development, particularly with respect to employment creation albeit at a slower rate than that of rural population growth. Rural resources - principally people and land - are regarded as

being underutilised, but have potential to be mobilised productively by an injection of skills, capital, and other resources, from the 'outside'. This increase in production and productivity is the starting point for IRD, and the cornerstone of the strategy is the agricultural sector - agricultural growth "is a prerequisite for rural development" (Weitz 1979:11).

The theoretical basis upon which the IRD approach is built emerges as being apparently sound, in terms of seeking to promote rural development in a manner which ultimately promises long-term results in terms of 'effective rural development'. This basis draws upon past successes and takes heed of past failures in the formulation of an approach directed at promoting productivity (particularly in the field of agriculture) and alleviating poverty in the rural environment. Further, it requires the integration of efforts at all levels and of sectoral policies and programmes. In this sense, IRD presents itself as being arguably the most comprehensive response to what Chambers (1983) terms 'clusters of disadvantage' which interact to 'trap people in their deprivation' (See Figure 2.1.).

Figure 2.1. The Deprivation Trap



Source: Fair (1983: Figure 5.1.)

Some consensus has, in recent years, been reached on the adoption of a strategic agenda for the 1990s between the main protagonists aspiring to promote the realisation of sustained and equitable growth in developing countries, including the International Monetary Fund (IMF), World Bank as well as the Organization of African Unity (OAU) and the UN Economic Commission for Africa (ECA). This agenda essentially answers to the IRD approach, where

the accepted strategy, directed principally towards rural areas, necessitates a human-centred approach directed at alleviating poverty and improving the welfare of the people. As such the strategy prioritises "developing human resources, strengthening the institutional framework, making agriculture the central source for raising incomes and achieving food security, protecting the environment, nurturing grassroots activities and organisations, and promoting the role of women in development" (Fair 1992:66). It is further articulated by the ECA and the World Bank that the implementation of the strategy "requires that an enabling environment be created within which development can prosper and a capacity built that will give people the ability to engineer that development" (ibid.:66).

Weitz (1979) advances that IRD strategy is based upon three basic assumptions, which revolve around the agricultural sector. First, "agricultural growth is the key to rural development", which requires, secondly, the "concomitant development of the secondary and tertiary sectors"; and the third is that "social forces play an important role in agricultural development" (11) which necessitates local level participation both in terms of willingness and capacity to participate.

IRD may be regarded as a continuous process of development planning, with a spatial as well as a sector aspect. Further, it is integrated both vertically (such as between national-regional-local levels) and horizontally, across various sectors, for instance. It involves participation and its rationale lies with people and their needs -planning with the people, for the people - and it is action oriented. (Robinson 1981:43). When applying strategies in terms of policy formulation, "experience has shown that a **strong commitment to rural development is necessary at the national policy level** if the impact of development is to be effective and broad-based" (Ellis-Jones 1981:32). Congruent with the IRD approach, and effectively taking into account the former three points, Fair (1992) argues that, in the translation of strategy into rural development programmes, these programmes need to be wide-ranging, integrated and long-term, and further that the participation of local people is essential if community support for projects is to be forthcoming. "Development approaches must therefore be both top-down, characterised not only by less government but by better government, and bottom-up to allow rural people to take charge of their own lives" (World Bank 1989 cited in Fair 1992:2).

In exploring IRD, several points are raised which pertain to the theory and practice of rural development. First, while IRD posits agricultural development as central, it remains an aspect, rather than the equivalent, of rural development. Rural economies do typically rely upon

agricultural production and a significant proportion of the rural population is engaged in land-based activities. Nonetheless, rural development extends to include: the delivery of basic services and infrastructure; the sustainable use and management of natural resources; the development of small businesses, manufacturing and marketing; the development of administrative and organisational capacity; and the promotion of inherent potential within the area, such as that for tourism or eco-tourism, conservation, trade and industry. Second, the development needs of rural areas tend to be multi-faceted and thus call for an integration of efforts in the face of the sectorally-defined, line delivery functions of delivery agents, notably with respect to government. Furthermore, the range of rural needs arguably calls for a flexible and coordinated approach to development which responds to particular demands, rather than attempting to apply a 'best fit' theory or approach to a broad and diverse range of needs.

2.2.3. People-driven development

People-driven, or community-driven, development focuses on people's immediate needs and requires their active involvement in the development process. In addition, people-driven development aims at the empowerment of the people involved in this process. As stated in the RDP (1994), "Development is not about the delivery of goods to a passive citizenry. It is about active involvement and growing empowerment" (5). Essentially, this quote serves to most succinctly describe the concept of people-driven development.

Furthermore, people-driven development requires that the power and control over the development process and the development resources be in the hands of the communities concerned rather than resting with institutions which have traditionally played the role of controlling and directing development. SANCO (Hanlon 1994) have compiled a report which seeks to conceptualise how communities might be able to "mobilise resources in a way that makes development people-driven. It is based on the understanding that money is power and that to change from the present developer-driven, institution-led, top-down development to community-driven development requires a total reversal of the way resources are distributed...Community-driven development will only occur when communities control the funds" (1).

Within the people-, or community-driven development paradigm, development may be defined as the satisfaction of basic needs "in a way which changes economic, social and power relations...(it) must be democratically controlled, at national as well as community level" (ibid.:7). Hanlon (1994) goes on to state that the setting of overall priorities and goals is the

responsibility of national government, interpreting these priorities within the context of local conditions is the responsibility of regional and local governments, while it is "for communities to determine the actual form and content of the development" (7).

2.2.4. Last first approach

Chambers (1983) outlines an approach to rural development referred to as the 'new professionalism' or as the 'last first approach'. Essentially what is put forward as being required for improving the lot of, and empowering, the rural poor is 'reversals'. Such reversals are identified to include those dimensions pertaining to: space; professional values and preferences; and specialisation.

Spatial reversals "concern the present concentration of skills, wealth and power in the cores, draining and depriving the peripheries. They have two main complementary aspects: where people live and work, and seek to live and work; and where authority and resources are located" (ibid.: 169). A significant factor in spatial reversals is argued by Chambers (1983) to be decentralisation whereby "[w]ith strong leadership or strong local demands, it is possible, though difficult, to force funds outwards, to give more local discretion..., to disperse, in short, parts of the cores towards the peripheries" (170).

Reversals in professional values and preferences, from a 'first' to a 'last' list, is the second dimension explored by Chambers (1983) where "'last' values and technology are closer to the poorer rural people and serve them better" (177). Three aspects of professional values and preferences are, in turn, examined by Chambers (1983) and include those for: technology, research and projects; contacts and clients; and place and time. Examples for the 'last' list of the first aspect would include: rural (versus urban); agricultural (versus industrial); labour-using (versus capital-using); and traditional (versus modern). For the aspect of 'contacts and clients': low status; poor; powerless; illiterate; female; and dark-skinned. While for 'place and time': rural; outdoors; field; and remote. (lbid.: 173).

Finally, reversals in specialisation, or 'reversals into gaps', "enabling the identification and exploitation by and for the poor of gaps - under-recognised resources, and opportunities often lying between disciplines, professions and departments" (ibid.: 168). With reference to such reversals Chambers (1983) argues that to "counter the ignorance inherent in specialisation, one common remedy is multi-disciplinarity" (180) where "many of the better chances for the

poor...can be found and seized through wider and more open-minded observation, discussion, learning and analysis than that of any one discipline, profession or department" (185).

2.2.5. Basic needs approaches

It should be noted that there are no distinct body of theory and policies that can be explicitly noted and defined as the 'basic needs approach'. Rather, what the approach entails is a "broad outlook on development, which focuses on combatting poverty and raising the productivity of the poorest sections of the population" (Keeton 1986: 143). Furthermore, it is argued, "particularly by theorists of rural development, that integrated development programmes cannot proceed satisfactorily until basic needs are satisfied within the community" (Wellings 1983:1). Consequently, a principal concern of the basic needs strategy regards the provision of services - of which water, education, health care and transportation figure highly on the agenda of priorities; that are within easy reach (both physically and in terms of purchasing power) of every individual within the community (ibid.:1-2).

There are, however, two distinct basic needs approaches, labelled by Sandbrook (1982: 7) as 'conservative' and 'radical'. The difference between the given approaches expressly reflects upon the extent of change envisioned. Where the former approach entails what is essentially social reform, the latter embarks on a path of radical reform. That is, a 'conservative' basic needs approach would advance piecemeal reforms from "within the existing national and international economic orders, whereas a radical one would prescribe a mutually reinforcing set of policies entailing structural change at the national and international levels" (ibid.: 7). In addition to this essential difference between these two basic needs approaches, is the notable divergence in outlook with regard to the reasons or responsibilities for the problems experienced by developing countries (notably poverty). Where the conservative approach generally deems such problems as having arisen due to internal factors within respective developing countries, the radical approach holds a more holistic view and takes account of external as well as internal factors, as such not disregarding the role that advanced capitalist countries play in underdeveloping the third world.

Conventional development approaches to development stress the need for economic growth with the consequent (surmised) 'trickling down' of the benefits of growth to the poorest sections of the population. By contrast, the 'radical' basic needs approach takes due cognisance of the more typical 'trickling up' of benefits, and the material conditions of inequitable resource distribution, poverty and underdevelopment. Furthermore, the basic needs approach to

development recognizes that "as long as the poor remain deprived of the essentials required for an economically productive life, they will neither contribute to nor benefit from economic growth" (Keeton 1986: 142). Rather, it is recognized that should these latter conditions prevail within the framework of conventional development efforts, the poor will in fact remain outside the economic process.

The basic needs approach seeks to address such issues as malnutrition, illiteracy, unemployment and disease and, further, sees participation as a crucial element to the success of any development process. The basic needs approach, as such, attempts not only to look at material basic needs but also at basic human rights (such as equality, justice, equity and participation). Moreover, the basic needs approach acknowledges the fact that nothing is constant but change itself, and thus requires that there be flexibility and, where necessary, adaption of any strategies and programmes that are developed, in line with changes in the material conditions of the particular context.

In practice, the basic needs approach places considerable emphasis on "internal self-reliance, changes in the composition of aggregate demand, consumption and production patterns, and the use of local resources and appropriate technology" (Keeton 1986: 143). Redistribution of income and wealth is a further aspect of the radical basic needs approach to development whereby effective demand for basic goods and services can be fostered amongst the poor. Such a strategic option appears to be of necessity in breaking with past interventions that have simply led to the reproduction of existing power relations and stark inequalities in wealth and resource distribution. It is in this context that the state in underdeveloped countries is called upon to "intervene in order to remove class biases in access to public services and redistribute income and probably assets from powerful social classes to those whose economic and political power is currently unsubstantial" (Sandbrook 1984: 14). As such, participation alone, while a necessary element to the development process, is insufficient and "a complete shift in economic power is necessary" (Keeton 1986: 145).

2.2.6. Sustainable Development

The 1980s saw in an increased appreciation of the scale of environmental crisis globally and had the effect of raising awareness of the interrelationship between the environment, population growth and development. As a result, the question of sustainability, not simply in terms of natural resources but also in terms of human resources and capacities, emerged as being in dire need of being addressed. 'Sustainable development' may be defined as that

which is "likely to achieve lasting satisfaction of human needs and improvements of the quality of human life" (Allen 1980 quoted in Elliott 1994: 3).

Coovadia, Dominik, Walton and Wulfsohn (1993) maintain that the thrust of the argument for sustainable development is that the environment of developing (as well as developed) countries needs to be considered from an international perspective. The "perceived differences in the nature of environmental crises in the North and South cannot be separated from the historical processes which link the industrialized North with the developing South" (ibid.: 156). In this manner, the sustainable development approach may be compared with the radical basic needs approach by virtue of the fact that they both draw attention to the role of externalities, as well as to internal factors, in the effective underdevelopment of the Third World.

The core issues that arise, regarding sustainable development, identified by the World Commission on Environment and Development (WCED) as noted by Elliott (1994: 4), are: population and development; food security; species and ecosystems; energy; industry; and 'the urban challenge'. Furthermore, sustainable development necessarily focuses on meeting the needs of present generations without jeopardizing the capacity of future generations to do the same. In order to achieve such sustainability, that is, effective management of contemporary environmental crises, it needs to be "fully recognised that environmental concerns cannot be divorced from development policies" (Coovadia *et al* 1993:157).

Coovadia *et al* (1993) identify three guiding principles of planning and intervention, being, the protection, conservation and efficient of use of both natural and non-natural capital stock (where the latter includes the built environment and social institutions). In addition to these two principles, the third principle should follow naturally, and is: "the pursuance of intragenerational and intergenerational equity; that is, maximum chances for disadvantaged groups now and maximum choice for future generations" (ibid.: 157). As may be noted from the latter principle, the basic needs and sustainable development approaches share a common emphasis on addressing the needs of the poor and marginalized groupings in any society. In this regard, it is significant to reiterate the importance of addressing the needs of the impoverished for the goals of sustainability would otherwise come to nothing in the context of the poor being ultimately forced to contribute to environmental degradation owing to the fact that they "do not have adequate access to basic environmental needs such as water and

sanitation" (ibid.: 158). In turn, it is the poor who suffer from such degradation, leading again to a cycle of depravation and poverty.

A further similarity between the basic needs and sustainable development approaches is that they stress the need to "base development on the participation and acceptance of power of local (as opposed to foreign) populations" (Cornwell 1991: 21). In line with this, it should be noted that the sustainable development approach is frequently referred to as 'people-centred sustainable development'. In this respect, non-governmental organisations (NGOs) have been identified as having a significant role to play, based on "their proven ability to secure popular participation in decision-making" (Elliott 1994: 59). Environmental groups, other interest groups and representative bodies of communities are becoming increasingly involved in projects and development initiatives, which emerges as an essential ingredient to the success of these projects, particularly since cooperation is required for sustainable development.

In line with the above comment, certain necessary conditions for sustainable development, as identified by the WCED, include that there be a "political system that secures effective citizen participation in decision-making" (Elliott 1994: 4). As such, the role of the state emerges, as in the radical basic needs approach, as being of fundamental (but not singular) importance in contributing to the success of the development process. A further condition is that there be an "administrative system that is flexible and has the capacity for self-correction" (ibid.: 4). That capacity would to a large degree be dependent on popular participation in the development process, and furthermore, a similarity can be drawn between the sustainable development and radical basic needs approach whereby both require flexibility and adaptability.

2.3. Power structures and institutions in rural development

The role of elites and powerful institutions in determining when, where and how investment into development initiatives will take place cannot be underplayed. Historically, powerful decision-makers have directed resources in such a fashion as to further advantage the privileged, white minority while marginalising and further disadvantaging the black majority. In addition, an urban emphasis has consistently allowed for rural initiatives - notably in terms of investment into development and research - to be neglected or ousted by initiatives in the urban arena. With the notable exception of white farmers, the rural populace, together with the rural environment, has largely been excluded from priority concerns on the national political, economic and social agenda of the apartheid government. This environment promises to change significantly under the new dispensation, however, the role that past practices have

played on effectively underdeveloping rural areas and their populations cannot be dismissed as inconsequential. Similarly, the role of powerful institutions in relation to rural development must be seen, within this context, as being significant in terms of redress.

While an urban bias cannot be denied when looking upon past policies and practices, particularly of government institutions and the apartheid government itself, a number of structures and institutions have emerged within the same era to 'champion the rural cause'. NGOs, community-based organisations (CBOs) and development organisations emerge as being most prominent in this regard, together with individual agents, particularly academics. The ground that has been covered by these institutions and individuals, together with the role that they may be expected to play under the new dispensation, proves significant in the face of the 'drought' in information and practices in the rural development context.

2.3.1. The State

Bernstein, Crow, and Johnson (1992) note that while agriculture and its linked activities are key to the rural economy, they are not identical with it, where the fortunes of agriculture and the rural economy more generally are strongly influenced by their links with other sectors and by government policy. The role of the state, under the apartheid regime, has been determinant in generating marked regional disparities "within the economy as a result of policies designed to ensure a migratory labour supply and of the ethnic division of South Africa" (RDP 1994:75), and compounded by a failed industrial decentralisation policy. Furthermore, the position and privilege of white commercial farmers has been advanced and protected under apartheid, at great expense to the country and its citizenry. The existence of black small-scale and subsistence farmers has been notably threatened under the old regime whereby plot sizes have decreased, support services have been minimal to non-existent and the migrant labour system together with forced removals have destabilised or destroyed any prospects of maintaining a successful livelihood.

As noted earlier, under the new dispensation, there is a promise of a significant shift in policy and practice towards the material development and upliftment of rural areas and their populations. Bernstein (1991) argues that the new national framework for development must include a "rural development strategy that goes beyond the repeal of the land acts to expand South Africa's capacity to feed itself, provide new rights and opportunities for African farmers and workers, and provide a means of dealing with the historical legacy of forced removals" (333).

2.3.1.1. Provincial government

KwaZulu-Natal is home to 5.3 million rural people, amounting to 62.0% of the total population of the province (May 1995, quoted in KNDA 1995:77). As such, considerable pressure and responsibility is placed before the provincial government in ensuring that basic needs are met amongst this large constituency, and further that rural development becomes a reality in KwaZulu-Natal. Proposals made by the KwaZulu-Natal RDP Provincial Alliance Committee (1994:38) with respect to rural development, discussed at greater length below (2.4.), revolve principally around economic intervention in the sphere of agriculture. Considering that around half of the rural population, or between 360 000 and 400 000 households (May 1995, quoted in KNDA 1995:77), are engaged in agriculture, this emphasis would appear warranted.

The White Paper (1995) sets forward a set of policy principles which KNDA "believes it can follow in order to make its full contribution to both agricultural development in the Province, and to the Reconstruction and Development Programme" (15). The strategy promoted by the Department, while obviously focussed upon farmers and agriculture growth, seeks to respond to rural needs and problems in a manner which takes account of the interrelated, multi-faceted nature of rural development needs. Further, specific proposals are made to promote the effective participation of the rural populace in its programme and proposed policy interventions. Such proposals include: facilitating institutional development and enhancing - through education, information, training and extension - the capacity of farmers and other rural dwellers at local and provincial level to ensure that they have a say in the formulation of policy that affects them (35-6); and attempting to lessen the load placed upon rural women, by virtue of domestic responsibilities, through the design and delivery of services and infrastructure which promote productive activity while ameliorating reproductive activity in the spheres of food security, child care and health care (43).

While the Ministry for Agriculture is expected to play a central role in promoting the development of rural areas within the province, any interventions made will need to be coordinated with those made by the ministries concerned with tourism, transport, health, education, welfare, finance and public works, local government as well as traditional and environmental affairs. Consequently, the role of provincial government in rural development becomes considerably complicated by the need to integrate the efforts of the various sectorally-defined, line function departments of all the provincial ministries. The Department of Agriculture (KNDA), in its draft White Paper (1995) arguably makes provision for such integration, as conveyed in the policy commitments to 'complement, rather than duplicate'

services (47) and to 'promote integrated development' (48) through its strategy "to co-ordinate its inputs with those of others (government departments, local government, non-government organisations, etc.) by taking part in integrating structures, such as a development council for each local government area of jurisdiction, a task team for a particular project, etc." (49). The policy proposals put forward by KNDA are manifestly as admirable as they are enormous and indicate a significant shift in policy towards supporting and developing both people and rural environments that have been historically neglected. Whether the tasks that they have set out for themselves will be achieved in the desired manner remain to be seen in practice.

2.3.1.2. Rural local government

Historically, local government has been present in urban areas but has failed to be established within rural areas. Proposals for a new rural local government system are for a two-tier system with "elected Regional Councils at a secondary local government level, and elected primary local government bodies at a primary level" (RCF 1995:4). The latter primary level - the Local Councils - are responsible for electing councillors to serve on Regional Councils which are, in turn, responsible for generating local revenue, redistributing money raised through taxes from the towns to the rural areas, and for the provision of services throughout the region, particularly within poorer, rural areas. "The Province will be divided into District and Traditional Constituencies. Rural representatives will be directly elected from these constituencies to sit on the Regional Council" (Ewing 1995:7). Local government services include: water; electricity; basic health care; refuse collection; roads and transport; library services; parks and recreation; protection services; sanitation and environmental protection; and pension payouts (ibid.:43).

Given the weak political and economic position of rural people and their institutions, it is clear that "without outside support, rural localities will not be well placed to protect the integrity of their local institutions" (McIntosh 1993: 15). As such, considerable support will be necessary from higher levels of government to ensure that a viable local government system is enabled. However, the Local Government Transition Act "does not deal with setting up of local authorities where none exist at the moment. An amendment to the Act did allow for transitional councils to be set up in rural areas. However, in most parts of rural KwaZulu Natal there have been no local government negotiating forums to establish such councils" (Ewing 1995:30). As such, regional councils will take on the responsibility of providing local government services to rural areas, while local councils may be established at a later date. The implications of this arrangement, within the context of a relatively powerless (notably in political and economic

terms) constituency, where "newly established structures of local government...can hardly be expected to carry the necessary political authority to pursue their local political and developmental priorities" (ibid.:16) underscores the necessity of higher level government to take responsibility for service provision and further give support to the process of establishing a viable, representative rural local government.

It has however been noted that the issue of rural local government has been given relatively low priority and little prominence and has generally only been considered incidentally in relation to other national debates, particularly urban and regional government issues. "This holds obvious dangers: rural people's concerns are unlikely to be addressed by rural structures which emerge out of processes which are residual to urban, regional and central government restructuring initiatives" (McIntosh 1993:8). Moreover, concern has been expressed at the very low level of involvement by local rural constituencies in the policy formulation process given the "real fear that this vacuum might result in the interests of existing rural elites with bases in existing regional structures, (such as civil servants, commercial farmers and erstwhile Bantustan politicians), prevailing in the new local government arrangements which emerge. There is a strong likelihood of such arrangements making minimal provision for local government in favour of existing patterns of unresponsive delivery from distant regional centres with little local accountability" (ibid:14).

Furthermore, concerns have been expressed with respect to both the knowledge and experience that rural people have of the local government process, where "the political culture... is generally not conducive to effective participation...There is no tradition of local government here, nor is civil society in these areas well organised. Moreover, McIntosh and Vaughan (1994) found, for example, that many farm workers in 'commercial farming areas' are unaware of the new Act and all pointers suggest that they will be poorly represented within the new structures. The same applies in former homelands" (Heymans 1994:11)

The perspective that has thus far been developed with regard to 'representative and democratic local government' is reinforced by the argument put forward by Tsenoli (1995), who argues that one "cannot talk about democratic local government if there is no effective community participation. The provision of facilities, resources, technical skills and money so that development is people driven ensures that such development is sustainable." (34)

2.3.2. Traditional authorities

Mokgoro (1994:13) puts forward that traditional leadership "plays the simultaneous role of development facilitator, executive and judiciary" since its current functions include: the allocation of land held in trust for farming, grazing and residential purposes (not for commercial use); the preservation of law and order; the provision and administration of services at a local government level; social welfare administration within their communities; and the promotion of education, including the erection and maintenance of schools and the administration of access to education finance. Essentially, traditional authorities have fulfilled governmental roles in the absence of any democratically elected local government. One obvious drawback of this system of governance is that the accountability and representivity of a leader who has acquired such a position through hereditary processes essentially cannot be questioned nor called to account through "ordinary mechanisms of checks and balances of power (which) often renders the system vulnerable to corruptibility and abuse" (ibid.:13). Before proceeding with this brief, and somewhat bleak, examination of the role of traditional authorities in rural development under the new dispensation, it should be noted that a number of tribal authorities have proven to be responsive to their constituencies and have been noted as having "legitimacy and some capacity to deliver services and raise funds" (McIntosh 1993:20).

The future role of traditional authorities within a new system of local government has become a central debate over the last few years. In October 1994 a two-day workshop on the role of traditional leaders in local government was held amongst various professionals, academics, and political and traditional leaders. "The workshop found that the new South Africa faces the challenge of building one nation by *inter alia* integrating modern and traditional elements" (Botha 1994: 45). One of the issues outlined by some workshop participants, which is perhaps highly problematic, is that traditional authorities "must have full control in regard to administrative matters and the provision of basic services" (ibid.:45). The basis for stating that this might be problematic is, firstly, that the capacity, in terms of administrative skills and organisational structure, may not already be in place in some rural areas and may thus delay the process of responding to the needs of local communities. Secondly, the fundamentally male character and inherently undemocratic nature of traditional leadership, "coupled with a history of corruptibility and political manipulation" (Mokgoro 1994: 12) does not bode well for a future system which continues to rely on the same structures for providing services, despite the fact that that role has not been satisfied in the past.

A further question which is raised with respect to traditional authorities in local government concerns the enhanced protection of such a system of governance "in a constitution that aims to establish a non-racist and non-sexist democracy (which) not only seems a contradiction in terms but also results in significant constitutional tension" (ibid.:13). This final point raises the argument for the need to redefine and reconstruct both the character and the role of traditional leadership such that it becomes a democratic, representative and inclusive structure of local government (Mokgoro 1994:13; Botha 1994:45).

Traditional leaders, or their representatives, will automatically have the right to a seat, with voting powers, on Regional Councils. However, they may never outnumber the elected councillors from any given constituency. In addition, traditional authorities will continue to perform their traditional functions, such as resolving disputes and holding traditional court, but will not be responsible for local government services, which will be the responsibility of Regional Councils. (Ewing 1995: 34). These considerations do, to an extent, alleviate the concerns raised earlier with respect to the role of traditional authorities in the provision of basic services.

2.3.3. Development institutions

Essentially, a development institution may be defined as a formal organisation "with one or more objectives, the existence of which is regarded as necessary by the people who are affected by its activities" (Kotze and Swanepoel 1983:31). Such institutions can be seen to operate at a variety of levels, from central government level to the local level. The most critical, as well as topical, development institution today is undoubtedly made up of the various government levels of RDP implementing and co-ordinating structures. An overview of the organisation of this 'development institution' is given below.

The President is identified as being responsible for the awesome task of co-ordinating the RDP, while the Minister without Portfolio is responsible for co-ordinating the Special Cabinet Committee on the RDP which performs a variety of functions pertaining to policy formulation and implementation. The work of the Special Cabinet Committee is, in turn, supported by the Core Committee, constituted by: Ministers, Deputy Ministers and Directors-General of finance and State Expenditure, Public Administration, Constitutional Development, Public Works and the Office of the President. Within Parliament, the Standing Committee on the RDP is responsible for reviewing and evaluating the Minister's Annual Report on the RDP programmes and projects, inputting into RDP policy and strategy, conducting public hearings, and for

providing a link between the Government and the grassroots in the implementation of the RDP through their constituency work. (RSA 1994: 12-13).

In order to ensure effective management of the transformation process - the responsibility of the RDP Office - the Intergovernmental Forum has been established "to provide an opportunity for consultation and joint decision-making between Ministers...and Premiers" (ibid: 15). This Forum is to be supported by the Intergovernmental Technical Committee, which offers advice on technical matters and is to promote coordinated decision-making and cooperation at all levels of government. In addition to these forums, there are also a number of Ministerial Forums between national Ministers and their provincial counterparts, each with their respective technical committees.

The various national level RDP structures are further complemented (or complicated) by other standing committees, and task teams convened by the Minister without Portfolio. The standing committees have similar rights and responsibilities as the Standing Committee on the RDP, particularly with respect to the budgetary process and performance monitoring, while the task teams are responsible for interdepartmental and intergovernmental cooperation around implementation of the RDP. The established Interdepartmental Task Teams are those concerned with urban development; rural development; and human resource and capacity development. The task teams' briefs are to: facilitate cooperation and integration of planning and implementation between government departments and with all levels of government; develop methodologies to facilitate policy-formulation; advise on implementation of programmes; monitor the implementation and impact of integrated strategies; and to advise the Special Cabinet Committee on the RDP on strategic priorities. (RSA 1994: 14). By all appearances, the RDP structures are complex (and abundant), such that the task teams are faced with a daunting responsibility and most certainly have their work cut out for them. Lack of coordination has historically proven to be a terminal shortcoming in other development institutions' initiatives (Kotze and Swanepoel 1983:31-2), such that the briefs of all the structures aimed at promoting coordination at all levels of government in implementing the RDP, essentially have to be fulfilled, if any effective and sustainable development is to result.

2.3.4. Funding institutions

The Regional Consultative Forum on Rural Development (RCF) recently compiled a 'Rural Development Directory' (1995) of service providers within KwaZulu Natal including 91 non-profit organisations, together with a couple of government departments. The type of work, or

service, that the organisations listed are engaged in varies widely, yet each may be regarded as an organisation aimed at assisting rural communities in meeting specific, pre-determined needs and in financing particular types of projects. Of these organisations, 17 are specifically equipped to offer financial support or funding, and include, among the more prominent: the Development Bank of Southern Africa (DBSA); the Independent Development Trust (IDT); KwaZulu Finance Corporation (KFC); Kagiso Trust; and the Mvula Trust.

Funding organisations play an important role in any development initiative not only since they enable a project to proceed, but by virtue of conditions attached to grants. Such conditionality enables a considerable degree of power and control of the development process on the part of funding capital, which may be used to the advantage of the community concerned.

Alternatively, such power may be abused in directing development in a manner which furthers the interests of a particular group over those of the broader community, or in a manner which does not conform with the needs and aspirations of the community.

Progressive, development-oriented funding organisations do, however, allow for checks and balances to enter into the realm of delivery where the institutions involved have not historically dedicated a significant proportion of their budget to community participation and capacity building, if any. As such, within the context of a highly bureaucratic or technocratic process, the conditionality attached to grants may effectively prove to be an insurance policy, whereby development will not be limited to meeting basic, material needs but also to the empowerment of the community concerned. However, funding has not traditionally been directed towards the empowerment of community in the sense of social development, capacity building or institutional development, but rather restricted to the physical and infrastructural development of a given area. Furthermore, funds have not historically been allocated towards promoting community involvement in these projects, which has facilitated the process of inappropriate development in the face of community exclusion. This practice has persisted today, particularly with respect to funding being directed at infrastructural projects, although there is a growing recognition of the importance of community participation to ensuring the long-term success of any development initiative.

2.3.5. Development agents

According to Kotze and Swanepoel (1983) 'agents' may be defined as "all those people and organisations within and outside a community that (I) either can assist with community development projects, (ii) or can form the nucleus or centre of a community development

project" (23). Traditional leaders, political parties and politicians, agricultural staff (such as extension workers), education and health sector staff, religious organisations and their spokespersons and voluntary associations all form part of the broad category of development agents. Unlike development institutions, agents can be more closely tied to the local community concerned in the development initiative and emerge as part of the greater picture. In other words, the development agent enters or assists in the initiation of a project which is more focussed or limited in scope, or may contribute to a broader development project. For instance, where a government institution may be facilitating a water delivery project within a given rural area, an extension officer might be active in disseminating information to the local community on economic and productive methods of irrigation.

Cashdan (1994) argues that structures outside of a new representative government remain crucial 'for the most important of all post-apartheid policies' - improving the quality of life of South Africans - for three principle reasons. "First, government alone is an inadequate vehicle for developing communities. Second, the involvement of local non-government community organisations in all stages of development distributes power more widely. Third, democratic and effective local government is no more than a distant hope in many parts of the country" (1).

A number of concerns may, however, be raised with respect to the operation of development agents, particularly where they represent and propound sectoral or party-political interests rather than pursuing the development task in a nonpartisan and impartial manner. An additional concern relates to personal agendas, in that the process of facilitating a project may result in benefits being directed towards meeting the interests of the agent. Using the example of a water delivery project once more, an agent may direct the process such that standpipes are erected within the vicinity of his/her home, or that of relatives. Consequently, the question of transparency and accountability within any development project becomes crucial in the event of community representatives exercising a degree of control or influence over the process.

2.3.5.1. Non-government organisations

As has been noted in discussing the basic needs and sustainable development approaches to rural development, local control and power over the process is stressed, such that development is 'people-centred'. In addition, NGOs were recognized as having a vital role to play, together with interest groups and community structures at all stages of projects and development initiatives. This sentiment is reiterated by Jaggemath (1995) in stating that "all

the objective and social indicators point to a growing role and significance for NGOs in the process of promoting sustainable development" (99). In addition, the significant growth of NGOs in South Africa may bear testament to their increased relevance and significance in the present development climate.

The Developmental Resource Centre has estimated that there are about 54 000 NGOs in South Africa, including: 22 000 religious organisations; 2 000 civic organisations; 7 000 educational agencies; 1 000 intermediary NGOs; and 10 000 CBOs of other categories. Furthermore, about 20 000 of these above-mentioned NGOs are developmental in nature. (Jaggernath 1995: 99). As such, there is considerable scope and capacity available for communities to draw upon in seeking to meet their needs and to further their own capacity, in terms of skills, organisational development or establishment, and resource management.

2.3.5.2. Community organisations

A community organisation may be defined as a relatively small group of people who have been elected, from within a community, to represent the diverse interests of that local community. Where community refers to a geographically defined group of people which reflect a diversity of interests and needs yet have an identity as a group by virtue of areas of commonality, whether cultural, religious, political, economic or social.

Development organisations "usually depend on groups such as development committees, church groups, sewing clubs, and sports clubs to reach communities. Groups can do far more than individuals to solve problems and to work toward longer term solutions" (RCF 1995: vii). The importance of community organisations' involvement in development initiatives is reflected in the statement made by Tsenoli (1995) that those "initiatives which have been undertaken with no regard to the views of the community organisations have unfortunately been disastrous" (33).

The existence of a representative community organisation often emerges as a pre-condition for service provision or funding by development agents. This condition may prove difficult to fulfil where rural communities and rural workers are noted as being 'unorganised', together with being geographically dispersed thus aggravating efforts to organise. As such, a number of development agents may be active within the same area, where one specialising in organisational development and organisation building may first engage with the community, whereafter a further agent may enter into the process to work with the community organisation

in assisting with meeting the identified development needs of their constituency. In this sense, the community organisation acts as a vehicle for gaining an understanding of conditions and dynamics within the area before attempting to plan and implement development programmes. This emerges as an essential step in the development process since "the knowledge and understanding of community dynamics is not commonly found in the major developers of the private or even public sector, and tends to be limited to some people or organisations within the community" (Xaba and Coovadia 1994 cited in Kitchin and Robinson 1994:7). While the process of establishing a viable community structure may be time-consuming and may conflict with the desire to 'get on with the job', "rural development projects will continue to fail if the building of such structures is not dealt with" (Korten 1980, cited in Lund 1987:103).

Lund (1987:106) offers several compelling motivations for the creation of community structures within the ambit of any development project. These include: developing the community's responsibility for, and ownership of, the project; ensuring responsiveness to local needs; introducing democratic procedures into the decision-making process. Furthermore, community structures can act as a vehicle for promoting rural women into formal decision-making positions and for the training and development of skills and leadership qualities.

A community organisation which is broadly representative reflects the diversity of interests within that community and is not partisan in any way, such that it is not dominated by a particular interest group, whether by traditional leaders, a political party, men or warlords. The creation of a "representative group is likely to be a long and continuing process" (Hanlon 1994:19) and more likely to emerge in response to needs or grievances felt in a given community than merely through outside stimulation.

2.4. Rural development and the RDP

As noted above (2.3.3.), structures for co-ordination and implementation of the Reconstruction and Development Programme appear to be highly complex and anything but an example of rationalisation. This complexity, owing largely to the multitude of committees and fora at all levels of government, serves to create the impression that it is virtually impossible to enter or impact upon the policies and strategies to be adopted in realizing the objectives of the RDP. As noted by Coleman (1995), with reference to the RDP in KwaZulu Natal, at present, no allowance has been made for input from the communities in the steering or task committees, rather "the role of communities is to prepare and present their application for approval" (6). Given that rural communities are not typically organised and further that both access to, and

dissemination of, information around the RDP is extremely limited, the likelihood of any significant degree of participation by communities is equally limited.

The KwaZulu Natal Provincial Alliance RDP Co-ordinating Committee (1994) have developed a set of proposals for implementing the RDP in the province. Within the document, a short, and rather vacuous, if not insubstantial, section is devoted to 'rural development'. One cannot help but think that the development needs of people within rural areas will be responded to in manner that is "residual to urban, regional and central government restructuring initiatives" (McIntosh 1994:64).

The proposal which the Co-ordinating Committee (1994) has developed with respect to rural development, within the ambit of the RDP programme on 'Building the Economy', in the province is that: The provincial government needs to create mechanisms to give special attention to rural development particularly with regard to the implementation of the RDP (38). Where the objectives identified are given as follows:

- The key task of building the economy in rural areas is to identify what forms of economic intervention could assist the existing forms of economy and finding ways of ensuring the integration of urban and rural development processes and stimulating the rural economy in particular. This needs to be done at the level of institutions and the identification of opportunities which could be targeted for incentives.
- · Within rural areas the following areas provide key areas for incentives and investments:
- small scale agriculture (crop production, livestock, etc.)
- seed banks.
- co-operatives.
- agro-industries.
- transport and access networks.
- storage depots for produce and products.
- eco-tourism.
- one stop development, training, information and service centres.
- village shopping centres. (Ibid.:38)

Arguably, should the Province succeed in establishing a representative local government equipped with the capacity and resources to further create the 'necessary mechanisms to give special attention to rural development', the RDP-rural development picture would not look as grim as it would appear to be presently. However, the proposal put forward by the KwaZulu Natal Provincial Alliance RDP Co-ordinating Committee remains vague and prompts the question as to whether the mechanisms and structures to be put in place will be accessible to

rural people, and further whether information of the process will be disseminated to any significant degree throughout rural areas.

The latter is of particular concern since the onus falls squarely upon communities to make application for services. This has clearly been demonstrated, in the case of water supply and sanitation, in an interview with Water Affairs Minister, Kader Asmal, who has stated that "where people do not demand water supply and sanitation, or are not willing to pay their contribution, there will not be provision" (The Financial Mail August 1994:46). Consequently, information of the process, of contacts and of the procedure of application is essential if needs are to be expressed and responded to.

2.5. Conclusions

Popular participation is generally accepted as being crucial in rural development and planning as a means of obtaining information about local conditions, needs and attitudes. In addition, as noted by Sharma (1995), people are more likely to be committed to a project if they are involved in its planning and preparation, as they then effectively own that process and programme and can identify with it. Furthermore, "it is also important for getting local assistance in the construction and maintenance of projects. Local contributions in cash or kind may be easier to get for 'self-help' projects if people see these as something they have helped initiate." (30). The latter point is particularly relevant within the current context where implementing agents require service payments to be made by beneficiary communities.

