

**THE PUBLIC MANAGEMENT OF ENVIRONMENTAL
IMPACT ASSESSMENTS IN SOUTH AFRICA**

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ABSTRACT

The thesis explores the nature of public management of environmental impact assessments in South Africa. As concern for the environment and for the attainment of sustainable development has grown globally, so too has the adoption of environmental management systems in line with this goal. The environmental impact assessment (EIA) is regarded by many, as being an effective tool that, when used within and supported by these management systems, will advance the attainment of sustainable development. While the environmental impact assessment is an important tool, experience with it illustrates how its effectiveness is constrained by a number of factors. These range from shortcomings with the technical design of the procedure to shortcomings of an institutional nature.

Research has shown that the technical soundness of design will be of little consequence to the effectiveness of the procedure if the political structures and decision-making processes are not taken into account. The technical constraints on EIA do not reflect a weakness of science rather they reflect the reality that environmental impact assessment has evolved as an ongoing political process within development planning. These issues will be explored in this thesis with particular reference to experience with the implementation of EIA in the United States under the National Environmental Protection Act of 1969.

The issue of public management is considered by looking at South Africa's environmental management strategy in the Environmental Conservation Act 73 of 1989, and the provisions in the Constitution that directly impact on the three spheres of government's responsibilities towards the environment are highlighted.

A case study of the provinces of Gauteng and KwaZulu-Natal is also undertaken in an endeavour to illustrate the 'practical reality' versus the 'procedural ideal' of policy implementation. Provinces are constrained in their ability to effectively implement EIAs by financial and capacity constraints. The manner in which these two provinces have attempted to overcome these constraints in order to implement EIAs will be considered in this thesis.

As research undertaken has shown and in conclusions drawn in this thesis, EIAs can be considered an important tool in the world move to sustainable development. But they are simply a tool and cannot be expected to operate in isolation if they are to be effective. They need to be supported by strong national policy, co-operative governance and the necessary budget allocation if they are to operate in the manner they were designed to and if they are to achieve sustainable development.

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Declaration

Except where explicitly indicated to the contrary, this study is the original work of the author.

In the Beginning...

-author unknown-

God created heaven and the earth. Quickly he was faced with a class action suit for failure to file an environmental impact statement. He was granted a temporary permit for the project, but was stymied with the cease and desist order for the earthly part. Appearing at the hearing God was asked why He began His earthly project in the first place. He replied that He just liked to be creative. Then God said "Let there be light", and immediately the officials demanded to know how the light would be made. Would there be strip mining? What about thermal pollution? God explained that the light would come from a huge ball of fire. God was granted provisional permission to make light, assuming that no smoke would result from the ball of fire, that He would obtain a building permit, and to conserve energy, would have light out half the time. God agreed and said He would call the light 'Day' and the darkness 'Night'. Officials replied that they were not interested in semantics. Then God said, "Let waters bring forth creeping creatures having life and the fowl that may fly over the earth." Officials pointed out this would require approval from the Department of Game co-ordinated with the Heavenly Wildlife Federation and the Audubongelic Society. Everything was OK until God said he wanted to complete the project in Six days. Officials said it would take at least 200 days to review the application and impact statement. After that there would be a public hearing Then there would be 10-12 months before... At this point God created Hell.

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INTRODUCTION

i. AIMS AND OBJECTIVES

It was during my postgraduate studies in the field of environment and development that I first encountered environmental impact assessments (EIAs). One of the short courses undertaken at this time focused primarily on the regulation of South Africa's EIA procedure in September 1997. The course's concern was primarily with the technicalities of the procedure, and we were tasked with evaluating it according to criteria devised by Christopher Wood.¹ The aim was to use these criteria as a guide to determine to what extent EIAs in South Africa conform to internationally accepted principles of environmental management. The course while informative was short and discursive, but for me it had sparked a particular interest in environmental management. Rather than disregard what I had learned I decided to turn it into the basis for my thesis. The primary concern for me, however, was not for the technicalities of procedure although they are important, but rather for the nature of government and policy implementation; essentially for the organisational structures and institutions of management.

Analysts of policies tended, until the 1970s and 1980s, to bypass the impact of bureaucracy and service providers on the effectiveness of policy. A policy was judged in terms of the decision-makers rather than the 'street-level' implementation of fine-sounding ideas from national and local leaders.² In recent times, however, there has been a growing awareness of the importance of placing public policy in the context of institutions. The concern is to go beyond the formal structures of institutions and examine what they did or what their function was, and how they functioned in 'reality', as opposed to some 'ideal' rational type. How institutions really worked on the 'inside', as opposed to what their structures presented as the formal 'outside' rationale.³

¹ Wood, C. Environmental Impact Assessment. A Comparative Review. Longman, 1995.

² *Ibid.* p.462.

³ Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar, 1995, p.323.

The primary concern when undertaking this research was therefore for the capacity of provinces in South Africa to undertake and implement the environmental management tool as part of the national management of the environment. While the adoption of EIAs is a significant move on the part of the government, especially the Department of Environmental Affairs and Tourism, towards establishing processes designed to achieve sustainability, the institutional and organisational constraints, it was feared, would limit the success of their adoption.

In an endeavour to understand the complexities of the institutional structures and how they define and impact on the technical soundness of policy adoption a case study of two provinces was undertaken. Gauteng and KwaZulu-Natal are committed to undertaking EIAs, as are provinces nationally, but their effective management is constrained by the institutional realities they face. This will be explored throughout this thesis as the central tenet is that institutional structures define the implementation of policy and alter the technical viability of the policies and tools themselves. Decision-making, which takes place in organisations, is influenced by its dependence on the context in which it is situated rather than by purely formal, rational considerations or technical soundness. Provinces have had to refine and reconstruct policies in an endeavour to implement them. Are provinces as the competent environmental authority able to undertake the implementation of such a tool effectively and efficiently and with anything resembling uniformity throughout the country? Or are there practical constraints to the technical fluidity of the procedure?

The implementation of EIAs also needs to be considered in the broader context of environmental management, as they are simply a tool rather than an end in themselves. Therefore, the broader objectives of the thesis are to contextualise the adoption and implementation of EIAs. In order to situate South Africa's implementation and adoption of EIAs in the wider framework of environmental management consideration is given to the particular policy statements and management structures, under the Constitution, adopted in 1996, and the Environment Conservation Act of 1989. Environmental management, in turn, is increasingly seen in South Africa as a means of attaining sustainable development, bearing in mind that the latter is not only a local objective but also very much a global one.

ii. METHODOLOGY

The methods employed in undertaking this research involved the use of social research techniques. Social research is often complex as much of the time the researcher is dealing with perceptions and attitudes.⁴ These are important in understanding the complexities involved in implementing at provincial level a policy which has been developed at a national level. Added to this is the difficulty of trying to implement and streamline EIA processes and procedures when for many the idea of sustainability and why it should be pursued is a vague one.

Qualitative research is undertaken to gain an understanding of the complexities of a topic rather than to gather highly accurate statistics on a list of variables. It is the technique used throughout the research undertaken. Qualitative research provides a disciplined approach to gathering and analysing information using primarily a repertoire of open-ended interviewing techniques and formal and informal analysis methods. At its most simple level, qualitative research involves observing and listening to people as they respond in a carefully constructed environment of enquiry. The outcome of this is gaining an understanding and appreciation of their attitudes and behaviour. Its main strength is that it enables the decision-maker to see the world through the respondent's eyes, and thereby to understand the basis for their attitudes and behaviour. Exploratory research was also used to determine the reasoning behind particular ideas, beliefs and opinions.⁵

Within these techniques a mix of data collection methods was used: both non-structured and semi-structured interviews were undertaken.

Nonstructured interviews have no prespecified set of questions, nor are questions asked in a particular order. Furthermore, no schedule is used. With little or no direction from the interviewer, respondents are encouraged to relate their experiences. The main aim is to encourage them to reveal their own opinions and attitudes, to describe whatever events seem significant to them, and to provide their own definitions of their situations. The

⁴ Babbie, E.R. The Practice of Social Research. Wadsworth, 1995.

⁵ *Ibid.*

interviewer therefore has a great deal of freedom to probe various areas and to raise specific queries during the course of the interview.

A number of these nonstructured interviews were conducted in the course of this study. The range extended from interviews with people who were interested in the nature of the research rather than directly involved with EIAs, to interviews with people faced directly with the task of implementing the regulations. These interviews not only aided in the development of a broader, overall understanding of the complexity of issues and the nature of environmental management as a whole, but also raised issues of a policy nature more directly related to the difficulties of implementation.

As a direct result of ‘snowballing’⁶ at the International Association for Impact Assessment South Africa (IAIASa) conference held in September 1998 key informants were identified. Semi-structured interviews were conducted with these people regarded as being instrumental in the formation and implementation of environmental policy, and with consultants having to deal directly with the practical application of the regulations.

A semi-structured interview takes place with respondents known to have been involved in a particular experience, and refers to situations that have been analysed prior to the interview. This knowledge forms the basis of an interview guide specifying topics related to the research hypothesis. The guide is simply a checklist of questions and issues, rather than a questionnaire and is devised to focus on the subjective experiences regarding the situation under study. Open-ended questions are asked to allow for expanding ideas and debate.

Semi-structured interviews were undertaken with people involved directly in the field of environmental impact assessments, predominantly government officials at both national and provincial level. Interviews were also undertaken with various environmental consultants and town planners. These people were contacted in order not only to gain an understanding of the complexities involved with administering the EIAs but also to determine the perceptions and attitudes of those having to undertake the EIA procedures.

⁶ Brian, A. Research Skills for Students. Kogan Page, 1996, p.20. ‘Snowballing’ is a method of sampling where a sample group is built up from interaction with other informants.

The combination of the two forms of data collection techniques meant that certain standard information was obtained from all respondents in a structured manner, while other information was collected from only some of the respondent in a nonstructured manner.⁷

In addition a number of secondary resources were used. This included an investigation of policy documents, law journals, and government papers and discussion documents, as well as consultants' reports.

Research was also undertaken at two 'workshops' which were attended. The one, an annual conference held by South African affiliate to the International Association of Impact Assessment (IAIAsa), was held over a period of three days. Presentations were given, concepts were discussed and then individuals broke away into groups to pursue topics of the most interest and pertinence to them. These breakaway groups consisted of smaller numbers of people aimed at facilitating more ready and active participation by all involved. Group dynamics and interaction obviously had a considerable role to play and hence the smaller groups were meant to facilitate a more relaxed and steady flow of information as they were designed to be less intimidating than the big conference sessions. The other conference was organised by the Environment Planning Professions Interdisciplinary Committee (EPPIC) and had to do with environmental impact assessment (EIA) in particular. It was more of a question and answer session after an explanatory presentation had been given detailing how Gauteng's Department of Agriculture, Conservation and Environment was coping with the flood of applications received. Both were relatively informal and allowed for a free flow of information and ready public participation.

The provinces for the case studies, namely, Gauteng and KwaZulu-Natal, were chosen in order to develop an understanding of the complexities involved with implementing regulations related to the environment in the context of a developing country faced with financial and human resource constraints. Despite the limitations placed on them, both provinces are able to implement the regulations with a due degree of success. They

⁷ Nachmias, D and Nachimas, C. Research Methods in the Social Sciences. Edward Arnold, 1976, pp.101-102.

therefore proved more fruitful to analyse in the endeavour to understand the nature of the implementation process, than would provinces unable to cope with the task of implementation at all. These provinces of Gauteng and KwaZulu-Natal were chosen as they were convenient and accessible from a research point of view. Their significance also lay in their adoption and development of techniques and methods enabling them to cope with their mandate as the competent environmental authority. Had provinces unable to implement the regulations been chosen, such streamlining methods and tactics would not have been uncovered. The limitation of considering only two provinces is the fact that the results of the case studies cannot be extrapolated to the country as a whole as provinces function under different capacity, funds and resource constraints.

iii. OUTLINE OF THE STUDY

Chapter One considers the concept of sustainable development, its adoption globally and the need for the development of environmental management systems that have as their ultimate goal the attainment of sustainability. A technical description of EIAs and their adoption and implementation in the United States, where they were first regulated, provides a framework in which to consider the successes and shortcomings of EIAs as they have been experienced. The description provides an understanding of what an EIA is, what can be expected from them and what considerations need to be borne in mind by those countries adopting them. The focus of this chapter and of the thesis as a whole will be on highlighting the complexities inherent in adapting a tool to the individual circumstances of the countries involved as the very nature of environmental impact assessment is constrained and structured by the political forces at play. Each country has its own characteristics, structures and complexities, but there are common lessons that can be learned with regard to implementation and design regardless of the nature of the country involved.

Chapter Two highlights the fact that although EIA is a tool used to aid in the management of the environment, because the state in South Africa is the custodian of the environment, it is ultimately influenced by the political institutions and structures that exist. South Africa has grappled with how to implement environmental management effectively for

many years. This chapter will pursue these elements by detailing the nature of the environmental management under the Environmental Conservation Act (ECA) of 1989, and the associated difficulties with implementing a management tool within a fragmented and ineffective framework.

EIAs were only regulated in South Africa some eight years after the adoption of the concept of EIA within the environmental management structures of the Environment Conservation Act. With the adoption of the new Constitution in 1996 and the associated Bill of Rights which have as basic tenets the environmental rights of all South Africans, environmental management received renewed focus and impetus and in 1997 regulations were formally passed. The process of regulating these EIAs will also receive consideration in Chapter Two.

Chapter Three looks more closely at the nature of implementation within South Africa's environmental policy arena. It highlights the respective implementation of EIAs in two provinces, Gauteng and KwaZulu-Natal, by means of a case study analysis. Attention is drawn to the similarities and differences faced by provinces guided by the same regulations and overall environmental framework. Each province operates under different constraints and copes in different ways, although there are related similarities and consistencies.

In Chapter Four the lessons learned from the United States' experience highlighted in Chapter One are drawn on. Chapter Four considers the nature of implementation in South Africa in the categories of the technical and institutional shortcomings of the process. While the framework of structures and institutions within which EIAs are implemented is unique to each country, there are similarities within the constraints of the process faced.

Finally, the conclusion deals with the broader contextualisation of environmental impact assessments as a management tool used within environmental management systems. The conclusion focuses on whether environmental impact assessments are a successful means of influencing decision making to take account of the environmental impacts of development and whether considering the broader environmental management systems in which they function they are likely to advance the attainment of sustainable development.

CHAPTER ONE: THE INTERNATIONAL CONTEXT

Increasingly since the 1960s the relationship between people and their environment has become a topic of widespread attention and importance. The policy statements of governments throughout the world ranging from both the developed and developing sectors is testament to this, as is the considerable literature that has been published centred around how to balance the competing goals of environment and development.¹ The view increasingly adopted in the second half of the 20th century is that people have a moral responsibility to protect the environment as a consequence of its finite nature and the need to take future generations into consideration.² As Fuggle and Rabie have stated, 'It is now universally accepted that according to present trends, we must expect the world, and South Africa, to become more crowded, more populated, less ecologically stable and more vulnerable to natural hazards in the years ahead.'³ Evidence from research undertaken suggests that development cannot subsist upon a deteriorating environmental resource base and that the environment cannot be conserved when economic growth leaves out of account the costs of environmental degradation and destruction.⁴ Accordingly, 'the ideal is to achieve economic growth upon an environmental foundation that can sustain such growth, in short to strive towards sustainable development'.⁵

It was in 1980 that the idea of sustainable development was formalised and emerged as a serious concept. The 1980 International Union for the Conservation of Nature and Natural Resources' (IUCN) World Conservation Strategy made the first attempt to reconcile ecological and economic concerns and approaches, and thus introduced the concept of 'sustainable development'.⁶

¹ Glasson, J. *et al.* Introduction to Environmental Impact Assessment. Principles and Procedures, Process, Practice and Prospects. UCL Press, 1994, pp.vii-9.

² Holmberg, J. (ed.). Policies for a Small Planet. Earthscan Publications Ltd., 1992, p.21.

³ Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, 1992.

⁴ Holmberg, J. (ed.). Policies for a Small Planet. Earthscan Publications Ltd., 1992, p.27.

⁵ Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, 1992.

⁶ Graham Smith, L. Impact Assessment and Sustainable Resource Management. Longman Group Limited, 1993, pp.2-5.

The increased focus on and adoption of the concept of sustainable development during this time led governments to renew the attention given to their environmental management policies and strategies. This was not simply because many governments believe that they have a constitutional responsibility as custodians of the environment, but also because it fell within many governments' broader responsibility as signatories to international treaties and conventions. These international conferences and treaties demand the recognition that environmental issues know no boundaries and are not contained within nation states or countries. The World Commission on Environment and Development stresses the importance of adapting these management policies and strategies to the individual needs and political, social, cultural and economic characteristics of the countries themselves. 'No single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications. Yet irrespective of these differences, sustainable development should be seen as a global objective.'⁷

While the environmental management frameworks may be unique to individual countries, the management tools used within them are often very similar. Amongst the variety of tools and techniques used are cost-benefit analysis, environmental accounting, and the adoption of minimum criteria and standards, for example, to monitor levels of pollution. Another tool that has been adopted and is the focus of this thesis is the environmental impact assessment (EIA). EIAs have formally been in existence since the regulation of the National Environmental Protection Act in the United States (NEPA) in 1969.

While NEPA established the requirement for an environmental impact assessment a decade before the formalisation of sustainable development as a concept, the renewed focus on sustainable development provided by international conferences such as the IUCN, amongst others, reinforced the need for environmental management and the use of tools such as the EIA within these management systems.

⁷ World Commission on Environment and Development. Our Common Future. Oxford University Press, 1987, p. 41.

As a point of departure, this chapter therefore begins with a consideration of the National Environmental Protection Act of 1969 and the adoption of EIAs. Attention is then given to the Conferences responsible for the adoption of sustainable development and for providing the impetus behind the global adoption of environmental management systems, an important part of which is the environmental impact assessment as one specific management tool.

1.1 THE CONCEPT OF SUSTAINABLE DEVELOPMENT AND THE NEED FOR ENVIRONMENTAL IMPACT ASSESSMENT

1.1.1 THE UNITED STATES' NATIONAL ENVIRONMENTAL PROTECTION ACT OF 1969

In the mid-1960s, a strong 'ecology' movement began to emerge in the US.⁸ Coupled with this, was a widespread recognition in the late 1960s that some significant environmental problems in the US resulted from the actions of government itself.⁹ The appetites of large infrastructure agencies in charge of water resource projects, highways and energy facilities appeared to be insatiable, and the mission statements of those agencies did not force them to account for the adverse environmental impacts of their actions.¹⁰ This meant that measures needed to be taken to mitigate this degradation of the biophysical environment and the apparent consequent lowering of the quality of life caused in large measure by the heavy emphasis on short-term economic gain in both the public and private sectors.¹¹

⁸ Sondheim, M.W. 'A Comprehensive Methodology for Assessing Environmental Impact' Journal of Environmental Management 6 (1978), p.27.

⁹ It is argued that there was more to the emergence of the 'ecology' movement than simply concern for the state of the environment and that it was simply part of a much wider political debate. The aftermath of the Vietnam War made the American public at large more critical of government actions. In line with this, the view is that Nixon was looking to appease critics so as to deflect attention from the controversy over the US's involvement in the Vietnam War, and therefore focused on the critics of environment degradation as one means of attaining this appeasement. Regardless of the motivations behind the rise of the ecology movement and the subsequent concern government gave to environmental issues, the 1960s signalled progress for environmental considerations for future development projects and initiated an extensive consideration of EIAs.

¹⁰ Ortolano, L. and Shepherd, A. 'Environmental Impact Assessment' Vanclay, F. and Bronstein, D.A. Environmental and Social Impact Assessment. John Wiley and Sons, 1995, p.5.

¹¹ *Ibid.* p.27.

The procedure adopted was environmental impact assessment and, by the end of the decade, the basic principles of impact assessment had been formulated in the National Environmental Policy Act (NEPA) of 1969. It was the passage of the first comprehensive, environmental legislation to be passed by any government.¹² NEPA sought to reverse the clear and intensifying trend towards environmental degradation and to remedy the lack of environmental awareness of many federal agencies whose policies were in conflict with the general public interest. Its main function was to hold the federal government accountable as trustee for the protection of the American environment.¹³

Under NEPA, all federal agencies were required to consider the environmental impacts of their decisions. To ensure that agencies gave more than lip service to their new responsibilities it required the preparation of a formal statement documenting the consequences of any major federal action on the environment. This environmental impact statement had to accompany all other documents through any decision making process so as to ensure that the environmental consequences of projects, plans or programmes were considered together with economic and technical considerations.¹⁴

NEPA influenced significantly both federal projects and federal agencies. It also influenced indirectly the decision-making processes of hundreds of other political jurisdictions. For example many of the fifty states of the USA have their own programmes calling for EIAs.¹⁵ The influence of NEPA also extended beyond the United States. By the early 1990s many other countries had followed this lead and over forty countries had EIA programmes.¹⁶ Some included language similar to NEPA while others were quite different and reflected well thought out efforts to tailor requirements for environmental impact statements to the local political context. Some countries set up their

¹² Preston, GR.; Robins, N.; and Fuggle, RF. 'Integrated Environmental Management' Fuggle, F.R. and Rabie, M.A. (eds.). Environmental Management in South Africa. Juta, 1992, pp.748-761.

¹³ Wathern, P. (ed.). Environmental Impact Assessment- Theory and Practice. Unwin Hyman, 1988, p.23.

¹⁴ Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, 1992, p.762.

¹⁵ Ortolano, L. and Shepherd, A. 'Environmental Impact Assessment' Vanclay, F. and Bronstein, D.A. Environmental and Social Impact Assessment. John Wiley and Sons, 1995, p.5.

¹⁶ Sondheim, M.W. 'A Comprehensive Methodology for Assessing Environmental Impact' Journal of Environmental Management 6 (1978), p.27.

EIA programmes using laws, while others relied on executive actions and administrative orders.¹⁷

1.1.2 SUSTAINABLE DEVELOPMENT AND EIAs

A decade after the legislation of the National Environmental Protection Act and the subsequent regulation of environmental impact assessments, the 1980 IUCN's World Strategy on sustainable development created an understanding of sustainable development and the linkages between environment, development and society. Key to the strategy was an understanding of the word 'environment' in its broadest sense. The environment according to the IUCN's World Strategy is not just the biophysical and ecological elements, but it also has a strong human (economic, political and social) element the interrelationship between which ultimately constitutes a global environment. *global env?*

Such broad definitions have been incorporated into most national environmental policies and strategies, as the virtue of moving away from considering environment and development as two separate objectives and rather towards considering them in an holistic manner has become widely recognised as being integral to sustainable practice. The Conference highlighted the importance of balancing economic development with equitable growth and evenly distributed social benefit, and for the combination of these to be balanced with protection of a finite natural resource base. At this conference the linkages between poverty, inequality and environmental degradation were highlighted.¹⁸

The IUCN's World Conservation Strategy served as the antecedent to further promotion of the concept of sustainable development by the World Commission on Environment and Development (WCED). The WCED was established in 1983 by the United Nations to formulate 'a global agenda for change'. Gro Halem Brundtland, Prime Minister of Norway, headed the Commission, and was the namesake of the final report, commonly referred to as the Brundtland Report.¹⁹ *a global aggr. for change*

¹⁷ *Ibid.*

¹⁸ Graham Smith, L. Impact Assessment and Sustainable Resource Management. Longman Group Limited, 1993, pp.2-5.

¹⁹ *Ibid.*

The WCED published its final report, 'Our Common Future', (the Brundtland Report), and submitted it to the United Nations in 1987. It refined the concept of sustainable development by adopting the following definition:

Sustainable development seeks to meet the needs and the aspirations of the present without compromising the ability to meet those of the future.

Economic growth always brings risks of environmental damage, as it puts increased pressure on environmental resources. But policy makers guided by the concept of sustainable development will necessarily work to assure that growing economies remain firmly attached to their ecological roots and that these roots are protected and nurtured so that they may support growth over the long term. Environmental protection is thus inherent in the concept of sustainable development, as is the focus on the sources of environmental problems rather than the symptoms.²⁰

The Brundtland Report called for a reconsideration of future decision-making based on balanced attention to environment, development and society:

In essence sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.²¹

The Brundtland Report was the conceptual foundation for the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992, and for the mammoth global action plan, Agenda 21.

At the Rio Conference, the pursuit of sustainable development was for the first time acknowledged as a long-term objective of the international community. Agenda 21 was agreed on as a blueprint for achieving this sustainable development, thereby reflecting a global consensus and political commitment at the highest level to integrate environmental concerns into social and economic decision making processes.²²

²⁰ World Commission on Environment and Development. Our Common Future. Oxford University Press, 1987, p.41.

²¹ *Ibid.* p.46.

²² Republic of South Africa, Department of Environmental Affairs and Tourism. White Paper on Environmental Management Policy for South Africa. May 1998, p.14.

The global success of the programme hinges on the dedicated commitment of national governments to develop strategies, plans, policies and processes under the rubric of Agenda 21 that will integrate environmental, economic and social objectives into decision-making. National Agenda 21 programmes are aimed at facilitating the implementation of Agenda 21 programmes at a local level (LA21) too. Agenda 21 progress reports therefore include country reports by national governments, and various endeavours by local councils, and non-governmental organisations.²³

While the IUCN Conference introduced the concept of sustainable development, it was the Rio Conference that entrenched the concept of environmental impact assessments as a tool aimed at achieving this concept. In accordance with Principle 17 of the Rio Declaration, it was stated that: 'EIAs shall be undertaken for proposed activities that are likely to have a significantly adverse impact on the environment, and are subject to a decision of a competent national authority, and, where appropriate, they shall be made available early in the project cycle.'²⁴

The influence of this conference on environmental management is borne out to a degree by the adoption globally of both the concept of sustainability and its accompanying tool, the environmental impact assessment. This is reinforced by the fact that the adoption of EIAs has not been confined to the developed world only. By 1981, 106 countries had similar environmental impact assessment systems, the majority of which were in developing countries. Another decade later in 1991, nearly all the countries in the South had some form of environmental impact assessment system set up to deal with environmental issues.²⁵

²³ Republic of South Africa, Department of Environmental Affairs and Tourism, Directorate Sustainable Development. Programme for the Further Implementation of Agenda 21 Adopted by the Special Session of the General Assembly 23-27 June 1997. November 1997.

²⁴ Graham Smith, L. Impact Assessment and Sustainable Resource Management. Longman Group Limited, 1993, pp.2-5.

²⁵ Biswas, A.K. and Agarwala, S.B.C. Environmental Impact Assessments for Developing Countries. Butterworth Heinemann, 1994, p.239.

1.2 A DESCRIPTION OF EIAs AND WHAT CAN BE EXPECTED FROM THEM

In order to analyse how EIA has been implemented as an environmental management tool, it is necessary to get a better grasp of what EIAs in fact are from a more technical and theoretical perspective. Consideration will therefore be given to the development of EIAs in light of their adoption and implementation in the US where they were first legislated and regulated. While this section refers predominantly to literature related to the United States experience, Wood argues that their experience is common in many respects to experiences throughout the developed world and indeed is replicated in developing countries too.²⁶

In some countries these lessons have been used as a foundation on which to base the implementation of EIAs. For other countries, because EIA processes themselves are defined by and dependent on the particular needs, abilities and resources of different countries, EIA as practised in the United States has served to simply flag associated pitfalls. Therefore, while using the United States' experiences with NEPA as a base for the analysis of EIAs, cognisance is taken of the fact that the complexities and constraints faced by each country are unique. Countries differ from one another in their cultural, social, political and economic situations and in their related governmental structures and institutions. However, there is merit in not re-inventing the wheel and rather learning from and adapting the experiences of others.

* The United States' experience demonstrates that unless the processes determining how EIAs are to be implemented are carefully considered, the accuracy and soundness of the scientific design of the environmental impact assessment itself will be of little consequence. Unless cognisance is taken of the particular nature of the decision making and planning processes, EIAs will not be afforded the opportunity to operate in the way that they have been carefully designed to. These issues will be considered in the next section in order to illustrate what it is that makes EIA effective and how indeed they have been adopted to aid in the process of environmental management.

process det how - EIA implemented?

²⁶ See the various related works by Christopher Wood: Wood, C. Environmental Impact Assessment a Comparative Review. Longman, 1995.

This description of EIAs is not aimed at arguing for or against the various definitions of EIA that have evolved over time and with practical experience. There is much literature supporting the use of EIA, as an important environmental management tool.²⁷ In light of this, EIAs will be considered as such while the limitations of what they can and cannot achieve will also be highlighted. This will allow for a better understanding of what an EIA in fact is, what function/purpose it performs and what the shortcomings of the process are considered to be.²⁸

Because the United States has been practising environmental impact analysis since the passage of the National Environment Protection Act (NEPA) of 1969 it has been through a considerable and extended learning curve. The United States has both broadened and defined environmental impact assessment by including, the social and cumulative effects of various impacts, while also refining the nature of the process and addressing the limitations of what the impact assessment can achieve.²⁹

The early 1970s witnessed much activity in the development of EIA methodologies as government agencies and consultants struggled to determine what constituted an EIA and what methods should be used to conduct one. Attempts to discover a single, applicable methodology were creative, but did not yield a widely agreed-upon algorithm.³⁰ Perhaps one of the most common conceptions of an EIA was as a planning tool.³¹ Assessments were done to forecast and evaluate the impacts of a proposed project and its alternatives.

- This perspective of an EIA as a planning tool has been referred to as the 'technocratic paradigm', since it is a view widely held by engineers and scientists who conduct EIAs. According to this technocratic paradigm, an EIA is an element of the 'rational model' of

²⁷ See for example: Graham Smith, L. Impact Assessment and Sustainable Resource Management. Longman Group, 1993 ; Wathern, P (ed.) Environmental Impact Assessment, Theory and Practice. Unwin Hyman Ltd, 1988 ; and PADC Environmental Impact Assessment and Planning Unit (ed.). Environmental Impact Assessment. NATO ASI Series, Martinus Nijhoff Publishers, 1983.

²⁸ McDonald, G.T. and Brown, L. 'Going Beyond Environmental Impact Assessment: Environmental Input to Planning and Design.' Environmental Impact Assessment Review 15 (1995), p.483 supports this declaring: 'Environmental impact assessment (EIA) has been, and remains for the time being, a very important tool of environmental management.'

²⁹ Canter, L. Environmental Impact Assessment. McGraw-Hill, 1996, pp.31-32.

³⁰ Ortolano, L. and Shepherd, A. 'Environmental Impact Assessment' Vanclay, F. and Bronstein, D.A. Environmental and Social Impact Assessment. John Wiley and Sons Ltd, 1995, p.6.

planning and decision making. In this model, objectives and criteria for evaluating alternative projects are identified at the outset. Engineers and planners then design alternative projects and undertake studies to predict impacts and to evaluate alternatives. The information is then used to select one project from among the alternatives. As a planning tool, an EIA serves largely to inform interested parties of the likely environmental impacts of a proposed project and its alternatives. It illuminates environmental issues to be considered in making decisions. Generating and circulating information on impacts has salutary effects - it forces a 'hard look' at the environmental effects of projects, and it facilitates co-ordination among those affected by the proposed project.³²

One function of EIAs, therefore, is to provide decision-makers with an indication of the environmental consequences of the options open to them. Even when sanctioning a development appears the only decision that can be countenanced, applying an EIA may still yield benefits. An EIA may reveal other ways of achieving the same objectives, but with less environmental disruption. In addition, there may be economic benefits from using an EIA. Mitigation measures identified during EIA may be incorporated more economically at the design stage than subsequently.³³

The objective of EIA is not, however, to force decision-makers to adopt the least environmentally damaging alternative. If this were the case, few developments would take place. The environmental impact of development is but one of the issues addressed by decision-makers as they seek to balance the often competing demands of development and environmental protection within the context of planning and environmental management.³⁴

³¹ *Ibid.* p.3.

³² *Ibid.*

³³ Wathern, P. (ed.). Environmental Impact Assessment Theory and Practice. Unwin and Hyman, 1988, pp. 28-29.

³⁴ *Ibid.* pp.19-21.

By the late 1970's it had become apparent that, in practice, the NEPA model of impact assessment had many shortcomings.³⁵ Some of these could be attributed to the technical nature of the EIA procedure while others are a result of the wider institutional context of resource management in which EIAs are adopted. The shortcomings of EIAs therefore will be separated into these two main categories, although they are not mutually exclusive.

1.2.1 TECHNICAL SHORTCOMINGS

As Ortolano and Shepherd declare, there are limitations with EIA as practised in the United States that relate to the actual design and structure of the EIA itself. One set of constraints on the effectiveness of EIAs, they argue, stems from a systemic problem.³⁶ That is to say, EIA is typically conducted as a one-time exercise, whereas the process of the project design is cyclical and iterative. Moreover, the EIA exercise is often conducted late in the planning, often long after project proponents have become attached to a particular design concept.³⁶

A second set of shortcomings is less fundamental and thus more amenable to solution. These concern beneficial analyses and activities that could be more frequently conducted. Among these are strategic assessments, cumulative impact analyses, risk assessment, social impact studies, public involvement that is timely and meaningful, and post-project monitoring and follow ups to ensure that proposed mitigation is implemented.³⁷

Related to this second shortcoming, experience with EIAs in the United States suggests that projects were often formulated and assessed according to their technical and economic criteria, and the potential health and social impacts of projects were rarely considered in a vigorous manner. Even when considered, such assessment usually took the form of cost-benefit analysis which crudely attempted to put a monetary value on

³⁴ *Ibid.* pp.19-21.