Concerns have been expressed above regarding the effectiveness of the RDP in relation to rural development, however, these cannot be divorced from the context of the legacy of apartheid left to the new government. The context being one where the "planning system which the new provincial government has inherited is inaccessible, not transparent, and does not encourage local participation...(and which) is reactive and does not proactively facilitate economic development" (KwaZulu Natal Provincial Alliance RDP Committee 1994: 52). Furthermore, existing state capacity to deliver has been found wanting as has "expertise to meet backlogs and to develop integrated strategic RDP planning at provincial and more specifically sub-regional and local government levels" (ibid.:52).

Within this context outlined above, the presence of a substantial number of NGOs in South Africa, offering a wide range of services and increasing the capacity available for use by communities, where that of the State remains to be further developed, does temper the

concerns raised, to a degree. In addition, the progress that has been made, in the current context, by a number of government departments should not be underplayed. The Financial Mail (April 1995) has drawn attention to a number of initiatives embarked upon in the name of the RDP, including Eskom's electrification programme and the Department of Water Affairs' water provision project. The latter project, which has been planned by the Department of Water Affairs, together with departmental officials and commercial water boards, like Umgeni Water, has earmarked 12 regions in which to implement a R200 million water project, and work has already started, or is about to start, within four of these regions. When completed, the "project should provide clean water, to international access standards, to more than 1,4m people in several hundred settlements around S.A." (ibid.:24).

What is of particular significance, according to co-ordinator Hugh Sussens, is the extent of community involvement in the process. "Past water-provision programmes have been racked with problems, from illegal connections to outright sabotage...The RDP is determined to end such practices. So far, all 12 regions have been brought into agreements with provincial authorities to pay connection, implementation and maintenance costs. Each region has appointed its own steering committee to represent its community. 'Once they are set up, they do everything,' says Sussens." (Ibid.:24).

The RDP may be argued to effectively fall within a theoretical framework informed by such principles as: sustainability; basic needs; and people-driven development. The radical basic needs approach is arguably best suited to bringing about 'real' development in the face of stark existing inequalities and overall depravation of the rural poor. The motivation for such an argument revolves chiefly around the fact that in order for a development approach to be successful, the benefits derived from it need to be enjoyed by the majority and not concentrated in the hands of the minority of elites. The radical basic needs approach takes as its focus the marginalised and impoverished and seeks to narrow the gap between them and the wealthy elite, through redistributive means. The approach further appears to offer the promise of returns since the State and the affected population are ideally working towards the same goal - which is arguably the case under the new dispensation.

Moreover, any basic needs approach needs to take cognisance of the context of global environmental degradation and of the need to facilitate a development process that does not irreparably damage the choices and livelihoods of future generations. An eclectic approach to rural development is arguably best suited to tackling the 'deprivation trap' and multi-faceted

nature of rural poverty and development needs. In conclusion, an integrated, people-driven, sustainable development approach complements the radical basic needs approach to such an extent that they could together co-exist quite fortuitously and effectively in embarking on planning and intervention within the rural development context.

Chapter Three

Conceptualising Capacity Building alongside Delivery in the Rural Development Context

3.1. Introduction

Having outlined the general methodological and theoretical framework of this study, the key concepts that have thus far been employed can now be articulated. Such key concepts are identified to include: effective management; the (service) delivery process; and capacity building itself. Particular attention is devoted to the conceptualisation of the latter, capacity building. Clarity is sought, in terms of focussing the study and identifying key components which need to be explored, particularly in progressing further into the research process. Consequently, the working definitions of these concepts are augmented with 'dimensions' and 'indicators', which is particularly useful in informing the formulation of interview schedules.

3.2. Effective management

Effective management entails competent and informed supervision or facilitation and monitoring of a project or process. As such, all necessary contextual information gleaned through research and consultation emerges as being of primary importance which would complement the skills, experience and capacity of the team or agent involved in managing a process. Effective management further demands that channels of communication remain open throughout the process, from planning through to implementation and project maintenance. In addition, effective management is that which is efficient in terms of both time and money, in the sense that the time-frame and budget of any particular project is adhered to in moving from the inception stage through to completion.

Consequently, effective management may be defined as that which refers to the competent and informed guidance or facilitation of a project and / or process in such a manner that is both cost and time effective.

A number of dimensions of effective management may be identified. Firstly, it includes the people involved in the management process, such as project managers and community development workers. The second dimension is that of information, involving a sound knowledge of community dynamics and needs as well as a grasp of the theory and process of

capacity building and service delivery. Third, a budget is required to set the cost parameters of the project, and finally, a time schedule or action plan would form part of the project.

Six indicators have been distinguished which could be employed in ascertaining whether the management process is effective. These are listed as follows:

- 1. Has the project remained within the budget in terms of both time and cost?
- 2. Do the project managers believe that they have proceeded from a sound understanding of the process, of local conditions, and of the expectations and needs of the recipient communities?
- 3. Do members of the community committees, together with members of the broader community, believe that the process is proceeding from a sound understanding of local conditions, and in accordance with their needs and expectations?
- 4. Has the process moved beyond the planning stage timeously?
- 5. Is the project being implemented?
- 6. Is there consensus around the manner in which the whole process is proceeding?

3.3. Delivery process

The first component identified in seeking to define the delivery process is that it follows from consultation and the identification of a need, through to planning and implementation. In addition, the delivery process is defined as involving incremental development and is further identified as a progression of changes and inputs which are required to fulfil a predetermined need.

As such, the delivery process involves a series of stages which move progressively from consultation, need identification and planning through to implementation and the satisfaction of that predetermined need.

The first dimension of the delivery process is that of ongoing community consultation and participation at all stages, including: the initial phase of consultation itself; planning and decision-making; and implementation. The former dimension, in turn, involves people, including the community and those engaged with the actual technical delivery of the service, as well as the community development worker or team. A further dimension regards the technology required in the process of delivery, including the necessary equipment and materials. The final dimension identified is that of information and knowledge of local needs and local conditions, including social and political, as well as geological and geographical.

Indicators derived from the above definition and dimensions include the following:

- 1. Is the community satisfied with the level of participation achieved in determining their needs, expectations and aspirations?
- 2. Is consultation taking place on an ongoing basis and are channels of communication open?
- 3. Does the community believe that they have been sufficiently involved in the planning stage of the process and that they have contributed significantly in making decisions made at this stage?
- 4. Is there physical evidence of development?
- 5. Is this physical infrastructure of an adequate quality?
- 6. Is this physical infrastructure being adequately maintained?
- 7. Is the community involved in the implementation stage of the process?
- 8. Are community expectations and needs being met?

3.4. Capacity building

Capacity building refers to the development of empowered, self-sufficient communities and / or organisations. Furthermore, capacity building entails enhancing the ability of people to access and control resources and decision-making processes themselves and to exercise power over their lives and their environment. Finally, the process of building capacity characteristically involves the assistance and support of an external agent in promoting the community to take control of its own development, whether that support emerges in the form of funding, through education and training, through access to resources such as information and technology, or through access to structures of power, in terms of decision-making and control over the development process. Furthermore, capacity building refers to that process which culminates in the community or organisation being fully equipped to confidently and competently engage in further development initiatives without necessarily having to call upon external agents for assistance.

Consequently, capacity building may be defined as that process which involves the empowerment of communities to access and control resources and decision-making processes and to thereby exercise power over, and determine, their own development.

The dimensions of capacity building include the organisational structures. Such structures may be in existence already, and hence capacity building would entail organisational development, whereas, should community structures presently not be in existence, capacity building would

include organisation establishment and building. Secondly, community leadership emerges as a dimension, and may include traditional leaders as well as elected, representative leadership. Following on from this, the third dimension identified includes the skills present within the community. A fourth dimension includes the community development worker(s) engaged within the delivery process. The degree of participation in the process, whether at meetings, in the process of delivery or in the monitoring thereof, is distinguished as the final dimension.

Consequently, a number of indicators may be developed, to include:

- 1. If no representative structures existed, has a community committee been established?
- Does the broader community believe the structures to represent their interests?
- 3. Do the community structures hold meetings amongst themselves on a regular basis?
- 4. Is attendance at these meetings satisfactory that is, do at least two thirds of the membership attend meetings?
- 5. Do the community structures hold meetings with the broader community? If so, when (on what basis), or how often, does this occur?
- 6. Are the meetings of the community structures open to the broader community?
- 7. Do members of the structures believe that their contributions made at the planning and implementation (delivery process) meetings are being adequately taken into account? That is, do members believe that they are part of the decision-making process, and have made an impact upon the process, at the start and later into the project?
- 8. Is attendance at these broader meetings satisfactory (two thirds membership or mandated members in attendance)?
- 9. Does the community feel that it is equipped to maintain and monitor the service, once it is in place, without external assistance? That is, does the community have the necessary skills to ensure that the service remains functional and in operation at optimal level, once in place?
- 10. Have individuals learnt new skills? If so, what new skills have been acquired and to what extent is this pervasive within the community?
- 11. Is the community equipped to carry the process of capacity building and community development further? That is, is the community confident that the skills and resources developed upon can be used in achieving further development needs, as they determine them?

3.5. Exploring Capacity Building

The term 'capacity building' carries a variety of meanings and implications, however, for the purposes of this dissertation the perspective offered by Brews (1994) will be drawn upon. This perspective is concerned with "the **equitable** distribution and use of resources for the benefit of all, and the argument is that until people can access and control resources themselves such equity is likely to be unattainable" (Brews 1994: 2). Furthermore, Brews (1994) notes that such capacity building has at least two dimensions, including, on the one hand, the "building of the capacity of people to exercise power within the macro economy (and) on the other hand it equally entails the developing of political economies of sufficient scale to impact on quality of life"(3).

Capacity building has been earlier defined in terms of the empowerment and development of communities to exercise power over, and determine, their own development. As such, capacity building may be closely allied to the community development process, which is concerned with on-going management of change and which stresses the use of intervention through group and collective efforts (Kotze and Swanepoel 1983: 2). Participation is one component of the capacity building process, others include: human resource development; education; training; organisation building and organisation development; capacity enhancement; capacity mismatch and matching different capacities (Xaba and Coovadia 1994:4).

The capacity building of truly representative groups may be regarded as being of primary importance as this would enable people to articulate their needs, to have an effective contribution and to challenge authorities and processes that are not seen as representing their interests. In addition, such representivity is essential owing to the fact that communities are not homogenous in terms of needs and interests, but are likely to contain a diversity and range thereof.

Institution building emerges as the predominant aspect of capacity building within the service delivery context, perhaps since it is more amenable to training than the more qualitative, intangible aspects of community empowerment. Furthermore, institutional capacity is arguably achievable within a shorter period of time through the transfer and acquisition of particular administrative and managerial skills, while empowerment may grow from such developments over time, through experience, greater competence and confidence in tackling various

problems and issues as well as through ongoing support and training being made accessible to the concerned community and its organisational structures.

An argument put forward, notably by the World Bank, is that institutional capacity to manage growth and investment in a particular economy is essential and that the lack, or decay, of local institution building forms the major component of those economic factors seen as being responsible for economic decline. This argument has been recently reiterated by the Institute for Local Governance and Development (1993), in stating that the "experience of other countries indicates that institutional and administrative capacity is crucial for development management and effective service delivery" (quoted in Kitchin and Robinson 1994: 4). Consequently, what is called for is not simply public intervention in the formulation and implementation of policies and projects, but a coherent strategic vision of where one aims to be and how one is to attain such a vision. The latter point is crucial since it highlights the need for a move away from top-down interventions and places the role of community participation and capacity into focus. In the same manner, the role of a representative and legitimate body, as opposed to a bureaucratic and removed authority, becomes crucial to the long-term success of any development initiative.

3.6. The capacity building - development debate

The capacity building-development debate "is often portrayed as a clash between those who emphasise the 'delivery' and 'quantitative' sides of development on the one hand as against those who lay stress on 'process' and 'local community decision making" (Pillay 1994, quoted by Mhlongo, Harrison, Mohlakoana and Schreiner 1994:1). While it is argued that the proponents of this debate have moved 'beyond these primitive beginnings', and that there generally now exists a great deal of consensus between these proponents, the reality may be considerably different. Mhlongo et al (1994) note that, as with many processes currently underway, this "emerging consensus is perhaps more apparent than real...(where), while there is lip service paid to establishing a proper balance between product and process, on the ground for many parties its business as usual and there is very little effort to adapt and change in line with stated commitments"(1).

In addition, a key debate that has persisted around the question of capacity building and participation in the delivery process concerns the efficiency of that process in terms of both time and money. This contention is captured by Tsenoli (1995) where he notes that arguments put forward are that community consultation is time consuming resulting in an increase in the

costs of the project. However, he argues that it should be borne in mind "that projects and programmes that involved local people have proven to be sustainable over time (and that) [i]t is in fact not often the case that the process is as long as it is made out to be." (34)

Furthermore, while the dedication of resources to actively engaging communities may be regarded as detracting from the effort to deliver necessary services in a rapid, cost-effective manner this does not necessarily have to be the case. An example of such an instant of an efficient community driven delivery process has been identified in a semi-independent study commissioned by the Independent Development Trust (IDT) in evaluating a drought relief programme, which will be outlined in greater depth and detail at a later stage in this study (4.2.). Within this programme not only was it found that communities had developed the necessary skills and organisational capacity to administer, maintain and deliver effectively. Moreover, it was found that the community-driven projects did not take any longer to complete, rather, in attempting to bypass community structures, some projects were delayed. Furthermore, in terms of cost, it was shown that lack of community participation can lead to higher costs in the long run where badly chosen sites were identified and the failure to organise maintenance lead to a high risk of collapse of the infrastructure which had been delivered (Hanlon 1994:14-15). Following on from the above point, it is argued that capacity building alongside delivery is not only possible, but desirable.

3.7. Capacity building and delivery

Just as the delivery of basic services may be seen as part of the greater project of development, so too may capacity building be regarded. The definition of development, as offered by PLANACT (1992), provides for a useful framework when seeking to explore the question of capacity building alongside the delivery of a basic service, where development is defined as follows:

"Development is: above all else a process rather than the delivery of a set of products to individual consumers; about empowering people and communities with the skills, knowledge and the capacity to act and engage effectively at the micro level; about gaining control over resources, especially at the local level; about sustainable production of goods required and the just distribution of these goods; about meeting basic needs and continuously improving the lives of as many people as possible" (206).

Mhlongo et al (1994) put forward the argument that capacity building, when not revolving around "the delivery of a tangible end product is of little value (since)...in the context of

development, capacity only really gets built when development committees and communities are actually engaged in getting a project or programme off the ground within specific time frames" (3). The basis for this argument is that community leadership does not generally respond well to "abstract examples and theoretical treaties unless this is in furtherance of responding to needs which they themselves have identified" (ibid.:3).

This argument would appear to 'hold water', and is given added credibility by virtue of the fact that it is based upon the experience of the authors through engaging with community structures through the Socio-Economic Reconstruction and Development sub-committee of the KwaZulu Natal Regional Peace Accord (SERD). One may thus argue that capacity building initiatives are most likely to be successful where the structures and resources developed within a particular community are given expression, and hence sustained and built upon, through activities that ultimately lead to meeting needs and objectives identified by that community. In addition, such initiatives may be regarded as achieving 'real' development, in the sense that the resource-base that has been built upon may be employed in further projects deemed necessary by the community, in building new leadership and organisational strength, and in improving the quality of life, in both qualitative and quantitative terms, experienced by that community.

A further aspect of the delivery process, with direct implications for the capacity developed within the community, is the extent of institutional support accessible by that community, its representatives and its small business and development agents. In this regard, Dewar (1992: 253) argues for the stimulation of various forms of essential support, including: administrative and legal procedures which are simplified and streamlined; financial institutional capabilities; rapid, large-scale training of small contractors; and the use of state contracts to stimulate the small business sector. This process would arguably maximise the extent of access to the delivery system and would thus allow for broader circulation of invested capital and also for the enhanced quality of environment through the participation of many agents.

3.8. Capacity building parameters

Following on from the above argument that capacity building initiatives, in order to be successful, need to revolve around the delivery of a need that has been identified by a particular community, by implication "the limits and possibilities of building capacity are directly linked to the nature of projects, their direction, their complexities and so on" (Mhlongo *et al.*:5). For instance, some projects, such as sewerage mains and non-domestic electrification, do not

lend themselves well to any significant degree of community participation nor to building upon the capacity of the community. Where development initiatives, aimed at building capacity and delivering services, call for the participation of community structures at all levels of the project and allow for substantial community-control and decision-making, the possibility of building community capacity to a notable extent is enhanced.

Consequently, capacity building may be seen to be most effective in the context of "the simplest of projects in which there are much higher levels of community involvement, than there are in sophisticated, capital intensive, high cost initiatives" (ibid.:5). Furthermore, the objective of building capacity may be best allied to those projects which are involved in the delivery of a particular end-product and which call for high levels of participation and for the development of skills amongst the community through "practical project implementation" (ibid.:6).

3.9. Capacity building and the RDP

As has been noted earlier, Interdepartmental task teams have been established as a component of the RDP implementation and co-ordination structures, and one such team is concerned with the area of 'human resource and capacity building'. The RDP has devoted considerable attention to developing strategies and policies around the programme of 'Developing our Human Resources'. According to the RDP White Paper (RSA 1994), the "empowerment of institutions of civil society is a fundamental aim of the Government's approach to building national consensus...(and to) facilitate effective involvement, the Government will introduce programmes that will enhance the capacity of community organisations" (48).

With particular reference to the empowerment of rural people, the RDP White Paper (RSA 1994) states that "the Government will formulate an integrated and sustainable rural development policy in consultation with rural people, their organisations and stakeholders" and adds that the "capacity to implement development programmes in rural areas is a serious bottleneck which will be addressed as a priority" (51).

Admittedly, such commitments by the State are highly laudable and, if achieved, likely to have an overwhelmingly positive effect on the quality of life experienced by their rural constituency. In addition, such commitments are ground-breaking not only in South Africa, but in the majority

of African countries. However, there are a number of legitimate concerns raised with respect to the initiatives proposed by the Government.

The first concern relates to the question of capacity building and delivery (4.3.), where the proposed RDP Capacity Building Programme plans for considerable funding of wide scale training by licensed RDP trainers for ongoing organisational development requirements without actually linking these initiatives to specific projects aimed at the delivery of tangible end-products. Consequently, the question arises as to whether it would not be wiser to commit such considerable funding to "specific development projects and (further to) differentiate capacity building initiatives within the context of such projects which may be a month or years in duration" (Mhlongo *et al*: 1994:3). This concern is reasonable considering that "it is in the nature of CBOs and development committees that they will come and go" (ibid.:3).

A further concern is raised with respect to capacity building parameters (4.4.) where the RDP Capacity Building Programme "envisages allocating prepackaged programmes and undifferentiated financial packages to CBOs to engage in capacity building exercises" (ibid.:5). Mhlongo *et al* (1994) note that while it might be useful to furnish such organisations with some initial start-up funding, "the main thrust ought to be on identifying needs and priorities and working on capacity building programmes around the meeting of these needs" (5).

3.10. Conclusion: Defining capacity building

The working definition of capacity building, as developed upon thus far is as follows: Capacity building refers to the empowerment of communities to access and control resources and decision-making processes and to thereby exercise power over, and determine, their own development. Kitchin and Robinson (1994) define capacity building as "the process whereby the ability of an individual, institution or organisation to deliver development is enhanced through experience, education, training, and / or skills development" (5) which may occur consciously through specific training programmes, or through experience, "as individuals and organisation work in certain fields addressing specific issues" (5).

Capacity building may be seen as being closely allied to community development, where the goal is one of empowering the community, as such, the model developed by Lee (1992 29-33) has been identified as being particularly useful. This model distinguishes various specific objectives that are aimed at in the process, other than the broader objective of empowerment. The first objective seen as being relevant to this study is that of participation, where problem-

solving is tackled by the community engaging in the decision-making process, identifying needs and acting upon decisions taken. Second, the objective of organisational development, including the building of a new organisation or the improvement of an existing one through increased participation and access to resources, for instance. Finally, the objective of concrete benefits or resources is identified as relevant where this entails achieving resources, rights or an increase in a service, or the development of a new facility, as such directly tackling the problem of being denied equitable access to basic resources.

Chapter Four The Capacity Building Experience

4.1. Introduction

An exploration of the capacity building-development experience within South Africa and internationally is useful in contextualising and in assessing the projects with which this study is concerned, presently being undertaken within KwaZulu Natal. The Million Houses Programme and FUNDASAL Housing Programme have been selected as examples of initiatives undertaken in other countries. While the Independent Development Trust (IDT) site and service (capital subsidy) scheme has been used as an example of a local initiative, which has more to offer by virtue of those lessons learnt from its failings rather than its successes. While each of the above mentioned projects do not relate specifically to rural water supply, the concern of this chapter is on the exploration of capacity building and community involvement and how these aspects may be applied successfully within any development initiative.

These initiatives have been selected on the basis that they have either highlighted the need for, or have quite successfully incorporated, community development and empowerment to various degrees in responding to the material needs of those communities. Further basis for selection of these cases lies in the fact that the implementation agencies involved come from different sectors, where the IDT and FUNDASAL programmes are non-governmental initiatives and the Million Houses Programme is a state concern. Finally, they have adopted quite different approaches and have been informed by distinct experiences and ideologies in the implementation of the respective initiatives.

Each of the these projects has been previously examined, as such the work of the respective authors are used as principal sources in looking at the each of the aforementioned initiatives.

4.2. The IDT's capital subsidy scheme

The IDT drought relief programme has been touched upon earlier (3.6.) as a community-driven delivery process, in illustrating that efficient delivery is not necessarily incompatible with capacity building, and in support of the argument that capacity building alongside delivery is both possible and desirable. While some reference is made to the drought relief development programme, it is the IDT's "first and still largest project...the capital subsidy or site & service scheme to provide 100 000 serviced plots" (Hanlon 1994:68) across South Africa, that is

explored below. The capital subsidy scheme, notable for the wide and ardent criticism that it has drawn, particularly with respect to having created 'toilets in the veld' is examined principally for its failings with respect to community development, and the lessons that these offer for future initiatives regarding the centrality of community participation, consultation and capacity building.

The capital subsidy scheme is arguably a 'harsh indictment of top-down development', where the overriding objective of ensuring rapid delivery was pursued at the expense of the community and of their priorities. The 'developer-driven' process was such that consultation and participation were intentionally limited, resulting in "badly chosen sites which have not been occupied and the failure to organise maintenance leading to 'a high risk' of collapse of roads, outlets and pipes" (ibid.:15). The drought relief development programme has been more broadly accepted as a community-driven process, although the IDT's Chief Executive himself admits that "not enough attention has been paid to capacity building" (ibid.:69), which has once more lead to the risk of infrastructural collapse where capacity to maintain the service, once in place, was not developed. While these programmes are notable for their differences in approach to development and delivery, in evaluating their shortcomings, they have effectively given force to the argument for the active participation of communities at all stages in the project cycle, from planning and design through to implementation and maintenance.

Viljoen and Adler (1993), writing on the failure of the site and service strategy, argue that in order to achieve sustainable development initiatives, "the goal of genuine community development...is an essential starting point, but notably absent from site and service schemes" (154). This goal in turn involves "real empowerment, both at the local political level and through effective community participation in the planning process...allowing local prioritisation in terms of service standards and local input on layout" (ibid:154). The shortcomings of the IDT capital subsidy scheme, and the criticisms which have arisen in response to them, have arguably contributed significantly to the increased acceptance and understanding of community involvement and capacity building as central to the success and sustainability of delivery projects.

The IDT's approach has evolved, primarily through community pressure, from one which 'talked of a community approach', but remained conceptually vague and laid greater emphasis upon community participation rather than project control, to one which acknowledged the

potential that communities had to implement projects (Hanlon 1994:14). Furthermore, the IDT recognized that the "sustainability of local capacity is dependent on empowerment through control over resources and access to information (and that)...active participation...only becomes effective if it involves control over resources" (quoted in Hanlon 1994:14).

In the process of evaluating a number of IDT programmes, not only was it conclusively found that communities had developed the necessary skills and organisational capacity to administer, maintain and deliver effectively, but that "there appears to be no convincing reason' for the use of NGOs or government agencies and that the IDT should 'make almost exclusive use of community committees as implementing agencies'" (cited in Hanlon 1994:15). This conclusion is further supported when reviewing the IDT's capital subsidy scheme, which allowed for 10 hours a month of consultant time for visits to communities, in directing resources towards capacity building at a cost of over R2 000 a month, whereas "for half that it would have been possible to hire a local person full time in most areas" (ibid.:12).

The conclusions arrived at through the IDT-commissioned, semi-independent studies of some of its programmes include that: genuine community driven projects do not take any longer to complete the planning process than those done through NGOs and government agencies; rural community structures are able to administer substantial budgets, are capable of supervising large work teams and have the skills to deliver quality goods; and, the system of community elected committees has been an unequivocal success. (Hanlon 1994:14). In addition, it was found that lack of community participation can lead to higher costs in the long run, as was the case in a number of the projects run under the auspices of the IDT's capital subsidy scheme (ibid.:15). To conclude, Robinson, Sullivan and Lund (1994) argue that, as a direct consequence of the scheme, "there is now a fairly large body of experienced people in community organisations, and among consultants, contractors, developers and public authorities" (158), indicating that while the scheme has been beset with problems and has drawn widespread criticism, it has at least achieved some success in building capacity amongst participants.

4.3. The Million Houses Programme, Sri Lanka

The Million Houses Programme (MHP), undertaken as a Government initiative from 1984 to 1989, represents the culmination of several decades' evolution of the Housing Policy in Sri Lanka, immediately preceded by the Hundred Thousand Housing Programme (HTHP), which ran from 1978 through to 1983. The policy changed from one which was "a supply oriented

approach to a process of actively supporting people to house themselves...(and) was pursued on a country wide scale including rural areas" (Lankatilleke 1994:4).

When the HTHP was completed in 1983, it was subjected to a critical evaluation by a task team of professionals who were, in turn, allocated the task of developing the next programme - the MHP. The lessons learnt from the HTHP, which informed the development of the new programme, included that: standards, and thus costs, were too high, resulting in heavy and unsustainable subsidies; the conventional Government approach required heavy outlays in administration and management of the programme; the programme did not reach target groups and failed to recognise the need to improve existing housing stock; and, during the same period, for every one house built by the Government, people had built six houses. (lbid.:5).

In the programme evaluation it was found that two processes were in operation - the People's Process and the State Process, and that the former was responsible for more delivery than the latter. Consequently, the role of the Government became one of supporter rather than provider in the delivery process. Furthermore, with the Government assuming this role, it was determined that the equivalent expenditure could be used to result in ten times as many houses through assisting families in meeting their housing needs. As such, the guiding principles of the MHP emerged as: minimum intervention and maximum support by the State; full cost recovery; affordable standards; allowing families freedom to take key decisions with respect to options, standards, design and choice of materials; and participation of community organisation in the settlements level decision-making. (Ibid.:6)

The primary objective of the MHP was that of assisting a million or more families in meeting their basic shelter requirements and was to be achieved through six sub-programmes covering different sectors. The major sub-programmes, in terms of financing and beneficiary families, were the Rural and the Urban Housing Sub Programmes. The MHP "placed the 'People's Process'...as the main stream process for the low-income groups. It acknowledged the initiative and the creativity of people. It established the rights of people to self development and it recognised the need to provide basic services to these settlements" (ibid.:6).

4.4. The FUNDASAL Housing Programme, San Salvador, El Salvador The FUNDASAL Housing Programme emerges as a joint venture between communities and

professionals, which aimed not only at meeting a basic material need, but at community

development, in terms of increasing both community consciousness and capacity to effectively manage the process, as well as to identify and work towards solving future problems. Copley (1993), in his dissertation, *Participation in Development: Some notes on theory and practice*, examines the housing programme implemented by an NGO, FUNDASAL (Salvadorean Foundation for Development and Low cost Housing), which considered housing "not as an end in itself but as a vehicle for social change" (42). Within this context, delivery was regarded "rather as an opportunity to incorporate into the housing process an action programme designed to promote greater awareness of social needs, collective responsibility and democratic practice" (ibid.:44-5 citing Stein 1990).

According to Stein (1990, cited in Copley 1993:45), FUNDASAL had a uniform project philosophy whereby it planned the core housing units, the initial stages of which were to be developed by private construction companies, on undeveloped land. Thereafter, the units were completed by the 'mutual help process'. "The aim of 'mutual help' as a social and technical process was to initiate a process of communal organisation based on the communal experience of working in construction groups of 25-30 families for which the participants were selected by the staff of FUNDASAL" (Copley 1993:45).

These groups were made up of a diverse range of people, with varying levels of skills, leadership characteristics and representing different social standings. Through engaging in construction in such groups, interaction amongst individual members was enabled and "the future neighbours...developed an organisational structure that would permit them to carry out the building task and to start a collective reflection process about broader social issues" (ibid.:46 citing Stein 1990). On completing the housing units, "the team of social workers...remained to work with the community to develop a viable organisational structure to assist the community and its leaders to respond to felt needs" (ibid.:46). Thereafter, each group established its own representative body which, in turn, elected people into the broader community body - the community general assembly. In this manner, FUNDASAL hoped to take on an advisory role only, and thus effectively disengage from the community once the structures were in place and participants were equipped to take initiative with respect to "decisions and actions around issues important to the community and the project such as project maintenance, relations with FUNDASAL and government agencies and the state in general" (ibid.:46). Furthermore, according to FUNDASAL, these structures were now deemed responsible for effectively responding to community needs "relating to urgently needed services (water, electricity, refuse removal, sanitation etc) and the rallying of support and

solidarity for their demands amongst similar communities" (Stein 1990 cited in Copley 1993:46).

According to FUNDASAL, by 1985, of the 22 communities that had participated in the programme, "only five were well consolidated in terms of their participative, administrative and post-project maintenance performance" (ibid.:48), while the remaining 17 communities had "in fact showed a tendency to be dependent upon FUNDASAL's staff and resources" (ibid.:49). However, leadership, at all levels, within the five successful communities was regarded as being representative and leaders were capable of planning and evaluating their own work and "had the power and ability to negotiate with different state agencies" (ibid.:48). In addition, high levels of commitment were displayed within the various structures within these five communities in all ventures regarding" project maintenance, consolidation of housing and community facilities and the initiation of new projects" (ibid.:49).

In assessing the FUNDASAL programme, some of the dilemmas and contradictions that are noted as having arisen, particularly with respect to different requirements and perspectives of funders, the World Bank, as opposed to those of the implementing agency revolving essentially around the funder's concern for efficient delivery with insufficient resources being allocated to pursuing the process of empowerment. Other difficulties which arose, particularly given the unstable and changing political climate within the country, include the management structure of FUNDASAL, which had not responded and adapted to these broader changes, together with the selection, and activities of, social workers which was noted as becoming more lax within the latter sages of the projects. (Copley 1993:49-51).

4.5. Conclusions: Lessons to be learnt

While the above programmes have taken place within underdeveloped, predominantly urban habitats, the evolution of approach on the part of each of the development agents, in seeking to improve the system of delivery remains appropriate to the rural context for a number of reasons. First, each scheme responded to a basic need amongst people without access nor immediate capacity or power, both financial and organisational, to meet that need. Each further aimed at providing a basic service to a disadvantaged sector of the population. More significantly, each of the programmes, in practice, underscore the centrality of community involvement and capacity building to their sustained success. Finally, the programmes serve to illustrate, and give force to, the argument that there is capacity within communities, the problem is that historically, in South Africa as well as in other countries, "the common approach

is to see no capacity in communities" (Xaba and Coovadia 1994 cited in Kitchin and Robinson 1994:26).

A critical lesson which may be learnt from the FUNDASAL experience is that "internal institutional cohesion, coherence and shared vision is vital to project success as well as a minimum of political space and tolerance" (Copley 1993:51 citing Sevilla in Stein 1990). What is conveyed here is that at no point should the development agenda be subsumed by the political agenda, and that the needs and aspirations of the community, along with the objective of empowerment, should never be subordinated to an undertaking of political education and organisation building on political grounds.

Stein (cited in Copley 1993) further argues that the most important lesson from the FUNDASAL case is that, while it may be desirable, "one cannot simply assume that it is possible to replicate what was done...in El Salvador in any given situation (rather)... a thorough analysis has (to be) conducted into local political conditions, history and attitudes of individuals within the community towards development" (52). For instance, the South African government has historically taken on the role of delivering housing and services to low income people (though for particular political ends under the apartheid regime), and while this has not been the case for some time, "there is a very strong perception amongst the poor that the state should continue to do so (which)... is exacerbated by increased expectations in the post 1990 period and makes very difficult the task of selling the idea of mutual help" (Copley 1993:52).

A further lesson which may be appreciated particularly from the former two cases, regards the evolution of the delivery process, the objectives and principles of the implementing agent within that given context. Both the IDT and the Sri Lanka Government, owe much of their success in evolving their respective approaches, to their self-critical and responsive approach to delivery. It may be argued that the FUNDASAL programme may have proved more successful, or more broadly effective, if it had responded to the changing political, and hence negotiating, climate in El Salvador.

Finally, all of the above cases point to the essential role played by recipient communities in determining the evolution of such processes, in that effective consultation and participation is essential to development programmes if they are to successfully respond to the needs of people in a manner which is both appropriate to local conditions and promises to be sustainable. The latter conclusion further points to the importance of community organisations,

together with their power, in terms of skills, legitimacy and access to information as well as to other agents which may be influential within the particular development projects. This point is concisely argued by Tsenoli (1995) where he states that development initiatives require community involvement and, moreover, that effective community participation "requires institutional and organisational capacity within the local community and structures with the necessary skills and information. Local communities must also have control over resources. Development must be people-driven." (34).

Chapter Five

The Masibambisane Community Water Scheme

5.1. Introduction

The Masibambisane Community Water Scheme is located in KwaZulu-Natal, within the Mapumulo Magisterial District of former KwaZulu which is comprised of 18 tribal wards and occupies an area of 750km². The district lies between the north coast town of Stanger to the east, and Greytown, further inland to the west, and is bounded by the Tugela and Tongaat rivers in the north and south, respectively (refer to Figure 1.1.; Figure 5.1.). (Still 1992: 1). This chapter is devoted to exploring the origins and scope of the water project, the management structure employed, and the development approach adopted. The geographic and demographic particulars of the area are examined through secondary sourcing and augmented by the results of the author's primary research. The chapter culminates in an assessment of the Masibambisane Scheme, based upon various interviews conducted amongst the organisations involved in the development process, as well as amongst members of the beneficiary community.

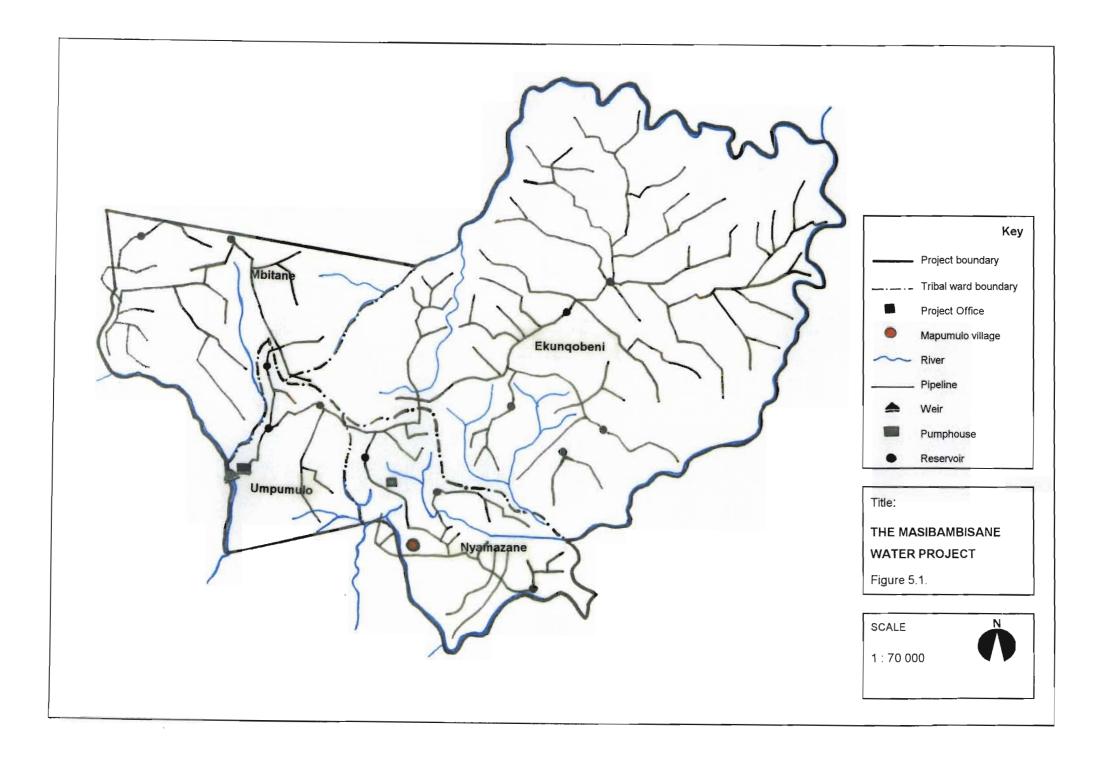
5.1.1. The research process

The primary research conducted on the Masibambisane Water Project, referred to above, principally includes the series of questionnaires completed over two days, between the 13th and 15th of October, by three field-workers. This survey resulted in 50 completed questionnaires, amounting to between 3.3% and 4.2% of the total households in the area¹. The data gleaned from this research forms the bulk of this chapter and, unless otherwise stated, is that which is represented in the tables and figures below. While this survey is the basis for the arguments and assessment of the project, given the limited size of the sample population, the results should be read with some caution.

5.1.1.1. Reliability of the study

The process of establishing contact with the Masibambisane project management committee, training field workers and conducting research within the area proceeded smoothly, despite poor weather conditions. The sample population, randomly selected from an aerial photograph of the area, was largely adhered to, except on rare occasions when a

Based upon the most recent figure of between 1 200 and 1 500 total households (Deverill October 1994:2).



selected household was vacant, whereupon the field worker proceeded to the nearest neighbouring house. While selection of field workers was effected by a member of the management committee, his involvement did not extend beyond this, and the research results do not reflect an apparent bias towards the committee or the project. The distribution, together with the size of the sample, are conceivably the principal aspects of the research which warrant concern with respect to the reliability of the study.

5.2. The project area and its people

This section seeks to locate the study through examining particular features both of the geographic and infrastructural features of the area and of the beneficiary community.

Demographic information and data on socio-economic conditions, is drawn together below from both primary research and secondary sources.