³⁵ Graham Smith, L. Impact Assessment and Sustainable Management. Longman Group, 1993, p.10.

³⁶ Ortolano, L. and Shepherd, A. 'Environmental Impact Assessment' in Vanclay, F. and Bronstein, D.A. (ed.). Environmental and Social Impact Assessment. John Wiley and Sons, 1995, p.27.

³⁷ *Ibid.*

non-economic variables such as the destruction of marine ecosystems or the social and health impacts of air pollution. As a consequence of such restricted assessment, many developments resulted in unforeseen harmful impacts, which reduced predicted benefits.³⁸

As stated, this limitation is more amenable to solution. Within a few years, a separate field of social impact assessment (SIA) had emerged, largely because of the perceived deficiency of NEPA to respond fully to social impacts. Technology assessment (TA) also emerged in the 1960s as a separate branch of EIA. This again was due to a perceived deficiency of the NEPA designed EIAs to address, as a general area of concern, the unintended consequences of technology on society. Technology assessment was formalised in 1972.³⁹

Brown and Hill⁴⁰ add to the list of EIA limitations by declaring that, a pitfall highlighted by the United States' experience with EIAs is the fact that the role of EIA as it has emerged is essentially passive.

In most jurisdictions, the environmental assessment (EA) statutes and procedures require that an EIA *be done* rather than that anything necessarily *be done by it*.⁴¹ There are usually clear specifications of when EAs are required, what their form and content should be, and the time-frame in which they should be completed, but little or no requirement or action-forcing mechanism for interaction in the course of an EA, nor even for the implementation of EA outcomes which rarely have more than an advisory status, both for the proponent and for the decision maker. Neither is bound to action, certainly not within the EA process, and other mechanisms have to be called upon to implement them.⁴² This runs the risk of mechanistic EIA reports being produced, which have little or no effect on

³⁸ Clark, B. 'The Aims and Objectives of Environmental Impact Assessment' PADC Environmental Impact Assessment and Planning Unit (ed.). Environmental Impact Assessment. NATO ASI Series, 1983, p.4.

³⁹ Vanclay, F. and Bronstein, D.A. 'Editor's Preface: The State of the Art of Impact Assessment' Vanclay, F. and Bronstein, D.A. (ed.). Environmental and Social Impact Assessment. John Wiley and Sons, 1985.

⁴⁰ Brown, A.L. and Hill, R.C. 'Decision-scoping. Making Environmental Assessment Learn How the Design Process Works.' Project Appraisal. Beech Tree Publishing, December, 10 (1995), p.224.

⁴¹ *Ibid.*

decisions.⁴³ This 'token compliance' is seen by some to be a 'something is better than nothing' consideration, but essentially is not likely to lead to any long term sustainability of resources or the long term success of such regulations and policies.

The ultimate result of this period of reflection and review of the initial United States experience was a practical realisation and frustration that impact assessment had not reached its potential. However, it is argued that attempts to resolve these concerns through refinement of the *technical* design elements of impact assessment are misguided.⁴⁴

The predominant rationale in developing various forms of impact assessment has been a concern for the poor level and quality of the *scientific components* of impact assessment. The reason for this lack of scientific content is perceived to be the fact that the impact statements have to be produced within well-defined administrative procedures and the 'result has often been a somewhat confused and frustrating technical review process'.⁴⁵ This situation is seen as the principal reason why the ability of science to protect the environment by means of impact assessment has been unfairly criticised. The solution usually proposed is the refinement of scientific concepts to define, specify and quantify better the design and conduct of impact assessment studies.

For example, in their attempt to determine the extent to which the science of ecology could be used to refine the design and conduct of EIA, Beanlands and Duinker⁴⁶ proposed that 'significant improvements' in the *scientific quality* of assessments could be realised through the reduction of *constraints*. Rather than confronting the limitations of impact assessment directly, Beanlands and Duinker⁴⁷ adopted the premise that 'the institutional framework for an environmental impact assessment is in place before the scientific basis has been established' and confined themselves to a consideration of the ways by which

⁴² *Ibid.*

⁴³ Wood, C. Environmental Impact Assessment a Comparative Review. Longman, 1995.

⁴⁴ Beanlands, G.E. and Duniker, P.N. 'An Ecological Framework for Environmental Impact Assessment', Journal of Environmental Management 18 (1984), pp.267-277.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ *Ibid.*

the adoption of ecological principles, and ecology as a science would improve the practice of impact assessment *within those constraints*.

As much as this line of research might advance the accuracy of impact assessment studies, it is inherently constrained from improving in any fundamental fashion the conceptual basis for impact assessment itself. These constraints do not reflect a weakness of science, rather, they reflect the reality that impact assessment has evolved as an ongoing *political* process within development planning. Improving the science of environmental analysis *per se* does nothing to reform the political processes of resource management that govern how that information is utilised.⁴⁸

This again relates back to the arguments of O’Riordan and Graham Smith who declare that the success of EIA depends upon a large number of factors in addition to the precise nature of the procedures in force and the soundness of the scientific and technical elements of EIA. Peckham argues that, initially, what was not immediately clear to many proponents of EIA was the fact that once the process had been given legislative status, as institutionalised in NEPA, the concept would necessarily become subject to the non-scientific forces shaping the ongoing political power play.⁴⁹ Whatever the capacity of impact assessment experts to assess scientifically the potential effects of activities on the environment, the effectiveness of EIA as an instrument of environmental planning and management -the manner in which the information is used- is inevitably shaped by the current politics of resource management.⁵⁰ Essentially, EIA effectiveness is associated with changing political regimes and with the changing level of support for the EIA process among courts, chief executives, and senior agency managers.⁵¹

Environmental evaluations cannot themselves ensure that correct decisions about the environment are taken as in fact many decisions on significant public or private development projects are not made following the logic of the rational model. Instead

⁴⁸ Beanlands, G.E. and Duinker, P.N. ‘An Ecological Framework for Environmental Impact Assessment.’ Journal of Environmental Management 18 (1984), pp.267-277.

⁴⁹ Peckham, B. ‘Environmental Impact Assessment in South African Law.’ South African Journal of Environmental Law and Policy 4(1997), p.118.

⁵⁰ *Ibid.*

⁵¹ Wathen, P. (ed.). Environmental Impact Assessment Theory and Practice. Unwin Hyman, 1989, p.165.

“decisions are influenced by non-scientific factors.” In some instances the political rationality will take precedence over the environmental rationality and in others the environmental analysis itself may be faulty.

Environmental evaluation is not the much sought after scientific device that need only be plugged in to solve all planning problems, and neither is it a rigorous technique that can be neatly packaged to churn out specific answers to difficult problems.⁵² Environmental evaluations utilise a battery of useful techniques that can aid the planning as well as the political and bureaucratic decision-making process.

Therefore environmental impact assessment, it came to be seen, has as much to do with policy, legislation, regulation, institutional structure and political commitment as it has to do with the environment in its biophysical sense of the word. “It is often these factors that have the largest role to play in the effective implementation of such environmental regulation and environmental management techniques, and it is these factors, not the procedural design of the environmental impact assessment process, that affect the ability of countries to effectively adopt and implement EIAs.” Irrespective of the state of the countries development if the decision is taken to adopt EIAs, it is the political, legal and institutional factors that are the greatest determinant of success.

* 1.2.2 INSTITUTIONAL SHORTCOMINGS

With an emphasis on overcoming the shortcomings of the technocratic paradigm as highlighted above, an understanding emerged that the success of EIA is dependent not only on the regulation of the process. Effective implementation of EIA is also reliant on the development and continual refinement of the institutional structures put in place to implement the EIA regulations, and thereafter, to monitor their efficiency and effectiveness.⁵³

⁵² Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, p.764.

⁵³ Wathern, P. (ed.). Environmental Impact Assessment- Theory and Practice. Unwin Hyman,

When adopting EIAs as a management tool it is the institutional capacity within the country adapting them and within the agencies/departments having to administer them that is a primary consideration because it is the institutional arrangements that define the conditions under which resources are managed. They affect the implementation of resource policies and they structure the policy-making process. Institutional arrangements are a composite of legal powers, administrative structures, financial provisions, informal procedures and the distribution of political support, which give rise to a definable system of public decision making. It is these institutional arrangements that define the role of impact assessment in resource management and environmental planning.⁵⁴

How then are institutional arrangements to be defined and operationalised in the study of impact assessment? Legal provisions for sustainable development and environmental protection planning and regulation establish the context for impact assessment. These provisions vary from country to country and are a product of each nation's distinct political culture. Indeed as much as the law may be viewed as an instigator of reform, it is itself shaped by new political perspectives.⁵⁵

According to O'Riordan, as one of the notable products of societal attempts to deal with environmental issues, impact assessment represents a major challenge to the 'procedural issue' of environmental and administrative law. Law provides a basis for planning and regulation but it must be viewed, understood, administered and implemented within a wider political context. That is, the implementation of provisions for impact assessment necessitates attention to the institutional arrangements for management.⁵⁶

To provide for an 'institutional' analysis, Mitchell and Pigram (1989) utilised a framework that focuses on the provision of institutional arrangements that provide for co-ordination and an integrated approach to resource management. The framework assumes that the responsibilities for public authority in resource management are fragmented and shared among several different agencies. This gives rise to boundary problems among

1988, p.13.

⁵⁴ Graham Smith, L. Impact Assessment and Sustainable Resource Management. Longman Group Ltd, 1993, p.30.

⁵⁵ O'Riordan, T. Environmentalism. Pion, second edition, 1981, p.265.

⁵⁶ *Ibid.*

and within management agencies, generating problems of overlapping jurisdictions and multiple mandates. Institutional arrangements must counter these problems if they are to facilitate integrated resource management.⁵⁷

The importance and relevance of the above cannot be overemphasised. It will be argued that institutional structures are of primary importance to both the effectiveness of environmental management as a whole and to the more specific but related success of EIAs as a tool for environmental management. These points need to be borne in mind when considering South Africa's environmental management structures, as their relevance and importance will become increasingly apparent.

Therefore, while EIA procedure is a necessary condition for determining the success of EIA, it is not a sufficient condition. To be successful in achieving a real shift in the weight given to the environment in decisions, the EIA procedure needs to interact positively with its jurisdictional context.⁵⁸ The law provides a basis for planning and regulation but it must be viewed, understood and implemented within a broader political context. Thus while the legal basis for carrying out EIA is an essential prerequisite, it is only one of several other considerations that need to be satisfied concurrently if the environment is to be protected and sustainable development achieved.

Breaking from the technocratic paradigm, however, to acknowledge the political elements of resource management and the institutional and governmental structures in place for their implementation presents its own complexities and constraints. As has been highlighted time and again it is essential that the structural elements be in place before the EIA processes are regulated, as they need to be supported by strong institutional and judicial structures if they are to be adequately implemented and monitored.

In other instances, according to Hill, the legal basis of EIA systems in many developing countries is often weak, non-mandatory or non-existent.⁵⁹ This is often a result of the lack

⁵⁷ *Ibid.* p.37.

⁵⁸ *Ibid.* p.42.

⁵⁹ Hill and Fuggle, 'Integrated Environmental Management of Development in South Africa.' Proceedings from the Eighth Quinquennial Convention of the South African Institute of Civil Engineers (SAICE), Pretoria, 1988.

of priority afforded the environment in many developing countries. Hill declares this to be a consequence of the fact that in many instances protecting the environment for scientific, educational or aesthetic requirements is regarded by many to be a luxury, while concern for the future is seldom as pressing as present needs for food, shelter and security. As a result, environmental concerns do not carry a strong electoral basis in many of these countries, leading to a lack of political will to introduce environmental assessments, or resulting in their adoption as a non-mandatory provision.⁶⁰ This therefore relates to the need for capacity building to take place not simply within the administration, but in the political arena too.

The interdisciplinary nature of environmental problems also means that close co-operation and co-ordination are essential among and within the various governmental departments dealing with specific types of problems.⁶¹ In many governments the politician/bureaucrat divide is strong. The politician decides on legislation while the bureaucrat is left to implement it. However little concern is given to the capacity and structures which have to implement them. There is a strong divide between the theoretical and the practical and hence there is also a strong divide in how successful such implementation strategies are.⁶²

What this analysis has illustrated is what the EIA can and cannot achieve; it has highlighted the limitations of considering EIA in the framework of the rational model and has highlighted the influence of political power plays and power relations on the implementation and effectiveness of EIAs. While the technical design of the EIA process is important for the attainment of sustainable development, regardless of their scientific nature and design EIAs are not likely to yield successful results unless they are implemented in the proper context.

When it comes to a country such as South Africa procedural issues such as policy, legislation, regulation, institutional structure and political commitment need to be

⁶⁰ *Ibid.*

⁶¹ Biswas, A. and Geping, Q. (eds.). Environmental Impact Assessment for Developing Countries. Tycooly Publishing, 1987, p.194.

⁶² Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar, 1995.

examined simultaneously with a consideration for South Africa's pressing demands for social justice and development. Bearing in mind the inherent complexities of individual countries the lessons learned from developed countries and indeed other developing countries can be applied directly to the South African case studies. Have similar pitfalls and shortcomings been experienced in the adoption and implementation of EIAs or has South Africa managed to adapt the implementation of EIAs to the South African context successfully?

CHAPTER TWO: SOUTH AFRICA

The starting point for examining environmental management systems and policy in South Africa, will be a consideration of South Africa's move towards adopting sustainable development. Consideration will then be given to how South Africa has adopted environmental management systems in line with achieving sustainable development.

The predominant focus of this section will be on the Environmental Conservation Act 73 of 1989, many sections of which are still binding although this Act has since been replaced by the Environmental Management Act 107 of 1998.¹ The analysis of the Environmental Conservation Act not only gives a broad understanding of the fragmented nature of environmental management as a whole, but also contextualises the complexities involved with implementing EIA procedure in South Africa. Attention will also be given to the Constitution and the Bill of Rights in this chapter as they can be considered the overall framework in which the country and hence the environment has to be managed. This will also illustrate the stance the government of South Africa has adopted to the environment and how it should be managed.

¹ Although the Environment Conservation Act of 1989 has since been replaced by the Environmental Management Act of 1998, sections 21, 22 and 26, the sections pertaining to environmental impact assessments are still operational under the Environment Conservation Act. Therefore the Environmental Management Act has not been considered in anything but a passing fashion in this thesis. The Environmental Management Act, although interesting from the point of view that it is trying to eliminate the fragmentation inherent in environmental management in South Africa, has no direct bearing on environmental impact assessments at this stage. In fact, according to McEwan, T. *et al.* Tackling Environmental Issues in South Africa: Learning from the European Experience. Pietermaritzburg, University of Natal, 1999, p.3. The National Environmental Management Act 107 of 1998's implementation has been delayed for no apparent reason and it has therefore yet to take effect.

2.1 SOUTH AFRICA'S ADOPTION OF SUSTAINABLE DEVELOPMENT

South Africa has not been exempt from the global trend of environmental degradation.² If one reads the literature dealing with the state of South Africa's environment that has surfaced over the last decade, many support the stance that South Africa shows evidence of environmental degradation due to the insensitive development that occurred under *apartheid*. Under *apartheid*, economic development was not guided by concern for the sustainability of the natural resource base.³ Development led to exploitation and the optimisation of South Africa's mineral and natural resources with little concern for long-term environmental impacts. The Department of Environmental Affairs and Tourism have declared that many of their policies did not address population dynamics effectively and neglected the development of the country's human resources. Constraints arising from the finite character of non-renewable natural resources and the ecological cycles that sustain renewable natural resources were largely ignored.⁴ Those then in power expressed more concern with nature conservation and the preservation of wildlife than with poverty and oppression being experienced by the majority of the population.⁵

While this lack of focus on environmental issues and the concept of sustainable development can therefore in part be explained by the legacy of *apartheid*, the low level of priority accorded the environmental basis for economic development can also be attributed to the isolation experienced by South Africa in the 1980s as a result of international sanctions. Perhaps this was most clearly evident from the minimal involvement of South Africa in the formal and informal meetings surrounding the United Nations Conference on Environment and Development (UNCED) in June 1992.⁶ The South Africa government did not participate fully in the UNCED process. They were

² Hallows, D.(ed.). Hidden Faces. Environment, Development. Justice: South Africa and the Global Context. Earthlife Africa, 1993, p.255.

³ Whyte, A. (ed.). Building a New South Africa. Environment, Reconstruction, and Development. A Report from the International Mission on Environmental Policy. International Development Research Centre, 1995, pp.3-4.

⁴ Republic of South Africa, Department of Environmental Affairs and Tourism. White Paper on Environmental Management Policy for South Africa. May 1998.