5.2.1. Description of the project area

Masibambisane, meaning 'joining hands together', was the collective name given to the four wards which comprise the water project area, including: Nyamazane, Mbitane, Ekunqobeni and Ntombiyehlulunina. However, informal communications with a number of people in the area revealed that this division was somewhat inaccurate since Mbitane encompasses the tribal wards of Mbitane and Umpumulo, while Ekunqobeni encompasses Ekunqobeni and Tshobe. "The project area is the Woza area of the Mkhonto tribal authority, whose chief is Nkosi Ntuli" (Still 1992: 1). This area is approximately 75km² and falls primarily within the Mapumulo Highlands, which straddles the R74, and extends to fall partly within the Tugela Region to the north.

Mapumulo is a mountainous district, where the project area is characterised predominantly by harsh terrain, falling steeply from a height of 1000m in the west to 300m in the east. The area is further characterised by high rainfall, particularly in the higher portions, and relatively abundant water resources, although it has also been a site of severe droughts, most recently suffered in 1992. In addition, not all of the surface water sources are perennial and most are located within the valleys which can be up to 150m below the ridge tops where the people mostly live. (Still 1992:6). There are three perennial rivers in the area, notably the Notweni, its equally large tributary, the Sidluluba, and the Icoli River. The latter two, the Sidluluba and Icoli rivers, had been developed prior to the water project in order to supply piped water to the Lutheran Church Centre, Umpumulu Hospital and several government buildings, and one of the local schools, the Vukile School, respectively. (Deverill 1994: 1).

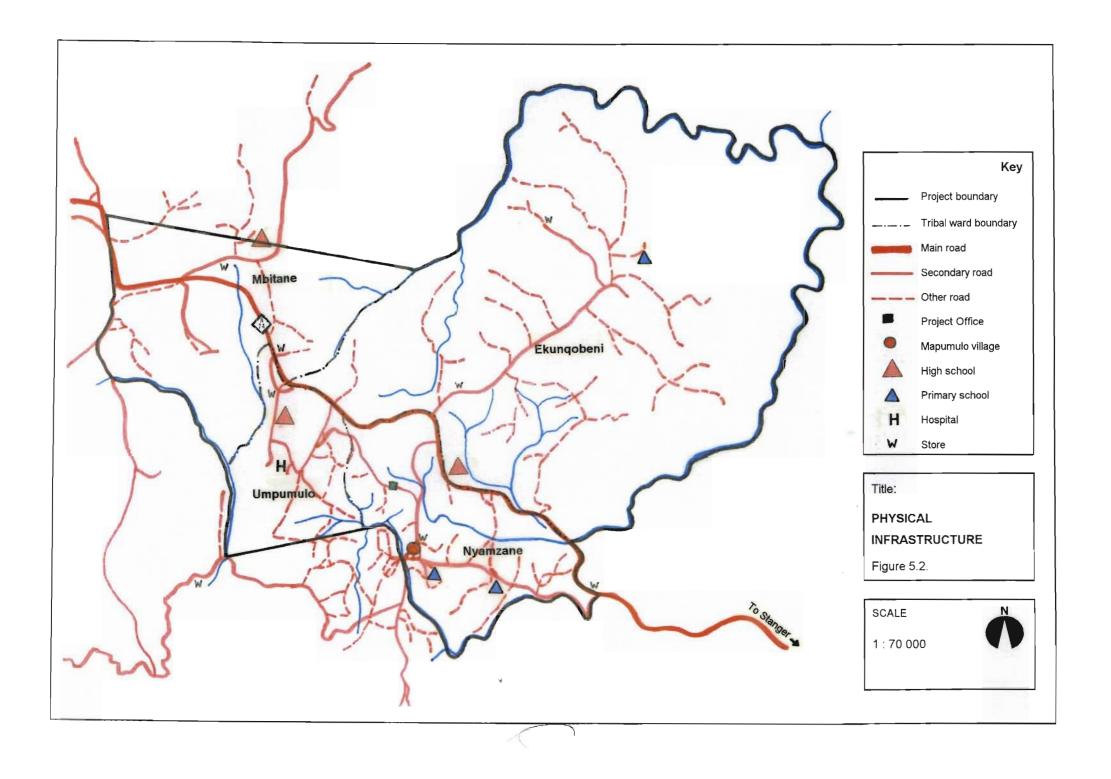
Much of the land in the Mapumulo area is unsuitable for intensive cultivation, although the greater Mapumulo Highlands, of which the project area is a part, is noted for its cooler conditions and superior soils, particularly south of the R74. Further, the Highlands contain some of the most successful sugarcane and maize farmers. (Peters and May 1985:9). Informal dialogue revealed that while sugarcane farming is a significant, if not principal, source of local employment, a decrease in its relative contribution to the Masibambisane economy was noted due to the increased evidence of veld-fires within the area.

The Mapumulo District is traversed by a regional road (R74) which runs from the N2 through Stanger to Greytown. The Project area is accessed from the R74 by several secondary roads, including a partly tarred road that links with Mapumulo's centre - the Mapumulo village. These secondary, predominantly 'dirt', roads grow increasingly impassable with wet weather and are met by numerous smaller and poorer quality 'dirt' tracks that serve the remaining area. (Refer to Figure 5.2.)

Masibambisane has recently been supplied with electricity and is the process of having its manual telephone exchange upgraded to an automatic one, which was partly completed by late October 1995. The area further contains several church buildings and schools, including three high schools, and a community hall is in the process of being completed. Furthermore, a large, and increasing, number of government departments and related buildings are located in the area, including: a court and magistrate's office; a police station; prison; post office; the departments of education, culture and public works; and the offices of the Health Inspectorate. Other agencies with a significant presence in the area include tribal courts, Eskom, and KFC. For the most part, these buildings are concentrated in the Mapumulo village, otherwise consisting of several bottle stores, a restaurant, informal trading stalls and small general dealers. The office of the Masibambisane Water Project is located just beyond this rural centre.

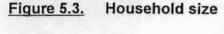
5.2.2. Population

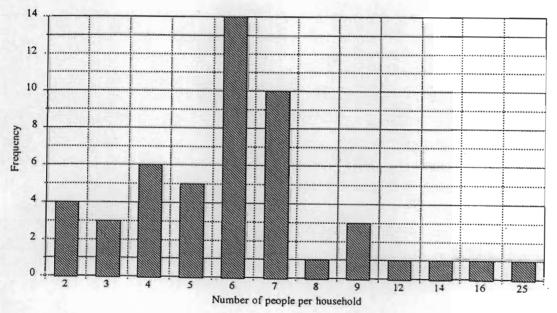
The Mapumulo District is classified as a rural area which "certainly does not imply that the population of the district is able to subsist on the land itself" (Peters and May 1985: 39), rather it conveys that the settlement type of the area is dispersed. Masibambisane falls within a low population density area of 50 - 100 people per km² with one exception in the



dense settlement area of around 200 people per km² extending south-east from the Mapumulo village. (Refer to Figure 5.1.). (Davies Lynn and Partners 1995:Maps 14-15).

The total population of the project area is variously estimated to fall between 10 000 and 15 000 people, where there are between 1 200 and 2 000 households (Davies Lynn and Partners 1995: Table 8; Deverill 1994: 2; Still 1992:1; Interviews 1995: Still; Khwela). According to a social survey conducted by CSIR in June 1992, the average household size is 7.5, within a range of 1 and 17 people, considerably higher than the figure obtained by the author as being around 6.4 within a range of 2 to 25 people per household (refer to Figure 5.3.). The median age, according to the CSIR study, is 19 years, and the estimated annual population growth rate is placed at 2.5%. Using the upper estimate of 15 000 people, the projected population for the 20 year design period of the Masibambisane project is around 25 000 in year 2012. (Still 1992:1-2; Deverill 1994:2).





5.2.2.1. The sample population

Of the 50 people interviewed, between the ages of 15 and 94 years, 32 are female and 18 male, giving a sex ratio of 1:0.56 (see Table 5.1.). As such, men are somewhat underrepresented in the survey, when considering that Peters and May (1985) had found the ratio of women to men to be 1:0.71 within the greater Mapumulo district. The majority (66.0%) of those interviewed had been born in the area, 6.0% had been there for more than

25 years, 14.0% from 15 to 25 years, 12.0% from 5 to 14 years, while only 2.0% of the sample population had been in the area for less than 5 years. A breakdown of the sample by age reveals that 30.0% of respondents are under 25 years, 22.0% are over 60 years, while the balance (48.0%) falls between these outer age limits. One might argue that the youth are under-represented, given that the median age in the Masibambisane area is 19 years (Still 1992:3), however, given the obvious drawbacks of attempting to interview people under 15 years, this argument is questionable. Heads of households are well represented in the sample, at 44.0%, and of these, 59.0% were female-headed households.

Table 5.1. Age by sex

Age Group	Male (%)	Female (%)	Total(%)	
15 - 19	4	8	12	
20 - 24	8	10	18	
25 - 29	2	4	6	
30 - 34	4	4	8	
35 - 39	2	4	6	
40 - 44	2	2	4	
45 - 49	2	6	8	
50 - 54	4	2	6	
55 - 59	6	4	10	
60 - 64	0	8	8	
65 - 69	0	4	4	
70 - 74	2	0 .	2	
75 - 79	0	4	4	
80+	0	4	4	
TOTAL	36	64	100 n = 50	

The sample population may be further analysed according to organisation by wards (refer to Table 5.2.). For the purposes of this study, the following wards have been employed: Nyamazane, Mbitane, Ekunqobeni (including Tshobe) and Umpumulo. The basis for selecting these wards is two-fold. First, respondents identified themselves as belonging to these areas, and second, each has particular qualities in terms of the level of, and access to, services and amenities and in terms of physical characteristics. Furthermore, the

aforementioned wards may be geographically demarcated (refer to Figure 5.1.). As indicated below (Table 5.2.), the percentage sample population by wards is constituted as follows: Nyamazane (34.0%); Mbitane (26.0%); Umpumulo (24.0%); and Ekunqobeni (16.0%).

Table 5.2. Geographic distribution of sample by sex and age

	Nyar	Nyamazane		Umpumulo		Ekunqobeni		Mbitane	
TANK	Male	Female	Male	Female	Male	Female	Male	Female	
15 - 19	1	1	-	1	1	1	1	1	
20 - 29	2	2	2	3	- 2	2	1		
30 - 39	-	-	1	2		18	1	3	
40 - 49	141	3	1	1	1				
50 - 59	3	2	1	1.5		1	1	-	
60 - 69		2		-		1		3	
70+	10.00	1		. 5.5		2	1	1	
TOTAL	6	11	5	7	1	7	5	8	
%TOTAL		34		24		16		26	

n = 50

Nyamazane and Umpumulo are best served by road, both in terms of quality and coverage. Furthermore, these wards have the highest level of access and provision of services and amenities, where Nyamazane contains both Mapumulo village and the Masibambisane office, and where a school, the hospital, church / convention centre, and future community centre may be found within the more mountainous Umpumulo ward. Ekunqobeni is the largest of the four wards and embraces less severe terrain than Mbitane and Umpumulo. However, the area is poorly served by facilities, with the exception of Vukile High School, which is located alongside the R74 at the southern-most boundary of the ward, bringing it essentially closer to Nyamazane. Both Ekunqobeni and Mbitane are quite remote, in terms of access to the area's hospital in Umpumulo and to the administrative and magisterial centre at Mapumulo village. Mbitane, while being home to a school and several stores, is considerably more mountainous and less densely populated than the other areas, making delivery significantly more difficult. Of all the four wards given, it is the only one to have received no water from the project, to date. The reason for this failing lies in the fact that an alternative means of supplying Mbitane with water was sought through boreholes, which

proved unsuccessful. However, this will be dealt with at greater length in exploring the details of the project (5.2.).

5.2.3. Employment patterns and household income

Peters and May (1985), who conducted a study of income and expenditure within the broader Mapumulo Magisterial District in 1983/4, which included both the absent and resident population, found that the greatest percentage contribution to household income was derived through wages, at 77.9% of total income. However, wages may be noted to be earned principally outside of the area, where total adult migrancy may be calculated as being around 23.0%. Other significant sources of income were found to be: pensions (12.9%); agricultural income (3.7%); grants (3.0%); and informal income (1.4%). (ibid.:Figure 5.3). (Refer to Table 5.3.).

Table 5.3. Sources of household income

	KFC 1985 - Mapumulo	CSIR 1992 * - Masibambisane	Author 1995 - Masibambisane
Wages	77.9%	49.5%	63.2%
Pensions and Grants	15.9%	49.0%	28.4%
Other**	6.2%	1.5%	8.4%

Adapted from: Peters and May (1985:75-6); Still (1992:Figure A3)

- Calculated to exclude percentage unemployment
- ** Agricultural income; informal sector; gifts; rent; self-employment; other household members

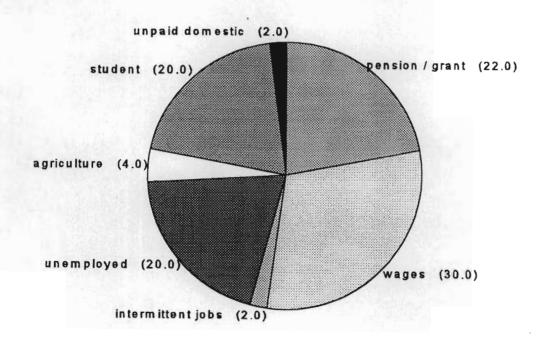
The CSIR Social Survey on Masibambisane conducted in 1992 reflects similar findings, although the study is based principally on an analysis of income distribution by resident heads of household. The findings of this survey reflect that a large percentage of heads were pensioners (48.2%), labourers (35.7%), and professional / clerical people (10.6%). Other forms of income-generating activities found amongst the heads of household include business (2.5%), other (1.0%) and building (0.5%), while unemployment emerged as being marginal (1.5%). (Still 1992: A3). (Refer to Table 5.3.).

A large percentage of household income was derived through migrant labourers working principally in Durban, where the majority of households were noted as having "at least one member employed as a migrant or contract worker who is not resident full-time in the community" (Still 1992:3), giving a migrancy rate of around 20.0% using an absentee ratio

of 1.5 people per household. This result differs quite significantly from that obtained by the author, where only 36.0% of all households surveyed had at least one member absent, as a migrant worker. Of the total enumerated sample population, migrants account for only 5.17%, although this figure increases significantly to 17.8%, when considering only those people aged 16 to 65 years. Information gleaned on an informal basis revealed that of the people working beyond daily commuting distances, employment was found predominantly in Durban and, to a lesser extent, in Johannesburg. According to the CSIR study, the median monthly household income was found to be R370, although 20.0% of those households surveyed subsist on less than R180 per month (Still 1992:3).

According to the results of the study conducted by the author, the most significant source of household income is gained through local waged labour (42.1%). Other significant sources include pensions and disability grants (28.4%) and migrant remittances (19.0%). Where one includes migrant waged labour and local permanent as well as temporary waged labour, the percentage contribution of wages to the household income increases to 63.2%. Other sources of household income include those gained from: other members of the household (3.2%); the sale of agricultural products (3.2%); intermittent and casual employment (2.1%); sewing (1.0%); and self-employment (1.0%). (See Table 5.4; Figure 5.4.).

Figure 5.4. Occupation (%)



The results of the study conducted by the author, correlate more closely to the earlier study by Peters and May (1985) on the broader Mapumulo Magisterial District. However, it should be noted that the CSIR study relating to sources of income within Masibambisane drew information from the heads of households whereas the author's research included a range of members within the household, including the heads, which may account for the divergence in results. (Refer to Table 5.3.).

The dependency ratio is calculated as being around 1: 3.5 or 71.7%² for the project area, which is noted as being higher than the average of around 62.0% for other rural areas (VARA 1989 Appendix 3:4), yet is somewhat lower than expected where both interviews (1995: Khwela; Sikikane) and questionnaires, together with informal communications, revealed that unemployment is considered to be a major problem. Of the respondents, 20.0% were unemployed. However, judging from the number of dependents within the household over the age of 16, the percentage unemployment in the project area could be around 34.0%, which would correspond more closely with the high percentage (84.0%) of the sample noting unemployment as a problem within the area, and more than half the sample (52.0%) noting it as one of the most pressing problems. (Refer to Table 5.5.).

Table 5.4. Occupation by sex

Occupation	Male (%)	Female (%)	Total (%)
Waged labour (permanent)	14	16	30
Pensioner	4	18	22
Student	8	12	20
Unemployed	8	12	20
Commercial farmer		4	4
Waged labour (intermittent)	2		2
Unpaid domestic		2	2
TOTAL	36	64	100 n=50

The principal occupation of the respondents was waged, permanent labour (30.0%). Other significant categories of occupation include: pensioners and recipients of disability grants (22.0%); students (20.0%); and the unemployed (20.0%). Other categories indicated were commercial farming (4.0%), intermittent employment (2.0%), and unpaid domestic labour

Number of dependents to total earners, including migrants.

(2.0%). However, the latter category (domestic labour) is likely to include a significant proportion of those female respondents indicating that they were unemployed (12.0%), particularly when considering that half of these respondents were the heads of their households. (Refer to Figure 5.4.; Table 5.4.).

5.1.4. Access to services

The data gathered in Masibambisane offered a clear indication as to the felt needs and perceived problems of the area, which permits some understanding of the area's development needs - some of which are presently being met. The problems identified by respondents, in terms of access to services, within the project area have been tabulated below. The results have been represented according to those problems regarded as being the most pressing (ranked by respondents as first and second), against the total range identified (see Table 5.5.).

Table 5.5. Problems perceived by respondents in ranked order

	Range of	% of sample who perceived access as a:				
	Problems identified	principal problem	general problem			
1.	Employment	52	84			
2.	Drinking Water	54	70			
3.	Electricity	20	68			
4.	Health	20	64			
5.	Housing	18	64			
6.	Education	20	62			
7.	Water for domestic purposes	42	60			
8.	Water for farming purposes	22	58			
9.	Transport	8	44			
10.	Sanitation	4	34			
11.	Agriculture*	Asset in \$2.50 miles	26			
12.	Recreation facilities		16			
13.	Shopping facilities		14			
14.	Sports facilities		4			
15.	Dependence**	- 1,379	2			

Land; extension services; technology; inputs

Water for drinking purposes was most frequently cited as the biggest problem (54.0%), although one would expect that this figure is considerably lower than it would have been prior to the Project's implementation. Water for domestic purposes also featured quite prominently as a pressing need (42.0%), while water for farming purposes ranked fourth highest (22.0%). Unemployment ranks as a close second (52.0%) to water for drinking purposes, although the frequency with which unemployment was identified as a general problem in the area (84.0%) significantly outweighs that of drinking water (70.0%). This is expected since the Masibambisane project has been successful in supplying most households with water, although the number of jobs, particularly of a permanent nature, generated by the project has been limited.

When analysing the data against the variable of sex, the most significant difference in perception, relating to the area's most pressing problems, is in terms of access to water for domestic purposes where one third (33.0%) of males as opposed to almost half (47.0%) of females identified this service as severely lacking. The fact that women perform the domestic chores around the home and that it is standard for taps to be installed in the yard of the household, (installation within the home is an option, at an extra cost), may contribute significantly to this result. While water for farming purposes is the only service regarded as being equally problematic (22.0%) by both sexes, there is a notable decrease in percentage difference of perception between male and female respondents, after domestic water.

Arranged by percentage difference, these services include: electricity (8.0%); drinking water (6.0%); employment (6.0%); sanitation (6.0%); housing (6.0%); health (5.0%); transport (5.0%); and education (3.0%). (Refer to Table 5.6.).

More than half of all respondents identified the following services when asked to list the problems that they experience in terms of access: electricity (68.0%); Health (64.0%); Housing (64.0%); Education (62.0%); water for domestic purposes (60.0%); and water for farming purposes (60.0%). One would expect that once the water scheme is running throughout the area, that the number of people identifying domestic and drinking water as being problematic, will fall substantially. Nonetheless, the relatively high ranking of water for farming purposes may increase to second place, after employment, given the project's success, since the design of the water scheme does not extend to respond to agricultural water demand.

Other problems identified by the surveyed population include: transport (44.0%); sanitation (34.0%); agriculture (26.0%); recreation facilities (16.0%); shopping facilities (14.0%);

sporting facilities (4.0%); and the continued dependence of one's children and grandchildren (2.0%). Of all these listed, the only problems that were identified as being the most pressing by more than one respondent were transport (8.0%) and sanitation (4.0%).

Table 5.6. Problems identified by sex and area

	Range of Problems	Most Pressing Problems identified (%)			Problems identified in terms of access to services (%)		
	identified	Male	Female	TOTAL	Mbitane	Other	TOTAL
1.	Drinking Water	50	56	54	92	62	70
2.	Employment	56	50	52	69	89	84
3.	Domestic Water	33	47	42	69	57	60
4.	Farming Water	22	22	22	54	57	56
5.	Health	17	22	20	77	32	64
6.	Education	22	19	20	62	62	62
7.	Housing	22	16	18	38	73	64
8.	Electricity	17	9	12	46	76	68
9.	Transport	11	6	8	38	46	44
10.	Sanitation		6	4	23	38	34
11.	Agriculture	-61/			15	30	26
12.	Recreation	-100			8	19	16
13.	Shops	-			8	16	14
14.	Sports Facilities	- 18		- 1	-	5	4
15.	Dependence	_		_	_	3	2

n = 50

Differences in felt need between residents in the Mbitane tribal ward and those of the other wards is significant since Mbitane is the only area which has not received water, to date. In addition, the Mbitane ward is noted as being more removed from the Mapumulo village and its accompanying services and facilities and is characterised by the area's most severe and mountainous terrain. The high percentage of Mbitane respondents noting drinking water as a problem is striking (92.0%) by comparison to other respondents (62.0%). Furthermore, the associated problems of an inadequate water supply, being health (77.0%) and water for domestic purposes (69.0%), are similarly more frequently identified by Mbitane residents than by other members of the broader Masibambisane community. All other categories but

education, which is noted as being equally problematic (62.0%), are less frequently cited as being problematic by Mbitane than other residents. (Refer to Table 5.6.).

While not emerging within the survey, another problem identified in the area is that of overcrowding (Interview 1995: Khwela). The basis for identifying this as a problem within the area relates to pollution of water caused by an increased number of people using the same water source, rather than relating to an increased demand on land for housing and agriculture.

5.2.5. Community organisation

Respondents were requested to indicate whether any organisations are active in their respective areas, and if so, what types of organisation were operating, and further whether respondents were involved in any of these (Refer to Appendix II: Q7). The overwhelming majority of the sample population (92.0%) indicated that they were aware of organisations operating within the area and 58.7% of these respondents were themselves involved, while 8.7% had held office, or were currently holding office within one or more active organisations. Only 2.0% of the sample population indicated that there were no organisation operating within the area. However, each of the respondents indicating that they were unaware of any active organisations and groupings within Masibambisane (8.0%), were aware of the water scheme and of the project management committee and water committees.

Of the seven types of organisations and groupings identified as being active within Masibambisane, women's organisations were most commonly cited (58.7%). Religious groupings and sports organisations also emerge as being relatively prominent, noted by 39.1% and 32.6% of respondents, respectively. Other forms of organisations known to the sample population include: burial (8.7%); youth (4.3%); agricultural (4.3%); and hand-work (4.3%) societies and organisations. Interestingly, political organisations did not feature at all. However, this may owe to the fact that field workers were from Masibambisane, and some conflict has historically arisen with the area, where both the ANC and IFP have a presence (Khwela; Sikikane: Interviews 1995).

Of the sample population, 18.0% were unaware that a community water project was in the process of being completed within Masibambisane, even though two thirds (66.7%) of these respondents were active within an organisation. A contributing factor to this relatively high

percentage may be age, where 44.4% were over the age of 60 years, and two thirds were 50 years and older. Another consideration is that all of the respondents with no knowledge of the project, who were younger than 50 years, were resident within Mbitane ward, the only portion of the area that has not yet received piped water.

5.3. The project outlined

This section is devoted to exploring the history of the Masibambisane Water Project, the parameters, in terms of administrative, organisational, funding and technical input, as well as the scope of the project, in terms of the number of households to be served and the level of service provision. The manner in which the process is managed according to certain principles and objectives is further examined below.

5.3.1. History

On the 28th of March 1992 a meeting was held amongst the communities of the wards situated in the vicinity of the Mapumulo village to discuss the prevailing water problems facing these communities, notably with respect to the water pollution and the consequent rise in water-borne diseases. From this meeting, a six member water management committee was elected to serve the broader community in tackling the water problem, and sub-committees were also elected within each of the wards. The four tribal wards concerned, namely Nyamazane, Mbitane, Ekunqobeni and Ntombiyehlulunina, "joined together under the umbrella of the Masibambisane Water Project, with the goal of improving their water supplies" (Still 1992: I).

With the assistance of the Chief Health Inspector for the Mapumulo / Ndwedwe area, with knowledge of a similar water delivery scheme within Ndwedwe, the next step was taken by the newly elected committee, in writing to the CSIR inviting them to conduct a social and technical study of the area to enable the committee to ascertain the feasibility of achieving the goal of improving their water supplies, and thereafter secure the funds to put this into action. (Still, Interview 1995; Deverill 1994: I). During the mass community meeting it was further agreed "that each household should contribute R40.00 to join the scheme, both to raise money for the project and to indicate to potential funders their commitment to the scheme" (Deverill 1994:5).

The CSIR feasibility study, referred to by Still (Interview 1995) as being more aptly defined as a 'pre-feasibility study', was completed in September 1992 by community liaison officers

within the CSIR Social Worker Department, some six months after first establishing contact with the community committee. The study included a social survey designed principally to assess the needs and perceptions of the community to their water supply and sanitation as well as to establish the level of water consumption and distance travelled by community members to water sources. Other aims of the survey were to gain demographic and socio-economic information, to establish the community's interest and willingness to work together to improve upon their water supply, and to work out some institutional arrangements to maintain and operate the scheme, once in place. (Gadd, Interview 1995; Still 1992, Appendix A: 1).

Funding was granted by the Port-Natal Ebhodwe JSB, by January 1993, and "CSIR were appointed to implement the project together with VKE, an engineering consultancy based in Durban. Shortly afterwards, CSIR subcontracted its work to a new consultancy, *Partners in Development*, formed by the original project engineer" (Deverill 1994:i). From January through to March 1993, VKE worked on the design of bulk infrastructure and contracted Eastern Drilling to conduct boreholing within the area, although the latter initiative proved unsuccessful. Construction began in April 1993 and Partners in Development were subcontracted to design and install the smaller reticulation lines, reservoirs and household taps. By August 1994, much of this work had been completed, although construction continued on a number of smaller reticulation lines into March 1995.

At this point, funds had dwindled substantially, resulting in the winding down of the operation and reduction of work teams. While it is noted that the project is close to completion, around 90.0% (Davies Lynn and Partners 1995: Table 8), work remains to be done on several smaller jobs, such as on road crossings, and further funds are required, in the region of R150 000, for this to proceed. At present, funds permit maintenance work and the continuation of limited work within Mbitane. (Gadd, interview 1995). However, it remains to be seen whether the community water management committee will be successful in securing the necessary funds to complete the project such that it will operate as designed.

5.3.2. The scope of the project

Based upon the CSIR 1992 Feasibility Study, the cost of the Masibambisane Water Project was initially estimated at R1 974 000.00 or R130 per capita, where the unit cost of water for the area was estimated as 43c per kilolitre. The community had itself, by August 1992,

collected funds amounting to R10 620.39, and the Port Natal-Ebhodwe JSB later agreed to provide a managed grant of R1.95 million. The feasibility study further suggested that the community, together with VKE and CSIR, could be responsible for the entire project. The design period was placed at four months and construction at around one year consequent upon funding being made available. (Still 1992:5; Deverill 1994:7,9).

As may be gathered from the history of the project, as outlined above, the process did not run as cost-effectively nor as expeditiously as planned. The project has "taken almost three times as long as expected and cost over 60.0% more than anticipated" (Deverill 1994:25), with much of this increase having being funded by the JSB. However, the unit cost of water has increased substantially to R1.10 per kilolitre and community households have witnessed two increases to the initial R40.00 'joining fee', first to R80.00, and now standing at R120.00. The value of the project, according to Davies Lynn and Partners (1995: Table 8) is now R3.2 million, translating into R270 per capita.

The Masibambisane area, as noted earlier, is approximately 75km², with a projected design population of 25 000 people by the year 2012 (Deverill 1994:2). While this figure is noted as being about 60.0% too high, it nonetheless formed the basis for the designs and cost estimates in the CSIR feasibility study (ibid.:8). The design demand is 360 kilolitres per day and will initially extend to serve 12 000 people within 1 600 households (Davies Lynn and Partners 1995: Table 8). The scheme, while designed to provide 1 250m³ per day, may only be able to supply as little as 500m³ in times of severe drought. Nonetheless, "this would still provide the present population of 15 000 with three times its present daily water consumption (averaging 12.5 litres per capita), and the design population of 25 000 with 20 litres per day per capita" (Still 1992:13).

A weir, constructed entirely by hand labour, was built to dam water below the confluence of the Notweni and Sidluluba rivers. At this point, a pumphouse has been built, from which water transported from up a 2 000 metre rising main to a disinfection (chlorination) works, by an electrically-driven pump, to feed both the reticulation system and the reservoirs located throughout the scheme area, as well as the booster pump stations required to pump water to Mbitane (Deverill 1994:10). Water is fed through a total of 45km of main pipes and 125km of secondary lines connecting the main supply to households. The total storage capacity of the 62 variously sized reservoirs in the area, is 1 192 kilolitres. (Gadd, Interview 1995).

The level of service provision, in terms of water supply, is high, particularly by rural standards, where taps are installed within the yard of each household rather than being located at a central, communal point. Further, the option to install taps within one's household is available at an extra cost. While water is not pumped from the weir throughout the day, but three times per day for around three hours at a time, the capacity does exist to extend this time in accordance with increased demand.

5.3.3. Project management structure

The Masibambisane Water Project is managed principally by elected community structures, in the form of the water management committee and four ward-based subcommittees. The two sub-contracting companies, VKE and Partners in Development, have further been involved in the supervision of the project within the field of construction and training in basic technical and, to a lesser extent, administration skills.

5.3.3.1. The Community Structures

Several community structures have been established in the name of the water project, including the management committee, effective in initiating the project in 1992, together with the four subcommittee formed to facilitate communication between each of the wards involved in the project. Each of these community committees is formally constituted of seven members, including a chairperson and vice, secretary and vice, a treasurer and two additional members. The responsibility of the treasurer within each of these structures is to collect the initial monetary contributions made by households in lieu of joining the project as well as the monthly payments made for the service. These funds are handed over to the central management committee which, in turn, deposits the funds with a bank in Stanger. The effective collection of these monetary dues is essential in ensuring that the service, both currently and in the future, is maintained, not simply in technical terms, but principally in terms of meeting the substantial, monthly demand made for payment of the electricity account.

The initial seven-member management committee, "elected by the community to plan, organise and operate the water scheme" (Deverill 1994:18), has undergone several fundamental changes resulting in a structure consisting of only three active members. Two of these representatives remain from the former committee - the vice-chairperson, Mr Sikikane, and the secretary, Miss Ntuli. However, the third member, Rev. Khwela, originally employed by the management committee as a 'General Manager', has been co-opted from

the Nyamazane Ward Sub-committee, where he holds office as chairperson. A number of possible explanations for the dramatic decrease in active membership exist. The first being political conflict, where the chairperson was effectively driven from the area through, apparently politically motivated, vandalism, and where the management committee indicated that they were occasionally accused of taking an ANC-aligned, rather than community, position (Khwela, Interview 1995). Second, the complexity of the scheme and the high level of commitment and application, for no remuneration, may have discouraged member's activity. Further, inability to meet the mandate set in being elected as treasurer, saw that position vacated. Finally, some indications of personal agendas, conflicts as well as alliances within the committee have been noted, which have, no doubt, contributed to the decrease in members' activity. (Gadd; Still, Interviews 1995; Deverill 1994: 10-11).

The ward sub-committees are intended to play a fundamental role within the project both in providing "the mechanism for implementing a charging policy, as well as representing the interests and problems of the community to the management committee and vice versa" (Deverill 1994:17). The sub-committees essentially act as the link between the community and the management committee, while the committee is intended to complete the link, through working with both the community members and the engineering teams. What has been noted, however, is that two sub-committees (Ntombiyehlulunina and Mbitane) are not operating, Ekunqobeni sub-committee is partially operational, while only the Nyamazane ward sub-committee is remains largely intact and active, arguably owing much to the continued commitment as well as knowledge of its chairperson. (Gadd, Interview 1995). The management committee indicated that sub-committees did meet with them, around once every three months, as well as with their respective communities on an irregular basis. However, this process was described as being problematic since sub-committees had not understood that their mandate was to work with communities and keep them informed of decisions and progress within the project. A further indication was given by the management committee that this misunderstanding was 'being worked out'. (Khwela; Sikikane, Interviews 1995).

The operation of the community structures appears to have fallen considerably short of expectations, on all accounts. The community, as revealed through the author's survey and through informal communications, is neither entirely confident that their interests are being adequately represented nor satisfied with the manner in which the project is proceeding. The management committee is concerned with the state of the sub-committees, upon which

they rely to fulfil the role of collecting service charges. Moreover, the committee note that the people in these sub-committees are best equipped to address and respond to people's problems, yet this crucial role is not being effectively fulfilled (Sikikane; Khwela, Interviews 1995). Finally, the engineering team is concerned with the operation of community structures, where the mechanism for executing a charging policy and keeping records of financial transactions is not being effected adequately and where the role of such structures in resolving disputes has been limited, particularly in the field of construction (Gadd, Interviews 1995).

5.3.3.2. The Engineering Team

Dave Still, of Partners in Development, heads the six-member Partners in Development 'engineering team', as project manager, however, his involvement in the Masibambisane Water Project began in 1992, with the feasibility study, while under the employ of CSIR. Overall responsibility for the satisfactory completion of the project is held by CSIR, while VKE and Partners in Development have both been active, as sub-contractors to CSIR, in the design and construction of the scheme. Further, the technicians and engineers of the latter companies have been involved, at various stages, in on-site training and supervision of construction, where VKE and Partners in Development took responsibility for the bulk and the remaining smaller infrastructure, respectively.

As noted by Deverill (1994), "the original project management structure, described as bottom up, consisted of two levels of control; the team leaders who are part of the work teams, and the external project staff who effectively became the supervision" (15). However, an intermediary link between these two levels, in the form of 'foremen' has never been effectively established since the employment of suitable people within such a managerial capacity was viewed with suspicion and resisted by the management committee (ibid.:15). As such, coordination between the two levels proved logistically exacting, since sometimes only one of the external staff was on-site to supervise as many as 20 team leaders dispersed throughout the project area (ibid.:15).

The team of external project staff is comprised of the project manager, four technicians, three engineers and a clerk. The involvement of Still extended principally over the initial stages of the project, whereafter, Chris Bornman, Dave Gadd and Andrew Broughton (Partners in Development) continued in the field along with Bongani Radebe, Maweni Macluna and Graham Simpson (VKE). Bornman and Gadd were respectively involved in

the design and construction of the weir and smaller piping and remained within the field for much of the time required in the on-site training and completion of such infrastructure. The clerk, Welcome Zondo, was active within the site office for one year to assist with administrative responsibilities as well as to help train the committee and was then replaced by a member of the community, at the request of the management committee. While construction has largely been completed, both firms have continued their involvement in the area through occasional visits, principally conducted by Partners in Development engineers, Gadd and Broughton, and VKE engineer, Simpson, to a lesser extent.

Deverill (1994:13-18) argues that there has been limited coordination and communication between the sub-contracting firms and the management committee as a result of delays arising from an insufficient grasp of the process on the part of the committee, together with the desire to complete the project timeously on the part of both the committee and the engineering team. However, it has been noted that monthly meetings have been convened throughout the project's implementation, along with occasional weekly meetings, and further that daily contact between members of the management committee and of the engineering team was common to the construction phase (Still, interview 1995). Further, the JSB required that professional, or project management, fees account for no more than 15.0% of the total project cost, including design and construction, thus placing significant time pressure upon the contracting firms to complete their respective contractual obligations and minimise overheads. This percentage was later increased to 21.0% when it became "clear that the project management fee...was not going to cover either *Partners in Development* or VKE's actual expenses (since) the original percentage had been based on a nine month project" (Deverill 1994:11).

5.3.3.3. The Council for Scientific and Industrial Research

The CSIR was drawn into the project at the initial stage of the feasibility study, for which it providing the funding. Thereafter, contractual agreements were drawn up between the CSIR and the sub-contracting firms of VKE and Partners in Development. However, this agreement does not delegate overall responsibility, as such, "CSIR have a standing obligation to ensure that the project is carried out satisfactorily" (Deverill 1994:14).

The CSIR is a national organisation which carries out work principally within the field of research, yet also has capacity to provide on-site training within a number of fields, including water, appropriate technology, environmental issues and, to a lesser extent,

administration (RCF 1995:22). The involvement of CSIR within the Masibambisane Water Project extended from conducting and financing the feasibility study to include several visits to the committee, conducted by a social worker, a technician and by the head of the appropriate technology group. However, the role fulfilled by this organisation and its agents, consequent upon the feasibility study, has apparently been limited. Some apprehension has been expressed with respect to the effectiveness and suitability of this organisation being involved in a rural water scheme within KwaZulu-Natal, where the CSIR is based within Gauteng and is 'spread very thinly' across the country. (Still, Interview 1995).

As noted by Deverill (1994), "it is only too obvious that there is little coordination or teamwork between CSIR, whose sociologists rarely visit the scheme, and Partners in Development, who normally have an engineer and technician on site" (18). This is evidenced where these visits tended to be unannounced and limited to the management committee, rather than being coordinated with both the committee and the engineering team which is both active within the area and contractually related to the CSIR. In addition, these visits, made with the intention of transferring basic administrative skills to the committee, tended to be for short periods (one to two days) with no follow-up training, thus calling their effectiveness in transferring such skills into question. (Still, Interview 1995).

5.3.3.4. The Port-Natal Ebhodwe Joint Services Board

The role fulfilled by the funder, the Port-Natal Ebhodwe JSB is limited, where their representatives have visited the project area, on average, once a year and have simply fulfilled the function of funding the scheme. The consequent restructuring of the JSB, whereby they have been drawn into the Durban Metropolitan Area and where their future role appears somewhat uncertain, has resulted in their inability to grant further funds to enable the completion of this rural project. The JSB does, however, keep records of the progress being made at Masibambisane and is kept updated of developments through communications with Partners in Development.