⁵ Whyte, A. (ed.). Building a New South Africa. Environment, Reconstruction, and Development. A Report from the International Mission on Environmental Policy. International Development Research Centre, 1995, p.11.

⁶ *Ibid.*

invited to submit an initial report, but were not invited to participate in any of the preparatory committee meetings nor in the UNCED conference itself.⁷

The liberation movements of the Africa National Congress (ANC), and the Pan Africanist Congress (PAC), however, attended the final UNCED meeting. They joined the official delegation of southern African governments with whom they had frequent contact through the course of the liberation struggle.⁸ The policy documents emerging from the ANC, and other liberation movements such as the Congress of South African Trade Unions (COSATU), the South African Communist Party (SACP), and the South African National Civic Organisation (SANCO) prior to the first general election in 1994 addressed the issue of environment and sustainable development to varying degrees. This process represented a major step forward and reflected progress on the part of the democratic movement towards constructing a new model for development policy in South Africa. In the past, resistance to *apartheid* policies left little space to reflect on alternative paths for social, economic, and political development beyond agreement that such future development must be shaped within a context defined by democracy and nonracialism. When such reflections did take place the environment was low on the agenda.⁹ Although the South African government was not therefore officially represented at UNCED with the move to a new democratic ANC-led government in 1994, the new government attempted a genuine paradigm shift in making sustainable development its touchstone.

The election of a new government in 1994 and their adoption of the concept of sustainable development meant that new policies were put in place and a new set of international relationships emerged as development objectives become redirected towards alleviating poverty, creating jobs, and meeting the basic needs of the majority of South Africans.¹⁰ Within this new context, it became necessary to define clear policy objectives in the area of environmental quality and the use of natural resources.

⁷ Hallowes, D.(ed.). Hidden Faces. Environment, Development, Justice: South Africa and the Global Context. Earthlife Africa, 1993, p.33.

⁸ *Ibid.*

⁹ Whyte, A. (ed.). Building a New South Africa. Environment, Reconstruction, and Development. A Report from the International Mission on Environmental Policy. International Development Research Centre, 1995, p.11.

¹⁰ *Ibid.*p.12.

This is recognised in South Africa's Constitution of 1996 where environmental quality is one of the fundamental rights of citizens. Section 8 of the Bill of Rights binds government to give effect to the environmental rights in section 24 of the Constitution.

In this section:

Everyone has the right:

- (a) to an environment that is not harmful to their health or well-being; and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
 - (i) prevent pollution and ecological degradation
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and the use of natural resources while promoting development and use of natural resources while promoting justifiable economic and social development.¹¹

In accordance with these rights, people can take legal action to protect their environmental and other rights, even where the government has no obligation in terms of any other statute to give effect to these rights. Section 7 (2) of the Bill of Rights places government under a constitutional duty to respect, promote and fulfil this right. The Constitution, furthermore, places government under a legal duty to act as a responsible custodian of the nation's environment.¹² The Constitution should therefore ensure that the universally accepted ethic of sustainable living becomes enshrined in all legislation and forms a key element in the future character of the nation.¹³

In line with the Constitution and its initiatives towards reconstruction and reconciliation, the government also drafted its vision on socio-economic development for the country, the Reconstruction and Development Programme (RDP), which contains specific provisions for sustainable development.¹⁴ In the RDP Base Document, the original version published by the African National Congress before it was adopted by the

¹¹ The Constitution of the Republic of South Africa, 1996, Chapter 2, section 24.

¹² *Ibid.*

¹³ Yeld, J. Caring for the Earth. South Africa. A Guide to Sustainable Living. World Wide Fund for Nature South Africa, 1997, p.9.

Government of National Unity, the environment is listed as a basic need. Probably the most significant environmental clause of the RDP, and the one which offers the most scope for ensuring a sustainable future is 2.10.3 which reads: 'environmental consideration must be built into every decision. To accomplish this, procedures must be set in place which oblige decision-makers to demonstrate what environmental considerations they take into account when considering projects'.¹⁵ While this clause was not introduced directly into the White Paper on Reconstruction and Development which was the translation of the RDP Base Document into a concrete set of implementation strategies, the White Paper does, however, as one of the four legs of the vision for the fundamental transformation of South Africa, include: 'creating a sustainable and environmentally friendly growth and development path'.¹⁶

Implicit in the final RDP document adopted by the government are major demands for environmental resources and services. The basic principles of the RDP state that it is a coherent programme that links reconstruction and development and democratises the state and society. There are clear signals in the RDP that environmental concerns are integral to the implementation of economic and social goals. For example, the emphasis on small-scale sustainable agriculture and the requirement for new mining operations to incorporate rehabilitation costs and to undergo environmental impact assessments. Included in the goals of the RDP are equitable access to natural resources, and a safe and healthy living and working environment. This approach had not been attempted previously in South Africa and was a fundamental break with apartheid practices.¹⁷ South Africa's Government of National Unity in its Reconstruction and Development Programme therefore accepted that environmental, political, social and economic issues are inextricably linked. The government thereby committed itself to the principles and agreements that resulted from the UNCED summit meeting.

¹⁴ *Ibid.* p.17.

¹⁵ The Reconstruction and Development Programme. A Policy Framework. Johannesburg, African National Congress, 1994.

¹⁶ Yeld, J. Caring for the Earth. South Africa. A Guide to Sustainable Living. Stellenbosch, World Wide Fund for Nature South Africa, 1997, pp.39-40.

¹⁷ Whyte, A. (ed.). Building a New South Africa. Environment, Reconstruction, and Development. A Report from the International Mission on Environmental Policy. International Development Research Centre, 1995, pp.13-14.

It is, however, true to say especially in terms of the new government and environmental management that past policies play an important role in determining how current issues will be defined, and what strategies, means and ends will be deployed. Policy making also takes place within the parameters of inherited 'institutional arrangements'.¹⁸ As institutionalists argue, politicians may promise innovation, but, having been elected, they inherit the decisions and commitments of previous incumbents. Agendas in government have a much longer life than appears from the comings and goings of politicians. New policy makers have to put their agendas into effect within the context of ongoing set of programmes and commitments, which restrict and inhibit change far more than political rhetoric suggests to voters.¹⁹

Although it had become explicitly apparent that a new perspective of environmental management needed to be adopted in order to attain the concept of sustainable development, the new government was slow to adopt a new policy of environmental management largely because of the all inclusive nature of this policy's development. It did, however, make several amendments to the Environment Conservation Act the governing Act dealing with the environment during this time. The Environment Conservation Act of 1989 was amended in 1991, twice in 1992, three times in 1993, and again in 1994. These amendments included the determination of policy by the Minister on issues including 'the sustainable use of natural resources'.²⁰

In a marked break from the Environment Conservation Act and past policies of environmental management under this Act, the Government of National Unity in August 1995 initiated a Consultative National Environmental Policy Programme (CONNAP). CONNAP represented the first ever opportunity for ordinary South Africans to make a direct contribution to the formulation of a new environmental policy for the country. After lengthy discussions, wide consultation and, inevitably, some hiccups, a management team was appointed to guide the CONNAP process. A drafting Team was appointed and on April 3, 1996 they produced a Discussion Document – *Towards*

¹⁸ Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar, 1995, p.230.

¹⁹ *Ibid.* p.231.

²⁰ Bray, E. 'Towards Sustainable Development: Are We on the Right Track?' South African Journal of Environmental Law and Policy 5(1998), 173-185.

Environmental Policy in South Africa. This was followed by the Green and White Papers and finally culminated in the National Environmental Management Act 107 of 1998.²¹ The Act sets out the principles of sustainable development.

While CONNEP and the National Environmental Management Act are important from the perspective they add to the adoption of sustainable development in South Africa, the focus of this thesis, environmental management and EIAs, necessitates a closer look at the Environment Conservation Act. As the new National Environmental Management Act was only enacted in 1998, between 1989 and 1998 environmental management under both apartheid and the new government was managed under the Environment Conservation Act. It was under this Act that environmental impact assessments were regulated. It is also under this Act, many sections of which have not yet been repealed by the National Environment Management Act, that EIAs are still governed.

The importance of the Constitution is also acknowledged, as it is the overarching policy guideline for management. It determines how the institutional structures that exist are to manage the environment. It establishes the importance of co-operative governance and thereby illustrates the institutional arrangements that are unique to environmental management and the implementation of EIA in South Africa. The constitution is important as far as environmental policy is concerned, as South Africa's democratic rule is heavily reliant on a highly effective form of intergovernmental relations. The framework of intergovernmental relations, which can embody and be responsive to national imperatives, provincial sensitivities and local realities, is dealt with in Chapter Three of the Constitution with its provisions for co-operative governance.²² It is therefore the Constitution that provides the institutional context for environmental management in South Africa; it dictates the mode of governance and how environmental management is structured. These institutional structures have a direct bearing on the implementation of EIAs as has been illustrated in Chapter One. The Environment Conservation Act and Constitution will therefore be given more attention below.

²¹ Yeld, J. Caring for the Earth. South Africa. A Guide to Sustainable Living. World Wide Fund for Nature South Africa, 1997, p.32.

²² Lawrence, R. *et al.* The Reality of Intergovernmental Relations. Environmental Management in South Africa. Paper presented by the Centre for Government and Policy Studies, University of Natal, Pietermaritzburg at the South African Political Science Association Biennial Congress,

2.2 THE ENVIRONMENT CONSERVATION ACT 73 OF 1989

From as early as the development of the 1980 White Paper on a National Policy regarding Environment Conservation, to the 1998 White Paper on Environmental Management, many of the issues and problems surrounding environmental management in South Africa have been the same. Issues of fragmented administration under the Environment Conservation Act 73 of 1989 and a failure on the part of the Department of Environmental Affairs and Tourism to adequately implement the legal provisions that have been instituted litter the history of environmental management. Questions pertaining to the role the Department of Environmental Affairs should play and how to effectively co-ordinate intergovernmental relations and interdepartmental functioning arise time and again. In light of the persistence of these issues, consideration of environmental management in South Africa here will extend to understanding the fragmented nature of environmental management and the difficulties that have confronted attempts to effectively implement the policies that have been devised.²³

Environmental management in South Africa has been problematic for many years primarily because of the ineffectiveness of the Environment Conservation Act. This has resulted in a number of related constraints and weaknesses. This statement will be explained below.

Until 1994 there was no clearly articulated general environmental policy in any statutes or regulations having the effect of law.²⁴ As a result of this central policy vacuum, various aspects of environmental legislation have traditionally been administered by a number of different government departments²⁵ and national, provincial and local

Military Academy, Saldanha, 1999, p.2.

²³Rabie, R.A. 'Environment Conservation Act and Its Implementation' South African Journal of Environmental Law and Policy 1(1994), p.125.

²⁴Ridl-Glavovic and Siyakhana. Review of Legal, Policy and Institutional Systems in the Durban Metropolitan Authority. Prepared for and obtained from Common Ground Consulting, 1998.

²⁵Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, 1992. 'The Departments of Environmental Affairs and Tourism, Mineral and Energy Affairs, Agriculture, Transport, Water Affairs and Forestry, Trade and Industry and Land Affairs, all have environmental responsibilities in terms of natural resource management, environmental health and sustainability.'

authorities²⁶ whose functions often overlap but whose activities are not always synchronised. Hence a 'plethora' of environmental laws scattered through some seventy statutes, many provincial ordinances, local by-laws and international conventions, adding to the law's fragmented character.²⁷

Despite the extensive powers given to various government departments and officials, their enforcement of environmental law is generally perceived to have been inadequate. The administrative officials of the various departments who have authority with regard to the issue of licenses, abatement notices and warnings, seem, for instance, to adopt a conciliatory rather than a confrontational approach to polluters, which is evidenced by the fact that, with the exception of the Department of Water Affairs and Forestry, they have initiated virtually no prosecutions.²⁸

Added to this, no single department has ever been entirely responsible for the administration of environmental legislation. Prior to the Environment Conservation Second Amendment Act 189 of 1993 for example, the Department of Environmental Affairs and Tourism was extremely weak, as it was obliged to obtain the concurrence of the Ministers of the other departments before even declaring policy. The Second Amendment Act recognised this limitation and hence legislatively empowered the Minister of the Department of Environmental Affairs to make environmental policy without the previously necessary concurrence of all other affected ministeries. The Department was also obliged to ensure that the policy was complied with and was given the authority to force compliance on the part of authorities.²⁹ Although a potentially effective legislative basis therefore existed it is obvious that such legislation does not in itself provide a solution to environmental problems. Ultimate success is decisively determined by the effective implementation of the legislation concerned.³⁰

²⁶ Loot, C. 'Effective Environmental Management' South African Journal of Environmental Law and Policy 1(1994), p.22. 'Almost all our environmental statutes endow administrative officials and bodies with the power to enforce their provisions by way of regulating procedures.'

²⁷ Ridl-Glavovic and Siyakhana. Review of Legal, Policy and Institutional Systems in the Durban Metropolitan Authority. Prepared for and obtained from Common Ground Consulting, 1998.

²⁸ Loot, C. 'Effective Environmental Management' South African Journal of Environmental Law and Policy 1(1994), p.23.

²⁹ *Ibid.* pp.24-25.

³⁰ Rabie, M.A. 'The Environmental Conservation Act and its Implementation' South African

The Department did not use the teeth that it had been given. It was only four years later, in 1997 that the Department mobilised sections 21, 22 and 26 by regulating for environmental impact assessments. This meant that the problem remained one of fragmented administration and ineffective implementation.³¹ Ultimately therefore, the problems surrounding environmental management in South Africa today can be attributed to the ineffectiveness of the Environment Conservation Act 1989 as a framework for environmental management.³²

Legally, the various amendments made to the Environment Conservation Act, empowered the Department of Environmental Affairs and Tourism to set environmental policy and guidelines. In practice however, it exercised little co-ordination or control over the other departments.³³ Co-ordination of this nature implies not only statutory adherence and authority by all other departments, but also the mechanisms and capacity to actually exercise or enforce this. If this does not exist, control or co-ordination is fruitless. Under such circumstances these departments administered their own regulations and mechanisms for dealing with their environmental responsibility. This has led to a tendency by other departments to exercise discretion in the application of sound environmental management in development project planning and implementation. An example in point is the Department of Mineral and Energy Affairs.

The Department of Mineral and Energy Affairs developed its own environmental guidelines and management criteria in 1992 with principles similar to those of the Department of Environmental Affairs and Tourism and began formal application of these guidelines to projects in 1993.³⁴ These were developed in response to the lack of overall environmental control exerted by the Department of Environmental Affairs and Tourism. The Department of Mineral and Energy Affairs' environmental guidelines and management criteria necessitate the preparation of an environmental management

Journal of Environmental Law and Policy 1(1994), p.121.

³¹ *Ibid.*

³² Van Reenen, T.P. 'Environmental Policy Making and Effective Environmental Administration' South African Journal of Environmental Law and Policy 1(1994) p.43.

³³ Rabie, M.A. 'The Environment Conservation Act and its Implementation' South African Journal of Environmental Law and Policy 1(1994), pp.112-124.

³⁴ Addo, P. A Review of the Implementation of Integrated Environmental Management in South African Government Departments. University of Natal, Pietermaritzburg, School of Environment

programme report (EMPR). An EMPR is, in fact, the management programme followed for the life of the mine from implementation to closure; while it has an environmental element its main focus is on the management of the life of the mine, and not on the protection of the environment.³⁵

Over and above this problem is the fact that protection of the environment is not the primary objective of most of the departments charged with responsibility for implementing environmental laws, this has resulted in the environment being treated as an add-on. Actually, their objectives often conflict with the interests of the environment, as must be the case with the Department of Trade and Industry,³⁶ which is obviously primarily concerned with the promotion of the economy. The same applies to the Department of Minerals and Energy which, is primarily concerned with prospecting and mining operations and encouraging economic development. They believe that much needed economic development should not be impeded by unmerited pressures in respect of the environment.

The fact that no institution, with the necessary authority and power, existed for monitoring the performance of such departments (which oversee activities that are likely to cause harm to the environment), only further compounds the problem. This apparent lack of uniformity in management principles and procedures probably stemming from conflicting departmental roles, interests and goals, reduces the effectiveness of environmental management and makes any attempts at formulating, implementing and enforcing consistent, overall policies difficult.³⁷

This section has served to illustrate the complexities and interconnectedness of environmental management. This is important to bear in mind when considering the

and Development, 1997.

³⁵ Franz, L. 'Environmental Control Feature' Mining Weekly, 1999.