According to Kitchin and Robinson (1994), the JSB has historically been "responsible for providing infrastructural development, mainly outside the DFR, and for limited services provision, mainly water supply in areas covered by the previous water boards of Amanzimtoti, Pinetown and North Coast" (17). The approach of the JSB to funding such infrastructural development is noted as being highly problematic for several reasons. First,

while the require that a feasibility study be conducted prior to granting capital, they do not provide funds to successful grant recipients in lieu of its completion (Gadd, Interview 1995). Second, while they fund the construction, they do not fund capacity building, training or bridging finances to get the project up and running effectively once the necessary infrastructure is in place (Still, Interview 1995). Consequently, the sustainability of projects is highly questionable, given lack of support which could be effected through 'booster' funding into such endeavours as further training as well as upgrading and extensions to the project as the demand increases.

While the process of restructuring the JSB was not expected to effect any serious disruption of their activities (White 1994:4 in Kitchin and Robinson 1994:17), it has in fact arrested the progress of the Masibambisane Water Project and is viewed with some suspicion and resentment by members of the management committee who are unsure as to whether it is 'unwilling' or 'unable' to commit further funds to the scheme (Sikikane; Khwela, Interviews 1995).

5.3.4. The development process

The Masibambisane Water Project is a relatively complex initiative given high delivery standards and difficulties associated in construction and in the conveyance of water across severe terrain. Further, it is one of the largest community-driven water projects within the province. As noted earlier (5.3.1.), the project was initiated by the community, with the assistance of a government health inspector, consequent upon a mass meeting with representatives from each of the wards surrounding Mapumulo village. Since such time, the responsibility for ensuring that the project is implemented and maintained has resided with the management committee, with significant roles being played by external project staff.

The implementation of the project did not proceed within clearly defined parameters, rather it "has largely been steered by the financial need to complete the physical work as soon as possible to minimise losses" (Deverill 1994:14). Nonetheless, several broad principles and objectives, which are explored below, relating to the manner in which such work was to proceed, have been identified by the various parties involved in the project. Further, the overwhelming impression gained, through personal communications with members of the management committee, is that the principal goal, relating to all aspects of the project, is

that the community must be driver, the manager and the beneficiary of the process, and its products.

5.3.4.1. Development principles

The Masibambisane Water Project, recent recipient of the Port-Natal Ebhodwe Joint Services Board Award of Excellence in Labour-based Construction, is notable for its commitment to ensuring a 'community participation' approach, by contrast to a 'conventional approach' to construction which, while being faster, relies upon plant works machinery rather than upon maximising labour. According to VKE, the "entire works were constructed and all the equipment installed by hand labour" (Leeman 1995:9). Labour costs, as of May 1994, accounted for around 36.0% of the funds allocated to the scheme, which serves to highlight the importance placed upon labour-intensive construction. (Gadd, Interview 1995). In addition, members of the community seeking work within the project, were not selected by the consulting engineers, but by community structures whereby they either approached the management committee or were selected for training and employment by their respective sub-ward committees. (Gadd; Khwela, Interviews 1995).

The aim of securing the highest level of service provision possible was further identified, as evidenced by the fact that the water source for each household is to be within their respective yards. However, this objective is likely to have contributed to high levels of expectation both amongst the community and the engineering team responsible for the design of the system, and has further slowed the pace of delivery considerably more than would have been the case should public standpipes have been opted for over yard connections. The combination of these effects serve to promote the likelihood of dissatisfaction with the project and its progress amongst the community and further serves to inculcate a sense of having failed amongst those involved in delivery. (Still, Interview 1995). Nonetheless, the project remains distinguished for the success it has achieved thus far in providing the majority of households within the area with such an accessible source of potable water.

One of the primary goals of the delivery process was to ensure that is was as cost-effective as possible, which was sought to be achieved through various means. First, construction of products which were economical, yet of high quality and functional value, was selected over alternative, conventional infrastructure. As such, tap fittings and slabs, as well as valve housing mechanisms, were constructed by hand, and several smaller ferrocement tanks

were selected over the more expensive, conventional large, reinforced concrete reservoirs. In addition, a measure of voluntary labour has been used within the project, whereby each household which is to be equipped with their own tap, is responsible for digging their own trench-lines.

5.3.4.2. Capacity building objectives

As noted by Deverill (1994:16), capacity building is a fundamental requirement for effective community participation since it allows not only for the active involvement of beneficiaries in introducing the water project to their area, but also for the initiation and direction of further changes in their society. The Masibambisane Water Project, while not stipulating 'capacity building' itself as an objective, offers several identified goals and principles which point to both the need and aim of building the capacity of the community and its representative structures.

The most prominent attempts at increasing community capacity are evidenced within the field of labour-based construction. Specific basic skills were needed by workers in implementing the project, which were principally transferred on-site, through the supervision by the few external project staff. Such skills include not only trenching and pipe-laying required, but further involved training in the construction of reservoirs and of the weir. Only six community members, selected by the sub-committees, were sent for formal training in ferrocement tank construction at the Valley Trust, while an additional two members were trained in the operation and maintenance of the water pump. (Khwela, Interview 1995).

A further objective identified relates to actively encouraging people to take on management and leadership roles, both amongst workers and the management committee. The importance of such roles being effective within the area is stressed, since without any particular body being assigned responsibility for the maintenance and operation of the system, the probability of failure is high. Structures which are active and performing such functions within the area include the management committee and the maintenance team, of three local workers. The management committee has had limited training in developing basic administrative skills, which has been attempted by one of the engineers through meeting with committee members as well as through the establishment of a clerk within the site office for one year. Some attempt was further made by the CSIR social worker to teach such skills, however, given the limited duration and frequency of visits, the effectiveness of these attempts are questionable.

Much of the informal training that has been conducted has served to build upon skills which were already in existence, if only partially. The challenge is, however, to ensure that those community members equipped with essential skills remain within the area both to maintain the scheme and to take the initiative in promoting further developments within the area. The degree to which the project has been successful in generating this sense of responsibility will be explored below (5.4.3.).

The extent of 'outside' involvement within the project is minimal, with occasional visits from CSIR social workers and the presence of one or two engineers within the area at the time of construction. While this serves to locate responsibility for the management of the scheme firmly with the community structures elected, as well as with the teams trained, to fulfil this role it does pose obvious threats to the running and sustainability of the project, in the absence of required capacity. Consequent upon construction being largely completed and on-site supervision terminated, the two engineers from Partners in Development have, at their own expense, conducted weekly visits to the area to offer support and expertise, where needed. Essentially, however, the community has largely had to fend for itself and develop its own capacity to manage the process in the absence of both funds and training to foster such growth. Rev. Khwela (Interview 1995) notes that no formal training with either sub-committee or management structures was conducted, and that people holding leadership positions tend to be elderly and respected members of the community who rely on their past experience in attempting to fulfil their respective mandates.

5.4. Project assessment

While the previous section (5.3.) has broadly explored the project, in terms of the manner in which it has been planned to proceed within the guiding framework of particular objectives and principles, this section seeks to explore the effectiveness of the process by drawing upon information conveyed through interviews together with the results of the author's survey and comments made by respondents. In attempting to assess the process of capacity building alongside delivery, the key concepts of effective management, delivery process and capacity building, along with their respective dimensions and indicators, as developed upon earlier (chapter 3), will be drawn upon as measures. Given relative importance placed upon capacity building within this dissertation, together with the considerable degree of commonality, in terms of indicators, and interdependence between 'effective management' and the 'delivery process', the latter concepts will be explored concurrently.

5.4.1. Effective management of the delivery process

As defined earlier within this dissertation (3.2.), effective management refers to the competent and informed guidance or facilitation of a project and / or process in a manner that is both cost and time effective. Such management thus has both a quantitative, in that progress and competency within a particular field and within certain parameters is measurable, and a qualitative dimension, where ongoing consultation, communication and monitoring is not directly quantifiable but is appraised. The delivery process, on the other hand, culminates in the satisfaction of a pre-determined need, moving from consultation and the identification of that need, through planning and implementation (3.3.). The delivery process, to be successful in terms of adequately addressing a need in a manner that is both economically and functionally sustainable, requires that the process be effectively managed and calls for the involvement of the community in consultation, decision-making and implementation.

5.4.1.1. Management and coordination

The Masibambisane Water Project has two institutional components responsible for ensuring that the process of implementation and the progress thereof is managed effectively, including the management committee and the engineering team. The management committee is that which is intended to have the ultimate authority over the project and to direct proceedings in a manner congruent with the needs and expectations of the community that it represents. In this regard, the sub-committees could play a vital role in ensuring that regular community meetings are instituted to review the mandate of representative structures and to feed back on progress, decisions taken and problems encountered. The principal management function of the engineering team is in ensuring that on-site training and supervision is adequate for the purposes of implementing the scheme, while further ensuring that such implementation proceeds timeously and within budgetary constraints. The coordination of these management functions is, however, essential if the project is to develop in a manner that is grounded in the needs and expectations of the community and responsive to local conditions. However, the results of the author's survey together with the study conducted by Deverill (1994), would tend to suggest that such coordination has not taken place.

The apparent breakdown in communication and coordination may be regarded as a critical issue within the Masibambisane Water Project. This has perhaps been aggravated by the role assumed by CSIR as sometime monitor of the project and occasional intermediary

between the committee and the engineering team. Several factors have further contributed to the manner in which the scheme has been managed, whereby it has essentially been driven by the engineering team. Dwindling funds and time pressures, coupled with the delaying tactics that appear to have been employed by at least one member of the committee, prompted the decision, on the part of the engineering team, to proceed as rapidly as possible. "As a result the management committee has tended to have been left out of the decision making process to avoid the associated delay" (Deverill 1994:13). Although, Still (Interview 1995) notes that this has not invariably been the case, where some decision have been taken entirely by the committee, to the exclusion of the engineering team. Finally, the extent to which sub-committees and their respective constituencies were involved in influencing the earlier involvement in decisions and in motivations made by the committee, appears very limited. On the other hand, however, the committee is noted as being respected and generally trusted by the community which elected them to office, which does hold promise for future attempts at reviving subcommittees and encouraging increased involvement and activity on the part of the elected structures and the broader community. (Gadd, Interview 1995). Nonetheless, the majority of respondents, that were aware of the scheme, appeared confident that there was some degree of coordination between their representatives and the external staff, on the basis that 78.0% stated that meetings were held between these parties. Only 2.4% of the sample population stated that no such meetings were taking place, while 19.6% were unsure.

The size and complexity of the project has been identified as a significant problem, both in terms of delivery and management. The fact that the sub-committees are largely dormant has effectively meant that their responsibilities have fallen to the management committee, along with the latter's role in overseeing the project. While the committee is notable for its commitment, there are only three active members and no level of dedication can meet the organisational demands and responsibilities that they have assumed. Further, the implementation plan initially attempted, upon motivation by the committee, was to start work "in all wards simultaneously to avoid dispute" (Deverill 1994:14). However, this proved logistically impossible and amounted to a management nightmare, such that work had to become focussed into particular areas at any one time. Should the sub-committees have been active, however, such problems may have been more readily overcome since management responsibilities could be delegated and delivery could have been facilitated within the wards in accordance with their needs and resource capacity.

5.4.1.2. Understanding of the context

Several problems have been encountered at various stages throughout the history of the project, dating back to the preparation of the feasibility study. The latter study, conducted and financed by CSIR, proved to be effective as a funding document but not as a planning tool. As outlined by Deverill (1994:8-9), the feasibility study based its design and cost estimates upon inaccurate population figures and insufficient investigative work into both sociological and hydrological aspects of the area. Consequently, the first critical set-back was experienced at an early stage in the project within the mountainous Mbitane ward, where groundwater was planned to be secured through boreholing. While the study had identified the area as having high groundwater potential based upon an earlier study of the Umvoti catchment area, actual yields proved too meagre to provide the area with a sufficient and dependable water supply. In addition, this discovery came at a considerable expense, both in terms of time and money (around R36 000.00). Furthermore, the feasibility study had not adequately explored alternative options, thus the process of designing the system had to be re-examined and an alternative source established which had capacity to supply water to the entire project area.

A further significant problem identified with respect to the feasibility study is that "it did not investigate the relative merits and costs of a diesel or electrical power source...(which) were only discovered after implementation had begun" (ibid.:8). As such, in the process of upgrading the diesel pump to a more reliable and automatic electrical pump, together with having to relocate the water source, further funds, amounting to around R300 000, had to be allocated. (Khwela, Interview 1995). While an electrical supply offers considerable advantages over a diesel pump, the fact that this move was not planned for caused some delays and a significant financial outlay. Finally, the study offered no clear plan of action suggesting how the project should be undertaken (Deverill 1994:9). Consequently, implementation proceeded in the absence of a complete design of the system and decisions regarding the sequencing and process of delivery were made largely on the basis of subjective motivations rather than being in accordance with a plan grounded in an understanding of the technical, logistical and managerial, as well as sociological, factors that have contributed to the complexity of the project.

Nonetheless, the author's study reveals that a high percentage (87.8%) of the sample population do believe that the project is proceeding from a sound knowledge of local conditions and problems, whereas only 4.9% do not, and 7.3% are unsure. In stating this

perception, all respondents, both those affirming and negating a grounded understanding of local conditions, were referring to the management committee. One respondent further identified the CSIR researcher as understanding the needs of the community, despite the fact of being 'a stranger'. Various reasons were expressed to support the view that the committee understood the dynamics and conditions within the area, the most common being that they were local people that were aware of the community's needs (76.4%). Others include: responsiveness to needs and problems (13.9%); selection by, and good relations with, the community (5.5%); and such personal traits as being determined and responsible (4.2%). Reasons given in support of the view that the committee was not equipped with a sound understanding of the needs and problems within the area, include that the committee has never done anything for the community, and that water has not been supplied despite the fact of having paid for the service. The remaining respondents, having indicated uncertainty with respect to the extent of knowledge informing the project's implementation, expressed concern that the interests of the youth were being omitted and that the process was moving too slowly.

On respondents being asked whether the believed that the Masibambisane project workers understood their needs, the majority (85.7%) responded positively. When asked whether they thought that their needs would be met, this percentage dropped quite substantially to 64.3%. The most prominent concern expressed, by the remaining 35.8% of the sample, related to the slow pace of delivery (19.0%), as well as to the problem of money required to pay for the water supply (4.8%), and discontent with the management committee (2.5%). 9.5% of the sample indicated that they did not know whether their needs would be met or not. However, all respondents stated that they knew how to contact the people involved in the project, referring to the Management Committee, and would gladly approach them to express their concerns and to ask questions about the project. The most common reason stated in support of approachability, was that the committee is available to the community (33.3%)on the basis that committee members spent long hours in the office (17.6%) and their residences were known (9.8%) as was the location of the office (5.9%). Personal traits of the committee members (29.4%) was also cited as a principal reason for their being approachable, while 25.5% of the sample noted that it was the committee's responsibility to deal with problems and respond to queries. Other reasons noted for approachability were that the members were from the community (5.9%) and that the offices were accessible (5.9%).

5.4.1.3. Project funding

While the project is notable for having been completed, thus far, for about half the cost of a more conventional contract situation, one of the most pressing problems faced by the implementing agents, and the community itself, is the lack of funding to complete the project. Additional funds, amounting to around R60 000, are needed for relatively minor, but essential, works such as road crossings, taps and an additional pump. However, the JSB are no longer in the position to grant additional capital to the scheme and the committee has been compelled to make applications for such funds, thus far unsuccessfully.

The financial status of any project undisputably has drastic ramifications for the effective management of the delivery process. Implications of a rapidly dwindling budget were evidenced in reduced number of workers and work teams where, for much of this year, only about three workers remain active as the maintenance team. However, this cutback in the number of labourers was also due to the unmanageable numbers which were reached within the first year of the project's implementation, relating both to supervision and training as well as to cost. In addition, the project aimed at providing the highest possible level of service provision in selecting yard installations over public standpipes, however, insufficient funds deny the achievement of this objective. Arguably, reducing the standards set for the scheme and hence the expectations, the project would have been more likely to succeed within both the time and budgetary constraints. By contrast, a sense of failure may be instilled, given that around 10.0% of the area has no water supply, on the part of both the management committee and the engineering team. Should the committee secure additional funds, the high level of both expectations and service are likely to be met (Still, Interview 1995).

5.4.1.4. Project maintenance

The question of finances again emerges when considering that the community is required to pay an initial joining fee and thereafter to pay for their water service on a monthly basis. Such cost recovery requires that the management committee be proficient in administrative skills since they are responsible for maintaining financial records, depositing money and paying project-related accounts, notably the electricity bill. Failing this, the service will be effectively terminated unless emergency funding is available, which in itself does not address the concern of the sustainability of the scheme. Informal communications have

revealed, however, that the committee has been unsuccessful in gathering the service payment for the month of November, this year, which does not bode well for the scheme nor does it reflect favourably upon the operation of the committee and its capacity, both in terms of managing the process and activating the sub-committees. Given the considerable size of the scheme area, it is neither feasible nor appropriate to expect community members to travel to the site office to pay for their water. As such, there is a strong argument for the involvement of the ward sub-committees and their respective treasurers in the collection and administration of payments and in the convening of community meetings which might prove as an effective means of both collecting monies and conveying that such monthly payments are critical to the scheme's maintenance. The management committee conceivably needs to take the initiative in terms of reviving the sub-committees and delegating responsibility to these community structures.

All of the respondents to the author's study, were aware that they would be expected to pay for the service, both for the system to be installed within their yard, as well as for monthly user charges. 95.2% of the respondents had already paid their 'joining fee', the majority (90.0%) having paid R40.00, while the remainder (10.0%) having contributed R80.00. However, a considerably higher percentage of the sample (26.2%) did not know how much the monthly charge was set at, while 73.8% affirmed that they paid, or would be paying, R12 per month for the service. The majority of the respondents (90.5%) stated that there would be a water source within their area, within 200 metres of their homes, while 9.5% were unsure. One respondent, on being asked whether there would be a local source, indicated that she did not know, but that she had lost hope. Conceivably, if the subcommittees were active and had the capacity to keep their constituencies updated as well as to feed-back on problems and delays, the community would be in possession of the necessary facts and figures to assist in maintaining both their morale, and the scheme itself.

Just as the size of the management committee is regarded as being problematic, so too is that of the maintenance team. While there is expressed confidence in the ability and capacity of the team to conduct repairs upon the system to keep it operational, the concern is that once the project is in place throughout the area, the small team may be logistically, rather than technically, unable to cope. (Gadd, Interview 1995). While the sub-committees and management committee has not been formally trained, and thus rely upon inherent capacity that they have gained through experience, the maintenance team has partly undergone formal training and has drawn upon the skills found within the community. It

appears, however, that much has been assumed, rather than managed, in ensuring both that adequate skills would be transferred to members of the community and that the project would proceed in accordance with expectations. In this regard, the onus has fallen upon the engineering team, notably Partners in Development, to manage the supervision, training and management of the project. As such, the extent to which the Masibambisane Water Project has been effective as a community-driven development initiative is questionable, except insofar as it has been initiated and constructed by, as well as left to, the community.

5.4.2. Capacity building

In attempting to assess whether the project has been successful in terms of building the capacity of the community, and its respective committees, to manage and maintain the service as well as respond to further needs identified within the community, two measures are employed. First, the indicators developed upon at an earlier stage within this dissertation (3.4.), were incorporated, in their entirety, within the questionnaire, and partly within the interview schedules. As such, the responses and comments made by interviewees and respondents emerge as the principal source of information upon which to base the assessment. Second, reports and evidence of the training and development of organisations, and of technical and administrative skills, offer an indication of the extent and commitment to capacity building on the part of key players within the project.

5.4.2.1. Organisational capacity

Deverill (1994) notes that the CSIR feasibility study failed to "identify the specific needs for capacity building in Masibambisane, and did not suggest a means of implementation (where) the scale and sociological and technical complexity of the project should have indicated how necessary this was" (17). No extensive formal training, aimed at developing the organisational and administrative skills of the management and ward committees, has ever been pursued, despite the fact that these community structures are expected to play a critical role in directing and sustaining the project, and representing community interests and concerns, besides.

Sub-committees remain largely dormant within the area and have played a minimal role in convening community meetings and in directing implementation within their respective wards. "One of the most serious omissions in terms of capacity building was...the failure to recognise the importance of the sub-committees in establishing a sense of community involvement, ownership and responsibility" (Deverill 1994:18). As indicated by members of

the management committee, the sub-committees are not clear on what their specific mandate and functions are within the scheme, although comment was made that this was soon to be remedied (Khwela; Sikikane, Interviews 1995). The marginal profile of the sub-committees became clear within the author's study, where, on speaking of community committees, respondents referred directly to the activities and characteristics of the management committee only.

A view expressed by Deverill (1994:17) is that the sense of community ownership of the process is minimal, if existent, and that there is a growing sense of isolation from the project and the management committee. Further, Deverill (1994) argues that many have lost interest in the project and that the "delay in getting water and lack of both information and consultation have combined to erode the confidence the community once had with the management committee" (17). Further, an observation made with respect to the activities of the committees, is that commitment and enthusiasm has tended to diminish as the project advances and further problems and demands emerge, as evidenced in the decreased size of the management committee and the virtual dissolution of the ward committees (Gadd, Interview 1995). Nonetheless, it should be stressed that both the management and ward committees were elected by the community and are described as being composed of people that are well respected and trusted by the community (Deverill 1994:17; Still; Gadd, Interviews 1995).

The impression gained through the author's study is that considerable confidence remains in the ability of the committee to respond to problems and contribute to improving conditions within the area. However, confidence appears more strongly held in the capacity of the community itself to impact upon its future development. On being asked who would be responsible for attending to problems with the water system, only 7.1% of the sample population indicated that the committee would be and only one third of these respondents were confident of their ability to do so. However, 83.3% of the sample population indicated that people within the community would solve such problems and 71.4% were confident of their proficiency. 4.2% indicated that the responsibility would fall to trained people within the community, 1.2% stated that external agents would play a role, while the remaining 4.2% did not know who would be liable. 16.7% of the sample population indicated that they did not believe that the community would be equipped to solve problems that arose with respect to the water supply system while 21.4% were unsure. Of the former group, the most commonly stated reason for lack of confidence was on the basis that there had not

been any evidence of problem-solving capacity (57.1%) within the community. Other reasons were that there was an absence of required skills (28.6%) and negligence with respect to work (14.3%).

5.4.2.2. Organisational development and representivity

While the project has proceeded in the absence of formal organisational training and development, the management committee has assumed much of the responsibility for administration, particularly in terms of accounting and in collecting and recording service charges. Still (Interview 1995) observes that members of the management committee have developed considerably and, further, that the degree of community involvement has been more significant that in most projects of this nature. In addition, such development has largely proceeded as the engineering team has increasingly withdrawn from process, basically leaving the committee to cope with problems and daily challenges in the absence of external support (Still, Interview 1995). However, training and organisational development amongst all community structures would have significantly decreased this burden and the problem of meeting their monthly cost obligations, notably to Eskom, might have been circumvented. Further, with this burden being eased, committee members may have maintained and increased the activities that they are noted as having initially performed, such as engaging with both workers and community members with respect to the project and their concerns. (Gadd, Interview 1995). The fact remains, however, that the size of the committee, and the responsibilities placed upon its few members, demand that more people become involved and active in the operating and maintenance of the project.

The majority of respondents (76.2%) believed that community organisations within the area were stronger now than they had been prior to the projects implementation, where only 7.1% negated this. Furthermore, 83.3% of the sample population indicated that they were confident that the people within the community were now able to ensure that further identified needs would be met while only 2.4% responded in the negative. Various reasons were given in support of these views. In terms of negative responses, lack of delivery (33.3%) was most commonly cited, while other reasons given include: that some problems have still not been addressed (25.0%); the committee has not learnt to work as a team (16.7%); still need outside assistance (8.3%); the youth being left out (8.3%); and that help is needed in terms of management skills (8.3%). Reasons most commonly given in support of the perceived capacity were based on the committee having learnt to work together (22.2%) and on the progress seen in this project (22.2%). That the committee had

developed considerably (20.0%) and were now active (15.6%) were also cited, while other reasons given include that: skilled people are now evident within the community (6.7%); this project's success will 'spur' or motivate further action (4.4%); there is talk of further initiatives (4.4%); the committee is educated (2.2%) and has learnt to work with the community (2.2%).

In terms of representivity, 68.3% of the sample indicated that they are satisfied that their interests are being represented by their spokespeople. Such confidence, on the part of these respondents, is based principally upon the fact that representatives are resident within the area (28.6%) and are thus regarded as knowing the community's needs and interests, as well as upon their responsiveness to reported problems (28.6%) and on their personal traits (16.1%). Further, 8.9% of the sample indicated that since committee members had been elected to their respective positions, it was their responsibility to fulfil their mandate and to ensure that the interests of the community were represented. Other reasons given are based upon actual water supply being effected within the respondents' area (7.1%), and visible delivery within other areas (7.1%), as well as upon the conviction that the community would offer the support necessary to enable the representative to fulfil any responsibilities (3.6%).

While 9.8% of the sample were not certain that their spokesperson could represent their interests, the remaining 21.9% of respondents were dissatisfied with their representatives. The most common reason cited, by the latter respondents, is that those people who had been elected to committees by the community had not fulfilled their mandates and were not responsive to reported problems (44.5%). Other reasons were that delivery is too slow and that the scheme is both unreliable and problematic (33.3%), and finally, that there is no transparency nor accountability (22.2%) on the part of representatives in the processes of decision-making and delivery.

5.4.2.3. Community involvement and satisfaction

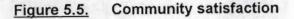
The limited degree of direct community involvement in the planning and control of the process of delivery is reflected by the relatively high percentage (18.0%) of respondents, to the author's study, with no knowledge of the water project. Further, none of the respondents, that were aware of the scheme, indicated any involvement in their respective sub-committees. Moreover, 31.7% of the sample did not know how those individuals on the committees had come to hold office, while 68.3% affirmed that they had been elected to

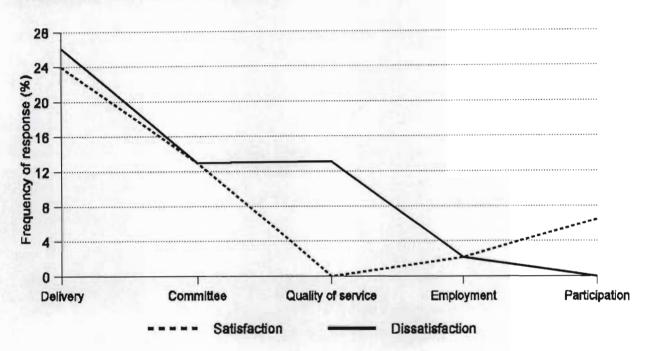
their respective positions. In terms of broader community meetings, 7.3% of the sample population with knowledge of the project, stated that they were unaware of such meetings while the majority (92.7%) stated that these were convened and were open to all members of the community. While 29.3% indicated that they did not know how often such meetings were held, of the balance (70.7%), the most commonly cited frequency (44.8%) is once per year, while 3.4% indicated that only the initial mass meeting has been held and the remaining 51.8% stated that community meetings were held more frequently, occurring once in every two to six months. The majority of respondents (78.0%) indicated that attendance was high, with more than half of the adult community members being present, while only 2.4% indicated that few people attended meetings. This would tend to suggest that the community is both interested and eager to increase their level of involvement in the scheme, yet that the mechanism for enabling this is absent.

In seeking to ascertain the level of involvement in decisions taken in the project, 63.4% of respondents indicated that they, or members of their household, had played a role in this respect, principally through attendance and participation in community meetings (84.6%). Decision-making appears to have extended principally to the issue of digging yard-connection trenches (42.9%). Other decisions taken revolve around: who should be involved as workers (17.8%); who should represent the community (14.3%); how much water will cost (14.3%); and how the system will be maintained (10.7%). One respondent expressed frustration with the decision-making process, since decisions were not effected and there was no follow-up.

On being asked whether they were happy with the manner in which the project is proceeding, 57.1% of the sample population responded in the negative. The principal reasons cited for such discontent revolved around the delivery process, which was described as being too slow (17.4%), or as non-existent (8.7%) within the respondents' area. Quality of service provision also featured quite prominently, being noted by respondents as being irregular (13.1%). Further, considerable dissatisfaction has been expressed with respect to the functioning of the management committee, for the following reasons: lack of transparency (8.7%) and accountability (2.2%); and lack of sufficient skills to manage community projects (2.2%). Finally, respondents noted employment-related issues, such as worker discontent and wage disputes (2.2%) as a basis for dissatisfaction. Of the respondents indicating that they were satisfied with the manner in which the project is proceeding, the most common reasons similarly revolved around the delivery process, in

terms of the convenience of being supplied with clean water (10.9%), and on the basis of visible progress being made elsewhere (4.3%) and within their area (6.5%), as well as on the basis of equality in service delivery (2.2%). The functioning of the committee, in terms of transparency (6.5%) and the determination of some of its members (6.5%), were among the more commonly noted reasons for satisfaction. While participation, or community involvement (6.5%), and employment creation (2.2%) through the project, were noted as further reasons for community satisfaction. (Refer to Figure 5.5.)





What emerges as being quite striking, in examining the comments made by respondents, is that the degree of dissatisfaction is considerably more pervasive than initially expected through analysis of predominantly closed-ended questions. 71.4% of those respondents that did not make comment, and 77.1% of those respondents that did, expressed dissatisfaction with the management of the process and with the service itself.

Consequently, 76.2% of the sample population may be noted as not being entirely happy with the project and its proceedings. It may further be noted that positive perceptions vary considerably across the four wards. 83.3% of the sample made comment, and of these, only 22.9% indicated some degree of satisfaction with the scheme. Half of the latter respondents were resident within Umpumulo, 25.0% within Nyamazane and 12.5% within Ekunqobeni and Mbitane, respectively. This result is not surprising given that residents of Umpumulo and Nyamazane wards are serviced with water and are within easy access of

both the project office and management committee members, who are resident within these areas. Furthermore, community facilities and amenities are best represented within these wards. What is interesting to note is that only those respondents from Nyamazane and Umpumulo expressed concerns about security (4.0%), as well as the lack of electricity (4.0%) and centres for recreation (12.0%); shopping (8.0%); and training (8.0%). It does not seem unwarranted to argue that the needs and interests of residents within these wards, characterised by a significantly higher level of services and urban-related amenities, are rather different from those found within the remaining, more peripheral wards of Masibambisane

The bulk of concerns expressed (73.0%) relate to the characteristics, composition, skills and activities of the management committee. The most prevalent responses, related to the committee, include: a lack of transparency (18.5%); negligence and delays in fulfilling responsibilities (18.5%); inadequate skills (18.5%); inactivity (14.8%); and the absence of representation of the youth (11.1%). One respondent proposed that experts be called in to assume responsibility for managing the project, while another proposed that training in management skills be facilitated. Other comments related to the lack of follow-up on problems (7.4%), a restrictive attitude on the part of the committee (7.4%) and poor communication between the management committee and workers (3.8%). Of the remaining 27.0% of respondents, 13.5% were dissatisfied with the service, since they were paying for water yet were not being supplied on a regular basis. 8.1% of respondents, all from Mbitane, indicated that they had started to lose hope that water would ever be delivered. Further expressed concerns relate to the method of recording service payments, which is perceived as being unreliable and inadequate (2.7%), and to the 'poor' training of workers (2.7%).

5.4.2.4. Skills transfer

As noted earlier, members of the community, engaged both in the initial construction of the scheme and in the subsequent maintenance thereof, have proved their competency in practice and in the products of their work. The project, while falling significantly outside of the planned time and budgetary parameters, is considered technically sound and has been successful in developing particular, transferrable skills amongst approximately 250 members of the community. Confidence in the proficiency of the community and its ability to solve problems which arise in connection with the water supply system, is expressed not

only on the part of some members of the engineering team, but by the majority of respondents (63.4%) in the author's study.

While only 7.3% of the sample population had themselves acquired skills, and 11.9% of all households had at least one member that had been employed in the project, in digging trenches, building reservoirs and supervising labourers, 85.4% knew of people within their community who had learnt new skills. Furthermore, the average number of such people reported is 9.2, indicating that the project has been successful in building technical skills, and, to a lesser extent, developing management skills, amongst the beneficiary community. Appointment to positions of employment within the project appears to be largely as a result of being given the mandate to do so by the community, according to 66.7% of the sample. Only 2.4% of respondents indicated that they had acquired a job through having made application, while 30.9% of the sample did not know how work had been secured by people in the community.

While confidence in existing capacity thus appears relatively high, this is not the case with respect to transference of skills to other members of the community. The majority of the sample (73.8%) did not believe that people who had acquired new skills would teach others, while 23.8% were unsure. Only 2.4% were confident that skills were being transferred on the basis that the number of workers appeared to be increasing. Suggestions on ways in which skills could be developed include that members of community with potential be recommended to the committee, and that KwaZulu Finance and Investment Corporation (KFC) be approached and requested to organise that training be conducted within the area. The most common reasons expressed for lack of confidence in the process of skills being transferred were based on the fact that people who had acquired new skills were nowhere to be seen (24.2%) or had left for work within urban centres (21.2%). Arguably the majority those members of the community who had 'disappeared', were seeking employment or had since found work elsewhere, bringing the percentage to 45.4%. Other reasons were based upon the personal traits and behaviour pattern of workers (15.2%); dissatisfaction with the project (12.1%); skills regarded as worthless in monetary or vocational terms (9.1%); lack of interest (9.1%) and of community support (6.1%) in facilitating training; and poorly trained workers (3.0%).

As such, while the level of confidence in existing capacity is generally high, the overwhelming perception amongst the sample population is that newly acquired skills will

be used for personal gain rather than for the further development of the community. This result would support the view expressed earlier, by Deverill (1994:17), that community confidence is gradually being eroded. Further, the impression gained is that a 'sense of community' has not been promoted throughout the scheme and further that "the community (is) not as united as its name implies" (ibid.:14).

5.5. Conclusion

The Masibambisane Water Project has proceeded, and largely completed, in the face of severe time and budgetary constraints, which have further been aggravated by the emergence of several unforseen problems, principally of a technical nature. Further, the project has proceeded within the context of an inadequate examination and appraisal of local dynamics and capacity. Should funding and time have been devoted to the production of a sound and extensive feasibility study, these problems may well have been militated against. However, such an exercise carries its own complications given that the funding agent, the Port-Natal Ebhodwe JSB, generally provide for financial support to construction and infrastructural projects but not to the completion of a feasibility study, even though the latter is required in securing a grant. Consequently, the study was completed within a short period of time with minimal funds being allocated to the conduct of extensive investigative work into both physical and social aspects of the area that have subsequently resulted in a significant, and essentially unnecessary, expense of time and money.

Further, the feasibility study failed to develop a clear implementation plan with considerations being given to viable alternatives and capacity limitations. Such an oversight has arguably drastic ramifications for both the delivery process and the ability to effectively manage that process. Moreover, in the absence of an investigation into existing organisational capacity, any confidence in the project being managed, planned and sustained as a community-driven initiative has to be questioned. The role that community organisations have played within the Masibambisane Water Project has evidently been severely constrained, from planning through to implementation, by a lack of foresight on the part of all key players, from the management committee to the funders. While a possible action, to assist the committee in devising a mechanism for gathering and recording service charges, is being mooted by Partners in Development and CSIR, should work have been done from the outset of the project to build the operating and administrative capacity of the committee and its sub-committees, 'emergency measures' presumably would not be necessary at this late stage.

The coordination of management functions has emerged as being poor, with the effect, at times, of being counter-productive. The size and complexity of the scheme, particularly as a community-driven endeavour, again highlights the need to ensure that the institutional capacity to manage and maintain the process as well as the product is developed within the community. Further, given the limited extent of follow-up support, principally through the weekly visits conducted by employees of Partners in Development, the presence of strong organisational and technical skills becomes critical. While technical capacity has been evidenced in practice, the organisational strength necessary to maintain the scheme is undermined by the inactivity of the sub-committees and the majority of members on the management committee. It is highly probable that the current management committee, responsible for the installation of the project, will be replaced by an 'operating and maintenance' management committee. While the same members may be reelected to office, it is essential that some form of training and initiation into ways in which the project may be sustained is ensured. Failing which, the sustainability of the project is severely threatened.

Finally, the extent to which skills that have been developed are transferred to additional members of the community is highly questionable based upon the consistently small size of the management committee and the apparent exodus of skilled workers to positions of employment elsewhere. Some antagonism towards this activity is understandably felt by the broader community and the project has arguably failed to contribute towards promoting both a sense of ownership of the process and cohesiveness within the community. Rather, it would appear, that community members have grown disillusioned and impatient in the face of a project that has demanded considerably more resources than anticipated.

Chapter Six

The Shemula Community Water Supply Scheme

6.1. Introduction

The Shemula Community Water Supply Scheme (SCWSS) is situated in northern KwaZulu-Natal (refer to Figure 1.1.), between the Lebombo Mountains of Swaziland in the north and the Pongola River in the east to as far as Tembe Elephant Park, and south of Ndumu Game Reserve. While, the scheme is proposed for extension, this chapter seeks to outline the initial regional scheme (refer to Figure 6.1.), with respect to its origins and scope, the management structure of the scheme, and the development approach adopted. The chapter culminates in an assessment of SCWSS, based upon various interviews conducted amongst key decision-makers and agents in the delivery and capacity building processes as well as amongst 61 members of the beneficiary communities.

6.1.1. The research process

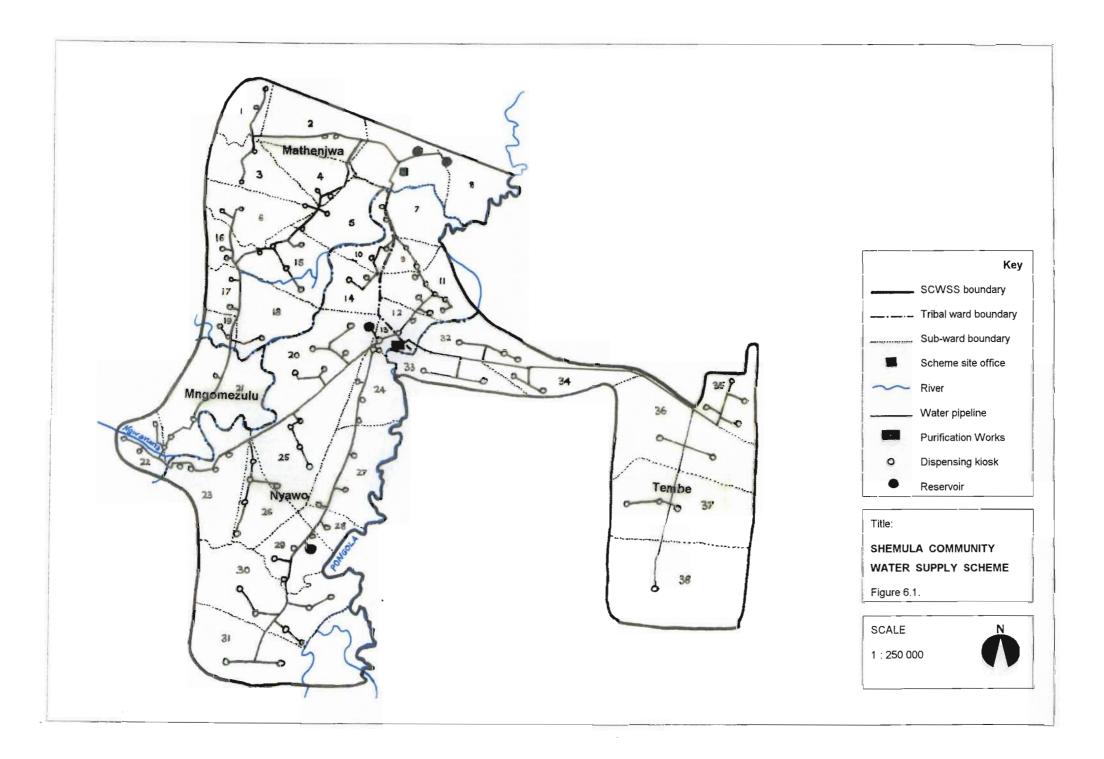
The primary research conducted on SCWSS, referred to above, principally includes the series of questionnaires completed over two days, between the 4th and 6th of November 1995, by four field-workers. This survey resulted in 61 completed questionnaires, amounting to between 0.9% and 1.4% of the total households in the area¹. The data gleaned from this research forms the bulk of this chapter and, unless otherwise stated, is that which is represented in the tables and figures below. While this survey forms the basis for the arguments and assessment of the project, the limited size of the sample population and several problems noted with respect to the research process, suggest that the results should be viewed critically.