³⁶ Dlodlu, J. 'Trade Department Says Priority is Jobs not Environment' Business Day, August, 1997. 'According to a report prepared by the Foundation for Global Dialogue on the way forward, trade department officials told the seminar that the department was mandated, firstly 'to create employment, and not to protect the environment.' Industrial Environmental Forum of Southern Africa representative Di Soutter told the workshop that the 'real problem is a lack of political will and understanding of environmental issues in the trade department'.

implementation and indeed the effectiveness of EIAs since, as has been illustrated, EIAs are simply a management tool, an aid to decision making. They are therefore ultimately constrained by the structures, be they political, environmental, developmental or related to planning that they function within. As illustrated, there must be certain legal constraints and enforcement of these legal provisions on development, if sustainable development is to be achieved.³⁸ Hence the importance of EIAs and environmental management tools that take into consideration the nature of such development.

2.3 ENVIRONMENTAL IMPACT ASSESSMENTS

Under the Environment Conservation Act 73 of 1989, for many years sections 21,22 and 26,³⁹ the sections pertaining to environmental impact assessments, remained only potentially valuable, awaiting the publication of regulations which would activate them.⁴⁰ A wide ranging ‘implied’ requirement did however exist even where there was no legislative requirement. The Minerals Act 50 of 1991, for example, declares that the holder of a prospecting permit or mining authorisation may not commence prospecting or mining before the regional Director has approved ‘an environmental management programme in respect of the surface of the land concerned’.⁴¹ The Director General may ‘pending the approval of an environmental management programme require that an environmental impact assessment be carried out’.⁴² Similar requirements are laid out in the Development Facilitation Act 67 of 1995. The Act contains several environmentally significant provisions, *inter alia*, the definition in section one of ‘environmental evaluation’ as, ‘an evaluation of the environmental impact of a proposed land

³⁷ Fuggle, R.F. and Rabie, M.A. Environmental Management in South Africa. Juta, 1992.

³⁸ *Ibid.*

³⁹Section 21 pertains to identification of activities, which will probably have a detrimental effect on the environment.

Section 22 pertains to prohibition of undertaking of identified activities

Section 26 pertains to regulations regarding environmental impact reports.

The Act lists categories of activities, which may have negative impacts on the environment and states that the Minister may prescribe in regulations the scope, content, and procedures for environmental impact reports.

⁴⁰ Peckham, B. ‘Environmental Impact Assessments in South African Law’ South African Journal of Environmental Law and Policy 4(1997), p.124.

⁴¹ The Minerals Act 50 of 1991 section 39(1).

⁴² *Ibid.* section 39(4)(a)

development'.⁴³ However, the haphazard and often ineffectual application of non-mandatory EIAs; the voluntary application of EIA by private institutions; as well as South Africa's readmission into the international community brought South Africa more clearly under an obligation to practice sustainable development practices, and ultimately resulted in mounting pressure for EIAs to be formally regulated.

The media has also played an important role in intensifying public awareness. Major environmental events in early to mid-1990 such as the kaolin mining application at Chapman's Peak in the Western Cape, the mining application on the Eastern Shores of Lake St Lucia in KwaZulu-Natal and the proposed steel plant at Saldanha Bay on the West Coast, to mention a few, were reported and communicated nationally as well as internationally.⁴⁴

The original intention with the draft EIA regulations was that they would be implemented and executed on a national level. The provisional list of activities and the draft regulations for environmental impact reports (EIRs) were therefore published for comment in the Government Gazette of 4 March 1994. The comments received were collated and analysed and the Department met with the key role players during November 1994 to address their specific concerns.⁴⁵

By implication, the fact that a draft guideline for EIA was devised in 1994 means that it was in fact under the 'old' government (pre-1994 elections) that EIAs became a consideration. While this may be so, as the Environmental Conservation Act of 1989 in fact made provision for EIA administration, the provisions were not legislated until 1997. This suggests that under the 'old' government while the importance of the environment was understood and the need for regulated development evident, the impetus behind making these provisions enforceable was provided by the ANC government, which came to power in 1994.

⁴³ Peckham, B. 'Environmental Impact Assessments in South African Law' South African Journal of Environmental Law and Policy 4(1997) pp. 127-128.

⁴⁴ Deputy Minister of Environmental Affairs and Tourism Plenary sessions of Globe 1996, Vancouver, 1996.

⁴⁵ *Ibid.*

In fact, the desirability of including some sort of EIA requirement in South Africa's regulation of environmental management issues has long been evident, and it was commented on directly or by implication by Barend van Niekerk,⁴⁶ more than two decades ago, and subsequently by Andre Rabie in 1986.⁴⁷ Several stages in the development of EIA are evident, ranging from an academic recognition of the need, as expressed in the above articles, *inter alia*, and works such as Fuggle and Rabie's 1983 book⁴⁸ the 1991 President's Council Report⁴⁹ as well as potential requirements, as embodied in the Environment Conservation Act 1989 before activation of the sections related to environmental impact assessment. Practical recognition commenced with the publication of Integrated Environmental Management (IEM) guidelines by the department of Environmental Affairs and Tourism in 1992, which formed the basis for Departmental standards, and the voluntary application of EIA by private institutions. It was however evident that legislative intervention was needed to give statutory expression to the otherwise implied requirement. This statutory requirement was only provided in 1997 with the regulation of EIA under the Environment Conservation Act 73 of 1989.⁵⁰

After the draft EIA regulations were published in 1994 environmental management was also affected by the larger constitutional changes taking place. In terms of the Interim Constitution of 1994 the new provinces would have legislative competence in the functional areas of agriculture, environment, housing, health, nature conservation, regional planning and development and road traffic regulation regarding the environment.⁵¹ One hallmark of the new Constitution is that a decentralised political system was created in terms of which nine provinces each with an elected legislature were established. They were given substantial law-making powers over a wide range of functions.⁵² The Constitution stipulates that the provincial government will have the

⁴⁶ Van Niekerk, B. 'The Fight Against Pollution, or the Need for an Environmental Norm in South African Law' South African Journal of Law 92(1975), p.78.

⁴⁷ Rabie, M.A. 'Strategies for the Implementation of EIA in South Africa' South African Public Law 18(1986), pp.18-23

⁴⁸ Fuggle, R.F. and Rabie, M.A. Environmental Concerns in South Africa Juta, 1983.

⁴⁹ President's Council, Report of the Three Committees of the President's Council on a National Environmental Management System. 1991, p.188.

⁵⁰ Peckham, B. 'Environmental Impact Assessments in South African Law' South African Journal of Environmental Law and Policy 4(1997), pp.119-120.

⁵¹ Du Plessis, W. 'Integration of Existing Environmental Legislation in the Provinces', South African Journal of Environmental Law and Policy 1(1995), p.23.

⁵² Minister Mohammed Valli Moosa, Minister of Provincial Affairs and Constitutional

executive responsibility for the EIA regulations. The responsibility of the national Department of Environmental Affairs and Tourism was still to set national norms and minimum standards for regulating EIA, but it was decided that the responsibility to effectively implement the regulations was to rest with the nine provincial governments.⁵³

The process of actually gazetting the regulations dragged on for a number of years, as after the provisional list of activities had been published for public comment in 1994, another was published in 1996.⁵⁴ The list of activities published in 1994, which evoked widespread comment, identified many relevant activities, but did not extend the requirement of EIAs to a sufficiently early stage of the planning process.⁵⁵ The draft guideline document published to provide the various role players with a uniform basis for implementing the regulations was published by the Department of Environmental Affairs and Tourism in September 1997 to coincide with the publication of the List of Activities and Regulations for EIAs in the Government Gazette of 5 September 1997. The draft guideline was subsequently revised and finalised. Thus EIA has become a legal provision and an integral component of the project clearance process rather than a non-mandatory activity as it was previously. The promulgation of legislation for compulsory EIA may be regarded as a very significant step in formalising environmental impact assessment in South Africa.⁵⁶

This section relating to the Environmental Conservation Act and EIAs has referred predominately to policy and statutes. But while management is much more than this it is within these legal structures that it has to take place. The consideration of the Environmental Conservation Act therefore leads to an understanding of the Constitution as this is the overriding policy influencing all other policies whether they be environmental, social, cultural or related to economic growth and development.

Development Republic of South Africa. Co-operative Government, Governance and Decentralisation in South Africa 1998, p.7.

⁵³ *Ibid.*

⁵⁴ Peckham, B. 'Environmental Impact Assessment in South African Law' South African Journal of Environmental Law and Policy 4(1997), p.124.

⁵⁵ *Ibid.*

⁵⁶ Republic of South Africa, Department of Environmental Affairs and Tourism. Guideline Document- EIA Regulations April 1998.

Responsibility for achieving the goal of sustainability must be shared by all sectors of South African society; central and regional governments, metropolitan and local authorities, commerce and industry, organised labour, community groups and civic associations, non-governmental conservation organisations, and families and individuals.⁵⁷ Emphasis must therefore be given to the implied organisational structure and institutional dimensions of environmental policy under the South African Constitution. Policy makers have to work within a framework of given constitutional arrangements, voting systems, territorial distribution of authority, and executive-legislative relationships.⁵⁸

2.4 THE CONSTITUTION

Under the Constitution of 1996 the environment is a *concurrent competence* between national and provincial government. The functional areas of government are determined by Schedules 4 and 5. Schedule 4 lists those functional areas of government in respect of which there is a concurrent national and provincial legislative competence. Schedule 5 lists those functional areas of government in respect of which there is exclusive provincial legislative competence. Both schedules are divided into parts A and B. In both, part B lists matters in respect of which local government has executive authority, the right to administer and the right to make by-laws for effective administration. (Schedule 4 of the Constitution assigns concurrent responsibility for environmental management functions to the national and provincial governments. Matters of *national* concern are the responsibility of the Minister (and the Director General) of Environmental Affairs and Tourism and those of *provincial* concern are the responsibility of the Provincial Minister (MEC) and the Deputy Director. Responsibility for the enforcement of compliance by all Ministers and competent authorities is given to the Director General (Environmental Affairs and Tourism) whereas competent authorities have the duty to ensure compliance with the policy by all local authorities and government institutions referred to in

⁵⁷ Yeld, J. Caring for the Earth. South Africa. A Guide to Sustainable Living World Wide Fund for Nature South Africa, 1997, p.10.

⁵⁸ Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis Edward Elgar, 1995, p.231.

section 3(1).⁵⁹ This makes it imperative that procedures be standardised in order to coordinate and synchronise environmental impact management. Although it is realised that detailed procedures place certain restrictions on flexibility, it is more important to establish certainty and consistency if the ultimate goal is efficiency and effective management. More than this, a coherent framework is seen as essential for helping to realise sustainable development.

The national executive has the power to supervise the provinces and to intervene where the provinces do not fulfil executive obligations in terms of the Constitution or legislation.⁶⁰ The national legislature has the power to amend the constitution and to legislate on all matters, including those listed in Schedule 4 as functional areas of concurrent national and provincial executive competence. It does not generally have the power to legislate on those matters listed in Schedule 5 as functional areas of exclusive provincial legislative competence.⁶¹

The provincial governments have similar legislative and executive powers with respect to local authorities. Parts B of Schedule 4 and 5 set out a wide range of activities including planning and regulatory functions where local government has responsibilities that affect the environment. Because of the important role provincial and local governments play in implementing environmental policy, effective environmental management in these spheres is essential for its success. Provincial government has an important role to play in setting provincial norms and standards and assisting local government to carry out its role effectively.⁶²

The Constitution provides for the *devolution of responsibility* for environmental management to *local government* if the latter has the administrative wherewithal and capacity to do so. Local government in assuming these responsibilities is required to operate within the confines of national legislation and policy.

⁵⁹ Ridl-Glavovic and Siyakhana. Review of Legal, Policy and Institutional Systems in the Durban Metropolitan Authority Prepared for and obtained from Common Ground Consulting. 1998.

⁶⁰ Republic of South Africa, Department of Environmental Affairs and Tourism. White Paper on Environmental Management Policy for South Africa May, 1998.

⁶¹ *Ibid.*

The Constitution is primarily concerned with governance through the three spheres of government, namely, national provincial and local. These three spheres are regarded as ‘distinctive, interdependent and inter-related’ and inter-governmental interaction should be undertaken in accordance with the principle of ‘co-operative governance’.⁶³ Co-operative government which is enshrined in Chapter Three of the Constitution seeks to establish new ways in which the institutions and structures of government, in all three spheres, deal with and relate to one another and to the citizens they serve. It is intended that co-operative government be more than simply a constitutional ideal; it is intended to be a means of pursuing governance.

This provision is particularly important as far as environmental management is concerned. Numerous government departments have an environmental responsibility and have adopted their own regulations for dealing with the environment, not necessarily in ways that are either best for the environment or in ways that are in keeping with the Department of Environmental Affairs and Tourism’s end goal for environmental management. In addition, many departments should be involved with the application or implementation of EIAs but are not as they see it as being the sole role of the Department of Environmental Affairs and Tourism. Hence the constitutional obligations placed by the constitution on co-operative governance and interdepartmental co-ordination is directly pertinent to environmental management as a whole, and to the effective implementation of EIAs.

The traditional term *government* refers to the actions of a narrow set of government institutions. The term *governance* however encompasses a wider range of issues and actors and focuses on the interactions among them. One aspect of governance in South Africa is what might be called ‘decentralised governance’. Nine provinces, each with an elected legislature, were established. They were given substantial law-making powers over a wide range of functions. Co-operative governance was built on these foundations and is designed to regulate the relationship between spheres of government. It is believed that this decentralised political system affords opportunities for wider consultation and

⁶² *Ibid.*

⁶³ Ridl-Glavovic and Siyakhana. Review of Legal, Policy and Institutional Systems in the Durban Metropolitan Authority. Prepared for and obtained from Common Ground Consulting. 1998.

participation by civil society in the workings of government. The nature of decentralised governance, however, leads to additional complexities from an environmental perspective for maintaining equity between provinces, and in terms of standardising procedures given the inherent differences in both the resources and capacity of the different provinces.⁶⁴

The importance of the role played by intergovernmental co-operation and co-ordination cannot be overemphasised with regard to environmental management for these very reasons. As has been illustrated, in the case of numerous environment related functions, more than one sphere of government has legislative and/or executive and administrative authority, and this authority is often exercised concurrently by different government agencies.⁶⁵ In order for EIA to be effective as a management and as a planning tool, the co-operation and co-ordination of all spheres, sectors and departments is critical to its effective operation.

The structures of environmental management as framed by the Constitution of 1996, and the Environment Conservation Act of 1989, therefore determine not simply the organisational and institutional structures of national environmental management, but also impact on and influence the way EIAs are to be implemented. Unless a clear framework is provided by these structures, EIAs will be constrained in their effectiveness and in the way they are implemented. Not only do the tenets of co-operative governance need to be adhered to for effective environmental management to be a reality, but unless they are realised in practice, the fragmentation that is the hallmark of environmental management under the Environment Conservation Act, will not be overcome. EIAs are

⁶⁴ Minister Mohammed Valli Moosa, Minister for Provincial Affairs and Constitutional Development, Republic of South Africa, Co-operative Government, Governance and Decentralisation in South Africa 1998, pp.2-8.

⁶⁵ Republic of South Africa, Department of Environmental Affairs and Tourism. White paper on Environmental Management Policy for South Africa May, 1998.

simply an environmental tool and alone cannot ensure effective environmental management unless they are supported by such structures more generally.

CHAPTER THREE: FROM POLICY TO IMPLEMENTATION

This research conducted into EIAs was stimulated by a concern for the nature of the process in South Africa. As has been illustrated, EIAs have been adopted globally as a tool to achieve sustainable development. They have in some instances extended from project level assessments to being incorporated into the policies, planning and programmes of many countries. They have also extended in many cases from purely ecologically based assessments to include consideration of the social, health and cultural impacts of development. In South Africa, in light of the way they entered the environmental arena and given how environmental management is structured, there is concern that unless the proper institutions and organisations are in place to implement and administer EIAs, they will be ineffectual. Concern for the ability of provinces to equitably implement EIA so that they can achieve what they were designed to do prompted this investigation into how EIAs are being administered in South Africa.

The ultimate decision to implement EIAs in South Africa can be considered to be political as the promulgation of EIA regulations was an attempt to illustrate a move away from the stagnant 1989 Environment Conservation Act and to show that delivery was part of the new government's programmes and commitment.¹ They were meant to be implemented in a phased in and responsible manner with a one year lead in period and consideration for capacity.² Provinces had devised various strategies to facilitate the implementation of the regulations and to ensure their overall effective operation.³ These progressive stages did not materialise, however, and EIA regulations were implemented in 1997 with no lead in period and no real consultation.⁴ There has been strong criticism of the political decision taken to implement them in such a rushed manner by the

¹ Personal comment: Christelle van der Merwe, Department of Environmental Affairs and Tourism Pretoria, 12 October 1998.

² Personal comment: Sarah Allan, Department Traditional and Environmental Affairs, Pietermaritzburg, 3 September 1998.

³ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference Development Bank South Africa, Midrand 21 October 1998.

⁴ Personal comments: Sarah Allan, Department of Traditional and Environmental Affairs, Pietermaritzburg, 3 September 1998, and Bryan McCourt, Department of Agriculture, Conservation, and Environmental Affairs, EPPIC Conference, Development Bank South Africa, Midrand 21 October 1998.

provincial environmental departments faced with having to implement the regulations. The decision taken, however, was based on the premise that once the National Environmental Management Bill had gone through, the regulations would be revisited.⁵

In general, despite the various limitations of the EIA process in South Africa, which will be highlighted in this chapter, numerous EIAs are being conducted. There is broad support for the process, which is evolving, and is being refined as familiarity with the concept is gained and streamlining processes are adopted.⁶ Admittedly thanks to funding from the Danish Corporation on Environment and Development (DANCED), some provinces such as Gauteng and Mpumalanga are far better equipped to deal with the processes that have been regulated nationally. The two provinces considered in this analysis are provinces that are able to conduct EIAs, although with differing degrees of success, due to different working environments, strengths and constraints.

The provinces chosen have adopted their own particular approaches to the implementation of EIAs. They have developed and adopted techniques and methods of implementing EIAs as is their mandate as the competent environmental authority. They therefore prove more fruitful to analyse than provinces unable to undertake the implementation of EIAs with any degree of success. In this chapter using the two provinces' implementation procedures as a point of departure, their strategies and approach to the implementation of EIAs will be considered and compared to the national EIA guideline documents procedure. The provinces EIA procedures will be considered in light of the constraints they face and in light of what they determine their mandate to be.

⁵ Personal comments: Howard Benkenstein, Department of Environmental Affairs and Tourism, EPPIC Conference, Development Bank South Africa, Midrand 21 October 1998 and Christelle van der Merwe, Department of Environmental Affairs and Tourism, Pretoria, 12 October 1998.

⁶ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, Development Bank South Africa, Midrand

3.1 CASE STUDIES

Two provinces, namely, Gauteng and KwaZulu-Natal were selected for the practical analysis of EIA implementation in South Africa. While the analysis will be conducted in the form of a comparison, direct comparison is not always possible as there are certain elements in each of the processes that need to be highlighted in and of themselves.

Although there are obvious similarities in the processes undertaken, each province has adopted their own particular coping strategies and stance on the implementation of EIAs. A profile of each of the provinces is provided in order to highlight the unique characteristics of each province and how successful they have been at implementing the EIA requirements.

3.1.1 GAUTENG

Gauteng as the ‘powerhouse’ of South Africa faces considerable pressure from developers and environmentalists alike to make sure that EIAs are implemented effectively and efficiently, and are not simply a costly and time-consuming legal requirement that hinders development.

The Gauteng environmental department is one of the smallest in the province. It is made up of sectors dealing with Agriculture, Conservation and the Environment. In Gauteng, the sub-directorate for assessment was set up in 1994. Initially the Gauteng Department of Agriculture, Conservation and Environmental Affairs had an assistant director, deputy director and three environmental officers. In 1998 when this research was undertaken, the Department had increased to include an assistant director, deputy director, seven environmental officers and one senior environmental officer.⁷

DANCED foreign donations to Gauteng’s provincial Department of Agriculture, Conservation and Environmental Affairs amounted to some six million rand. Although this amount in its entirety is not spent on EIAs in the province, it is significant in light of the fact that the Ministry of Finance allocated R 2 491 000 in 1999 to the Department of

⁷ Personal comment: Leza Bothma. Senior Environmental Officer, Department of Agriculture, Conservation and Environmental Affairs, 22 October 1998, Johannesburg, Gauteng.

Traditional and Environmental Affairs in KwaZulu-Natal for the implementation of their environmental impact assessment regulations.

3.1.2 KWAZULU-NATAL (KZN)

The KZN Department of Traditional and Environmental Affairs sees its role as being one of facilitating development. The primary responsibility of the Department as they define it is to ensure that environmentally sustainable and responsible development takes place while at the same time facilitating development.⁸

The Department of Traditional and Environmental Affairs in KwaZulu-Natal is divided into jurisdictions. South of the Tugela, there are two people dealing with environmental impact assessments, and north of the Tugela there are four people dealing with environmental impact assessments. (Thus two people in Eshowe and four people in Pietermaritzburg, excluding the Director of Pollution Control Sarah Allan). According to an article in a local KwaZulu-Natal newspaper, the *Natal Witness*,

Lack of funds and manpower capacity are causing a backlog of Environmental Impact Assessments (EIAs) in KwaZulu-Natal and related delays in development.

“We realise that the Department of Traditional and Environmental Affairs has a lack of capacity as far as time and funds go towards reviewing all EIAs, but this is causing a huge backlog in KwaZulu-Natal which further impacts on development. It is a major problem for us when so many of our small projects have gone out to tender and now the developers are sitting very frustrated,” said Durban environmental consultant Nick Holdcroft.⁹

The same article highlights the fact that ‘at least 10 new staff positions, advertised in November 1998 have yet to be filled’. This only serves to compound the concern for all involved in the process that staffing problems could result in a situation where developments are put on hold due to shortages of staff to review EIAs. According to Sarah Allan, the Department of Traditional and Environmental Affairs’ Director of Pollution Control, ‘71% of the department’s budget for 1999 will go towards salaries for

⁸ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

⁹ O’Grady, J. Fund Shortages Cause EIA Backlog.’ *Natal Witness*. March 13, 1999.p.2.

18 new staff members, only eight positions of which have been filled to date. This leaves 30% of the budget for operations and administration functions'.¹⁰

According to Sarah Allan of the Department of Traditional and Environmental Affairs, "I do not foresee a problem regarding international developers being put off by delays and our staff component has already increased in March [1999] and will increase again in April [1999]. These new employees will receive in-house training before they become effective", she said.¹¹

In order to make sense of the regulations EIA regulations and what is required of provinces in terms of their environmental mandate, it is necessary to understand what the EIA process itself entails and how it has been adapted to suit circumstances in provinces. The EIA procedure as set out in the national guidelines will be highlighted and the EIA procedures carried out in Gauteng and KwaZulu-Natal will be compared in the table that follows. Many of the stages outlined in the national guideline are followed but there are also differences in each province's procedure.

¹⁰ O'Grady, J. Natal Witness. March 13, 1999.

¹¹ *Ibid.*

3.2 THE ENVIRONMENTAL IMPACT ASSESSMENT APPLICATION PROCESS IN SOUTH AFRICA

The table below is a summary of the EIA process but the Department of Environmental Affairs and Tourism's (DEAT) guidelines¹ should be referred to for a more specific description. The summary provides an understanding of the nature of the EIA procedure as conducted in South Africa. Pertinent points, as they relate to the complexities of implementation, will be highlighted in the analysis of the table as the constraints faced by provinces have dictated the nature of provincial implementation.

Table 1: The Environmental Impact Assessment Procedure.

Stages in EIA Process	Activity Undertaken in Respective Stage	
NATIONAL APPLICATION PROCEDURE		
The Consultant	An EIA is undertaken by the applicant/developer with the expertise of an environmental consultant. ² The consultant ensures compliance with the regulations that call for the involvement of interested and affected parties through public participation.	
GAUTENG APPLICATION PROCEDURE		KWAZULU-NATAL APPLICATION PROCEDURE
	<p>In Gauteng the Department of Agriculture, Conservation and the Environmental Affairs, highlights the importance of appointing an independent consultant. A consultant according to the department is not deemed independent if:</p> <ul style="list-style-type: none"> • They are “in-house”³, • They are involved in the design work or if they earn more than 50% of their salary from one source, or if • Their payment is dependent on the successful authorisation of the project. <p>While working for any applicant in terms of these regulations, a consultant may not work for any relevant authority in respect of the same application. An example of a declaration form that the consultant has to complete declaring that there is no vested interest in the proposed activity, is provided (see Appendix 2).</p>	<p>Depending on the type of development and the impact it may have on sensitive environments, the developer will be told to either appoint a consultant or to prepare and present the information themselves. This the department determines by considering the degree of detail required and in accordance with the applicants capabilities having looked at the initial project proposal.</p> <p>The department sees this as a way of facilitating development, which is one of its primary goals. They facilitate development further by providing the developer with base information detailing what it is the department wants them to consider and what additional information is needed for the department to be able to make an informed decision. They thereby remove the initial need for the developer to appoint a consultant, a process that is often costly and time consuming for the developer, and according to environmental officers is not always necessary.</p>
NATIONAL APPLICATION PROCEDURE		
The Authority	The provincial environmental authorities have been designated as the relevant environmental authority and receive all applications for consideration. Provinces determine how to implement the regulations within the framework accorded by the Constitution and the national guidelines. Where a local authority has been designated as the relevant authority they shoulder this responsibility. ⁴	

¹ Republic of South Africa, Department of Environmental Affairs and Tourism, *EIA Regulations Draft Guideline*. September 1997, p.ii. Draft legislation for implementing EIAs in South Africa was published for comment on 1 November 1996. Thereafter a participatory process was undertaken to finalise this draft legislation. During this participatory process, one of the major recommendations was that a Guideline Document be published to provide the various role players with a uniform basis for implementing section 21, 22 and 26 of the Environment Conservation Act.

² *Ibid* p. 6.

³ Republic of South Africa, Department of Environmental Affairs and Tourism, *EIA Regulations Draft Guideline*. September 1997, p.6. Consultants who are in the permanent service of the applicant are referred to as

In certain circumstances the application is referred to national level. For example an activity with a potentially substantial detrimental effect on the environment is referred to the national Department of Environmental Affairs and Tourism if it:

- Is not contained within a single province, that is to say if it spans provincial borders;
- Has direct implications for national environmental policy or international environmental commitments;
- Where a national government department, the relevant provincial authority or a statutory body is the applicant; or
- Where province has requested its intervention.⁵

GAUTENG APPLICATION PROCEDURE

There is no local government with competency status although Midrand and Germiston have applied.

KWAZULU-NATAL APPLICATION PROCEDURE

No local government has been awarded competency status. Durban Metro has applied and conducts many reviews themselves, which then as a final report gets sent to province for final approval.

NATIONAL APPLICATION PROCEDURE

The Application Stage

The initial phase in which consultation is an important aspect is the application phase. This may involve a pre-application consultation with the provincial department responsible for environmental management. The consultation may take the form of a formal meeting, a telephonic conversation or facsimile or email. The purpose is to clarify the requirements of the regulations and procedures to be followed, and to determine whether other authorities are involved. This will allow the authority to register the application. The competent authority engages in pre-application consultation for general guidance purposes only and does so without prejudicing the subsequent exercising of its statutory powers.

GAUTENG APPLICATION PROCEDURE

In Gauteng in accordance with the national guidelines, the first step in the EIA process is to determine whether the activity the developer proposes to undertake is indeed a listed activity according to the national list of activities. If the activity is not included in the list of activities the developer is exempt from this whole process. The Environmental Management Act 107 of 1998⁶ allows provinces to determine what additional activities they wish to identify and list in their province. In the case of Gauteng for example, this may in time include mining which at present is not a nationally listed activity but is an activity of prominence and potentially devastating environmental impact in the province.

The Department stresses the importance of early application, as the department's priority is to ensure efficient procedure, which necessitates their involvement in the planning process rather than simply as an end of pipe solution or decision.

Once it has been determined that the activity is a listed activity, an application is submitted and is registered by the department.

KWAZULU-NATAL APPLICATION PROCEDURE

According to the Department of Traditional and Environmental Affairs' application procedure, anyone can go to the Department of Traditional and Environmental Affairs with a development proposal or they can write them a letter of intent in terms of proposed development plans. The department must receive a letter of intent or project proposal from any prospective developer whose development falls within the criteria as listed by the guideline document and listed activities. The environmental officers within the department then meet with the developer/applicant/consultant or send them an application form. The applicant must submit an application form to the department of Traditional and Environmental Affairs (DTEA). The application form does not require in-depth information, but rather a general description of the intended activity. After receiving the application from the DTEA assesses the application.

Based on their assessment the Department could:

- Submit an application to the Minister of Traditional and Environmental Affairs for

⁴ The local authorities can also apply to be the competent authority according to section 3.1.4.2. of the regulation's guideline document and in terms of section 22(1) of the Environmental Conservation Act 73 of 1989. Provision has been made in the regulations for the relevant provincial authority to identify local authorities that could be designated by the Minister of Environmental Affairs and Tourism to act as a competent authority.

⁵ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC, Conference, Development Bank of South Africa, Midrand, 21 October, 1998. A case in point is the Sterkfontein casino application. A copy of this application, and indeed all the impact assessment reports they have received, is available from the Gauteng Department of Agriculture, Conservation and Environmental Affairs. National government was asked by province to take over the decision of the Sterkfontein casino application, as it was a highly emotive and contentious issue.

⁶ Refer to Chapter 5 of the National Environmental Management Act No 107 of 1998 for more detail regarding this provision.

Application in three forms:

When a developer undertakes a development and begins the application process, any of three routes can be followed depending on the consultant, the development and the activity.

1) Send in a national application form.

If the developer/consultant knows the activity is listed and that an EIA will be required there is no need to undergo the pre-application process and an application form can simply be submitted to the department.

2) Phone, e-mail, fax or arrange a pre-application meeting:

The department tries to avoid pre-application meetings where possible as they are time consuming and are not always necessary. Pre-application meetings are necessary where the developer is unsure whether the development to be undertaken is indeed a listed activity or where there are issues he wants to discuss with the department in terms of his application. At this meeting a pre-application checklist is used by the department to determine whether the activity requires an EIA to be undertaken or whether it is exempt from having to undergo the whole process. The pre-application checklist was devised by Gauteng to deal with the number of applications they were receiving, many of which did not require an EIA or were exempt under section 28A.⁷ The checklist enables the environmental officers to easily identify activities that require an EIA and enables them to determine which category they fall under. The environmental officers use the checklist to determine the nature of the application and the process that needs to be undertaken. The checklist is therefore a guideline to the environmental officers and is also made available to local authorities so as to facilitate an understanding and clarification of which activities are important and which are exempt from the whole process.

Under activity 1(g)⁸ Gauteng has registered the construction of cellular phone towers exempt from the EIA process. The conditions of this exemption are that MTN or Vodacom submit a management plan which is in accordance with the EIA guidelines and environmental management processes and that they advertise as is required of all other applicants. Telkom is also exempt from undertaking EIAs when setting up its transmission lines as long as their developments are accompanied by the

exemption from the regulations.

- Require that the applicant complete either a scoping report or EIA report (it should be noted that in most cases an EIA would be preceded by a scoping exercise).

The Department then registers the application with a registration number, thus making up the register they are compelled to keep in terms of the regulations.⁹ There is then a meeting with the applicant on site to discuss the issues and potentially detrimental effects of the development on the environment.

The Department itself then liaises with the other departments involved which is really the developers/consultants responsibility, but, because they know they are more efficient and effective at getting the material they want and need they assume this responsibility. There is not simply one approval process, but often the compliance and consent of numerous departments needs to be obtained before a development can be approved. This is where streamlining mechanisms have come in to facilitate more efficient and effective communication and processing between departments and within environmental protection procedures.

The particular streamlining mechanisms have been highlighted in the course of discussions about the KwaZulu-Natal EIA process.

If there are important environmental issues relating to the development and of concern to the department, a consultant has to be appointed to take the application further. The appointment of consultants according to an environmental officer at the department of Traditional and Environmental Affairs is very controversial because the regulations state that the consultant must have relevant environmental knowledge but nowhere is it defined what this is.¹⁰ As with Gauteng there are certain activities that are exempt from the whole process, for example in KwaZulu-Natal, the process of exempting Eskom from undertaking an EIA on powerlines less than 32KW is going through the channels of exemption at the moment.

⁷ In terms of section 28A of the Environment Conservation Act the Minister or competent authority may exempt persons, local authorities and government institutions from complying with specific provisions of the Act.

⁸ Structures associated with communication networks, other than telecommunications lines and cables, as well as access roads leading to these structures, see appendix two for comprehensive list of activities.

⁹ Department of Environmental Affairs and Tourism 'EIA Regulations Draft Guideline' September 1997, p. 15. The objectives of the register are to facilitate public access to information upon which the require¹ environmental reports are based, and to ensure efficient and convenient access to such information.