6.1.1.1. Reliability of the survey data

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Several problems arose in seeking to complete the survey on SCWSS which resulted principally from time and transport constraints, as well as from communications difficulties. First, the process of establishing contact itself has a number of problems. The planned time for the conduct of the study fell overdue owing to the inability to contact the local project facilitator. While permission to proceed with the study had been secured from the Amanzi

Lower percentage is based upon the VARA (1989) figure of an average 6.7 persons per household for the entire Maputaland area (Appendix 3:29). However, this percentage may be slightly higher, on the basis of observations and research results, which places the average household size at 11 people.



Trust, and both the project manager and local facilitator had been aware of the intended study, the author remained unsuccessful in attempts to contact the project facilitator directly in order to confirm arrival, owing to communications difficulties. Consequently, the decision was made to travel to the project area to meet with the project facilitator personally and thereby make arrangements for conducting the study. Despite the fact that this path of action proved effective in terms of meeting with both the facilitator and local training officer, and thereafter organising for the employment of field-workers to conduct the interviews, it resulted in arrangements having to be made on very short notice.

Second, the selection and training of field-workers proved problematic for two principal reasons. First, the training officer, who chose to work as a field-worker and who selected one of the other field-workers, has been integrally involved in the capacity building process in the area and thus has a vested interest in seeing that the scheme, principally as related to institutional training, is assessed in a positive light. Further, the officer's influence over the field-workers' training was significant, where, in the process of running through the interview schedule, the ideal answer to each question pertaining to the water development committees and to the extent of community involvement in the scheme was repeatedly forwarded as being the 'correct' answer. While it was stressed throughout the training process that responses should be accurately recorded, in accordance with actual knowledge and perceptions, the degree to which the 'correct' answers were conveyed to, and noted as being stated by, respondents is unknown. In addition, the influence of the officer, with some authority and respect within the area, is likely to have extended into the field work, in that respondents may have felt obliged to highlight the positive aspects of the scheme and to give answers that were pleasing to the training officer.

Another problem relates to the sample, as it was applied in the field. Some areas proved inaccessible by a two-wheel drive vehicle and others were too far removed from the road to access by foot, given severe time constraints and the expanse of the scheme area. Consequently, the sample had to be adapted, resulting in the survey of households that were closer to fairly good roads.

6.2. The project area and its people

The following section seeks to set the context of the study through exploring the physical qualities of the area, together with various demographic characteristics of the resident

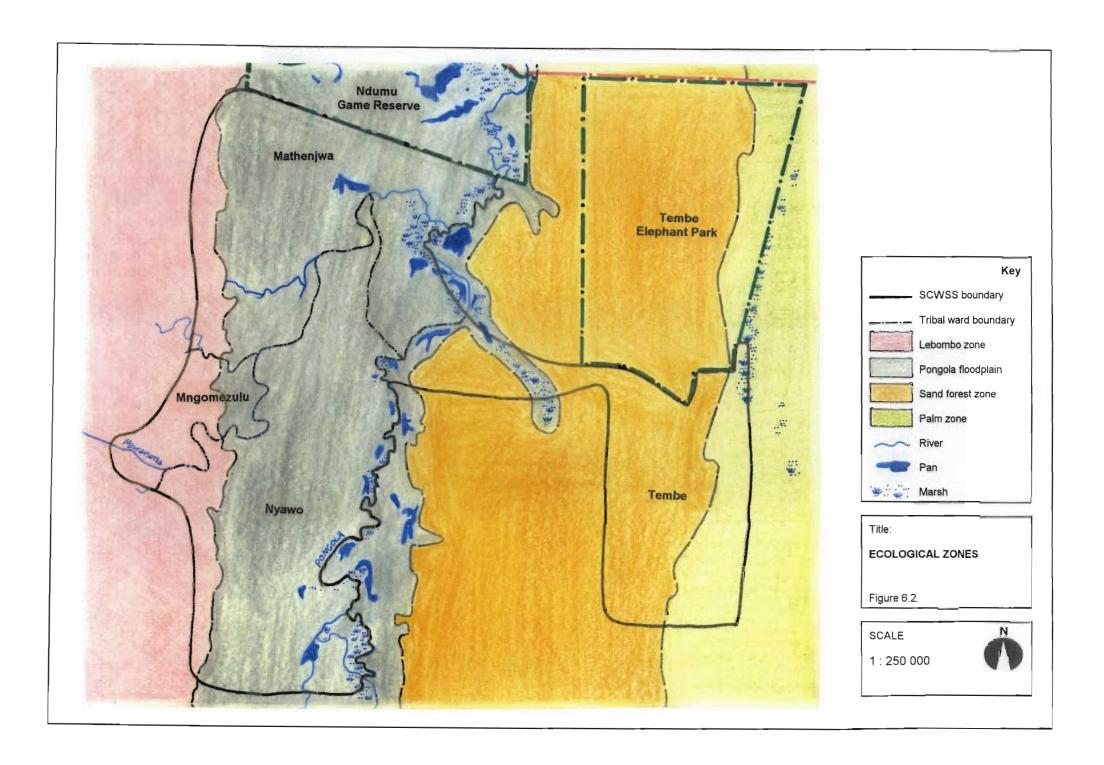
population, including: spatial organisation; patterns of employment; sources of income; and socio-economic conditions.

6.2.1. Description of the project area

The irregularly-shaped project area owes much to the history of the scheme, which was initiated prior to the 1994 national elections, and involves only that land which falls under the administrative responsibility of the former KwaZulu Government. Within this area, however, is a "corridor" of State Land which lies along the Pongola river and fell under the jurisdiction of the now defunct Department of Development Aid, the majority of which has been included within the scheme. (VARA 1989:13). The area lies within the Ngwavuma portion of Maputaland and extends to the four tribal authority wards of Mathenjwa, Nyawo, Tembe, and Mngomezulu and covers 38 tribal sub-wards, 37 of which are presently included in the scheme. (See Figure 6.1.; Appendix IV).

The scheme falls principally within the Pongola / Mkuze floodplain ecological zone extending into the Sand Forest zone, with some portions falling within the Lebombo and Palm zones (Refer to Figure 6.2.). The terrain is relatively flat and slopes gently, falling within an altitude range of 60 to 130 metres above sea level. Occasionally, the terrain becomes more difficult where steeper gradients may be found along river beds, and where, as one moves into the Lebombo zone, the terrain becomes more mountainous. However, the project extends minimally into this zone and brings the highest point of the scheme to an altitude of around 250 metres.

The area experiences marginal rainfall, with the mean annual precipitation of between 550 and 700mm. However, the area is home to abundant water resources, most notably the Pongola river, with its potential stored water reserve of 2 500 x 106 m³, and the Ngwavuma river. At the time of the field work, both these 'perennial' rivers were remarkably dry, to the extent that the Ngwavuma resembled a dirt road with occasional mud pans and where the Pongola represented a series of relatively small dams rather than a continuous river. Other water resources include numerous smaller, predominantly non-perennial, rivers traversing the western portion of the project area, as well as numerous perennial pans and marshes which extend from the Pongola river. (Refer to Figure 6.2.). While there are significant water resources located principally along the Pongola river, "the supply of water for domestic and agricultural purposes is probably the most important constraint to development" (VARA 1989: 38).

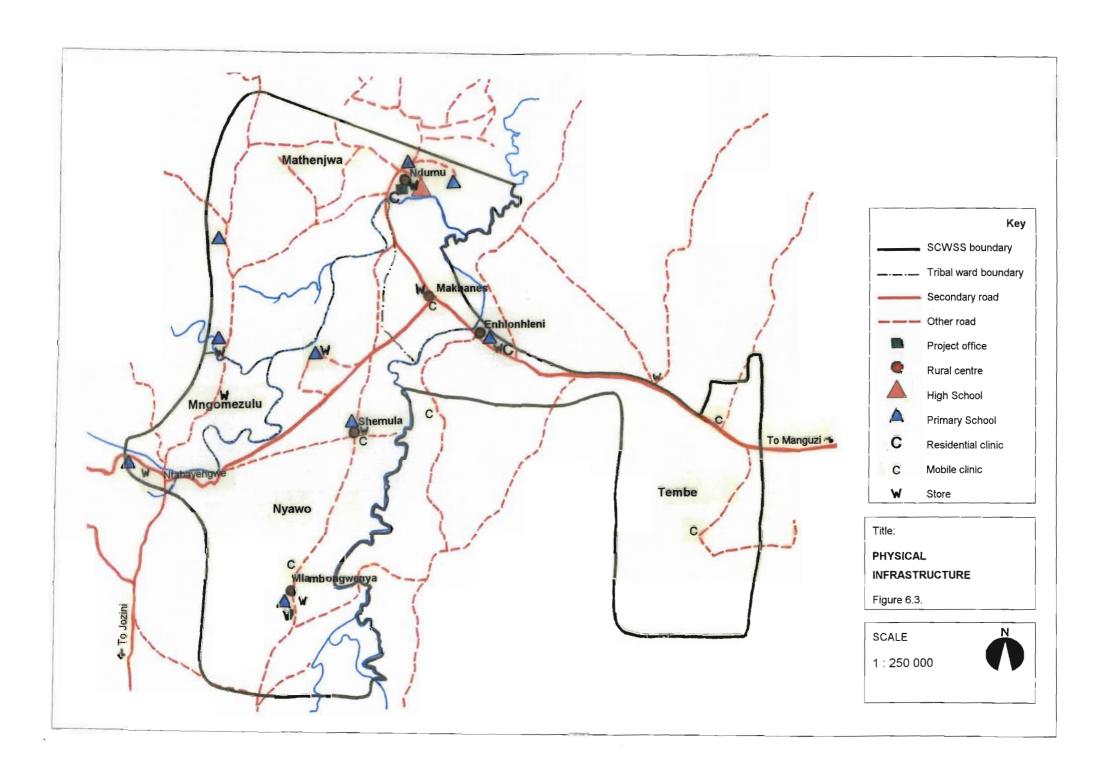


Agriculture potential for much of the area - that falling within the Pongola floodplain zone - is classified as 'very high', owing to the abundance of water resources, large areas of excellent soils on gentle topography. Beyond the Pongola floodplain, agricultural potential is low, particularly within the sand forest zone. (VARA 1989: Table 2.; Figure 8.). The predominant land use within the scheme area is that of concentrated subsistence agriculture, stretching south from the Ndumu Game Reserve within the floodplain zone beyond the project's southern border. (VARA 1989:Figure 17).

The scheme area is served by three inter-connected secondary roads, one of which is completely tarred and runs from Jozini north, to Ntabayengwe. The road from Ntabayengwe is tarred only to the north-east, to Manguzi, and remains as a graded road to the west, to Ngwavuma. The secondary road running from Ndumu to meet the Ntabayengwe-Manguzi road is a graded, though rocky, dirt road. This road is nonetheless described by residents as "the tar road". Other roads are variously comprised of several small, sandy or rocky tracks as well as a number of larger roads of the same quality. (Refer to Figure 6.3.).

The area is not served by electricity, although the prospect for this service seems likely within the longer term on the basis that both Ndumu Game Reserve and the scheme's water pump are served by electricity, and further, that members of the community have indicated that they expect this service within the next few years. The scheme area has an automatic telephone exchange, however the few lines that extend into the area are unreliable. This became painfully evident in attempting to contact the scheme site office, at Ndumu, which is supplied with a direct line.

Ndumu is one of the five centres within the scheme boundaries, and emerges as the most developed in terms of the number of activities present, including: a junior primary school; two primary schools; a high school; a residential clinic; a police station; a postal agency; general dealer; a large, covered informal trading station; Ithala bank; a service station; bottle store; tea room; church hall; workshop and an airstrip. Furthermore, Ndumu is situated just outside of the Ndumu Game Reserve, which serves to generate continued activity in this remote area. Mlambongwenya, is located in the southern portion of the scheme area and is developing as an elongated centre along one side of the road, with two general dealerships, a motorware store and a primary school. Shemula is located towards the centre of the scheme area, near to the pump station and purification works. Several



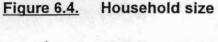
pre-fabricated scheme buildings are situated here together with a primary school and small trading store. Both Mlambongwenya and Shemula are served by a mobile clinic. Makanes is emerging as a significant centre, conceivably due to its location at the intersection of the main tarred road from Jozini and the graded road to Ndumu. Makanes has a post office, a brick-making enterprise, general dealer and a market area. Finally, Enhlonhleni is developing into a significant centre along both sides of the main tarred road. This centre appears to have attracted considerable investment, notably with respect to agriculture and is home to: a permaculture training centre; the offices of, and entry-point to, two Goldfields community garden schemes; a residential clinic; primary school; bottle store and general dealer. (Refer to Figure 6.3.). (VARA 1989: Figure 20; Table 14). The scheme area may be noted for several development initiatives taking place predominantly within the Ndumu area, including: two KFC-KNDA funded Farmer Development Association projects: the KFC-IDC funded Cashew Nut Development project; an IDT-funded Ndumu Caravan Park venture; a KFC-funded Banzi Pan Wilderness Safari Camp project; Zululand JSB-funded Ntshongwe-Malobeni Potable Water Scheme; and three educational projects funded by the Peace Foundation on extensions to Ndumu lower primary school and Ndumu high school, as well as to St Phillips primary school.

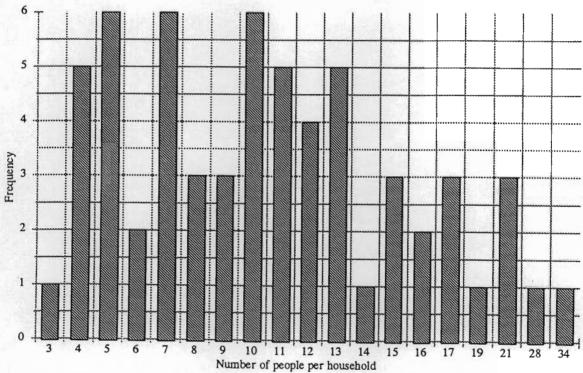
6.2.2. Population

The scheme area is characterised predominantly by dispersed settlements, most markedly so within those areas of low agriculture potential, being the mountainous area towards the west of the scheme and the flat, sandy area towards the east. The settlement pattern tends to become more concentrated along major transport routes and within the immediate surrounds of the Ndumu rural centre. However, households tend to be organised as clusters of smaller, predominantly 'traditional' huts, rather than within one larger, single structure.

The average population density for Ngwavuma is 27 people per km² (VARA 1989: Appendix 2 Table 1). The population density ranges from between 10 and 20 persons per km² in the eastern portion of the project area, to between 20 and 50 person per km² in the remaining areas, to the west. However, much of the project area falls within the upper population density estimate of between 40 and 50 persons per km². (VARA 1989: Figure 9). The estimated growth rate for the broader Ubombo / Ngwavuma region is 2.3%, with some 56.0% of the population falling below the age of 19 years (Ibid.:28-9). The growth rate for the scheme area is, however, expected to be somewhat higher than the 1985 estimate, at

around 2.65%, where the present population of 47 762 people is projected to increase to 70 904 by the year 2010. (KFC 1995:1). The VARA study conducted in 1988 placed the average household size at 6.7 people (Appendix 3:4), significantly lower than that figure obtained by the author which brings the average size closer to 11 (11.03) people per household (See Figure 6.4.). This dramatically different estimate may be as a result of different definitions of the household, where the author's study includes principally household 'clusters' rather than single houses, but probably owes more to the small sample upon which this study is based.





6.2.3.1. The sample population

Over the two day study, 61 interviews were conducted to include respondents between the age of 10 and 75 years. For the purposes of consistency between, and ultimately, the comparison of, the Mapumulo and Ngwavuma samples, three interviews have been excluded from much of the demographic and all of the scheme-related data, including two migrant workers and a respondent of 10 years. Of the 58 remaining respondents, 31 are male and 27 female, giving a sex ratio of 1:0.87 (See Table 6.1.). As such, women are underrepresented in the survey, when considering that they are responsible for currently collecting water from various, often distant, sources, and where women tend to outnumber men by one in every 100 people (VARA 1989:Table 3).

The majority (71.0%) of those interviewed had been born in the area, 2.0% had been there for more than 25 years, 10.0% from 15 to 25 years, 5.0% from 5 to 14 years, while 12.0% of the sample population had been in the area for less than 5 years. A breakdown of the sample by age reveals that 19.0% of respondents are 25 years and below, 11.0% are 60 years and older, while the balance (70.0%) falls between these outer age limits. Heads of households are perhaps over-represented in the sample, at 76.3%. Furthermore, female headed households form a small proportion of the total, at only 37.8% of all heads, and represent 28.8% of the total sample.

Table 6.1. Age by sex

Age Group	Male (%)	Female (%)	Total(%)		
15 - 19	2	0	2		
20 - 29	7	23	30		
30 - 39	19	9	28		
40 - 49	14	7	21		
50 - 59	5	3	8		
60 - 69	3	3	6		
70 - 79	3	2	5		
TOTAL	53	47	100 n = 58		

The sample population may be further analysed according to organisation by the four tribal wards of: Mathenjwa, Nyawo, Tembe, and Mngomezulu (refer to Table 6.2.). It should be noted, however, that each of these wards are variously subdivided into tribal sub-wards, and are of vastly different sizes. Mathenjwa and Nyawo incorporate the greatest number of subwards, at 17 (including Ndumu) and 13 respectively, while Tembe and Mngomezulu account for 6 and 2 sub-wards each (refer to Appendix IV). (Refer to Figure 6.1.). Owing to the large number of such sub-wards, and to the small sample population, the data is represented predominantly according to tribal ward. While this organisation is somewhat problematic due to the large expanse of area that each ward covers, it is potentially the most suitable variable against which to analyse data for several reasons. First, each ward falls within the jurisdiction of a particular tribal authority, and is further represented as such on the community umbrella organisation, the Amanzi Trust. In addition, respondents tend to identify themselves as belonging to a tribal ward, rather than to one of the sub-wards. Finally, while the wards tend to encompass a range of physical qualities, they may be

characterised according to a number of predominant geographic and agricultural features and in terms of the degree and level of service and infrastructural provision, which is discussed below. (Refer to Figures 6.2.; 6.8.).

As depicted in Table 6.2., below, the percentage sample population by ward is constituted as follows: Nyawo (40.0%), Mathenjwa (31.0%), Tembe (24.0%), and Mngomezulu (5.0%). This distribution corresponds fairly closely to the relative sizes of the respective wards (Refer to Figure 6.1.).

Table 6.2. Geographic distribution of sample by sex and age

		Nyawo		Mathenjwa		Mngomezulu		Tembe	
		Male	Female	Male	Female	Male	Female	Male	Female
	15 - 19			1					
	20 - 29	- 1	3	2	4		1	1	5
	30 - 39	7	3	_1	1			3	1
	40 - 49	4	2	1		1		2	2
	50 - 59		1	3	1				
	60 - 69			2	1	Di Maria	1		
	70+	1	1	1					
	TOTAL	13	10	11	7	1	2	6	8
and the second	%TOTAL		40		31		5	192	24

n = 58

Nyawo and Mathenjwa are conceivably the most developed wards, when considering the number and range of activities incorporated within their boundaries together with the degree of access possible by road. Each of these wards are home to two discernable rural centres, although Mathenjwa is the only ward with such services as a high school, police station, air strip, banking outlet and service station. In addition, Mathenjwa ward is notable by the presence of the KFC project office and is the only area with telephone and fax facilities at Ndumu. Finally, both Nyawo and Mathenjwa fall within the relatively flat, to gently undulating, floodplain zone, with high agriculture potential, which is particularly significant within the project area given the importance of farming for both subsistence and economic purposes.

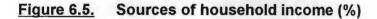
Tembe ward is situated below the Tembe Elephant Park, which offers a limited number of employment opportunities but does serve to generate activity within the area. However, the ward does not enjoy good access, with the exception of those areas closer to Nyawo and Matheniwa wards as well as those along the main tarred road. Much of the area falls within sand forest zone, with poor soils, few water sources and sparse vegetation. Further, the eastern portion of Tembe, characterised predominantly by widely dispersed settlements, is no longer served by a small dealership at Mpophomeni, since this enterprise has since stopped functioning. The notable exception to this generally grim portrayal of Tembe, is in the growing rural centre at Enhlonhleni, which has been discussed above (6.1.2.). Finally, the small Mngomezulu ward, located in the western portion of the scheme area, is characterised predominantly by relatively harsh terrain though generally good rainfall and considerable water resources. Access to the ward is possible by two wheel drive in dry weather conditions, although the roads are generally of a poor quality, particularly as one moves into the more mountainous and rocky areas. The ward is home to a general dealer and primary school within Njinjikazi, and is closest to the town of Ngwavuma, with both a hospital and high school. The ward falls principally within the Lebombo zone, with low agricultural potential, although it does contain a significant amount of livestock (cattle and goats).

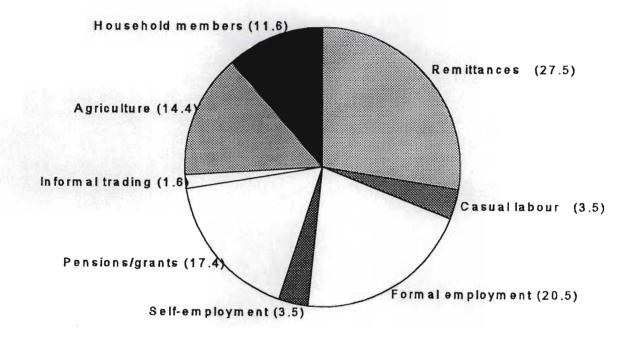
6.2.3. Employment patterns and household income

VARA (1989) conducted a study on the socio-economic characteristics of households in Ubombo and Ngwavuma in 1988, which serves as a broad guide against which to compare the results gained from the author's study. Agriculture is the predominant activity within Maputaland, where the majority of households plant crops and where some 32.0% of all households derive some income from crop sales. While agricultural production is recorded as falling short of household subsistence requirements, production levels are noted as being more than twice that of other rural areas in the former Transkei, Ciskei and Venda. (VARA 1989: Appendix 3:23). Amongst the economically active population (aged 20 to 65) of Maputaland, around 61.0% were not formally employed (ibid. Appendix 3: Table 9), and further only 30.0% of those with formal employment resided in the area (29). Within Ngwavuma, government pension and disability grant recipients account for just over 3.0% of the population (Appendix 12:26). The estimated per capita income for Maputaland in 1986/7 is R400.00 per annum (ibid. Appendix 12:33).

While 62.0% of households surveyed had at least one absent member (Appendix 3:4), VARA (1989:29) note that migrancy levels for Maputaland are relatively low by comparison

with other rural areas, with only 14.3% of the population being absent, predominantly working in Natal and Gauteng, at the time of their survey. The results obtained through the author's study correlate quite closely to those of VARA, where 64.0% of all households surveyed had at least one member that was employed elsewhere, and an average absentee ratio of 1.16 people per household. However, of the total enumerated sample population, only 9.4% were migrant labourers, although this percentage increases to 15.5% when considering only those people aged 16 to 65 years. Employment outside of the area was most commonly cited as being found in Gauteng, principally as mine workers, and within Natal.





While levels of migration within the scheme area are relatively low, remittances are the principal source of household income, at 27.5%. Other significant sources include local, waged labour (20.5%), pensions and disability grants (17.4%), income derived from the sale of one's own agricultural produce (14.0%) and unspecified economic support given by other household members (11.6%). Additional sources include income generated from: casual labour and intermittent employment (3.5%); self-employment (2.3%); sale of vegetables (1.2%); practice as a traditional healer (1.2%); through livestock (0.4%) and the operation of a 'spaza' shop (0.4%). Where one includes all forms of waged labour (migrant, permanent and temporary), the percentage contribution of wages as a source of household income accounts for some 51.5%. (See Figure 6.5.).

The dependency ratio is calculated as being 1: 2.85 or 64.9%² for the project area, slightly higher than the figure of 62.0%, suggested by VARA (1989), which is further noted as being consistent with that of other rural areas (Appendix 3:4). This dependency ratio is, however, considerably higher than expected given the low ranking of unemployment as a problem within the study area (refer to Table 6.3.; Figure 6.8.), which is discussed below (6.1.4.). In addition, personal communications with the project facilitator suggest that the level of poverty within the area is considerably lower than one might expect, based upon the general standard and quality of living, owing to a high and pervasive commitment to saving (Malwane, Interview 1995). This statement is given credence when observing the significant degree of building activities taking place within the area, in terms of housing construction as well as home extensions and improvements.

Of the 58 respondents resident within the scheme area, above the age of 16 years, only 2 were formally unemployed. However, this figure is misleading when considering that almost half (44.9%) of all dependents within the surveyed households were over the age of 16. Consequently, based upon this figure against the total enumerated sample population, formal unemployment may be closer to 31.0%, although this figure must be considered against the likelihood that a significant proportion of this percentage may be engaged in subsistence agriculture and domestic labour. The latter consideration is given force when noting that 50.0% of the respondents were engaged in subsistence agriculture, and 17.2% (37.0% of all female respondents) in unpaid domestic labour.

As defined by the KwaZulu-Natal White Paper on Agriculture (1995:11), a significant number of respondents are active as household food security farmers, and to a lesser extent as emergent commercial farmers. A significant feature amongst the sample population, relating to forms of occupation, is the high percentage respondents engaged in more than one activity, at 43.1%. What is particularly interesting, is that 40.0% of this category is made up by respondents who are formally employed. This finding may be interpreted in two principal ways. On the one hand, it may be as a basis for the argument that the area's population is relatively affluent. On the other, it may well be a survival strategy for rural households in an environment where there are limited employment opportunities, low levels of disposable income and high poverty. The latter view appears more probable given that subsistence agriculture is recorded by 88.0% of those respondents engaged in more than one activity. While this argument does not entirely

Number of dependents to total earners, including migrants.

invalidate the former, it does suggest that there may be a considerable degree of inequality within the study area.

When considering all activities engaged in, the most significant occupation is subsistence agriculture, where half of all respondents, 67.7% of all males and 29.6% of females, indicated that they spent time farming for household produce. Permanent formal occupations, including both waged labour and those respondents who ran their own businesses (shop owners), accounts for 29.3% of the sample's activities, including 41.9% of all males and 14.8% of females. A third of all women, and one man, fall within the category of 'unpaid domestic workers', amounting to 17.2% of the sample. Commercial farmers are equally prevalent (17.2%) among the sample, although men dominate within this field, at 22.6%, as opposed to 11.1% of women. 13.8% of the sample, 6.5% of men, and 22.2% of all women, are recipients of either a pension or disability grant. Women engaged in informal sector occupations (sewing and trading) and men engaged in animal husbandry represent 11.1% and 9.7% of the sample, by sex. 5.2% of the sample were studying, while unemployment and under-employment (intermittent or temporary labour) each accounted for 3.4% of the sample, although men dominated within these categories, at 9.7% against 3.7% of women. (Refer to Figure 6.6.).

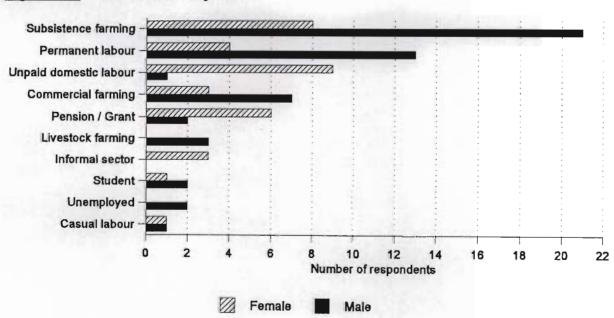


Figure 6.6. All activities by sex

In attempting to give an indication of the principal occupations within which the respondents are engaged, where they are active in more than one field, economically productive, rather than reproductive (i.e. subsistence agriculture and unpaid domestic labour), activities have

been given precedence, and in those cases where more than one productive activity is engaged in, they will be denoted as such.

The principal occupation of the respondents is waged, permanent labour at 25.9%. This figure increases to 29.3% when including those respondents active in both formal employment, as shop-keepers, and 'emergent commercial farmers'. Recipients of disability grants or pensions and respondents engaged in subsistence agriculture each account for 13.8%, while unpaid domestic labour and commercial farming account for 12.1% and 10.3%, respectively. Other categories of occupation indicated include: student (5.2%); temporary and intermittent employment (3.5%); livestock and commercial produce farming (3.5%); livestock (1.7%); unemployed (1.7%); small manufacturing (1.7%); selling vegetables (1.7%); and operating a 'spaza' shop (1.7%). (Refer to Figure 6.7.).

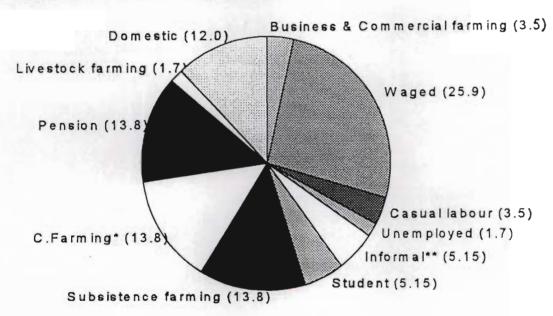


Figure 6.7. Principal occupation (%)

- Commercial produce and livestock farming
- " Informal trading and sewing

6.2.4. Access to services

One of the objectives of the primary research conducted amongst the communities was to get an indication of what major problems are experienced, in terms of access to services and facilities within the area (Refer to Appendix II: Q6). The perceived problems, which are graphically represented below (Figure 6.8.; Table 6.3.; Table 6.4.), indicate that there are some differences in perception across the variables of sex and household size, however,

the results are remarkable in their uniformity across the four wards. This consistency is considered unusual, since one of the sub-wards (Ndumu) within Mathenjwa is already serviced with tapped, chlorinated water and is home to both a high school and several primary schools, yet education and drinking water were commonly noted as being the most pressing problems by these residents. One explanation for this result might be that respondents identified problems relating to the broader tribal ward or even the entire scheme area, rather than those relating directly to themselves and their households. Another possibility is that, since the questionnaire pertains to a water scheme, responses may have been directed in concordance with the subject. That is, the problem of access to water may have been foremost in the respondents' mind and thus ranked first. Alternatively, responses may have been given which might have a direct impact upon the scheme - in terms of speed and cost of delivery, with the knowledge that the author's results would be presented to the umbrella organisation, the Amanzi Trust.

The results have been represented according to those problems regarded as being the most pressing (ranked by respondents as first and second), against the total range identified (see Table 6.3.). As noted above, differences in perceptions of problems are insignificant across the variable of locality, however, there are variations according to both sex and household size. As such, the perceived problems have been disaggregated by sex (Figure 6.8.), but have been further presented in terms of households with 10 or fewer members, against those with more than 10 members (Table 6.4.).

Water for drinking purposes is cited by all respondents as being among the most pressing problems that they experience in terms of access to services, while education was rated by more than half the sample (50.8%). Other pressing needs identified include: water for domestic purposes (23.0%) and farming (9.8%) purposes; fuel (9.8%); sanitation (4.9%); and health (1.7%). (Refer to Table 6.3.; Table 6.4.).

An interesting feature of the results, is the high degree of variation between problems listed as principal against the full range identified (Refer to Table 6.3.). This is notably the case with health, water for both farming and domestic purposes, transport, sports facilities and employment. Where water for domestic purposes ranks third amongst the most pressing needs, it drops to eleventh amongst the full range, while water for farming purposes similarly drops from fourth to tenth ranking. By contrast, health is ranked last among the most pressing needs, yet it is noted by 83.6% of respondents as being one the area's problems, placing it third.

Employment, while being cited by more than half of the respondents (54.1%) as a general problem within the area, does not feature among the most pressing concerns, which is an unexpected result. The remaining problems of transport and sports facilities, are all listed by more than half of the respondents, and while not indicated as being amongst the most pressing, they do fall within the top five identified problems that are experienced by the respondents in terms of access to services. (Refer to Table 6.3.;Table 6.4.; Figure 6.8.). These results are fairly consistent with the study conducted by Makanjee (1989:71), where almost half (46.4%) of the population live beyond five kilometres of a clinic and where "lack of transport and clean water supplies were identified as major common problems experienced in (Maputaland)".

<u>Table 6.3.</u> Problems perceived by respondents in ranked order

Range of	% of sample who perceived access as a:			
Problems identified	principal problem	general problem		
Drinking Water	100.0	100.0		
2. Education	50.8	93.4		
3. Health	1.7	83.6		
4. Transport	-	63.9		
5. Sports facilities	-	59.0		
6. Employment	<u>-</u>	54.1		
7. Fuel*	9.8	47.5		
8. Communications	-	45.9		
9. Sanitation	4.9	42.8		
10. Water for farming	9.8	34.4		
11. Water for domestic purposes	23.0	24.6		
12. Recreation facilities	-	24.6		
13. Shopping facilities	-	19.7		
14. Agriculture**	-	11.5		
15. Housing	-	8.2		
16. Self-sustainability	-	1.7		

Electricity; paraffin; wood

^{**} Land; extension services; technology; inputs

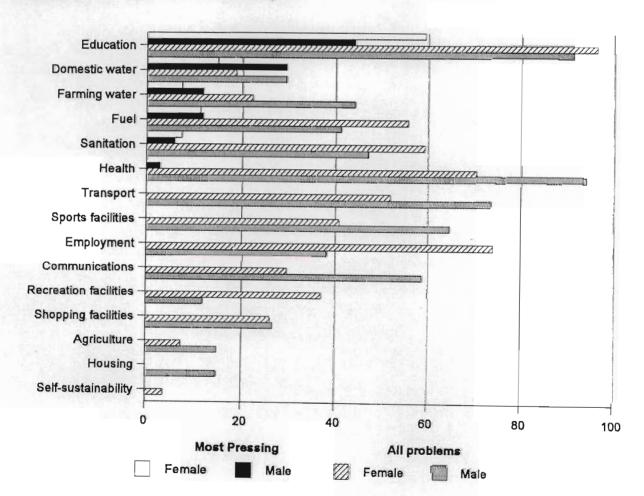
Perceptions of problems within the area vary significantly for household size, with respect to water for farming and domestic purposes, health and agriculture. (Refer to Table 6.4.). The fact that a greater percentage of the larger households note agriculture and its related services, including water, as an area of concern is understandable when considering the extent of subsistence farming within the scheme area, and hence the greater demand for sustained and substantial yields. The significantly higher ranking given by the larger households to water for domestic purposes, is also comprehensible on the basis that an increase in the number of people within a household would logically demand that a proportionately greater amount of water be used for such activities as washing, cooking and cleaning. The reason for the difference in perception as regards health, is not quite as apparent. One explanation might lie in that fact that 10.3% of all the larger households have a resident traditional healer.

Table 6.4. Problems identified by household size

	Range of Problems	Most Pressing Problems identified (%)			Problems identified in terms of access to services (%)		
	identified	≤ 10 member	>10 member	TOTAL	≤ 10 member	>10 member	TOTAL
1.	Drinking Water	100.0	100.0	100.0	100.0	100.0	100,0
2.	Education	50.0	51.7	50.8	90.6	96.6	93.4
3.	Domestic Water	15.6	31.0	23.0	15.6	34.5	24,6
4.	Farming Water	9.4	10.3	9.8	28.1	41.4	34.4
5.	Fuel	15.6	3.4	9.8	53.1	41.1	47.5
6.	Sanitation	3.1	6.9	4.9	40.6	44.8	42.6
7.	Health	3.1		1.7	90.6	75.9	83.6
8.	Transport	-		-	68.8	58.6	63.9
9.	Sports Facilities	- 1			56.3	62.1	59.0
10.	Employment	- 0.30			56.3	51.7	54.1
11.	Communication	- 1	-	1	50.0	41.4	45.9
12.	Recreation	- 10		-	25.0	24.1	24.6
13.	Shops	- 5	-	-	15.6	24.1	19.7
14.	Agriculture	-	-		3.1	20.7	11.5
15.	Housing	-	-	-	9.4	6.9	8.2
16.	Self-sustainability	-	-	44	0	3.4	1.7

When analysing the data against the variable of sex, the most significant difference in perception of the area's problems, is with respect to employment. Just short of three quarters (74.1%) of all women noted employment as a concern, as opposed to only 38.2% of men. This result is not altogether surprising, considering that significantly more men than women are employed or are active in commercial farming. In addition, while the sample does not accurately reflect the demographic composition of the area, women fall within the majority yet are severely underrepresented within the economically active population. VARA (1989 Appendix 3: 12) note that 85.4% of females within Maputaland, as opposed to 34.6% of males, are not engaged in wage labour. This situation is given expression by one of the female respondents to the author's survey, who expressed dissatisfaction with the manner in which the scheme is proceeding, noting that it would take time to solve the problems within the area since men are being employed while the area is composed mostly of women.

Figure 6.8. Problems identified by sex



All other problems noted as having a significant difference, with respect to perception by sex, with the exception of recreation facilities, have been identified by a considerably greater proportion of men than women. Communications is the most prominent in this respect, where more than half (58.8%) of all male respondents identified this as a problem, against only 29.6% female. Transport also features quite highly with respect to differences in perception, at 73.5% male as opposed to 51.9% female respondents. These differences may be due to the fact that men are more active within the formal and productive sectors, whereas women tend to dominate within the informal and reproductive sectors. Problems experienced in terms of access to, and lack of, recreation facilities is noted by 37.0% of female against 11.8% of male respondents, while sporting facilities are cited as a problem by 24.0% more men than women. Given that male respondents are more active within the agricultural sector, according to the author's survey, the higher percentage of men (44.1%) noting water for farming purposes as a problem is not surprising.

What is, once more, unexpected is the significant difference in the perception of access to health services as a problem, accounting for 94.1% of male, and only 70.4% of female, respondents. (Refer to Figure 6.8.). While a slightly higher percentage of pensioners and disability grant recipients are resident within the households of which male respondents are members, relative to female respondents, the difference is only 9.0% and thus does not entirely explain this significant variation in perception of access to health services as a problem. Finally, housing is noted by 14.7% of male respondents as a problem, whereas no women noted this, which might be due to a distinction in duties, where men might be responsible for the purchase of material and for construction and home improvements.

6.2.5. Community organisation

On being requested to indicate whether any groupings or organisations were active within their respective areas, a relatively high percentage of the sample (20.7%) responded in the negative, although 75.0% of these respondents were aware of the water scheme. Of the respondents that were aware of community groupings operating within the area, 32.6% were themselves involved and 26.1% had previously held, or were currently holding, office within at least one of these groupings.

The most frequently cited grouping, of the eleven identified, is religious (93.5%), while sports organisations were reported by 26.1% of the respondents. Other community bodies known to the sample include: sewing clubs (15.2%); development committees (13.0%);

women's groupings (10.9%); agricultural organisations (8.7%); youth (2.2%) and concert groups (2.2%); school (2.2%) and water development committees (2.2%). Once again, as in the Masibambisane study, political organisations do not feature at all. However, the area is noted as being IFP-dominated (Swart, Interview 1995) and membership to this party is evidenced by political t-shirts. A possible explanation for respondents omitting this form of organisation is that, while the area is predominantly IFP-affiliated, the water scheme is regarded as being an ANC-funded undertaking, which has generated some tension within the area (Swart: Interview 1995)

The majority of the sample population (84.5%) were aware of the scheme, while of the 15.5% of respondents with no knowledge of the water project, none is involved in any form of community organisation and further one third were older than 65 years. The breakdown, by locality, of those respondents that were unaware of the scheme is as follows: Nyawo (44.5%); Tembe (33.3%); and Mathenjwa (22.2%).

6.3. The project outlined

This section seeks to examine the historical development together with the scope of the Shemula Community Water Supply Scheme, as well as the manner in which the project is financed and managed, according to development principles and capacity building objectives. As such, the designed level and capacity of service provision is explored below, as are the structures put in place and developed throughout the scheme to facilitate and ultimately sustain the service. Unless otherwise stated, the facts conveyed within this section have been drawn from the KFC draft report of the SCWSS (1995:1-6).

6.3.1. History

The scheme essentially has its roots in the Ubombo / Ingwavuma Structure Plan completed by VARA in 1988, on request of the Department of Development Aid (DDA). This culminated in a 1991 KwaZulu Government White Paper for development in the region, as well as in the appointment of KwaZulu Finance and Investment Corporation (KFC) as the Project Facilitators, with the primary function of facilitating the implementation of projects in the area.

In 1989/90, the former KwaZulu Department of Agriculture and Forestry appointed KFC to conduct a Resource Development Plan in the four Tribal Areas of Mathenjwa, Mngomezulu, Nyawo and Siqakatha (KwaZulu land). The SCWSS "is the result of the identification of the

need for such a scheme from the KFC study and as a result of facilitation work conducted by the Project Facilitator on behalf of the communities involved and the supporting roleplayers" (KFC 1995:1), including Mhlatuze Water, KNDA and KDEA. The project facilitator, while being employed by KFC, is resident within the scheme area and has been established within the Ndumu Field Station for some two and a half years. Over this period, the facilitator has been responsible for consulting with the broader resident population, informing them of developments and plans for the area as well as attempting to stimulate the revival of community development committees. The social impact assessment conducted for the scheme was further headed by the facilitator.

A pilot scheme was implemented by the KwaZulu Department of Agriculture, KFC and Mhlatuze Water, to test the parameters of a regional water supply scheme in the Ndumu community. The pilot was funded by the KFC, in the form of a R115 000.00 loan, while Mhlatuze Water assisted in implementation and ultimately took on the responsibility of operating the scheme (Linscott 1995:17). The success of this pilot encouraged the pursuit of implementing the larger, RDP-approved and funded, regional scheme - SCWSS. Further, application is being made to the RDP fund to include the KFC loan within the broader scheme budget and hence reduce the pressure of higher loan repayments, at 15c per 25 litres, currently being placed upon the Ndumu community. While the potential for this bid being successful is rated as being low, alternative means of partly meeting KFC loan repayment are being sought out. Motivation for such endeavours is arguably high, given that tension and conflict may arise once the scheme is operational at a lower unit cost to the beneficiary communities of the larger RDP-funded SCWSS. Moreover, dissatisfaction and consequent negotiations at Ndumu have been reported to be taking place currently (Swart, Interview 1995), even though no water delivery is yet effected in the other sub-wards, which merely serves to highlight the probability of significant levels of tension arising.

Construction on the project began on the 6th of June 1995, with implementation falling within four distinct phases, each being completed by different construction contractors. Phase 1 includes the pipeline north of the purification works together with the high point storage reservoir, while Phase 2 is the purification plant itself. Phase 3 includes the line south of the plant as well as a balancing reservoir, and Phase 4 is the line which supplies the areas east of the Pongola river. (Refer to Figure 6.1.). While some delays were experienced in terms of Phase 2, all have since gotten underway.

The project is comprised further of two training programmes. The first is concerned with the development of necessary construction skills, or basic skills training, amongst those community members employed by the contractors. The funds for this training programme are drawn from the SCWSS budget and allocated to the contractors, who have, in turn, subcontracted to a training company, RDP Management Services. This programme is scheduled to continue through from July 1995 to September 1996. The second programme focuses upon institution building amongst the 37 elected water development committees based within each sub-ward. This training programme, which is facilitated by Edusew and funded by Mvula Trust, is comprised of three phases, the first of which, dealing with the formation of community committees, has been completed. The second phase is planned to start in January 1996, and deals with the subject of community awareness, while phase three covers the topic of administration. Each of the latter phases consists of several modules which seek to develop particular skills necessary both for the administration and maintenance of the scheme, as well as for the sustained operation of the committees. These training components of the project will be dealt with at greater length and depth later within this chapter (6.3.4.2.).

6.3.2. The scope of the project

The scheme comprises a low lift pumpstation on the Pongola River from where raw water is drawn to supply the purification works station, located on the left bank. Hereafter, water is carried into the reticulation system by means of high lift pumps. There will initially be 270 dispensing points, up to one kilometre each side of the 109 kilometre long main pipeline. Each of the latter dispensing points will consist of a four to five cubic metre tank, supplying a bank of four to five taps. The capacity of the scheme upon implementation will be 0.325 million litres per day, with a final capacity rating of 1.83 million litres per day, calculated on the basis of plant capacity being 31.77 litres per second over 16 hours per day including five percent plant losses. Water treatment will be done using modules of 300-500m³ per day, allowing for upgrading through installation of additional modules.

The Scheme aims at providing 108 dispensing points, or kiosks, within 200 metres of each household - although some users are expected to be further away. Each is to be operated by a water bailiff, appointed by the sub-ward water development committees, who will take responsibility for the collection of tokens from community members in exchange for 25 litres of water. The current local, resident population, around 48 000 people or 6 500 households, are based within 38 sub-wards spread over four tribal ward areas, however, the design consumption is 20 litres per capita per day for the design population of around

71 000 for the year 2010, giving the scheme ample capacity to meet present and immediate future water demands. The Ndumu pilot scheme, with 18 standpipes distributed throughout the sub-ward (Linscott 1995:17), showed actual consumption levels to be as low as two to five litres per day, although consumption levels are gradually increasing, such that the average most recently cited is at 15 litres per person per day (Swart, Interview 1995). The scheme, which is scheduled for completion in March 1997 and initially estimated to cost around R25.4 million, "is being implemented by regional water authority Mhlatuze Water, (and) is being paid for by the RDP fund, having been selected as one of the country's 12 presidential lead projects" (Jenkins 1995:4). The initial capital cost estimate translates into a unit reference cost, in terms of serviced 1995 population, of approximately R553.00 per person. However, the necessary capital costs presently estimated, have increased to around R28 million, presumably increasing the unit cost to around R609.00 per person. Nonetheless, the unit cost for the 25 litres of purified water dispensed at communal water points in exchange for coupons is expected to be lower than the 15c currently paid by the beneficiary community of the Ndumu pilot scheme.

6.3.3. Project management structure

The Shemula scheme has seen in the establishment of a sizeable and relatively complex four-tier management structure, where overall decision-making power and responsibility for ensuring the implementation and maintenance of the project lies with the Amanzi Trust, which is composed of both community representatives and service providers and key role-players. Direct facilitation and coordination of the scheme falls within the terms of reference of a subsidiary body of the Trust, the Project Steering Committee, while the latter has two sub-committees focussing upon the training and technical management components of the scheme. Finally, community structures have been elected within each of the sub-wards and are represented on the Trust. (Refer to Figure 6.9.). These structures will be briefly explored below.

6.3.3.1. The Community Water Development Committees

Development committees, with the aim of ascertaining and responding to the needs and interests of their constituencies, have been present within the area prior to the introduction of the scheme. Consequently, in early 1992, the KFC Project Facilitator, Andreas Malwane, who is a local resident of the Ndumu sub-ward, was initially tasked with the mandate of establishing whether each of the 38 sub-wards had an existing committee and further whether this committee, if in place, was active or, as was more commonly the case,

dormant. On the basis of this information, the facilitator, funded by the Department of Economic Affairs, worked within the project area for a period of two and a half years assisting communities in reviving dormant committees and in developing new, democratically elected water development committees with sufficient skills to sustain organisational activities, within each area.

The committees consist, on average, of seven members, including a chairperson and secretary, together with their respective deputies, a treasurer and two additional members. The treasurer is the only member to be renumerated for performing basic accounting services. The committee, at this juncture in the project, is principally responsible for regularly convening mass community meetings to gain direction from the community and to keep them updated with respect to the progress of the project and to decisions taken by the Trust. The chairperson and secretary carry the mandate of ensuring that monthly meeting are held with the community representatives that hold positions on the Amanzi Trust, both for the purpose of communicating needs and interests from their respective constituencies to the Trust, and for gathering information from the Trust and Project Steering Committee meetings.

The role of the committees within SCWSS is manifold, since they provide the mechanism through which community consultation is effected and further represent the sub-wards of the area, which have been employed within the scheme as the organising units for such activities as: mass community meetings and dissemination of information; the operation and maintenance of dispensing points; the payment of the water bailiff; the maintenance of reticulation pipes; the collection of coupons in exchange for water.

Committees undergo a fairly extensive, three phase, institutional training course, which seeks to equip the members with the skills to convene and conduct meetings as well as with basic organisational and administrative skills, such as keeping records, drawing up a constitution, setting goals and planning for their achievement, together with problem-solving skills. In addition, the training equips the committee with the necessary knowledge and details, pertaining to the scheme and their role within it, that will be indispensable to the operation of the project. The first phase of the training, in basic committee skills, has been completed. The success of this phase is being monitored by local trainers, where the effectiveness of the committees in convening a mass community meeting is established. While some of the sub-ward committees are noted as having have achieved such a meeting, this has not occurred throughout the area.

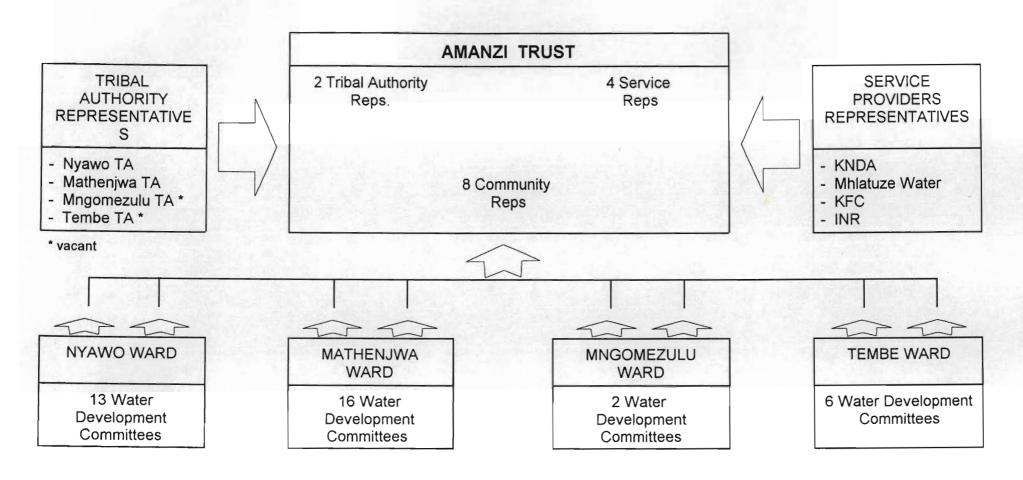
The role of the committees at this stage in the project is clearly of fundamental importance in seeking to ensure that the needs and aspirations of the communities are represented and that the flow of information is open. Nonetheless, the responsibilities of the committees, once the water project is operational throughout the area, will be substantially more exacting. The sustainability of the scheme, in terms of maintenance, operation and payment, rests quite squarely upon the shoulders of the water development committees at this point. However, given that trainers are located within the area and that the training agency, Edusew, has committed itself to remaining within the scheme area for several months into the running of the scheme, to assist the committees, the onerous task of ensuring the successful operation of the water service is somewhat relieved.

6.3.3.2. The Amanzi Trust

The community umbrella organisation, which meets on a monthly basis, was formed to act as a vehicle through which development projects can be initiated, planned and implemented is embodied as the Amanzi Trust. The Shemula scheme is one of the projects which fall under the responsibility of the Trust, while others noted include drought relief and sanitation programmes (Swart, Interview 1995). This legally constituted body is comprised of both community representatives and individuals from key role-player and service provider organisations, including: KFC as the founding 'member' and in its project management capacity; Mhlatuze water as the implementing agency; KNDA as the funders of the pilot scheme at Ndumu; and the INR, based on their expertise and general involvement in community projects within the area. The Trust is chaired by a community representative, Mr M.Z. Tembe.

The sub-ward water development committees elected two community representatives from each of the four wards. These trustees are responsible for reporting back to, as well as representing, the community as facilitated through the regular, monthly meetings with the chairperson and secretary of the development committee. In addition to these eight community members who sit on the Trust, four places are open for tribal authority representatives. However, only the tribal wards of Nyawo and Mathenjwa have filled these positions, while those of Tembe and Mngomezulu remain vacant since the tribal authority structures here maintain that they are adequately represented by the elected community trustees from their respective wards. (Swart, Interview 1995).

Figure 6.9. The Amanzi Trust



Source: KFC (1995: 7)

The Amanzi Trust has been responsible for securing RDP funds for the project and further, for successfully applying to the Mvula Trust for funding the institutional training component of the scheme. Further, the Amanzi Trust, as the ultimate body regarded as representing the community, is responsible for approving the appointment of the consulting engineers on the scheme, the implementing agents (Mhlatuze Water) and both the project manager and facilitators (KFC). As noted by Swart (Interview 1995), the Amanzi Trust is the sole decision-making entity. Consequently, the role of the sub-ward water development committees in adequately representing the interests of, and disseminating information to, their constituencies becomes of critical importance in ensuring that both the process embarked upon in implementing the project, as well as the end-product of the scheme, are in-keeping with the communities' expectations and needs.

Some apprehension has been expressed with respect to the constitution of the community umbrella organisation as a trust. Such concerns are founded given that a trust is essentially a permanent, legal body comprised of individuals. As a trust it is quite distinct from a representative structure, since it has considerable autonomy and power, and further, the position of its trustees tend to be stable. Consequently, it is not an organisation that is structured to be accountable. The reason for establishing the policy-level body as a legal one, is apparently that KFC, which was initially going to fund the Shemula scheme, only makes grants to legally-constituted structures where development committees are not yet regarded as such (Swart, Interview 1995). Nonetheless, the central role of the elected community structures is again highlighted, where the challenge might arise to ensure transparency and accountability on the part of the trust. Failing which, the risk of high levels of discontent coupled with that of isolating the communities and effectively threatening the sustainability of the scheme is marked.

6.3.3.3. The Project Steering Committee

All RDP projects are characterised as having steering committees, and the Shemula scheme is no exception. The Amanzi Trust Project Steering Committee (PSC) was established to focus directly upon the task of directing the implementation of SCWSS and essentially operates as the executive arm of the Trust (Bosch, Interview 1995). It meets on a monthly basis, usually within the latter part of the same day of the Amanzi Trust meetings, and is chaired by Mr M.Z. Tembe, who occupies the same position within the Trust. Members of the PSC include the trustees and KFC project manager and / or facilitator, together with representatives from Mhlatuze Water, the Department of Water Affairs and Forestry, and the RDP office.

The PSC is responsible for dealing with practical issues, for receiving and processing progress reports from the contractors and trainers, as well as employment and training agreements, and for making decisions with respect to these activities. Although final decision-making power resides with the Amanzi Trust. The committee assumes responsibility for discussing such matters as water tariffs, fund applications, contractual appointments, disputes and further functions to weigh progress against budgetary constraints, such that the project may remain within time and funding parameters, as far as possible. While the PSC essentially drives the process, its sub-committees similarly fill that role with respect to the training and technical management components of the scheme. Each of these sub-committees, which meet at least once per month, are dealt with briefly below.

6.3.3.3.1. The Technical Management Sub-Committee

The Technical Management Sub-committee (TMC), is directed in its activities by the PSC, and was formed to deal with the technical aspects of project implementation. It is chaired by the KFC Project Manager, Gary Swart, and is comprised of representatives from the Department of Water Affairs and Forestry, the Amanzi Trust, Mhlatuze Water and from the principal consulting engineers (Campbell, DeKorte, Thorburn, DuToit and Prinsloo).

The TMC effectively relieves some of the coordinating and management responsibilities placed upon the PSC, in attempting to coordinate and direct the implementation of this rather complex and manifestly expansive water delivery scheme. Meetings, noted for lasting the entire day, deal with those issues raised in connection with the contractual work performed by the engineers, labour-based concerns and employment agreements, and further with such community issues relating to technical aspects, such as purification and the suitability of selected options for the location of dispensing points. (Swart, Interview 1995).

6.3.3.3.2. The Training Sub-Committee

As with the TMC, the Training Sub-committee (TSC) is chaired by the KFC Project Manager. Its membership further includes the KFC Project Facilitator together with representatives from the Amanzi Trust, Edusew and Mvula Trust. The responsibility of the TSC is devoted principally to monitoring and facilitating progress made with respect to institutional training, as well as to dealing with claims submitted to the training funding agency, Mvula trust.

The TSC appears to play a less active, if limited, role in terms of gauging the progress made within the basic skills training programme (BSTP). However, the latter training component of the scheme was only initiated some six months after that of institutional training, which may contribute to the impression gained from minutes that the BSTP has not been highly prioritised by the TSC. Further, it would appear likely that basic skills training is dealt with at TMC meetings, given that the consulting engineers are represented here and that other issues relating to labour and construction fall within the ambit of the technical committee.

6.3.3.4. The Mvula Trust

The Mvula Trust was founded in June 1993 by the Development Bank, the IDT and the Kagiso Trust, who "made R150m available for Mvula's sole aim: financial assistance for community water supply projects. More than 400 communities have already applied for support and 27 projects are running" (Financial Mail August 1994:46). It is a national organisation which further offers funding for the implementation of community sanitation projects and for related training (RCF 1995:51). The Trust usually grants such support to smaller projects, and further provides funding directly to the community, rather than to a body, such as a trust, which is comprised of various individuals that are not necessarily elected to their position by the community. Nonetheless, it agreed to grant funds for SCWSS capacity building and training amounting to R0.5 million, consequent upon a long series of negotiations principally with KFC. At one stage, prior to the decision made by the Department of Water Affairs regarding SCWSS as an RDP lead project, the possibility existed that Mvula Trust would fund the entire Shemula Project. (Dyer, Interview 1995).

The role of Mvula Trust within the Shemula scheme is surprisingly limited, where it is represented only within the TSC even though it is fulfilling a vital and significant funding role within the scheme, particularly when considering that much of the training is geared towards ensuring the sustainability of the project once water delivery has been operationalised. Furthermore, the Mvula Trust is grounded within rural and peri-urban water and sanitation projects and has experience and expertise which could be invaluable to the long-term success of the scheme. Nonetheless, the Trust is not directly involved in the water scheme, but the institutional training component thereof and further, contractual relations exist between Mvula and Amanzi Trust, and between Amanzi Trust and Edusew, implying that the funding organisation has relatively limited or, at least, indirect, influence even over the training component of the scheme.

The principal concerns of the Mvula Trust relate to the suitability and effectiveness of that training. Consequently, the Trust has employed a Durban-based capacity building organisation, Zimele Nawe, to input into, as well as assess the institutional training programme. In addition, Zimele Nawe is to play a role in attempting to initiate a process whereby everyone can agree that some mechanism for monitoring is necessary, and further decide upon a manner in which this monitoring may proceed without massively increasing the work-loads of all parties concerned. Essentially, Zimele Nawe's mandate is to explore ways in which relationships between the training provider, the community umbrella organisation and the funding agency may be strengthened, such that all three key players are satisfied with both the process and outcome of the training.

6.3.4. The development process

The KwaZulu Government, through its initiating role in prompting the formulation of a structure plan for the area, essentially set the tone for future development in the region by formulating the goal of timeously fulfilling the basic needs of the region's populace as well as promoting sustained development in the longer term. The objectives set out for achieving this goal included the involvement of local leadership and agents active in the area. (VARA 1989:1). Consequently, while the process has essentially been initiated from outside of community structures, attempts have been made, from the planning stage, to involve the people who will ultimately be affected by development programmes for the region.

The Shemula scheme, which covers an expansive and relatively flat area, was essentially put into effect through the efforts of KFC. The SCWSS is largely typical of RDP projects, in terms of its management structure and its primary goals and objectives, particularly with respect to capacity building. Further, the objectives, together with the principles guiding the project are clearly stipulated within the SCWSS RDP Business Report, and will be explored below. An interesting feature of this scheme, which makes it somewhat different from the 'typical RDP project', is the fact that it has not arisen as a direct result of community demand for the service. The KFC Project Manager, however, states that the pilot project at Ndumu did in fact correspond with an earlier application made by that community for water, and that the regional scheme is effectively a continuation from that project (Swart, Interview 1995).

6.3.4.1. Development goals

The Shemula scheme principally seeks to supply 20 litres of safe drinking water per capita per day to satisfy this basic need amongst the resident communities of the project area. The capacity of the scheme is designed to meet the basic needs of the projected population for the year 2010, of 70 904 people (KFC 1995:1) Further, the manner in which the project is to be implemented, in terms of labour-based construction, seeks to create job opportunities amongst members of the beneficiary communities. (Swart, Interview 1995). The scheme is further desired to be implemented and operational with as short a period of time as possible, evidenced in the contracting of four consulting engineers in the construction of the delivery system. As such, one of the principles is ostensibly 'fast-track delivery', which is congruent with the aforementioned goal furnished within the KwaZulu Government-initiated Structure Plan.

A considerably more complex and qualitative (as opposed to technical) objective stated within the Scheme's Business Report, is to "obtain and maintain full participation of community served" (quoted by Swart, Interview 1995). In seeking to meet this objective, significant levels of commitment and activity on the part of the project facilitators, trainers and, particularly, the development committees within the area will need to be sustained effectively. Further, such sustained dedication will, in turn, demand that, from the policy-making level of the Amanzi Trust down to the water development committees and their respective communities, communication remains open and responsive.

Finally, the scheme aims to secure the approval of a practical system through which payment for water may be made by each consumer for each litre used. This objective is in the process of being negotiated, with respect to the unit cost and points of sale of the coupons. Clearly, however, this objective necessitates considerably more than the establishment of a physical structure and a mechanism for payment. The role of water development committees in the process is crucial, since they are responsible for employing water bailiffs to operate and maintain the system as well as for recording and managing finances.

6.3.4.2. Capacity building objectives

In the process of implementing the scheme, technical and administrative skills have been identified as being both necessary and desirable, principally for the project's success and sustainability. Those goals and objectives, stated within the SCWSS business report, which

fall within the ambit of the capacity building, revolve primarily around the establishment and training of committees, as well as the transfer of specific skills to individuals. The ultimate objective, with respect to capacity building, is arguably that the community be equipped to operate and maintain the project.

Two distinct training programmes are being run within the area. The first being institutional training, which is coordinated by an 'external agent', and facilitated by local people who have been equipped with training skills. Second, a basic skills training programme, which falls under the responsibility of each of the four consulting engineers, is being run largely by agents from within these firms, with the exception of one consultancy which has subcontracted to RDP Management Services, a private training company. Capacity building, within the ambit of the scheme, is essentially directed at ensuring sustainability, and translates, in practice, into the transfer of technical as well as organisational skills.

The 37 water development committees, elected to represent their respective sub-wards, have undergone the first of three phases in the institutional training programme that has been developed by Edusew, given approval by the Amanzi Trust. While a significant proportion of the training programme deals expressly with the scheme, the committee are also undergoing a course that seek to equip them with transferrable organisational and leadership skills. The programme further extends, within Phase 2, to include the training of water bailiffs and a role-play workshop within each sub-ward aimed at informing communities both of various particulars of the scheme (the unit cost of water, the extent of the SCWSS) and of operational details.

Edusew has also been involved in conducting workshops with trustees to cover such skills as reading graphs and understanding cash flows and progress reports. Such activities coincide with the project objective of training the Amanzi Trust to empower trustees to fulfil their role in making decisions, problem-solving and in coordinating the project. However, such workshops are not held regularly, nor with the full attendance of trustees. Rather, it appears that the personal growth and empowerment of trustees is being effected through experiential learning, whereby they have been immersed within a decision-making body operating essentially at the level of policy formulation, and have acquired leadership and other organisational skills (Swart, Interview 1995).

In terms of basic skills training, part of the contractors brief, for which they are allocated a grant, is to ensure that community members employed in the construction of the scheme are proficient with such skills as pipe-laying, bedding, trenching and pipe connections. The training of such technical skills is manifestly indispensable to the continued operation of the service and further is effective in equipping workers with transferrable, vocational skills.

6.4. Project assessment

The following section is devoted to an examination of the relative strengths and weaknesses of the development process underway in Ngwavuma. As in Chapter Five, the project is assessed against the key concepts of the author's theses that effective management of the delivery process would enable capacity building to proceed apace. Since the format of the previous chapter is largely adhered to, the definitions and components of such key concepts are not reiterated. The reader is requested to refer to Chapter Three for a fuller explication of the author's understanding and analysis of such concepts.

6.4.1. Effective management of the delivery process

This section is devoted to exploring the functions and coordination of project management, and whether the scheme is proceeding within the time and budgetary constraints that have been established at the planning stage. Further, the extent to which the project is both grounded in an understanding of local dynamics and needs, and designed to meet those needs, is examined against the question of sustainability. In this respect, the question of project operation and maintenance is also explored.

6.4.1.1. Management and coordination

The Shemula scheme is directed through a relatively complex set of institutional arrangements, which have been outlined above (6.3.3.). This arrangement is perhaps necessary owing to the extent of the project in terms of both area covered and the number of people to be served. However, one needs to seriously consider means of securing the effective coordination of activities and the maintenance of open lines of communication across all levels, in a project of this size.

The project has been described as 'blessed' on the basis of the perceived sense of cohesion between the communities, their respective committees and the agents involved in construction and implementation (Barkhuysen, Interview 1995). The scheme is noted as

being one of the most successful RDP Presidential Lead Projects and, while not being without difficulties, as being an unproblematic and smooth running project (Swart; Bosch, Interviews 1995). While the budget has been increased and the planned completion date extended, SCWSS is anticipated to fall within these resource constraints, and is, in some cases, ahead of schedule (Bosch, Interview 1995). What is perhaps the most pressing concern, is whether the various aspects of the scheme will be adequately integrated to allow for the completion of a sustainable community project.

The roles and responsibilities of the various structures within the project are evidently well defined, which effectively reduces the burden, of having to coordinate and monitor progress, placed primarily upon the central, umbrella body, the Amanzi Trust. Several agents take responsibility for ensuring that there is some continuity between the various structures by holding office within each. The project manager is noted for sitting on all committees, while trustees are present within the PSC, the TMC and TSC. Further, the majority of the trustees, ten of the fourteen, are community members, eight of whom have been elected to the Amanzi Trust by the water development committees while the remaining two have been appointed by their respective tribal authority structures. However, it should be noted that the latter arrangement provides the only significant link between the policy level, decision-making structures and the sub-ward community committees. This is somewhat strengthened by the role played by the project facilitator, from the Ndumu field base, in maintaining contact with, and being available to, members of the community. Further, the facilitator played a fundamental role in seeking both to prepare the ground for the project's implementation through the establishment of community committees and to set the context for the implementing agents through conducting research together with a social impact assessment prior to planning and design of the project.

The degree of coordination between the community committees, on the ground, and the decision-making structures is debateable. It is apparent that development committees are not yet in full operation, further, monthly meetings are not being convened in all sub-wards, thus the degree of community involvement in both the planning and implementation stages of the project is arguably limited. In addition, the extent to which the decision-making structures are operating autonomously needs to be assessed. Expressed concerns have been earlier noted with respect to the constitution of the community umbrella organisation as a trust (6.3.3.2.). However, a further concern is that the link between the latter and the development committees is a tenuous one, which could have implications for the manner in

which the process is directed. That is, the extent to which the project is implemented in accordance with the needs and expectations of the community, rather than being a combination of developer driven and top-down development, needs to be monitored and mitigated against. Further motivation for the latter exercise is based upon the fact that the Trust is composed entirely of men, whereas women constitute the majority within the area and are conceivably worst affected by problems associated with water.

The concerns expressed above appear somewhat founded on the basis of results from the author's study. 55.1% of respondents indicated that their representatives attended meetings with other project workers, principally in gaining feedback from, as well as participating in, the Amanzi Trust. While this percentage constitutes the majority of the sample it is significantly lower than what might be considered desirable, particularly when noting that 32.7% of respondents stated that their representatives do not attend any such meetings and the remaining 12.2% are unsure.

The size and scope of the project represents an awesome management and delivery task. Should the decision-making structures act autonomously of community involvement and / or ongoing consultation, by relying upon the continued respresentivity and accountability of community trustees while only calling upon development committees in the operation and maintenance of the system, the scheme may well be running the risk of delivering a service which is not necessarily congruous with the interests and needs of the community and which is thus further threatened in terms of sustainability.

Having expressed these concerns, the success of the scheme, to date, in managing to proceed in fulfilling the objective of labour-based construction with minimal delays is highly laudable. This is particularly so when considering that wage disputes and stoppages have arisen in implementation and have been resolved, through negotiation, to the satisfaction of both contractors and labourers. It should further be noted that selection of workers is not entirely at the liberty of the contractors, but is facilitated by the community structures, the water development committees. Finally, the scheme is proceeding within clearly defined phases of implementation, essentially running concurrently under the supervision of four different engineering consultancies. The division of the scheme into several contracts seems well founded, since an attempt at implementation by one agent throughout the expansive scheme area would decidedly run the risk of being unmanageable.

6.4.1.2. Understanding of the context

The scheme has evidently proceeded from a sound understanding of local conditions and dynamics, given that the KFC Project Facilitator spent more than two years travelling within the project area, gathering and disseminating information relating to the water scheme and assisting in the establishment of representative community committees. The facilitator's work within the communities constituted the social impact assessment for the project, while the research conducted by VARA (1989) in the formulation of the *Ngwavuma / Ubombo Structure Plan*, and that conducted by the KFC in 1989/90 in producing a Resource Development Plan, both augmented the social and demographic knowledge gleaned through the work of the facilitator and constituted the geographic and infrastructural investigation into the area.

The entire sample indicated that they perceived the project workers to have a sound knowledge of local conditions and problems, with respect to the trainers (69.4%), the development committees (51.0%) and the facilitator (22.4%). However, the high percentage of respondents noting trainers is considered inaccurate on the basis that those of the sample who were interviewed by the training officer and the field worker that the officer selected account for 88.9%. The results obtained by the remaining two field workers indicate that a significantly lower percentage (30.8%) of the sample population believed trainers to have a sound understanding of the area, its characteristics and local problems.

Reasons most commonly forwarded in support of expressed views included that: trainers had identified the need to train people on the scheme and the use of water (42.9%); committee members were local people who understood the needs and problems of the people (20.4%) and further knew the whole area (12.2%). Other reasons given were that: the project workers, particularly the committee, worked with and knew the community (8.2%); the facilitators worked with the committee (8.2%); and that the committee members were available or approachable (4.1%). Further reasons were that the development of committee members was evident (2.0%) and that they had been trained (2.0%).

On respondents being asked whether the believed that the project workers understood their needs, the majority (85.7%) responded positively. Further, this percentage remained relatively stable on respondents being asked whether they thought that their needs would be met, dropping slightly to 81.6%. Only 4.1% of the sample indicated that project workers do not know what the community's needs are and that their needs would not be met,

respectively. The remaining 10.2% and 14.3% of the sample stated that they were unsure of the extent of knowledge of community needs and the capacity to meet these, respectively.

In response to the question of whether respondents knew how to contact project workers, only 55.1% responded positively. However a significantly higher percentage (81.6%) indicated that they would like to establish contact with project workers. Reasons noted are that they would like information on the project, and specifically, on when water would be supplied (10.0%) and would further like to know where to locate people if problems emerged that would need to be addressed, as part of the project workers' responsibilities (10.0%). Other respondents that were unaware of how to meet with project workers indicated that they relied upon meetings for contact (5.0%). However, 17.5% of respondents noted that project workers were too far away from their households to be contacted. Reasons noted for approachability include that: committee members' residences are known and accessible (27.5%); meetings can be convened by the committee (25.0%); and that the project office is accessible (5.0%).

5.4.1.3. Project operation and maintenance

The SCWSS is to culminate in the establishment of a sizeable infrastructural system to pump purified water across the expanse of the project area. Three agents are involved in the operation and maintenance of the system, in accordance with ownership. The purification works and main bulk reservoir is owned by Mhlatuze Water, while the bulk water mainlines fall under the ownership and responsibility of Amanzi Trust. The smaller reticulation system falls within the jurisdiction of the communities within the respective subwards. Responsibility is evidently distributed such that pressure placed upon the capacity of individual communities to maintain and operate the system is significantly relieved.

Mhlatuze Water, while not being historically associated with rural development initiatives, is recognised as a strong organisation with sufficient resources and capacity to ensure that the bulk water works is maintained and functional (Dyer, Interview 1995). The Amanzi Trust will assume responsibility not only for operation and maintenance of bulk lines but for the purchase of water from Mhlatuze Water, the collection of money from communities served, and for the overall operations management of the scheme. The individual communities, represented by the water development committees, will further take responsibility for the collection of coupons in exchange at each dispensing point in the sub-ward, the

employment of water bailiffs in the operation and maintenance of these standpipes, and for the purchase of water from Amanzi Trust. (KFC 1995:3). This system of ensuring maintenance and ongoing operation of the scheme is relatively complex and, to an extent, bureaucratic. Whether communities and the Trust will succeed in sustaining their activities, particularly as related to cost recovery, emerges as a concern when considering that sufficient demand needs to exist within the respective sub-wards to ensure that the water and related maintenance and installation costs, as well as the salary of the bailiff, are paid on a monthly basis. The first few months of the projects operation will, in all likelihood, prove to be the most exacting in this respect, based upon the experience within Ndumu, where initial consumption was significantly lower than expected and has only recently been noted for approaching the design level of daily per capita water consumption.

The technical maintenance of all bulk supply and storage systems falls under the responsibility of external agents, or engineers, while basic skills training is designed to equip members of the beneficiary community with the capacity to conduct repairs upon the reticulation system and ensure the general upkeep of the system. While ownership, in itself, is a significant consideration when exploring project maintenance, the question of whether communities have sufficient capacity to maintain their respective systems can only be fully examined upon the project's completion and operation in 1997. Consequently, such an appraisal is beyond the scope of this study. However, the extent to which the community is confident that training, both in basic technical skills and in the administration of the water supply, will equip its members with sufficient capacity may be examined, to a degree. While this will be explored below (6.4.2.1.), suffice to say, at this point, that the overwhelming majority (91.8%) of respondents conveyed their confidence in the ability of community members and, in the case of bulk systems, external agents, to ensure that any problems with the water supply system are adequately dealt with.

The unit cost of water (25 litres) has not yet been established within the scheme area, such that the predominant response (87.8%), of 'unknown', given by respondents to this question of charges, is expected. The majority (97.9%) did, however, recognise that they would be charged for the water service. 6.1% of the sample, all residents within Nyawo ward, stated that the cost would be set at 15c per litre. From whence this extraordinarily high charge comes is not known. Further responses from residents of the Nyawo ward include that no water source would be established within the sub-ward of Khwambuzi (4.1%) and, according to one Shemula sub-ward resident, that the service would be free of charge. In

addition, one Bhekula sub-ward resident (Tembe ward) noted that no local source would be established, while the majority of respondents (93.9%) stated that a source would be installed within their respective sub-wards.

On being requested to state how close the dispensing point would be from the household of the respective respondents, the most commonly cited distance was that it would be within 200m (61.7%). Other noted distances were as follows: less than 500m (17.0%); up to a kilometre (4.3%); up to two kilometres (10.6%); and more than two kilometres (6.4%). As an RDP project, however, the general requirement is that standpipes in rural areas be within 200m of all households (ANC 1994:29). While the implementing agents of the SCWSS have recognised that this requirement will not be met, it is not expressed as being deviated from to the degree of several kilometres (Swart; Bosch, Interview 1995). However, in examining the scheme plan (refer to Figure 6.1.), it becomes evident that distances of between three and five kilometres may be travelled, within Nyawo and Tembe wards, before reaching a dispensing kiosk. A possible explanation for this considerable distance being imposed upon the residents of these wards, in seeking to collect purified water, is that, given the highly dispersed nature of settlements and the low densities, found particularly within the Tembe ward, the feasibility of achieving a sufficient threshold to secure the funds necessary for the payment of a bailiff as well as the installation and maintenance of the system is highly questionable. As noted by Still (Interview 1995), the system of individually operated and maintained dispensing kiosks is not necessarily sustainable within the context of such a dispersed, low density settlement area and alternative means of securing water supply for more remote households needs to be explored.