¹⁰ Franz, L. 'Mining environment sector still too 'green' ' *Mining Weekly*. Environment Feature. 'Danny Liebenberg Director of Environmental Impact Consultancy (EIC), warns that there are many people claim to be environmental consultants-"it is a much over-traded world". The Environment Conservation Act stipulates that, at the very least, a scoping study is required from prospectors. However, these pr sometimes enlist the help of inexperienced environmental auditors, who do not know what adverse conditions to look for in the environment, but who, on occasion, write long reports identifying hundreds adverse conditions in the hope that they can create more work for themselves. Conflicting reports on one site are also becoming quite common due to the inexperience of some environmental auditors, w them writing so-called 'sweet-heart reports' that basically tell the clients what they want to hear. Liebenberg's fervent hope is that the environmental consulting industry will be regulated, along the lines c registration process of the Engineering Council of South Africa, where a relevant qualification and a number of years experience are required.'

same documentation and advertising. Another activity, which falls into this category, is land use change from agricultural land to township development. Because of the number of these applications the Department receives, they have been given exemption as long as they are accompanied by management plans.

3) Submit pre-application:

If an exemption is to be granted a pre-application form still has to be completed which then gets the consideration of the local authorities. Here it is determined whether there are any objections before the exemption is given. It is also advertised so the public can raise any objections.

At this stage however once the application has been received and the decision has been taken as to whether the activity is exempt, requires the appointment of a consultant or can continue with the guidance of the department. The option still remains for the application to be refused outright.

Once a consultant is appointed and the application is approved, the scoping stage begins.

NATIONAL APPLICATION PROCEDURE

Plan of Study for Scoping

The level of an impact assessment will depend on the nature and extent of the development proposal, its complexity, the sensitivity of the environment and issues identified during the scoping process. Depending on the nature and location of the activity, the relevant authority may request a plan of study for scoping. This plan of study is important for ensuring consultation with all the interested and affected parties and for determining time-frames for this consultation. The plan of study for scoping also includes a brief description of the activity to be undertaken, an indication of the stages at which the relevant authority will be further consulted, and a description of proposed methods of identifying the issues and alternatives must also be provided. Once the plan of study is deemed adequate, the applicant will proceed with the scoping exercise, which will culminate in a scoping report.

GAUTENG APPLICATION PROCEDURE

A plan of study is undertaken as set out in the national guidelines. The department takes 10 days to consider these documents.

KWAZULU-NATAL APPLICATION PROCEDURE

KZN are unable to give any definite time frames for their stages of review as they declare each development and procedure to be case specific.

NATIONAL APPLICATION PROCEDURE

Scoping

A scoping report consists of a description of the project itself, how the environment may be affected, what alternatives have been identified during the scoping process and how the public participation process is to be undertaken. A decision regarding whether the project should go ahead or not, and whether an EIA is required to further investigate issues and alternatives will be made on the basis of this report. In many cases where there are no major issues identified, the scoping report will be sufficient for a decision to be made and no further studies will be required.¹¹

GAUTENG APPLICATION PROCEDURE

The Department takes between 30 and 60 days to consider these reports. According to the department they are effectively meeting the time-frames they have set for themselves in this regard although it is closer to 60 days than it is to 30 days. This they declare is partly due to the delay from other departments that have to take the application into account before it can be approved. The amount of time the other Departments spend on the application is out of the control of the Department of Agriculture, Conservation and Environmental Affairs.

A critical component of the scoping process is to identify all the interested and affected parties.

Included in the documentation must be:

- Details about the development itself,
- What is being proposed in terms of undertaking the development and how it is to be undertaken, e.g. construction details.
- When the development is proposed to be undertaken and where, as well as

KWAZULU-NATAL APPLICATION PROCEDURE

A scoping report has a number of aims, which include:

- Identifying the alternative approaches that can be taken and selecting the most appropriate one;
- Identifying significant environmental issues; and
- Identifying possible methods of mitigating negative environmental impacts.

Scoping should also indicate whether an EIA needs to be undertaken, and in cases where an EIA is required, scoping should determine the terms of reference of the EIA.

It is the consultant's job at this stage to identify the major impacts the development may have.

The consultant is to raise issues of concern with the developer, architect, planner and to mitigate or find alternatives to alleviate the impact. A list of alternatives or mitigation measures needs to be included in the scoping document. This document is then submitted to the Department for review.

- Any other pertinent general development information.

The consultant also has to detail all the interested and affected parties it has identified and plans to consult with, included with this are details of how they are going to advertise and what other consultative methods will be adopted. An example of the list of key people to be included in such a process includes: landowners/residents, ratepayers, local authority, business, and other government departments.

Advertising is an important element in the process not only for the department to ensure its accountability in terms of its custodianship of the environment and ensuring that the interests of all involved are protected, but also to validate the process from the developers point of view too. In Gauteng even if a developer/consultant has had to advertise under town planning requirements, the consultant still has to advertise under the EIA regulations. In terms of advertising the Department requires that a notice be on site for two weeks and that an advertisement appears in the newspaper for a day, (they are however looking at extending this advertising period).

If the scoping is comprehensive and adequately undertaken, including all the requisite information as well as proposed mitigation for example, authorisation is granted in consultation with the other players such as the other departments and local government and it will seldom be necessary for a full EIA to be undertaken.

In the Gauteng EIA process there is in practice a distinction between two different types of scoping. The one type has as its end product an 'issues report' the other has as its outcome what is termed a 'mini' EIA.

- 1) issues report- this then goes to full EIA. Generally as the name indicates, the scoping report only identified the 'issues' and does not deal with how any of the potential impacts are going to be managed and does not attempt to determine mitigation measures.
- 2) 'mini EIA' - in this scoping report, there has been considerable attention paid to potential impacts, how these are going to be managed, and the mitigation measures that will be taken are already addressed. If this scoping is done properly then there is little need to complete a full EIA in many instances. In other words, the scoping report qualifies as a 'mini-EIA'.

If the scoping report identifies all the relevant issues and adequately addresses the concerns of the Department, and it can be determined that the project is of low sensitivity, the scoping report and hence the development can be accepted and approved. It is neither a given nor a necessity that every project goes to EIA for many, a professional and inclusive scoping that addresses all the relevant issues is sufficient. In other instances, the scoping report itself highlights important issues and potential problems that may arise and the developer will then be required to conduct a full EIA. The project can also receive a 'no-go' option at this stage and the development can proceed no further.

In the scoping process, all possibly environment related issues are identified and the public is given a chance to comment. As of August 1998, the call for public comment in KwaZulu-Natal has been done away with, not deliberately, but according to the department it seems that it has inadvertently be replaced with a call for tender. The development therefore continues without technically having advertised and both the department, developer/consultant have to deal with public issues and complaints further down the line. Before this process materialised, the department used to get a great deal of public comment which used to be beneficial from the point of view that it aided in determining which were the critical issues to examine. The Department of Traditional and Environmental Affairs is therefore in the process of carefully considering the role of public participation and how best to facilitate it. The present situation of advertising for tender, as opposed to advertising the intention to develop, is deemed inadequate and goes against the purpose of the advertising period as set out in the national guideline document.

In KZN the application and scoping processes have been extended into detailed application and detailed scoping processes. In these stages, the application or the scoping is undertaken as comprehensively as possible, and thereby further removes the need for an EIA to be undertaken. Many of the applications received have simply had to undertake what they have termed detailed application or detailed scoping for approval to be granted. This is similar in many instances to Gauteng's issues report and 'mini-EIA' requirements.

NATIONAL APPLICATION PROCEDURE

Plan of study for EIA

Should the decision be that an EIA needs to be undertaken the applicant will be required to submit a plan of study for it. This plan of study will ensure that the relevant alternatives are investigated further and that the critical issues are carried forward into further processes.

EIA

After accepting the plan of study, the applicant will be expected to submit an environmental impact report. If new issues were raised and addressed during the EIA process, these must be added as an addendum to the initial scoping report submitted. The decision regarding the activity will be based largely on this document.

The primary purpose of the EIA is to aid decision-making by providing comprehensive and detailed information on the environmental consequences of development. An EIA is a process to gather

information so as to provide sufficient supporting arguments to evaluate the overall impacts, consider alternative options and make a value judgement in choosing one development alternative over another. Such an assessment should never be a decision-making process in itself. The drafting of an environmental impact report is merely a stage in the EIA process wherein the information, arguments, impacts and alternatives are documented.

GAUTENG APPLICATION PROCEDURE

If it has been determined that an EIA must be undertaken a plan of study has to be written providing a description of the environmental issues defined in the scoping report. It should also include a description of methods used to identify the potential environmental impacts and methods that will be undertaken to mitigate the impacts of the development. This plan of study for EIA is then reviewed before the EIA itself is conducted. An EIA is therefore only undertaken where the development will have a detrimental effect on the environment, has raised considerable public concern, or is quite a substantial development. The EIA needs to answer all the issues and concerns raised and include a detailed description of mitigation measures likely to be undertaken. The EIA is reviewed on completion and again there is a 30 day period during which to appeal the decision. It cannot serve this purpose if the document is not open for review and scrutiny.

KWAZULU-NATAL APPLICATION PROCEDURE

Again there are two options after the full EIA has been conducted. The development can either go ahead as long as it complies with certain criteria, or recommendations that the department attaches to the report, or, the EIA and hence development can also receive the 'no-go' option. In either case there is room for appeal by both the developer and the public.

NATIONAL APPLICATION PROCEDURE

Review

All interested and affected parties should be involved in reviewing the document, which consists of a systematic appraisal of the assessment as a contribution to the decision-making process.¹² Authority Review involving review by the provincial authority or national authority depending on the nature of the application takes place after the plan of study for scoping has been submitted, and again after the plan of study for EIA has been submitted. Review including the involvement of an authority, specialist and the interested and affected parties also occurs after the scoping report has been submitted, and again after the EIA has been submitted.

Record of Decision

The relevant authority will then issue a record of decision report. The applicant will also receive a copy, and it will be made available to any interested and affected party on request.¹³

GAUTENG APPLICATION PROCEDURE

Having completed the scoping report or having undertaken an EIA and on gaining approval for development the Department issues a record of decision detailing the reasons for the decision made. The record of decision has a life of 5 years whereafter the decision is revoked and the process needs to be repeated if it is decided to develop. Accompanying the record of decision and approval of the application are standard and site specific conditions, standard conditions may include an environmental management plan and/or an audit of the development once it is completed and operational. Site specific conditions are self-explanatory and are case specific including for example specific mitigation measures.

KWAZULU-NATAL APPLICATION PROCEDURE

Once a decision has been made, before the consultant is given the go-ahead, a record of decision motivating how the decision was made is issued. An assessment report is written indicating what the development is about, what the environmental officers' findings have been and why they made the recommendations that they did. They recommend conditions of development. The record of decision then goes to the director general for approval. Certain developments don't go to the provincial director general they go instead to the national Department of Environmental Affairs and Tourism. Issues that may go to national government level include developments below the high-water mark, developments impacting on neighbouring provinces for example the long Eskom lines and the new entry N3 toll road, or where for example nature conservation is the applicant. An assessment report is written which the director approves and it then goes to national Department of Environmental Affairs and Tourism for their record of decision.

¹² *Ibid.*

¹³ *Ibid.*

The department makes suggestions for mitigation in the record of decision. Along with the record of decision, the department places a requirement for an environmental management plan, with regards to how the development is to be managed post construction and also in some instances during construction. That is to say, the environmental management plan has to be accompanied by a site-specific plan detailing site protection measures, for example how it is to be constructed without damaging the environment unnecessarily. Developers are advised to use different technologies, find certain alternatives, or may not be allowed to go ahead all together. According to the department, the key to mitigation and alternatives is trade-offs a trade-off will always have to be made. The Department's responsibility is to determine the best trade-off in terms of the 'environment' from the biological, economic and social to cultural.

NATIONAL APPLICATION PROCEDURE

Appeal

Either the developer or the public can appeal the decision but the appeal must be lodged within 30 days. Appeals are made to the MEC of the province or to the Minister of Environmental Affairs and Tourism if the development is a national issue.

To date no appeals have been made.

3.3 THE EIA PROCESS

The Department of Environmental Affairs and Tourism have incorporated the processes highlighted in the table above in a flow diagram (see diagram on page 63) for easy reference by the related departments and as a guide for consultants undertaking the practical elements of the process.

The generic application procedure in terms of the Environmental Impact Assessment Regulations has three major steps:

1. Submission of application

The applicant must submit an application form to the relevant provincial environmental department. The application form does not require in depth information, but rather a general description of the intended activity. After receiving the application form the provincial department will assess the application. Based on their assessment the department:

- Could submit an application to the Minister of the provincial environmental department for exemption from the regulations, or
- Could require that the applicant complete either a scoping report or EIA report. In most cases an EIA would be preceded by a scoping exercise.

If the provincial department requires the applicant to submit some form of environmental report the applicant must appoint a consultant. The regulations require that an independent consultant must draft any environmental report required.

2. Scoping report

A scoping report has a number of aims, which include:

- Identifying alternative approaches that can be taken and selecting the most appropriate one.
- Identifying significant environmental issues, and identifying possible methods of mitigating negative environmental impacts.

Scoping should also indicate whether and EIA needs to be undertaken, and in cases where an EIA is required, scoping should determine the terms of reference of the EIA.

Once the consultant has completed the scoping exercise a scoping report should be submitted to the department. In terms of the regulations the scoping report must include at least:

- A brief project description,
- A brief description of how the environment may be affected,
- A description of environmental issues identified, a description of all alternatives identified, and
- An appendix containing a description of the public participation process, including a list of interested parties and their comments.

In most cases, the provincial department will provide the consultant with more detailed instructions on what should be done during scoping and what should be covered in the scoping report. The provincial department could also require that the consultant concerned submit a plan of study for scoping prior to submitting the scoping report. The plan of study would indicate the tasks that will be undertaken during the scoping phase.

Once the department has received the scoping report the department takes one of the following actions:

- Request that the consultant amends and/or adds to the scoping report,
- Request that the consultant submit an EIA,
- Issue an authorisation for the activity (with or without conditions) or
- Refuse authorisation for the activity.

3. Environmental Impact Assessment Report

The purpose of an EIA is to further investigate issues and alternatives that were identified during scoping. In general an EIA will focus on issues that have been identified as being of major concern. An EIA should gather information on the expected environmental consequences of an activity and evaluate that information.

Once the EIA has been completed the consultant will draft an EIA report which in terms of the regulations must include the following:

- A description of each alternative, including particulars on environmental impact, and the possibility for mitigation of each identified case.
- A comparative assessment of all alternatives, and
- Appendices containing a description of the environment concerned, the activity to be undertaken, the public participation process followed, including a list of interested parties and their comments, and media coverage given to the proposed activity and any other information must be included in the accepted plan of study.

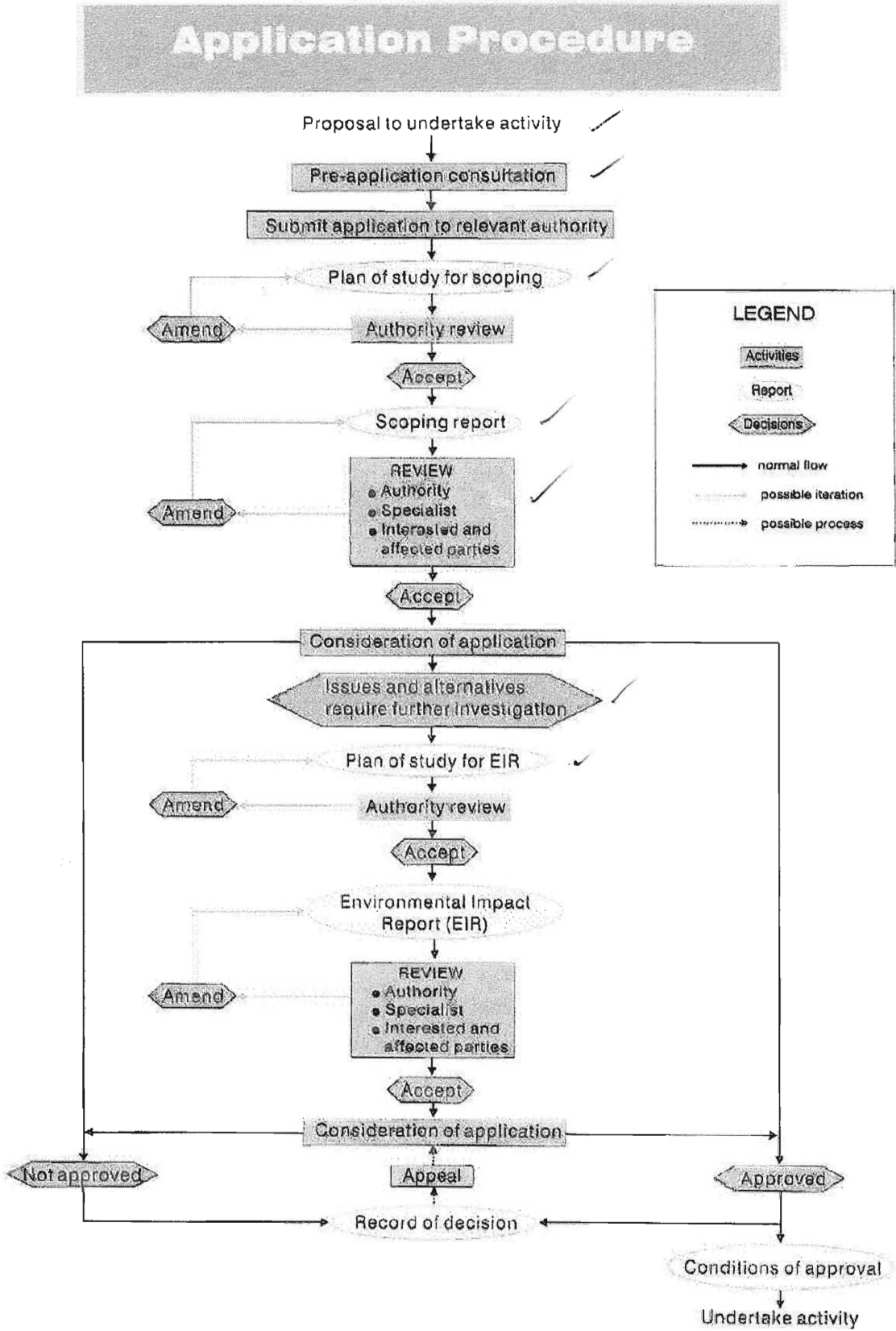
As with the scoping report the department will provide the consultant with more detailed instructions on what should be done during the EIA and what should be covered in the EIA report. The department could also require that the consultant concerned submit a plan of study for the EIA prior to submitting the EIA report.