6.4.2. Capacity building

This section seeks to explore the extent to which the Shemula scheme has been successful in developing the capacity of the community, its respective water development committees and workers employed in construction. The project is notably some way from completion and the extent to which this small study is effective in conducting such an assessment is limited. Nonetheless, the results of the author's survey, together with information and views expressed through interviews and internal documentation, have been drawn upon to offer some indication of the existing and potential capacity within the area.

6.4.2.1. Organisational capacity

The SCWSS is proceeding in accordance with RDP requirements in terms of building the capacity of the community, through the development of 'appropriate institutions', such as water committees, to operate and maintain the service (ANC 1994:30). Elected water development committees are present within each sub-ward and are currently undergoing an institutional training programme designed to equip members with organisational and administrative skills and with information on the operation and maintenance of the scheme. The latter phase of the training programme, termed 'community awareness', will involve water bailiffs together with the committee and will culminate in a role-play workshop with the broader communities to disseminate this knowledge and to prepare community members in the practice of collecting water.

The programme, which is facilitated by local 'training officers' who have been trained by Edusew, is run over three consecutive phases beginning with the organisational development of the committees, through 'community awareness', to the 'administration' phase. Phase one of the training ran from January through to December 1995, while the second phase is planned to begin in January 1996. The programme is running somewhat behind schedule, but is regarded as being 'justly delayed' given that it will now run in accordance with the time frame planned for construction. Furthermore, the delay allows for some evaluation of this first phase and for the results of this to impact upon subsequent phases. (Bosch, Interview 1995).

The phases are constituted of modules, spanning one week, which are arranged to cover each sub-ward committee, in turn. Day-long sessions are conducted within the respective areas in a communal meeting place, in the open. Visual aids are employed, including diagrammatic pictures and videos, to supplement training manuals. Each day ends in a short verbal 'quiz' designed to assess the success of the training and to impact upon the consequent session, in terms of whether repetition of some aspects of an earlier session is needed. These 'tests' are arranged on a competitive basis with 'prizes', sponsored by Suncrush Coco-Cola, being awarded to the committee member deemed as having assimilated the most information. Lesser prizes, or rewards, are then given to each participant in the programme. The effectiveness of this as a means both of assessing the success of the training and for the learning process itself, is disputable. In the view of a capacity building trainer, such an arrangement, as a basis for assessment is ineffectual (Bosh, Interview 1995). Further, in drawing upon psychological theory, learning or skills

acquired through regular reinforcement are subject to fairly rapid extinction with the removal of the reinforcer, the 'prizes' (Rosenhan and Seligman 1989:112-4; Hjelle and Ziegler 1981: 198-201). In the absence of continued material rewards, the concern is that 'job satisfaction' may also diminish, which may threaten the sustainability of the scheme and undermine community confidence and commitment to the maintaining and operating the water supply system. Should this eventuate, follow up training and support will be necessitated to ensure sustainability. However, the possibility of such 'extinction' of skills occurring would be dramatically reduced with an increased sense of ownership of the process and with the recognition and perception of the committee's roles and responsibilities as being valuable by both the community and members of the committee itself (McGill, Interview 1995).

Edusew note that the organisation of the training currently allows for informal follow-up to take place where sessions are open to committee members from formerly trained subwards. Members from other wards may represent the issues and questions that have arisen from their respective committee meetings and in the process address potential concerns that the committee currently undergoing may not have considered as yet. (Barkhuysen, Interview 1995). Further, training officers are resident within the Shemula scheme area and are available for questions, while they are further required to meet with committees to ascertain whether meetings are being convened with the broader community and to assist committee members with any problems that they may encounter. In addition, Edusew has committed itself to remaining within the area for some months into the running of the water scheme itself, to offer support to water development committees and bailiffs in what will conceivably be one of the most demanding periods.

In attempting to assess the level of confidence held for both the water development committees and other members within the community, respondents were asked to indicate who wold be responsible for ensuring that problems with the water system would be addressed, and whether they believed such individuals and groupings to have the capacity to successfully do so. The majority of respondents (93.9%) noted that people within the community would be responsible, and 91.3% of these respondents expressed confidence in their ability to do so. 24.5% of the sample population noted that both the community and external agents would be responsible for addressing problems, as they occurred with respect to the reticulation and bulk system, respectively. Only one respondent claimed that external agents would take responsibility for ensuring maintenance. The committee itself, and people whom they had selected, were only noted by 2.0% and 4.1% of the

respondents, respectively, while facilitators were cited as being involved in addressing problems by 10.2% of the sample population. Confidence that the external agents, facilitators, the committee and selected individuals, would be equipped to ensure that problems are solved, has been expressed by all respondents.

While confidence levels are significant within the communities, based upon the author's results, the communities' capacity to operate and maintain the system will only be truly and accurately evidenced in practice. At this early stage in the project, some means of assessing the effectiveness of the training may be practised. Monthly progress reports are submitted to both the Amanzi Trust and the Training Sub-committee, which form the principal basis for such assessment and monitoring. However, it seems unlikely that broad, monthly reports would enable any accurate reflection of the success of the training, other than to indicate how many committees had been through their respective modules. The virtual absence of monitoring seems a striking omission within a project of this size that will ultimately rely significantly on the capacity of the bailiffs and the water development committees to maintain and operate the system. While training officers are within the area and available to support committees and Barkhuysen has conducted several informal visits, the extent of monitoring is limited, as is that of follow-up training. Mvula Trust identified this omission as being potentially problematic, resulting in their approaching Zimele Nawe to take responsibility for introducing discussion on possible mechanisms for monitoring and promoting their incorporation into the programme. The ultimate responsibility for ensuring that such mechanisms are put into practice rests with the contractual partners, being Edusew, Amanzi trust and the Mvula Trust.

6.4.2.2. Organisational development and representivity

The water development committees are the principal community organisations within the area, comprised entirely of elected members. The Amanzi Trust is further described as the community umbrella organisation, potentially constituted of 75.0% local community members, where 50.0% would be elected and 25.0% appointed (Refer to Figure 6.9.). Organisational training is formally proceeding amongst the development committees, while some attempts have been made to develop organisational and administrative skills amongst trustees through workshops. Responsibility for ensuring the sustained operation of the scheme falls upon these structures as well as upon Mhlatuze Water. Final authority and decision-making power, however, resides with the Amanzi Trust, thus highlighting the need for coordination, consultation and representivity.

Where several of the water development committees have effectively convened and conducted both broader community and committee meetings, evidence of organisational growth may be noted. In addition, the personal growth of at least one trustee has been observed and commented on (Swart; Barkhuysen, Interview 1995) in chairing and contributing to Trust meetings. Further, it may be assumed that such developments will be evidenced consequent upon additional training, workshopping and practical application of skills. The institutional arrangements established for the planning, implementation and maintenance of the Shemula water scheme are relatively complex. However, they are notable for having clearly defined roles and responsibilities, which should feasibly contribute both to enabling ongoing activity and to promoting sustainability.

The majority of respondents (83.7%) believed that their respective community organisations, referring only to the water development committees, were stronger now than they had been prior to the project's initiation. 14.3% of the sample population were unsure. while 2.0% indicated that such development had not occurred. A somewhat lower percentage of respondents (79.6%) indicated that they believed their organisations to be capable of ensuring that further identified needs would be met, while 6.1% negated this and 14.3% were unsure. 12.2% of the sample population did not offer reasons in support of their responses, which were noted as being predominantly 'unsure' as well as negative. The most commonly noted, in support of positive responses, is based upon the progress evidenced in SCWSS (26.1%), which would inspire the committee and community to further action (8.7%). Further basis was that the committees are being trained (13.0%), are now active (13.0%) and able to work together and organise (10.9%). Other reasons include that: electricity is to be supplied in the area (10.9%); jobs had been created (4.3%); and that both water supply and further developments had been promised (4.3%). The remaining responses given were that more effort is needed on the part of the committee (6.6%) since this particular project was described as being too slow and further, that not all needs were known to the committee (2.2%).

In terms of representivity, 89.8% of the sample indicated that they are satisfied that their interests are being represented by their spokespeople. The most commonly stated reason for such confidence was that representatives were active, principally in attending meetings (41.0%). Further prominent reasons were: that representatives provide feed-back from Trust meetings (19.7%) and keep the community informed (4.9%); personal traits of the spokesperson (9.8%); and visible progress on the scheme (8.2%). Other reasons noted

include that: representatives were local and knew the needs and interests of the community (3.3%); progress had been made in other areas such as school and clinic building (3.3%); promises had been made to make water physically accessible (1.6%); and that it is the spokesperson's responsibility to represent the interests of the community (1.6%). Negative responses were based on a lack of accountability by the representative to the community (3.3%) and the slow pace of delivery (3.3%). 4.1% of the sample, who had indicated uncertainty with respect to the spokesperson's ability to represent the community's interests, made no comment.

6.4.2.3. Community involvement and satisfaction

The extent to which the community has been involved in decision-making and planning is arguably limited, given that the capacity of committees is being developed at present and that broader meetings are not being successfully convened in all areas. While the representivity of committee members is noted as being high amongst the sample population, the impression gained from responses (see above, 5.4.2.2.) is that committees play a principal role in disseminating information on both the scheme and Trust meetings, rather than gathering information from the community. Furthermore, the Amanzi Trust is stated to be the "sole decision-making entity", with final authority on all matters (Swart, Interview 1995) which would tend to set them up firmly as the body with both veto and sanction powers with respect to proposals and contributions made by communities, as well as by external players. It might be argued that the process of development within the Shemula scheme is not essentially bottom-up, but is an attempt at integrating top-down and bottom-up development, with the balance being somewhat skewed towards top-down.

Nonetheless, it is noted that communities are involved in maintenance and decision-making once the water scheme is in place and operational, and, to some extent, in the initial stages in establishing the unit cost of water and the mechanism for payment. As such, decisions made at this early stage will have considerable weight in the long-term, and are further not considered as being subject to revision, at least not without difficulty, upon being ratified by the Trust. (Bosch, Interview 1995). Consequently, the representivity of committees, as well as the perceptions thereof by the community, are critical to the success of the scheme if such decisions are to be abided by, both in the immediate term future, where new committee members will be elected annually, and in the longer term.

Despite the extensive research and activity by the KFC facilitator, 15.5% of the sample had no knowledge of the scheme. While this percentage is relatively low, it is somewhat.

surprising for two principal reasons. First, the sample was skewed towards households that were more accessible (refer to 6.1.1.1.), which lead to the expectation, on the part of the author, that respondents would be informed and perhaps contacted in the process of research and facilitation. Second, construction is evident, particularly along major routes, as are large boards containing details of the scheme's particulars. While illiteracy is recognised as being high within the area, with only 28.0% of the broader Maputaland population being identified as being 'functionally literate' (VARA 1989 Appendix 3:4), the presence of several large sign-boards would presumably arouse curiosity and prompt queries directed to workers and other community members.

Nonetheless, of the 84.5% of respondents, with knowledge of the scheme, a significant percentage (29.0%) indicated their involvement in the water development committees, where one respondent is a member and the remaining respondents referred to involvement in terms of attendance at committee meetings. Further, 42.9% of the sample indicated that they, or members of their household, had been involved in decisions relating to the project, through attendance at community meetings. Decisions taken refer principally to the labour-based system of digging trenches (81.8%), and further to which community members would be employed (9.1%) and who would represent the community (9.1%). However, 98.0% of the sample affirmed that committee members were elected by the community, while the remainder were unsure.

In terms of broader community meetings, 98.0% of the sample indicated that such were held, while only 2.0% negated this. While the majority of the sample (87.8%) stated that such meetings were open to all community members, 10.2% were unsure and an additional 2.0% indicated that they were closed. When requested to offer an indication of frequency, 70.8% stated that meetings were held monthly, while other noted periods were up to two weeks (12.5%) and more than two months apart (4.2%). 2.1% stated that meetings were held irregularly, according to whether issues needed to be discussed or not, while the remaining 10.4% were unsure. In terms of attendance levels, most respondents (46.9%) stated that few community members attend broader meetings, while 34.7% indicated that most members attend and the remainder (18.4%) stated that about half of all community members attend such meetings. These results, particularly with respect to levels of involvement in the committees and in decision-making, tend to indicate a considerable degree of community awareness and participation in the project. Alternatively, they call the reliability of the data seriously into question.

On being asked whether they were happy with the manner in which the project is proceeding, 87.8% of the sample responded positively, principally on the basis of expectations concerning the future service, where they would have access to purified water (43.8%) and where water would be closer to their households (19.3%). Other reasons noted were that employment was being generated (12.3%), progress was visibly being made with respect to the water delivery process (8.7%) and that the committee kept community members informed of developments (3.5%). Of the respondents indicating dissatisfaction with the process, reasons most commonly cited regarded the delivery process, noted as being too slow (3.5%) and as generating high levels of noise (1.8%). Other reasons related to the committee, described as lacking in transparency (3.5%), to the problem of money being required for the future service (1.8%), as well as to the minimal involvement of women in employment (1.8%). (Refer to Figure 6.10.).



Figure 6.10. Community satisfaction

6.4.2.4. Skills transfer

As noted previously, members of the community are participating in two training programmes, one directed at the organisational development of water committees (6.4.2.2.), and the other designed to equip workers, involved in construction, with basic skills. The Basic Skills Training Programme (BSTP) runs concurrently with the construction of the scheme and is facilitated principally by agents within the consulting engineering firms. In terms of the labour-based construction, basic skills would need to be taught in trenching, pitching, concrete small works, laying pipelines, bedding and building works. Such training

falls within the contractors brief and is funded by the RDP, as an inherent part of the scheme. The programme aims to train "local persons in the maintenance of pipelines, taps etc. with the view of developing within the communities a resource of trained labour able to effect minor maintenance on the reticulation lines" (KFC 1995:3). Labour-intensity within construction has been considerably lower than anticipated, although it is increasing, with employment averages at 92 and 139 people as of the months of September and October 1995, respectively. Construction is organised by task-based work, whereby the completion of a specific job, typically demanding much of the day, is remunerated with R15.00.

Confidence in the ability of the community and local agents to deal with any problems which arise in connection with the water supply system, is noted by 89.8% of the sample population. Only 6.1% of respondents stated that they had, themselves, acquired skills through the project, in pipelaying (4.1%) and organisational skills (2.0%). While, 16.3% of all households considered in the sample had at least one member employed by consultants, in digging trenches. However, 63.3% knew of an average 8 people within their community who had learnt new skills, indicating that the scheme has thus far proved relatively successful in terms of developing technical and, to a lesser degree, organisational, skills. Appointment to positions of employment within the project appears to be largely as a result of being given the mandate to do so by the community, according to 81.6% of the sample, while 18.4% did not know how jobs had been secured by other members of the community.

Where confidence in the capacity of the community appears significant, so too does that in acquired skills being transferred to additional members. 57.1% of respondents indicated that those people who had acquired skills would teach others, while only 4.1% responded in the negative and 38.8% stated that they were unsure. Responses given in support of stated confidence include that skilled people: have been trained and know the work well (56.2%); have a desire to teach others (21.9%) and to meet the needs of the community, particularly that of water (12.5%); and that skilled people have a responsibility to teach others (9.4%). Means by which such skills could be transferred were identified as being through practice and demonstration (44.0%), through calling on the services of a trainer (40.0%), and by organising into training groups (16.0%). The most prominent reason given by respondents that were either unsure or certain that skills would not be transferred is that nothing has been heard from skilled members of the community (50.0%). Other reasons include that workers were poorly trained (25.0%), lacked interest in facilitating training (12.5%) and did not want to communicate their acquired knowledge to other people (12.5%).

6.5. Conclusion

The Shemula Community Water Supply Scheme is noted as one of the most, if not the only, successful RDP Presidential Lead Projects. The development process is described as being largely unproblematic and as being managed effectively, such that the project has neither fallen significantly behind schedule nor beyond its budgetary constraints, in relative terms. (Swart; Dyer; Bosch, Interview 1995). The scale of the scheme has demanded a significant investment into technical expertise, with four engineering firms being deployed to the area to fulfil their respective contractual obligations in the implementation of the project, by early 1997. The scheme has further generated a sizeable and relatively complex set of institutional arrangements to take responsibility for ensuring the operation and maintenance of the project. Furthermore, SCWSS is notable for dedicated funding and training into the establishment and development of community structures, with the ultimate objective of securing a project that is operated and maintained by the community (Bosch, Interview 1995).

The Shemula scheme has arisen from consultation with community members and from intensive research into the socio-economic and physical characteristics of the area. While being an RDP project, it remains distinguished by the fact that delivery is not demand-driven, but planned as a result of the identification of a need for water. As such, the project was not initiated by the community, but gradually introduced into the area through the 'pilot project' at Ndumu and through facilitation work conducted by KFC, with funding from the Department of Economic Affairs. The scheme has grown significantly in stature since becoming an RDP Lead Project and undoubtedly owes much to this standing, particularly in terms of being equipped with sufficient financial resources for ensuring management, training, implementation and maintenance. Further, community expectations are presumably high, given both the status of the project and visits by such prominent political leaders as President Nelson Mandela and Minister Jay Naidoo.

Several factors arguably contribute towards placing pressure upon the Shemula project to succeed, including the expectations held by the community and the major investment into both infrastructure and training. The scale and scope of the project, particularly as a community-based undertaking, further elevates the SCWSS within the eyes of the public as well as development practitioners as a potential model, if it is sustained, or as a disastrous and extremely expensive experiment in mass service delivery, should it fail. However, confidence appears held in its capacity to be sustainable, particularly by agents directly

involved in its implementation and management (Swart; Barkhuysen; Malwane, Interviews 1995). What emerges as a concern is the absence of any structured system of monitoring the effectiveness of training, given that the project will ultimately depend upon the capacity of the community and its structures for continued operation, cost-recovery and maintenance. As noted by Bosch (Interview 1995), it would be tragic if, once the scheme is in place, the level, and the particular skills required, of the community are wanting or inappropriate. Consequently, the need to ensure that monitoring, support and follow-up are instituted as part of the scheme's implementation is evident. Failing this, the risk is run of a 'wait-and-see' attitude being adopted together with potential emergency actions and funding being required.

The results presented within the latter part of this chapter (6.4.), tend to support the view that the area is characterised by a strong sense of community (Barkhuysen, Interview 1995), and further that considerable confidence is held in the ability of the community both to operate and maintain the project as well as to take control of its own development. While the institutional training, directed towards the water development committees, is dedicated to one specific project, it may have positive spin-offs given sufficient capacity being built within the committee to initiate and manage additional projects designed to meet needs identified within the community. Such has been evidenced within Ndumu, where the development committee, trained by the KFC Project Facilitator, has been active in ecotourism ventures, school extensions and agricultural training and development initiatives. According to Swart (Interview 1995), "if all the committees can have such an impact, within 10 years the area will be quite developed".

In conclusion, there are several issues relating to capacity building and community ownership of the process which may be noted as concerns. First, the institutional training, is not designed specifically to empower communities to plan and make decisions beyond the realm of their respective dispensing kiosks and reticulation system. While evidently equipping committee members with organisational skills, there is no evidence of their role extending to decision-making within the technical, policy and administrative fields, except through indirect means where community representatives have been elected to the Amanzi Trust. Second, the Trust assumes an enormous proportion of the responsibility for operation and maintenance of the scheme, and consequently for ensuring that committees are equipped with the necessary organisational and technical expertise to keep the system functional. However, as noted earlier, no structured mechanism of assessment and follow-

up support has been instituted, which places considerable pressure upon the community and development committees to recognise and respond to problems at an early stage, thus preventing a snow-ball effect. This omission further highlights the need to secure open lines of communication between all parties responsible for operation and maintenance, which, in itself, holds problems, given that Trust meetings are held only on a monthly basis, that telecommunications are presently poor and that the area is both extensive and remote. Finally, while a significant amount of responsibility is to be handed over to the development committees, particularly at that point where the scheme is operational, the final authority as well as ownership remains with the Amanzi Trust. Further, considerable influence and control is held by external agents such as KFC and Mhlatuze Water. Consequently, a potential concern exists that the scheme might be regarded, not as a community, but as an Mhlatuze or Amanzi Trust, project. Should this scenario eventuate, the sense of ownership and control appreciated by the community may be severely undermined, in turn, threatening the capacity of the scheme to be both a sustainable and empowering rural development programme.

Chapter Seven

A Comparative Analysis of the Mapumulo and Shemula Regional Water Schemes

7.1. Introduction

This chapter is devoted to a concise assessment and comparison of the case studies, as presented in the two preceding chapters, against the hypothesis that effective management of delivery process enables capacity building to proceed apace. The results of the author's survey, together with information gleaned through interviews and secondary sourcing will be drawn upon in this comparative analysis. At the outset, the different situational contexts of the respective projects will be recalled by way of background to the assessment.

The scale and scope of the Masibambisane and Shemula schemes is vastly different, where the latter is designed to supply water to roughly four times the number of people across an equally greater geographic expanse than that of Mapumulo. The physical properties of the two project areas, particularly with respect to the terrain differ markedly, where Mapumulo is mountainous while Ngwavuma is generally flat, which pose their own peculiar problems for the tasks of engineering and delivery. Mapumulo is considerably more developed than Ngwavuma and is characterised by higher densities, greater accessibility to community amenities and facilities and by a higher level of service provision in terms of telecommunications and infrastructure. Further, where the Shemula scheme is remote, Masibambisane is within 50 kilometres of Stanger and 150 kilometres of Durban's central business district. (Refer to Figure 1.1.).

The projects fall within radically different budgetary constraints, where the SCWSS is an RDP Presidential Lead Project with financial resources amounting to approximately 10 times that of the predominantly JSB-funded Masibambisane project. The institutional structures and arrangements for the projects also diverge considerably, where the Shemula scheme has seen in the establishment of a four tier system comprised of community representatives and external agents such as Mhlatuze Water, INR, KFC, Mvula Trust, KNDA, DWA and representatives of the RDP office. By contrast, the Masibambisane project is characterised by a two-tier management system composed entirely of elected community members, with external agents in the form of the engineering team, having played an impermanent and informal management function.

Finally, while both projects were initiated at similar times, in 1992, they are at altogether different stages of implementation, largely due to the time and budgetary restrictions placed upon conducting exploratory studies, planning and project design. Where the Masibambisane Water Project is virtually complete, the SCWSS is essentially only a third of the way into implementation.

7.2. Project design and implementation

The Shemula scheme is notable for having developed from extensive research and consultation within the area as well as from a pilot project to test the parameters of a regional scheme (KFC 1995:1). While construction only began in July 1995, the project has its roots in facilitation work and planning, dating back to 1990, and further to preliminary design work, which was completed by September 1994. A considerable amount of resources have been at the disposal of the implementing and management agencies involved, and have been directed at ensuring the scheme's success, through such means as consultation, basic skills training, and the establishment and training of community structures to ultimately operate and maintain the system.

The Masibambisane Water Project proceeded from a brief and inadequate feasibility study and social survey with minimal, essentially 'risk' funding being made available by the CSIR. Upon being granted funding by the Port-Natal Ebhodwe JSB, the project proceeded rapidly into design and investigatory work, given that a proviso had been laid down by the funders that the commencement date was to be in early 1993, only months after securing capital (Deverill 1994:9). The project has proceeded despite numerous unforseen setbacks and problems which have arisen largely as a result of inadequate preliminary investigations with the result that considerably more resources have been required, and further, that the project remains incomplete. Management of the scheme arguably moved into crisis control, with little coordination being effected between the considerably diminished central committee and engineering team. The project has not succeeded in significantly developing the organisational and management capacity of the community and its structures. Further, the extent of community involvement, beyond actual construction work, has been limited.

The projects are profoundly different in terms of the degree of financial and organisational support that have been made available for their realization. Where Shemula has the commitment of national and provincial government along with that of established agencies with considerable institutional capacity, such as KFC, DWA and Mhlatuze Water,

Masibambisane has proceeded with little support beyond the engineering team.

Considering the high standard of service provision aimed at in the latter scheme, within the context of severe resource constraints, the project has been successful in significantly improving the quality of life of much of the area's people. Shemula, on the other hand, has targeted a more achievable level of service provision through the delivery of public standpipes, albeit controlled on a water bailiff system. Should the Masibambisane Water Project have lowered the standards and expectations sought, the success of the scheme, in terms of construction, would probably have been secured.

While the Masibambisane project has aimed at, and largely achieved, a high level of service provision, it is notable for having done so at an affordable rate, through labour-based construction, local manufacturing and appropriate technology. The calculated cost per capita for the implementation of the scheme is R270.00, and while this may be expected to increase in seeking to complete the project, it is significantly lower than that of the Shemula scheme, at around R609.00 per capita. Both projects are planned to provide safe drinking water for a 20 year design period, and each has encountered the problem of additional demand arising from communities beyond the scheme boundaries. In this respect, SCWSS is better equipped to respond, given its institutional and financial backing and status as an RDP Presidential Lead Project. As noted by Bosch (Interview 1995), the communities of the SCWSS will pay several times more for their water than urban people, but they will have a safe, reliable water supply for the first time. This is equally applicable to the case of Masibambisane. While the approach adopted in Mapumulo to design and implementation has been problematic, it has much to offer future community water projects by virtue of its affordability and reliance upon local expertise in manufacturing and construction.

7.3. Project management

As noted earlier, the institutional arrangements developed to support and direct the Shemula scheme are complex, particularly when contrasted to that of the Masibambisane project. However, the roles and responsibilities assigned to the various structures and individual agents within the operation and maintenance of the scheme, appear well defined, thus contributing towards the effective management and functioning of the project. Meetings are regularly held and some continuity and coordination between levels is achieved through individuals holding positions within several structures and through mechanisms of feedback, including both written and verbal reports. However, a number of factors may be identified as warranting concern with respect to the manner in which the

scheme is managed. First, meetings are held on a monthly basis, which may contribute to delays emerging in implementation should problems arise or should decision need to be ratified by the Trust. Community development committees are established within the area yet their decision-making powers at this stage are limited, as is their capacity to impact upon the broader scheme as opposed to activities occurring within their respective subwards. Further, the Amanzi Trust is a sizeable decision-making body, with trustees being drawn from localities well beyond that of the scheme area. Consequently, should an emergency arise, attempts at convening a crisis response meeting to decide on the way forward, are likely to be extremely trying. Third, the central role played by external agents, particularly by KFC, may act more as a hindrance than as a facilitator of community-driven development. Further, the central role played by external agents in implementation may undermine the sense of ownership felt by the community as well as their confidence in sustaining the project without external assistance. This is underscored by the lessons learnt within the FUNDASAL project (refer to 4.5.) where "internal institutional cohesion, coherent and shared vision is vital to project success" (Copley 1993:51 citing Sevilla in Stein 1990). Finally, a point of concern raised previously regards the constitution of the umbrella organisation as a trust, which is not structured to be accountable nor representative, but rather as a legal and essentially permanent body of individuals directed around a common cause.

By contrast to the Shemula scheme, the Masibambisane Water Project is characterised by a two-tier management structure, where the second tier is largely non-functional and the central management tier is composed of only three active representatives. The capacity of these community structures has never been formally developed to any significant extent, and the problems which have arisen within the project have demanded considerably more human and financial resources than are available. Further, coordination between the management functions performed by the project committee and the engineering team, as well as with the CSIR, to whom the engineering firms are sub-contracted, has never been effectively achieved. Such problems have certainly contributed to the technical delays experienced in the project's implementation as well as to the dwindling confidence and activity, and the increased dissatisfaction in the delivery process, on the part of all involved.

Both forms of management have inherent problems with respect to ensuring community participation at all stages in the development process. Where the Shemula scheme emerged from extensive consultation, it has not persisted with this activity into planning and

implementation. The size of the project has presumably contributed to diminished community participation as decisions are made on implementation and management on a substantially greater scale than that of sub-wards. While the Masibambisane project has generated little community involvement and has not grown from extensive consultation nor research, the management structure, itself, could be viable given sufficient resources. Arguably, should the two tiers established within the area be equipped with the necessary information, responsibility and organisational capacity, the structure would perform effectively as an accessible and accountable body in the management of the project. The community committees are comprised entirely of local representatives elected by their respective constituencies and may feasibly meet on a daily basis, if called on to do so. In fact, the management committee currently operates on this basis, where members tend to convene daily, throughout the working week, within the project office. However, given the administrative pressure placed upon this small committee, their effectiveness beyond maintaining financial records, is threatened. Motivation for delegating responsibility and developing the capacity of the sub-committees is high, particularly when considering that the project has not been successful in securing cost recovery from community members for the first month of its operation.

7.4. Capacity building explored

The extent to which the Shemula and Masibambisane projects have been successful in building the capacity of the respective beneficiary communities and their organisations has been briefly commented on above. However, this section seeks to examine whether the respective communities have been empowered to access and control resources and decision-making processes and thereby exercise power over, and determine, their own development. In this assessment several aspects of capacity building will be explored, including: community participation; organisational development; skills acquisition and transfer; and sustainability.

7.4.1. Community Participation

The Masibambisane and Shemula schemes have both incorporated some degree of community participation, principally within the initial stages. The Masibambisane project was initiated by the community, through a mass meeting, in seeking to respond to identified health and access problems in terms of water. At this meeting the communities of the wards immediately surrounding the Mapumulo village decided to establish representative structures that would take responsibility for ensuring that the decision to embark upon

improving the area's water supply would be carried through into action. While support and advice were offered by the Health Inspectorate, the Masibambisane Water Project is a community initiated scheme, intended to be further community-driven and sustained.

By contrast, the Shemula scheme was carried into action by external agents, principally KFC, as project facilitator, appointed by the former KwaZulu Government and the DDA. The scheme's origins date back to the Maputaland Structure Plan completed by VARA in 1989, and to extensive research and planning conducted by KFC within the area. The results of these various KwaZulu initiatives highlighted the principal need for water within the area which was responded to by KFC, the former KwaZulu Department of Agriculture and Mhlatuze Water, in the implementation of the Ndumu pilot project and subsequent extension thereof, in the Shemula Community Water Supply Scheme. The period of time between implementation of the Ndumu and Shemula schemes saw intensive facilitation work into the establishment, or revival, of development committees throughout the region. The principal objective of the latter process being not only to ensure that community structures were installed in each of the wards, but to disseminate information on the intended regional scheme, and thereby popularise the initiative.

The extent of community participation in the initial, essentially 'pre-planning', phases of the respective schemes differs markedly, particularly given that the Masibambisane Water Project has been a demand-driven initiative whereas SCWSS has been developer-driven. Within the latter scheme, community members were introduced to the project and subsequently extended their involvement into decision-making structures through electing eight representatives from the water development committees to the Amanzi Trust. The development committees are also participating in decision-making relating to the location of the dispensing kiosks, the unit cost of water and the employment of bailiffs. However, community participation has been most pervasive within the physical implementation of the scheme rather than in its planning and design.

The Masibambisane project has proceeded under the auspices of the management committee, who have been involved in planning, to some extent, and in decision-making relating to the implementation, operation and maintenance. However, the committee is less than half its initial size, which does not constitute a quorum, and the sub-committees have largely been inactive. Community participation, subsequent to the initial meeting and with the exception of the management committee, has largely been limited to the physical implementation of the project, as in the Shemula scheme.

7.4.2. Organisational development

The Shemula water project has devoted considerable resources into building the institutional capacity of the water development committees. Local community members have been trained as trainers by Edusew and have been active for nine months in developing skills around effective meetings, problem solving, planning and goal setting, as well as around drawing up a constitution. Roles and responsibilities of office bearers and of the committee itself within the project, have emerged as the principal aspect of this phase, the first of three, of the training programme. The extent to which this training has proved effective is partly evident through the activity of these committees in convening broader community meetings. Some have failed in this respect and local trainers have been involved in motivating and assisting these committees.

The Shemula scheme has seen in the establishment, and subsequent 'roles and responsibilities' training, of 38 water development committees throughout the project area. Training is to proceed alongside the implementation of the scheme and follow-up support will be available for a limited period into the operation of the system. As noted by Bosch (Interview 1995), this form of training represents a very directed form of capacity building, around the operation and maintenance of a particular programme, and may be effective in developing the organisational skills and strength of the committees to initiate and manage further activities in directing their own development. Alternatively, it may not. The limited extent of involvement on the part of committees in decision-making relating to the planning, design and implementation of the Shemula scheme does not enable any accurate assessment of their capacity. Further, the extent to which committees will be empowered to access resources has not been evidenced. The case of Ndumu is, to a large extent, an exception rather than a measure of the potential organisational strength of the water development committees, given that the project facilitator, with a considerable level of skills and experience as well as access to resources such as KFC, is resident at Ndumu and has been active in working with and supporting the committee. This level of ongoing support and involvement is unlikely to emerge as a common feature within the remaining water development committees.

The Masibambisane Water Project has not been characterised by any formal training, but rather by something of an 'immersion school' in organisational development. The CSIR has made a number of somewhat dubious attempts, largely in the form of one-day 'stints', at transferring organisational and administrative skills to members of both the management

and ward committees. In addition, Partners in Development were involved in establishing a skilled clerk within the site office for one year to be responsible for both performing and training administrative skills. However, these initiatives represent the only attempts at developing the organisational capacity of the committees, which may largely account for the extent to which committee members rely upon established skills rather than seeking to 'make themselves redundant' through transferring skills to additional members of the community. The few members that remain within the management committee have been active in attempting to meet all the demands placed upon them and have drawn upon existing skills within the community in this attempt, through co-opting the former 'general manager' and employing a former bank clerk in the administration of financial matters. However, should they have proved more active in delegating responsibilities and communicating with the elected sub-committees, their task of managing and maintaining the project would have, in all likelihood, been more achievable and effective.

Where the Masibambisane Water Project saw in the establishment of new committees tasked with the responsibility of directed activities towards ensuring the implementation and management of a water supply scheme, SCWSS has relied upon existing community organisations as well as upon establishing new committees. A concern, with respect to the latter approach, is that community development committees, with the responsibility of responding to a variety of needs expressed by their respective constituencies, have been transformed into structures devoted to the maintenance and operation of the water scheme. Consequently, the extent to which water development committees are able to identify and act upon further needs is limited given the demands that will be placed upon them in the daily running of the project. The respective communities may need to assess, in the near future, whether their committees have the capacity to wear both hats and respond accordingly.

7.4.3. Skills acquisition and transfer

A considerable level of technical skills have been developed amongst members of the community within the Masibambisane Water Project. Such skills include: the construction and basic design of weirs; operation and maintenance of the pump-station and pipelines; reservoir building; pipe-laying and trenching; slab and tap housing manufacturing. However, with the exception of the maintenance team, it would appear that few skilled members have remained within the community, but have drawn upon such skills in seeking employment elsewhere. Very little confidence, understandably, remains in the transferrance of vocational and maintenance skills to additional community members.

Further, no skilled people, to the author's knowledge, have made use of their practical experience and abilities in establishing small enterprises within the community which could conceivably have generated some employment opportunities and income within the area. However, the extent to which community members have been empowered with the knowledge and capacity to access resources and support has not appreciably fostered the introduction of this form of entrepreneurial development within the community.

The Masibambisane Water Project relied significantly upon the proficiency of local people in implementation and the level to which construction has been labour-based is considerably higher than that of the Shemula scheme. As such, the level of skills being transferred to community members within the latter project is somewhat subordinate to that achieved within the Masibambisane Water Project. Further, the materials used in construction within Shemula are expensive and thus not as accessible to community members should they endeavour to establish their own small enterprises based upon their acquired skills. Nonetheless, confidence that skills will be transferred to additional members of the community is high within the Shemula scheme area, and one would hope that this remains the case on completion of implementation.

The Masibambisane Water Project has shown little effectiveness in transferring organisational skills to additional members of the community, where existing skills have been drawn upon. Further, the sub-committees remain predominantly dormant and there have, as yet, been no signs of reviving or activating them. The committees established within the Shemula scheme will certainly need to equip additional members with skills given that elections are to be held on an annual basis and new committee members will need to be versed in their roles and responsibilities. Further, it is unlikely that newly elected committees will be reconstituted of entirely the same people, since legislation is in the process of being effected with respect to development committees which requires a certain percentage of the members to be women, while currently the majority of committee members are male. The committee's constitution will incorporate such legal requirements and will need to give effect to them in subsequent years.

7.4.4. Sustainability

The sustainability of the water projects relies almost entirely upon the capacity of the community and its elected structures to maintain and operate the system. Further, the mechanism of ensuring cost recovery and of supplying water to communities also plays a

prominent role in the securing the success of the respective projects. While the Shemula scheme is not advanced to the point where such aspects as cost recovery and proficiency in operation and management may be accurately assessed, some comments may be made with respect to the likelihood of success. As noted earlier, the bailiff system of water supply is not necessarily sustainable within the context of dispersed, low density settlements where effective demand may be lower than that required to recover the necessary costs to meet the monthly payment for the employment of the bailiff and for the water supply and maintenance of the system. This may be particularly problematic within the first year of operation where the level of per capita consumption may remain as low as five litres per day. Irrespective of the organisational capacity of the water development committees, this situation could seriously threaten the sustainability of the schemes operation within various sub-wards throughout the area.

The capacity of the committees to ensure that the system remains operational should be sufficiently developed. A concern is, however, that the water development committees need to consistently take responsibility for operation and maintenance on a daily basis throughout the area, while there is no mechanism to remunerate such a high level of activity. Should the scheme be viewed as an Mhlatuze Water or KFC, rather than as a community, project the work required to be performed by committee members may be regarded as unpaid and demanding labour. Further, these responsibilities may prescribe the level of involvement of committee members within agricultural undertakings or in seeking employment. These factors considered together, present a potentially disastrous problem where committees are no longer regarded as representing the community but as structures which demand an inordinate amount of work performed on behalf of an external organisation for no economic gain and further restrict one's involvement in areas that offer rewards. While this situation might never arise and may appear overstated, it serves to highlight the need to ensure community participation and consultation within this scheme. and to deliver a service which is in accordance with expressed needs and expectations. Community ownership of the project is arguably critical in ensuring its sustainability and the extent to which this will be effected upon implementation needs to be established. If deemed necessary, action will need to be taken by the umbrella organisation, the Amanzi Trust, to devolve a significantly greater level of power and control to the grass-roots level of this undertaking.

The Masibambisane Water Project, in terms of both capacity and cost recovery, is currently running the risk of collapse if no 'emergency action' is instituted. As noted on several

occasions, the need exists to activate the ward committees and delegate responsibilities to these structures. Such an action would assist in managing the scheme, detecting and responding to problems and complaints, and in ensuring that monthly service charges are collected, recorded and deposited with the central management committee to subsequently meet the expenses accrued through the scheme's operation and maintenance requirements. In order to fulfil these responsibilities competently, some follow-up support and training may be necessitated. In this regard, Partners in Development and CSIR are negotiating the employment of a student to work with the committee for several weeks in seeking to establish a viable means of cost recovery. While this may succeed in the immediate to short-term, the concern is that once the scheme is fully operational and delivery problems are addressed, the demands placed upon the management committee to sustain operation and maintenance of the scheme, despite monies being effectively collected, will prove too demanding for only three active members to fulfil adequately. Furthermore, while the maintenance team is competent, it may prove too small to cope with problems encountered throughout the sizeable area, which may, in turn, result in discontent on the part of consumers and refusal to pay until such time as the quality of service provision is satisfactory. The development of managerial and administrative skills amongst a broader base of community representatives is clearly indispensible to the sustained operation of all aspects of the project.

7.5. Problems militating against capacity building

This section seeks to identify those factors which may impede the process of capacity building alongside delivery, according to the results obtained through the author's research. Further, the 'product versus process' debate is explored as a current and topical development 'dilemma' which has surfaced, to some extent, within the Masibambisane and Shemula water delivery schemes.

7.5.1. Power structures' policy

What has emerged in the process of conducting and analysing the research for this study is that the role played by particular agencies may act either to promote or hamper the process of empowering communities and their respective organisations. All organisations and agencies need to remain appropriate and, whether urban or rural, need to be in the position to continually monitor their policies, motives and their actions or approach, and be equipped to adapt to different demands and changing conditions. The attitude held by various organisations to development, particularly rural development, can be noted as being highly

problematic in terms of objectives and policies and potentially owes much to perceptions held of what rural development entails.

Within the Masibambisane Water Project a number of problems have emerged with ramifications for capacity building, which have been, at least in part, as a result of the policies of the Port-Natal Ebhodwe JSB and the CSIR. The feasibility study has been earlier noted as being inadequate in several respects (7.2.), which impacted negatively on the project's implementation. However, it "also failed to take into account many of the sociological problems implicit in such a complex project, and did not investigate the need for capacity building. These shortfalls are all associated with the aim of producing a funding document rather than a complete feasibility study" (Deverill 1994:1). The CSIR, while having funded this study with no guarantee of ever being recompensed, could have played a vital role in ensuring that extensive investigatory work was conducted resulting in a sound document with both planning and funding value. However, the role played by the JSB has certainly been significant in terms of both the inadequacy of the feasibility study and the failure to ensure that any organisational training and support were made available to the community. The JSB grant funding for construction but not for training designed to build capacity nor for follow-up and support to ensure that the community and its structures are equipped to maintain the infrastructure that is established, in this case, a water supply system.

This approach appears highly problematic and reflects poorly upon JSB-funded programmes which cannot be, or prove very difficult to be, sustained. This policy approach has been contrasted to that of Umgeni Water, where the beneficiary community is equipped with the resources and support necessary in ensuring a successful project. The period over which this support is offered is five years, with Umgeni gradually withdrawing and the community assuming more responsibilities and control throughout. (Still; Gadd, Interviews 1995). Clearly, these institutions differ considerably, where Umgeni is devoted entirely to water provision and, to a lesser extent, sanitation while the JSB deals with a range of services. In addition, Umgeni Water has significant in-house institutional capacity, while the JSB is essentially a distributer of funds and makes use of outside contractors in the implementation of projects. The Umgeni Water approach clearly holds its own problems, in terms of the control that they assume on entering into a community scheme, however the amount of support that is made available to the community is estimable and the potential to succeed within such a 'nurturing' environment is significant.

When considering the Shemula scheme, the extent of control and power held by both the KFC and the umbrella organisation, the Amanzi Trust, is a point of concern, which has been discussed above with respect to sustainability (7.4.4.). KFC presence within the scheme area is strong and their involvement has extended to eco-tourism, banking and economic development projects. Their interest in seeing in the success of both the water scheme and the aforementioned ventures, all described as community-driven initiatives, is presumably significant given the need to gain credibility with respect to community projects and to survive the threat of restructuring within a new political climate. However, their desire to manage, or perhaps dominate, the process within Shemula runs the risk of hindering rather than promoting both the sustainability of the project and the capacity of the community. With respect to the Amanzi Trust, which acts as the ultimate authority and decision-making structure within the scheme, a concern relates to whether the community committees will be empowered with any degree of control over the process and whether they will continue to assume their responsibilities should no sense of ownership be felt.

7.5.2. Capacity building and delivery

As argued earlier within this study (3.7.), attempts at building capacity are most likely to be successful where the structures and resources developed within a particular community are given expression, and hence sustained and built upon, through activities that ultimately lead to meeting needs and objectives identified by that community. Where the omission of capacity building may generally contribute to ensuring greater speed of delivery, the sustainability and appropriateness of the product is severely threatened. Furthermore, consultation and participation, as components of capacity building, do not necessarily slow the pace of delivery given that conflicts or rejection of the process of implementation may thwart progress at a later stage.

The Masibambisane Water Project may serve as an example of a delivery process that has been slowed through lack of extensive consultation, as well as exploratory research. The project moved very quickly into implementation principally due to the condition attached to the JSB grant requiring that construction begin in early 1993, the same year of funding approval. Further, the pace of implementation increased as costs dwindled in an attempt to minimise overheads, which owes largely to the inadequacy of the feasibility study. The feasibility study may be regarded as critical within the Masibambisane project since it failed to ascertain the level of existing capacity and to determine the extent to which training was required. Consequently, the management committee was ill-prepared for the

administrative demands required of it in the implementation and operation of the scheme. Further, the responsibilities of the sub-committees were never clearly outlined and their capacity to fulfil these never identified nor developed. While the management function within the Masibambisane Water Project was initially intended to be held by the management committee, it was principally assumed by the engineering team when it became "apparent that the committee... was not able to cope with the complexity and size of the scheme" (Deverill 1994:18).

Capacity building within the Masibambisane project would have aided in implementation and consequent cost recovery, particularly with respect to the effective involvement of the sub-committees. Should all community structures have been active within the area and equipped with necessary organisational skills, implementation could have proceeded by wards, and problems dealt with timeously by the respective committees. The management committee would have been better equipped to fulfil its administrative responsibilities and might have ensured the coordination of activities to the satisfaction of the respective communities. Rather, it would appear that confidence in the capacity and skills of the committee has declined and the level of dissatisfaction increased.

The Shemula scheme has been described by the project manager as being a successful RDP project because of the extensive amount of community consultation that preceded its implementation (Swart, Interview 1995). Further, Swart argues that SCWSS is 'truly a community development project' which is based within, run and managed by the community (Interview 1995). To the extent that the Amanzi Trust is regarded as the 'community' this statement is valid. The scheme has, however, been most notable for its commitment to the establishment and training of the water development committees. The institutional training process currently underway throughout the scheme area seeks to equip members of the committees with the required skills to operate and maintain the water system within each of the sub-wards. This process has in no way hampered the progress of delivery, rather, as noted by Bosch (Interview 1995), the speed of project is determined mainly by technical progress not capacity building, since the latter fits in with the stages of construction. In addition, Bosch notes that the training component of the scheme involves fewer people, less time and was initiated prior to the scheme's implementation and is thus unlikely to slow down the delivery process.

The Shemula scheme has not generated a considerable level of participation within decision-making beyond the involvement of the community representatives within the

Amanzi Trust. The establishment of the Amanzi Trust, through networking and legal procedures, and the sub-ward committees, through facilitation, has been described as a 'twin-track process' that is only now beginning to meet up (Dyer, Interview 1995). This convergence is likely to be most pronounced, and successful, where all water development committees become active in convening meetings and thereby institute a flow of information both from, and to, their respective communities. Furthermore, given the success of the institutional training programme, the committees will be in a better position to impact upon their future development through identifying needs within the area and devising means of meeting them. The level of integration ultimately achieved between the process and the product within the scheme, through both institutional and basic skills training, is arguably significant, where both training processes have been designed around equipping members of the community with the necessary skills to implement, operate and maintain the water supply system. SCWSS emerges as an example of a physical development initiative which would not be able to succeed without some capacity building training. As succinctly stated by Bosch (Interview 1995), "some delivery products are entirely dependent on capacity building, so if it goes a bit slower, you'll have to accept it. But hopefully it will be more sustainable."

7.6. Replicability

Several features within each of the respective projects may be identified as being replicable. One of the most prominent aspects relates to financial outlay. The Masibambisane Water Project has been extremely cost-effective as a labour-based scheme which has targeted a high level of service provision. Its replicability, in terms of cost, evidently lies in the fact that it has made use of affordable materials in manufacturing and construction of essential infrastructure, has drawn upon voluntary labour in yard connections and has employed the expertise of engineers with skills in supervision, on-site training, design and construction. Essentially, the project has been successful in minimising external costs. Clearly, the Shemula scheme is not easily replicated in terms of financial outlay and has emerged as being an expensive delivery project in terms of per capita cost, particularly by comparison with the Masibambisane project. However, the Shemula scheme is notable for its commitment to ensuring funding and implementation of a programme designed to equip members of the community with organisational skills and the capacity to operate and maintain the water project. The extent to which this is replicable rests principally upon the resources available to communities, in terms of information on service providers and means of accessing the expertise, funding and support that are available.

The institutional arrangements established for the management of the Masibambisane project is indeed replicable. The two-tier structure planned for the project, composed entirely of elected community members is perhaps the most appropriate means of coping with a fairly large scheme while maintaining high levels of direct community involvement within all aspects of the development process, from planning through to implementation and subsequent maintenance and operation of the scheme. While the project has not been effective in generating this level of involvement, the structure has merits in its capacity to remain accountable to its constituency and in its simplicity, effectively preventing the generation of a 'top-heavy', bureaucratic decision-making body.

In terms of physical implementation of the respective projects, both are equally replicable, where 'technically, almost anything is possible' (Dyer, Interview 1995). The respective schemes have proceeded with labour-based construction approaches and have been successful, to differing extents, in developing transferrable skills among members of the community while proceeding the implementation. The practice of on-site training and, given sufficient resources, the conduct of basic skills training programmes both appear replicable and desirable in the delivery of a community service which is to maintained and operated by the beneficiaries.

7.7. Conclusion

The merits and shortfalls of the Masibambisane and Shemula water projects have been briefly explored above, with particular attention being devoted to assessing their effectiveness in building the capacity of the respective communities. Clearly, however, the process of development is not uncomplicated and various factors need to be taken into consideration in seeking to implement a project that is designed to meet a determined need adequately and appropriately while furthering the development of human resources to the extent that the beneficiaries are empowered both to sustain the product and to take further action in identifying and meeting further needs and objectives.

The initial stages within a project, in terms of developing a sound understanding of the context and its opportunities and constraints, emerge as being of fundamental importance in ensuring that the development process embarked upon is both viable and congruous with needs and expectations. It is apparent that attempts to implement a project in the absence of sufficient knowledge of local conditions is counter-productive rather than time-efficient. Further, in seeking to secure a process and product that is owned and managed by the

community, extensive consultation and participation within the initial stages, while consuming resources, holds greater promise in terms of sustainability and community satisfaction than would otherwise be the case. Such has been evidenced within both the Shemula and Masibambisane schemes, where the level of problems encountered has been largely proportional to the level of consultation and exploratory research. The Masibambisane Water Project has encountered various technical difficulties owing to the inadequacy of the feasibility study and has further proceeded in spite of the limited extent of existing human resource capacity to manage and sustain the scheme.

Should the parameters, within which the project is to proceed, be clearly defined, the possibility of planning for an effective development process is dramatically enhanced. The Shemula scheme emerged from such a context and responded to the identified need for particular institutional skills to sustain the project once operational, through establishing and proceeding in the training of committees throughout the project area. Consequently, the likelihood of success, in terms of the sustainability of the scheme, is significant. Whether such training will equip the community to access power and resources to direct their own development is not clear, although it does facilitate such a process, given that the level of skills and the strength of community structures will be augmented.

In conclusion, one might consider whether there is an optimum size, or scale, for community-based projects. The Shemula scheme spans a vast area and is designed to meet the water needs of a population equivalent in numbers to that of a small town. The degree to which such a project can be managed and sustained entirely by community structures is debatable and this consideration is likely to have contributed to the decision to establish a sizeable and complex set of institutional arrangements to perform such management and maintenance functions. However, this action may effectively remove control and ownership from the beneficiaries and concentrate power within the central structure, the Amanzi Trust. The latter concern gains plausibility where a problem noted with the Masibambisane Water Project, a considerably smaller project, has been that a community-based project of its size is a nightmare, resulting in 'government syndrome', where problems effectively become those 'somebody else', rather than being responded to by the community and its representative structures (Still, Interview 1995). The scale of the Shemula scheme has the potential to effect such an attitude in the absence of community ownership and control.

Chapter Eight

Conclusions and Recommendations

8.1. Conclusions

This dissertation has focussed upon two distinct rural community water supply projects against the question of whether the approaches and policies of the various development institutions and agencies involved, enable the process of capacity building to proceed apace. The study would suggest that the role played by external organisations is significant in determining the level of resources devoted to developing capacity. Further, it would appear that there is some truth in the statement that, "for many parties its business as usual and there is very little effort to adapt and change in line with stated commitments" (Mhlongo et al 1994:1). However, the RDP may prove an effective instrument in seeing significant policy shifts within institutions involved in rural development, particularly with respect to the extent that community participation and capacity building are requirements within projects. This effectiveness will, in all likelihood, be dependent upon mechanisms established to monitor and enforce such commitments to capacity building, rather than relying upon stated principles, goals and objectives which may be reflected in business reports yet never carried through to fruition.

Funding institutions, whether they are directly involved in the management of the process or not, play a central role in determining the level of capacity building achievable through conditionality attached to grants. Where the RDP office has essentially secured the place of training within the Shemula scheme, the policy of the Port-Natal Ebhodwe JSB has acted as a hindrance, where not more than 1.0% of the total project cost may be given over to training and where significant pressure is placed upon implementing agents to initiate and complete the project as timeously as possible. Whether this situation would have been different, given motivation for capacity building training's inclusion within the feasibility study, is questionable. However, it does raise concerns with respect to the role played by the CSIR at the initial stages of the Masibambisane Water Project, particularly when considering that this organisation offers training services and yet failed to recognise the need for assessing the existing capacity within the community and for identifying means of developing that capacity within the feasibility study cum funding document.

Capacity building may be understood as an amalgam of various development objectives, including, amongst others, consultation and participation, the acquisition and transfer of

skills, organisation building and development, as well as sustainability (Sapsford, Interview 1995). Within the 'product versus process' debate, applied to the water delivery context, both emerge as being critical for development and each as being reliant upon the other. In responding to a particular need identified by the community, consultation, participation and extensive investigatory work enable the formulation of an implementation plan that is in accordance with the aspirations and expectations of the community. In establishing what the product entails, the design of a process that will equip people with the necessary skills for delivery thereof, facilitates community involvement and further contributes to expediting the realization of the product. Moreover, the process embarked upon, given grounding within the particular constraints and opportunities of the development context, promises the empowerment of the community to sustain the product, through organisational development. This scenario, reflecting a directed form of capacity building, has been largely adopted within the Shemula scheme and will conceivably enable the delivery and sustainability of the water supply system.

With respect to the latter point, the extent of community control and ownership over the product and the process emerge as critical aspects in securing sustainability. The Shemula scheme is not a demand-driven project, having resulted from the identification of the need for water by external agents. Further, the extent of community involvement in management and decision-making is somewhat limited, given that such power resides with the umbrella organisation comprised of part-elected, part-appointed individuals. These factors manifestly have implications for the degree of community control and ownership, and hence for sustainability. However, there is confidence, even if sometimes guarded, in the project's success on the part of all involved, which reflects positively upon the capacity of the community to consistently maintain and operate the water supply system. Whether the development process will equip the community and its organisations with the capacity to initiate further actions designed to meet their needs, is not as apparent.

The approach of the training provider to the institutional training programme may be problematic, where 'operant conditioning' or reinforced acquisition of skills, as discussed in chapter six (6.4.2.1.), tend not to be conducive to long-term, sustainable proficiency in given roles and responsibilities, in the absence of material rewards. Further, the attitude held by the provider towards the recipients of the training is disconcerting, where the latter have been described as being 'like children' and taught accordingly (Barkhuysen, Interview 1995). Consequently, the level to which such skills as problem-solving, planning and goal-

setting are developed may be inadequate for the purposes of future identification and response to needs within the community. The extent to which the institutional training will equip members of the community to take control of their own development is thus debatable.

Attitudes held on the part of various agents in delivery and capacity building may prove counter-productive in seeking to fulfil the stated aims and objectives of the respective projects, as portrayed above, with respect to the training process. A fairly prominent attitude, which has surfaced as a point of concern in both projects, is that held towards agents involved in delivery within construction and engineering firms. Technical agents tend to be described as 'task-oriented', disinterested in promoting community participation and skills acquisition, directed towards rapid delivery, and as being inordinately expensive (Bosch; Malwane; Khwela; Sikikane; Gadd, Interviews 1995). As noted by Still (Interview 1995), "there is a paradigm held by those within the social-side of delivery, that engineers are the bad guys and, automatically that is their supposition, but one should always try to get the full picture in any kind of investigation". Such assumptions may promote distrust and hamper coordination of activities between agents engaged within the social and technical aspects of delivery. Further, the basis for such attitudes may be unfounded, as has apparently been the case within the Masibambisane Water Project, whereby the 'engineering' firm of Partners in Development have gone beyond their brief to dedicate considerable time and personal resources to promoting administrative skills amongst the management committee and to maintaining follow-up support, despite such activities being largely uncompensated. Furthermore, training has proceeded within the Masibambisane project equipping members of the community with transferrable skills, including those required in the implementation and maintenance of the scheme. The absence of prejudicial attitudes would undoubtedly facilitate open communication and coordination of activities to the benefit of the development process.

The aforementioned concern about attitudes, further relates to a current issue within the field of adult basic education (ABE), regarding the pursuit of an integrated approach to training where such is taking place as part of a development project (Bosch, Interview 1995). Bosch (Interview 1995) notes that skilled ABE trainers are encountering difficulties in attempting to integrate these organisational and individual skills development with technical skills development. Further, such attempts have been noted as being particularly problematic within the KwaZulu-Natal context, where there has been no legacy or tradition

of involving communities in development, further compounded by political conflict and underdevelopment. The challenge evidently lies in the formulation of an approach that takes cognisance of the objectives of both forms of skills development, within the context of sustainability and integration, such that the imperatives of the one do not defeat those of the other (Bosch, Interview 1995). Coordination and communication between technical and social training providers would presumably contribute significantly to achieving the desired compatibility and balance in application and facilitation of the training process. The Shemula scheme, given the substantial investment in basic skills and institutional development, emerges as an opportunity for training providers to follow and assess the manner in which training is conducted and the outcomes that it generates, since it could provide a model for other sizeable projects or could uncover issues that would need to be considered in future community works projects (Bosch, Interview 1995).

Both the Shemula and Masibambisane water schemes have been successful in involving local community members in implementation to a considerable degree. Such labour-based construction, together with on-site basic skills transfer and employment of local contractors, could quite feasibly be replicated within the National Public Works Programme (NPWP), with respect to the creation of public infrastructure. One of the most important aspects of the NPWP is 'labour-intensive construction', along with the further key principles of community empowerment and education and training (NPWP undated:6). The development process proposed to be embarked upon entails job creation, the provision and maintenance of public infrastructure, training provision, community empowerment, and capacity building of communities to manage their own affairs (ibid::1,4). The Shemula scheme has essentially proceeded along such lines, with similar guiding principles and objectives. Given the success of the SCWSS, the assertion might be made that the RDP's public works programme can be effectively achieved nationally. However, three principal concerns arise in stating this, the first relating to resources available to conduct a training programme comparable to that of the SCWSS. Further, given such ample resources, in terms of time, funding and human resources, will the NPWP institute a mechanism for ensuring both the appropriateness and effectiveness of the training process as well as means of ensuring support and follow-up where training proves inadequate? Finally, while the RDP states that the involvement of marginalised groupings, including women, youth and the poor, will be maximised in the implementation of the public works programme, how will this be ensured nationally, given that the regional Shemula scheme has been largely ineffective in this regard? The involvement of both women and youth, within the Shemula

scheme, has been limited particularly in terms of decision-making, involvement with water development committees and hence institutional training, and in permanent and 'full-time temporary' employment. Legislative changes, if enforced, will certainly act to rectify these imbalances, and conditionality attached to grants and service provision may further be employed to ensure broader representation and participation within community development projects.

While some physical development may foreseeably proceed in the absence of capacity building training, rural water supply projects clearly depend upon the community's ability and skills to technically and administratively maintain and operate the system, in the absence of external agents, such as a local municipality or water board. Such has been recognised within the Shemula scheme resulting in additional funds being applied for, and granted, in the interests of establishing the required institutional capacity to sustain the project throughout the expansive area. By contrast, the Masibambisane project is presently running the risk of collapse where cost recovery from beneficiaries has fallen short of monthly upkeep and running costs. While a "plan for remedial action has been recommended for consideration by CSIR and *Partners in Development*" (Deverill 1994:1), should the need for effective management and administrative capacity, at the level of community structures, have been recognised at the initial stages of the project, such action would, in all likelihood, not have been called for. The latter case gives credence to the argument that while capacity building is not a spontaneous or 'natural' feature of the delivery process, it is both an essential and desirable aspect of development.

8.2. Recommendations

Within the rural development context, which tends to be characterised by high levels of illiteracy, unemployment and poverty, any initiatives designed to respond to needs identified by the community require a thoroughgoing knowledge and understanding of the context. As noted by Marcus (1994), there is a "complex range of social interconnections which overlay the meaning and consequence of being part of the rural working poor (and)...to address rural poverty, it is necessary to re-examine the complex system that has created it" (276-7). The latter comment serves to highlight the multi-faceted nature of rural poverty and the need for an approach to rural development to be responsive to this context. As such, any attempts at improving the quality of life experienced by rural people needs to be grounded within, and emerge from, local conditions and should proceed in an integrated manner, taking cognisance of the multi-dimensionality of rural poverty. Consequently, the need for

extensive research, consultation and preliminary investigation into the development context is emphasized as an essential imperative within the delivery process. As argued by Stein (cited in Copley 1993:52), a successful project can not simply be replicated, but developed from a thorough analysis into community perceptions to development and into the particular political, social and physical characteristics of an area.

The principal recommendation to emerge from this study concerns the inclusion of capacity building as a component of the delivery process, rather than as an amendment or addendum, that is secondary to that process. As argued by Deverill (1994:25), "capacity building is just as essential in a water supply scheme as pipe-work, and is prerequisite for active community participation and thus sustainability". The case studies, particularly that of Masibambisane, clearly illustrate the centrality of administrative and organisational development to a community-driven project.

This said, one arguably needs to look at the policy level of funding agents and at alternative means of securing finance for training and institutional development. As noted earlier within this study (2.3.4.), funding bodies play a critical role within any development initiatives, principally on the basis of conditionality attached to grants or loans. It is essential that community organisations and implementing agents, such as engineers, assess such provisos against existing resources and constraints and seek financial support from appropriate service providers that seek to insure that the interests of the community are not subordinated to the infrastructural or material aspects of the project concerned. As such, not only do community organisations need to be equipped with the required information on the provider and the services offered, but with the means of accessing these resources in a manner that does not threaten the extent of community control and ownership of the development process.

The size of a community-based scheme has implications for the degree to which direct community involvement and participation is possible, particularly at the level of decision-making and planning. Agents active within each of the water supply schemes under discussion have expressed the view that the scale of the respective projects is too great, and that, given the chance, motivation for several smaller initiatives would be forwarded (Dyer; Still, Interviews 1995). The extent to which a process emerges from consensus and remains manageable by the community and its structures is conceivably determined both by geographic area and sense of community. As such, the interests of the beneficiary might

best be represented on a significantly smaller scale than that adopted for the Shemula scheme, where the delivery process may viably remain under the control of community structures which, in turn, are better able to be held accountable by the community that they represent. The complex institutional arrangements established for the management and planning of the Shemula scheme have not been effected by community decisions, but have essentially arisen from RDP requirements for a steering committee and KFC requirements for a legal body that may accept funding. Where community ownership has consistently been argued for as essential for sustainability and empowerment, the effect that such an external management structure may have on the sense of community ownership and control may well be negative. The potential for 'government syndrome' to arise within such an institutional management context would appear significant. While the Masibambisane project has similarly been described as being too large for a community-based project, the structures in place have arisen through community participation and decision-making and, given sufficient resources being devoted to developing the capacity of such structures, the institutional arrangements and desired level of coordination between the two tiers thereof, may have proved effective in managing and maintaining a fairly expansive, and cost-effective, project.

Effective management of the delivery process relates back to the argued necessity to proceed from a sound knowledge and understanding of the development context. Given such a basis, the formulation of a methodical and qualified implementation plan, with the benefit of community involvement, promises the realisation of identified goals and objectives in a manner that remains within time and financial resource constraints while promoting community satisfaction and human resource development. Furthermore, effective management extends beyond implementation, such that the community is equipped not only with the necessary skills to maintain and operate the system, but with the means of securing support and follow-up training, where deemed necessary. As noted by Still (Interview 1995), development agencies need to establish mechanisms for nurturing projects through the learning curve after construction, failing which, the risk of collapse is immense. In addition, such follow-up would better position the community and its respective structures in terms of developing upon established skills, fostering confidence in such skills and furthering capacity to access power and resources towards meeting further development needs and objectives.

In conclusion, several fundamental changes effected within the realm of power structures may prove invaluable to the processes of delivery and capacity building. The role of funding

agencies has been examined, whereby a lesser focus on rapid physical development at the expense of human resource development would prove advantageous to both processes. The attitudes held by both technical and social agents within the delivery context have further been explored, and the argument put forward for greater integration and coordination of efforts together with a review, and recall, of prejudicial and essentially counter-productive preconceptions held by one for the other. Attitudes held towards the task at hand may require review and modification, whereby the manner in which training or delivery is effected might not be in the interests of sustainability and community empowerment, such that their current value is questionable. The approach to delivery, on the part of the state, emerges as being significantly more constructive and conducive to 'real' development than has ever historically been the case. The potential for integrated rural development is conceivable, given the stated commitment by national and provincial governments to rural development and in considering the role to be played by the NPWP task force in integrating, coordinating and supporting the efforts of various sectors involved in development (NPWP undated:7). Nonetheless, mechanisms arguably need to be put in place for ensuring that principled commitments are realised in practice, which may well be achieved with the establishment of accountable local government structures. However, the realization of such structures, with the institutional capacity required to monitor publiclyfunded projects, to provide support, and to respond to identified problems relating to service delivery, remains a challenge in need of being addressed on the part of both the KwaZulu-Natal provincial government and the national government, as well as of civil society.

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APPENDIX

- I. Interviews
- II. Questionnaire (English)
- III. Interview Schedule (General)
- IV. SCWSS Tribal Sub-wards



Appendix I: Schedule of interviews

General

- Africa, E., 1995. Personal communication. Planner for Seneque.Maughan-Brown_SWK, Durban. 28 September.
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Masibambisane Water Project

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Shemula Community Water Supply Scheme

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- Swart, G., 1995. Personal communication. Project manager for KFC, Rural Development Division, Durban. 16 October.

Appendix II: Questionnaire (English)

DATE:	/ 10 / 1995	RESEARCHER:	
		RESPONDENT No	

I) SEX:	M [1] F [2]	
ii) YEAR OF BIRTH:	19	Age ()
iii) OCCUPATION:	Farmer:	Subsistence	[1]
		Commercial	[2]
	Student		[3]
	Unemployed		[4]
	Pensioner		[5]
	Temporary /	part-time work	7)
	Unpaid Dom	estic work	[8]
	Other:[9]		
iv) HOUSEHOLD STATUS:	Head		[1]
	Relation to H	lead [2]	

I am assisting a student from the University of Natal in doing a study to find out more about the Shemula Community Water Supply Scheme and the people living here. The student, Melinda Mc Cann, has consulted with the Amanzi Trust and has been permitted to conduct this research.

We would like to ask you several questions relating to your experiences and needs, and relating to the Project and Community Committees. All information that you give us is entirely confidential and private. We would appreciate it if you could give us half an hour of your time.

GENERAL

1.	Where do you live? (Which Ward / Community?)
2.	What year did you come here?
	Born here [1]
	Year [2]
3.a.	How many other people live with you? (Excluding respondent)
3.b.	How many children under 16 years live with you?
4.	Who owns the land that you live on?
	Tribal land [1] Self [2] Other [3]
5.a.	Sources of income? (Indicate number of sources on the line provided)
	Migrant Remittances [1]
	Farming (selling produce) [2]
	Other household members [3]
	Employed (waged) [4]
	Pensions / Disability grant [5]
	Other [6]
5.b.	How many other people who live in your household have an income?
	(Excluding respondent)

6.	{Prompt}
	Water for Demostic purposes [2]
	Water for Domestic purposes [2]
	Water for Farming [3]
	Education [4]
	Transport [5]
	Health [6]
	Fuel (electricity, wood, paraffin etc.) [7]
	Agriculture (land, extension services etc.) [8]
	Employment [9]
	Sanitation (sewage; refuse etc.) [10]
	Housing [11]
	Recreation facilities [12]
	Shopping facilities [13]
	Sports facilities [14]
	Other [15]
САРА	CITY BUILDING and MANAGEMENT PROCESS
7.a.	Are there any community groupings / organisations active in your area?
	Yes [1] No [2] Don't know [3]
7.b.	If yes, what kind of organisations are there?
	Political [1] Religious [2] Womens [3] Sports [4] Youth [5]
	Other [6]
7.c.	Are you involved in any of these?
	Yes [1] No [2]
7.d.	Have you ever held office in any of these?
	Yes [1] No [2]

8.a.	Do you know about the W	ater Scheme?	
	Yes [1]	No [2] {*If no	, stop here*}
9.a.	Have you been involved i	n the Community	Committee for the Water
	Project?		
	Yes [1]	No [2]	
9.b.	Does the community mee	et with this commit	ttee?
	Yes [1]	No [2]	Don't know [3]
9.c.	If yes, how often are broa	der community m	neetings held?
	< 2 weeks [1] 2 w	reeks [2] 2 - 4 v	veeks [3] 4-8 weeks [4]
	> 8 weeks [5] Oth	ner [6]	
9.d.	Are meetings open to all	people in the com	nmunity?
	Yes [1]	No [2]	Don't know [3]
9.e.	How many members of the	ne community atte	end the meetings?
	Few - < ½ [1]		
10.a	Did the community elect the Committee?	a spokesperson t	o represent the community on
	Yes [1]	No [2]	Don't know [3]
10.b	If no, how was the person	n on the Commur	nity Committee decided upon?
	Don't know [1]	Other [2]	
11.a	Does your community sp workers?	okesperson atter	nd the meetings with other Projec
	Yes [1]	No [2]	Don't know [3]
11.b.	Are you satisfied that you	ur spokesperson	can represent your interests?
	Yes [1]	No [2]	Don't know [3]
11.c.	Why?		
		vi	

12.a.			local problem		n the water Project under onflicts)?	Stariu
	Yes		No [2]		Don't know [3]	
12.b.	Which peop	1000000	200			
12.0.	- Column da - Col	ners [1]		Res	earchers [2]	
			mmittee [3]	Tech	nnicians [4]	
12.c.	Why?					
DELIV	ERY PROCE	:SS				
13.a.	Have you,	or member	s of your hou	sehol	d, been involved in any de	cisions
	in the Proje	ct?				
	Yes	[1]	No [2]		Don't know [3]	
13.b.	If yes, how	were you /	they involved	1?		
	Cor	nmunity me	eetings [1]			
	Cor	sultation b	y Project Wor	rkers	[2] Survey [3]	
	Oth	er [4]				
13.c.	If yes, wha	were thes	e decisions a	bout?	(Eg. Where; who; how; c	osts etc.)
	_					
14.a.	Do you thin	ık that the l	Project worke	rs kno	ow what you need?	
	Yes	[1]	No [2]		Don't know [3]	
14.b.	Do you thin	k that they	are going to	meet	your needs?	
	Yes	[1]	No [2]		Don't know [3]	
15.a.	Do you kno	w how to c	ontact the pe	ople i	nvolved in the Project?	
	Yes	[1]	No [2]		Don't know [3]	

15.b.	If yes, would you talk to them about problems, or to ask questions?
	Yes [1] No [2] Don't know [3]
15.c.	Why?
16.a.	Are you happy with the way that the Project is proceeding?
	Yes [1] No [2] Don't know [3]
16.b.	Why?
17.a.	Have you seen people working on the Project?
	Yes [1] No [2]
17.b.	Has anyone in your household been employed in the Project?
	Yes [1] No [2]
17.c.	If yes, what job are they doing?
	Digging trenches [1] Other [2]
17.d.	How were people selected / how will they be selected for jobs?
	They applied [1] Community mandate [2] Don't know [3] Other [4]
18.a.	Is there going to be a water source in your erea (account to 0
io.a.	Is there going to be a water source in your area / community? Yes [1] No [2] Don't know [3]
18.b.	If yes, how close is it going to be?
	<200m [1] <500m [2] <1km [3] <2km [4] >2km [5]
18.c.	How much will you have to pay for the water you use?
	Free [1] Don't know how much [2] Amount [3]

CAPACITY BUILDING

When the water source is in	n place, who	will ensure tha	it any problei	ns with
it are solved?				
People in the comm	unity [1]			
Outside people [2]				
Other [3]				
If the community must solve	e the problem	s, do you thin	k they are ed	uipped
to do so?				
Yes [1]	No [2]	Don't know	/ [3]	
Have you, or any other peo	ple in your ho	ousehold, lear	nt any new s	kills
through the Project?				
Yes [1]	No [2]			
If yes, what new skills have	vou / they lea	arnt?		
Do you know of any people	in your comm			v skills?
Do you know of any people Yes [1]	in your comn	Don't know	/ [3]	
Do you know of any people Yes [1] If yes, about how many peo	in your comm No [2] ople in the cor	Don't know	v [3] learnt new s	kills?
Do you know of any people Yes [1]	in your comm No [2] ople in the cor	Don't know	v [3] learnt new s	kills?
Do you know of any people Yes [1] If yes, about how many peo	n your comm No [2] ople in the cor 10-15 [3]	Don't know mmunity have 15-20 [4]	v [3] learnt new s 20-40 [4]	kills? >40 [5]
Do you know of any people Yes [1] If yes, about how many peo <5 [1] 5-10 [2]	n your comm No [2] ople in the cor 10-15 [3]	Don't know mmunity have 15-20 [4]	v [3] learnt new s 20-40 [4]	kills? >40 [5]
Do you know of any people Yes [1] If yes, about how many peo <5 [1] 5-10 [2] Do you think that those peo	n your comm No [2] ople in the cor 10-15 [3]	Don't know mmunity have 15-20 [4]	v [3] learnt new s 20-40 [4] kills will teach	kills? >40 [5]
Do you know of any people Yes [1] If yes, about how many peo <5 [1] 5-10 [2] Do you think that those people others?	n your common No [2] ople in the common the	Don't know mmunity have 15-20 [4] e learnt new sk	v [3] learnt new s 20-40 [4] kills will teach	kills? >40 [5]

	u think that your pefore the Proje		nisations are stronger now than th
	Yes [1]	No [2]	Don't know [3]
	u believe that yo		its organisations are now able to
	Yes [1]	No [2]	Don't know [3]
Why?			
ENTS			
ENTS			
S			

Appendix III: Interview Schedule (General)

A. GENERAL

- 1. How do you see your role in this Project / process?
- How would you describe the process or approach adopted to delivery?
- 3. How would you describe the process or approach adopted to capacity building?
- 4. Could you describe the composition of the Steering Committee?
- 5. How active has the Committee been? Would you say that its activities have contributed to speeding up the process, or not? (How have they dealt with conflicts, problem-solving, decision-making).
- 6. What is your perspective / understanding of capacity building? (What does capacity building entail).
- 7. Has your understanding of capacity building changed during the course of this Project?
- 8. How would you describe the Steering Committee's perspective on capacity building? (Priority in relation to importance of delivery; different agents with different priorities)
- 9. Have others agents / organisations involved changed their perspective on capacity building over the course of the project? (Resistance; priorities; learning)

B. PROJECT DETAILS

- 1. What time frame has been decided upon for the overall project?
- 2. How is this broken down?
- 3. How much funding has been allocated to the overall project?
- 4. How has this been broken down?
- 5. What is the scale of the project? (No. of people / communities; geographic scale)
- 6. What structures have been put in place to manage the process?
- 7. How do these relate to each other? (Meetings; co-ordinating bodies; intermediaries; regular correspondence etc.)
- 8. How well has this being functioning, in practice? (Coordination; communication)
- 9. What principles are guiding the project / process?
- 10. What are the goals and objectives of the project?
- 11. (Is capacity building one of these)?

C. PERCEPTION OF PROJECT

- 1. What would you say are the strengths of this project / process?
- What problems have you encountered thus far?
- 3. What would you say are the weaknesses of this project / process?
- 4. How would you rate the likelihood of this project's success? (Effectiveness in meeting community needs? Effectiveness in building community capacity? Achieving the degree of access desired to water; to decision-making and planning? Remaining within resource constraints time, money, expertise?)
- 5. Would you say that this project / process is replicable?

D. AGENCY INVOLVEMENT

- 1. What selection criteria (of funders / clients) were used to decide upon which agencies were to be involved in the project? (Researchers / planners; monitoring; technicians; trainers; the recipient community)
- 2. What terms of reference have been set out for those involved in the project?
- How much influence have you had / do you have over the process? (Decision-making time frame; budget; terms of reference;

Appendix IV: SCWSS Tribal Subwards

- 1. Magwangu
- 2. Ziphosheni
- 3. Mthonjaneni
- 4. Mpala
- 5. Mbadleni 1
- 6. Mbadleni 2
- 7. Mbundwini (not in scheme)
- 8. Mwayi
- 9. Mahlabeni
- (Mathenjwa)

(Nyawo)

- 10. Mahlabeni
- 11. Makhani
- 12. Sizane
- 13. Siwongana
- 14. Mziki
- 15. Munywane
- 16. Mgedula
- 17. Mkhanyeni
- 18. Mbekwana
- 19. Madeya
- 20. Mbodla
- 21. Njinjikazi
- 22. Ntabayengwe
- 23. Mphoweni
- 24. Sikebhe
- 25. Bhambanana
- 26. Siweni
- 27. Shemula
- 28. Ngwenyana
- 29. Khwambuzi
- 30. Thombothi
- 31. Makhohlomba
- 32. Kwandaba
- 33. Manyika
- 34. Mtikini
- 35. Sicabazini
- 36. Bhekula
- 37. Mpophomeni
- 38. Mabhudu