Once the department has received the EIA report, the department takes one of the following actions:

- Request that the consultant amend and/or add to the EIA report
- Issue an authorisation for the activity (with or without conditions), or
- Refuse authorisation for the activity.¹

¹ Department of Traditional and Environmental Affairs and the Department of Local Government and Housing. Environmental Impact Regulations and Planning Approval Procedures Training Manual, July 1998, pp.B1-B3.

DIAGRAM 1: The Environmental Impact Assessment Application Procedure



The flow diagram (on page 63) devised by the Department of Environmental Affairs and Tourism depicting the process involved in conducting the EIAs looks simple, logical and straightforward enough, although the element of monitoring is a glaring omission. It may be so for environmental impact assessment practitioners, but the reality for adjudicators is an administrative flow chart that is much more extensive with regards to decision making and approval processes even when streamlining processes have been adopted and implementation manuals accompany the process.²

Despite the limitations faced by provinces in terms of limited funds and capacity constraints, by refining the national procedures as they have done, they have managed to conduct a number of EIAs successfully.

The Department of Agriculture, Conservation and Environmental Affairs generally process twelve EIA applications a month. Most of them do not however go to full EIA. Between September 1997 and October 1998, Gauteng had received a total of 153 pre-applications. Forty of these pre-applications have been exempt from undertaking a full EIA, they have simply had to undertake the scoping stages of the EIA process. A further twenty-nine EIA applications did not legally require an EIA to be undertaken at all as they were not activities falling under R 1182³ of the Environment Conservation Act's list of activities. A total of 84 full EIAs were therefore undertaken between September 1997 and October 1998. The Department has finalised twenty environmental impact assessments with a record of decision. These figures do not however include the cellular phone tower applications that they have received.⁴ Table 1 should be referred to for a

² Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, Development Bank South Africa, Midrand 21 October 1998 Midrand. Unfortunately the researcher was unable to obtain the transparencies from this conference illustrating the complex matrix that is procedure laid out for and carried out by adjudicators in Gauteng.

³ Under the Environment Conservation Act 73 of 1989 Regulation No.R1182 relates to 'The identification under Section 21 of activities which may have a substantial detrimental effect on the environment'. No. R1183 relates to the 'Regulations regarding activities identified under Section 21(1)' of the Environment Conservation Act 73 of 1989. Both R1182 and R 1183 were regulated on the 5 September 1997.

⁴ Personal comments: Leza Bothma, Senior Environmental Officer, Department of Agriculture, Conservation and Environmental Affairs, 22 October 1998, Johannesburg, Gauteng and Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC

more detailed understanding of the application procedure itself in order to understand the stages an application goes through before a record of decision is passed.

In KwaZulu-Natal, from 18 October 1997 to 29 March 1999, 338 applications for EIAs have been received. Most of these relate to the construction of cell phone towers, 145 to be precise with a total project worth of R72, 5 million. Of the 338 applications received, 181 have been approved, 50 are under review and 71 are awaiting further information.⁵ Only 42 required a full EIA. Scoping was required of 92 of the applications, detailed scoping by 26 of the applications, and detailed application by 176, of the applications. The other two developments simply had to submit an application for approval to be granted. A consultant was not necessary as they simply went to application level and were considered to be of small scale and a low sensitivity. Of the applications received, eight have been given exemption from appointing a consultant.⁶ Again, table 1 should be referred to for a detailed understanding of the EIA application procedure that relates to these developments.

Having considered the practical nature of the EIA procedure and what is required of provinces in terms of their environmental mandate as the competent environmental authority to carry out the implementation of the EIA regulations, the procedure itself will be given further consideration. An analysis of the technical and institutional constraints faced by provinces in implementing the procedure and how this impacts on effective EIA administration will be undertaken in the next chapter.

Conference, Development Bank South Africa, Midrand 21 October 1998.

⁵ While these figures do not in fact add up to 338, they are the figures as listed in the Department of Traditional and Environmental Affairs' provincial register.

⁶ See Appendix three for the breakdown showing economic significance.

CHAPTER FOUR: ANALYSIS OF ENVIRONMENTAL IMPACT ASSESSMENT IMPLEMENTATION IN SOUTH AFRICA

The analysis of the case studies in conjunction with the table will be considered in the broader framework of the technical and institutional dimensions of the process identified in Chapter One. This means predominantly a consideration of the institutional structures in place to implement and facilitate the effective integration of EIAs into the existing development procedures, their constraints and limitations and attempts to overcome these in light of the need to implement the regulations. The technical and institutional division also facilitates a more analytical consideration of the EIA procedure and its shortcomings.

South Africa has experienced many of the same shortcomings implementing EIAs as were highlighted in Chapter One of this thesis. The EIA regulations were passed in September 1997 as a hasty political decision with no consideration for, or regardless of, the capacity constraints faced by provinces and the limitations of the institutional structures that were in place. This is symptomatic of the lack of strategic planning and focus that was typical of the 1989 Environment Conservation Act; the processes are reactive rather than strategically planned and co-ordinated. Those in government criticised the actions of politicians declaring that the provincial environmental departments were not consulted on the practicalities of such an action and neither therefore on the implication for those implementing the regulations.¹

This according to van Reenen, is because in a highly bureaucratised environmental management system like ours, the usual response to environmental problems is passing legislation or issuing regulations, often with little attention to organisational and institutional capacity, and with no attention to the simple question of whether the identified problems are susceptible to the solutions so far known.² The political system

¹ Personal comments: Howard Benkenstein, Department of Environmental Affairs and Tourism, EPPIC Conference, Development Bank South Africa, Midrand 21 October 1998.

² Van Reenen, T.P 'Environmental Policy-making and Effective Environmental Administration.'

has in many instances been viewed in a way that reinforces the problem of implementation, by demarcating between policy and administration. Administration according to this viewpoint takes over where policy ends. The job of the administrator is to carry out policy formulated by decision-makers, and the role of the service provider is to carry out the policy administered by the bureaucrat.³ This is likely to result in a policy hindered in its implementation and hence in its ability to deliver resulting ultimately in unfulfilled promises or disillusionment and frustration. Concentrating on the implementation of programmes as well as their initiation should increase the probability that policy promises will be realised.⁴

The complexity and fragmented nature of legislation and the devolution of environmental responsibility to provinces has led to the development of processes within provinces to streamline and cope with implementation. The outcome has been the implementation of EIAs within the provinces that have the wherewithal. But in those that do not the failure to set up the institutional structures and to develop capacity before the regulations were passed raises questions for the effectiveness of EIAs as an environmental management tool on a national scale. As has been illustrated by the implementation of EIAs in other countries it is not the technical design that is the problem but rather the administration of the process that causes difficulties and hampers development.

In South Africa many consultants began conducting environmental impact assessments before they were formally required and thus have considerable experience with conducting EIAs. The technical design elements are not the primary weakness in the South African impact assessment process. While there are technical shortcomings, there are also positive technical elements. For example, processes of public participation and consultation are far stronger in South Africa than in some other practising countries.⁵

South African Journal of Environmental Law and Policy 1(1994), and R.F. Fuggle and M.A. Rabie (eds.). Environmental Management in South Africa. Juta, 1992, pp. 47-49.

³ Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar, 1995, p.462.

⁴ *Ibid.* p.464.

⁵ Where South Africa seems to be ahead of some other countries is in our requirements for public participation. Ortolano, L. and Shepherd, A. 'Environmental Impact Assessment' Vanclay, F. and Bronstein, D.A.

Frustration with the impact assessment process is therefore an administrative one. By refining the technical design elements of impact assessment, the assessments may be easier to process in those provinces that are able to process them at all. In other provinces, however, an exercise in capacity building and funds transfer is critical if the environmental impact assessment is to reach anywhere near its potential in South Africa.

4.1 TECHNICAL SHORTCOMINGS

The results of the case studies cannot be extrapolated to the country as a whole. Indeed as has been illustrated in the table, the two departments in Gauteng and KwaZulu-Natal operate differently. This is of concern for effective environmental management as a whole and leads to the first technical shortcoming of the EIA procedure to be considered here, namely, that of a lack of standardisation of the procedures themselves.

Through monthly interprovincial meetings which were first convened in November 1997, the EIA regulations are constantly being refined with respect to all elements of their implementation, from shortcomings in the list of activities and discrepancies in how to define certain issues, to how to streamline and co-ordinate the process better. At these meetings cabinet notes are made to ensure that national government is aware of the problems provinces face in terms of refining and implementing the regulations. Provinces are afforded the opportunity to meet with one another and are able to solve problems and discuss issues that arise. It is a problem-solving forum and is seen to be a vital point of

Environmental and Social Impact Assessment. John Wiley and Sons Ltd, 1995, p.19. 'Many, but certainly no countries with EIA programmes have mandated some level of public participation in EIA. A continuing problem plaguing many EIA programmes is that public involvement occurs too late to attain fully the goals:

- i) To identify public concerns and values
- ii) To gather economic, environmental and social information from the public
- iii) To inform the public about potential actions or alternatives, and the potential consequences of these actions
- iv) To develop and maintain credibility
- v) Ultimately, to improve the overall decision making of the agency.'

contact between provinces advising on issues such as standardisation of the EIA procedure and related processes.

While these gatherings may further the cause of attaining procedural standardisation they are no means ideal or sufficient for attaining the broader standardisation of the effect and efficiency of EIAs. They provide a forum at which issues of standardisation are raised but as has been highlighted, standardising procedures is not simply a technical consideration. The institutional structures and the capacities of each of the provinces are unique, each province having different strengths and constraints. It is essential therefore that technical (procedural) standardisation is attained but, more than this, is the necessary process of institutional standardisation where provinces are equitably equipped to undertake the processes demanded of them. Different budgetary allocations and staffing levels are testament to the institutional inequality of provinces, as is the relative success of provinces at administering and conducting the EIA procedure testament to the inequity in procedural application. Provinces themselves although endeavouring to attain technical standardisation are constrained by the broader lack of standardisation in terms of institutional structures, capacity and funds.

Standardisation of procedures is an important issue when considering the effectiveness of environmental impact assessment as an environmental management tool. It is far from adequate for EIAs to be applied haphazardly and only where the capacity exists to do so. Environmental degradation is not limited to jurisdictions. For the country to make a positive advance towards sustainability it is necessary that EIAs are undertaken throughout the country in a manner that is in line with their purpose, that of environmental protection and sustainable development. Unless there is some degree of standardisation the EIA process runs the risk of not only losing credibility, but also of not achieving the purpose for which they were adopted.

Another major technical shortcoming presents itself in both provinces in the form of a lack of monitoring. As can be seen from the table and from the flow diagram, monitoring

as the final stage in the overall EIA process is conspicuously absent. Due to capacity constraints, neither province is able to monitor the impacts of development or to ascertain whether developments comply with the environmental impact assessment reports' provisions.⁶ Lack of monitoring is therefore not only a shortcoming of the provinces' procedures but is a shortcoming of the EIA process as devised by the national Department of Environmental Affairs and Tourism.

Provinces differ in terms of their capacity to deal with EIAs. Even those that have had the funds and skills to develop strategies by means of which to cope with the flood of applications do not yet have the capacity to monitor or halt those developments have slipped through the net. Many illegal developments have occurred in both provinces considered. The lack of post construction compliance monitoring in even these provinces is mostly due to a lack of staff to undertake such activities.⁷ Financial restraints continue to translate into shortages of skilled adjudicators, and general lack of ability to process the applications and thereafter to monitor any of the effects. The provinces without the funds or human resources leave little to consider.⁸

In South Africa therefore, the role of EIA can be considered to be essentially passive. The specifications of when an EIA is required are clearly laid out in the national guidelines. Gauteng as a province is even able to provide you with a list of how long each step in the process is likely to take and what is expected from the practitioner along the way, but there is no monitoring thereafter. Gauteng have, as described by the Department of Conservation, Agriculture and Environmental Affairs, a budget to 'sue and be sued' but

⁶ Personal comments, Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal, and Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1998, Midrand, Gauteng.

⁷ *Ibid.*

⁸ Le May, J. 'South Africa's Proposed Green Law' *The Sunday Independent*, August 9 1998 p. 7. Cas Hamman, the Director of Cape Nature Conservation, said "funding for provincial government was extremely limited and that consequently environmental administration had a 'low priority level. Unless the central government provided additional funding for the hire of more staff, delays in getting approval would be ever longer than they were at present. Environmental legislation is excessively fragmented. The plethora of legislation will make coherent administration impossible and will result in total confusion. Compliance and enforcement be severely disabled in such a legislative quagmire."

as yet they have not taken anyone to court, as they want to set the right precedent. No applicant in Gauteng thus far has had the receipt of a 'no-go' option for a development proposal either. The adjudicators have the option to declare the development a 'no-go' or they can give conditions that are so onerous that they are impossible to comply with.⁹ The fact that there is no post-project monitoring negates the effect of this.

The provincial environmental departments predominantly rely on the fact that the developer will adhere to conditions stipulated. If developers do not there is the perceived deterrent of a maximum fine according to the Environment Conservation Act of R100 000.¹⁰ In terms of the devastation such ill-devised development may cause, this sum can be considered woefully inadequate and of little consequence when the overall cost of the development itself is considered. The environmental departments declare that as staff numbers increase so compliance monitoring will receive more focus. The reality of this is brought into question by comments made by KwaZulu-Natal's Department of Traditional and Environmental Affairs who feel that it is a pipe dream to believe that having more staff will enable the department to spend more time undertaking monitoring. The Department highlights the fact that as the number of staff increases, so too do the number of applications. There is the tentative hope that eventually there will be a ceiling on development and the department will not get to the stage where they can't cope. This is already debatable.¹¹

At present the Department of Traditional and Environmental Affairs' monitoring includes the stipulation on significant developments that, after six months, a post construction compliance audit be carried out by the developers. The fact that the regulations have only been operational for just over a year means, however, that few compliance audits have in fact been carried out.¹² The Department sees another alternative to compliance

⁹ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1998, Midrand, Gauteng.

¹⁰ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

¹¹ *Ibid.*

¹² Personal comment: Sarah Allan, Department of Traditional and Environmental Affairs, 3 September 1998, Pietermaritzburg, KwaZulu-Natal.

monitoring as being to encourage, although they can't prescribe, big businesses and developers to subscribe to International Standards Organisation (ISO)¹³ certification. The South African Bureau of Standards (SABS) then becomes the monitoring body and has to audit the factory/company every year to see if it is environmentally responsible and whether it can retain its accreditation.¹⁴ The situation is similar in Gauteng where, if the EIA application, particularly for the construction or upgrading of petrol stations, is accompanied by environmental management systems as required under ISO accreditation, the application is more likely to be considered for approval. While ISO is an important tool that can be used to monitor the operations of companies and developments once they have been constructed and are operational, they do not influence the planning process to any large degree. It is still generally agreed that compliance monitoring is a major shortcoming of the EIA process and something both provinces have yet to resolve.

One therefore has to question a process that has minimal enforcement power. The Environment Conservation Act was long criticised for having the provisions for EIA in place but for not legislating the requirement. With the regulation of the EIA procedure in September 1997 the provinces began to undertake EIA implementation. Developers may now submit an application for EIA as is legally required of them, but having submitted an application and having undertaken the steps of the procedure required, there is no enforcement of the procedures' provisions and hence no disincentive for them to comply with the recommendations and conditions. This illustrates how the institutional structures and provincial capacity constraints define the technical success of the EIA process.

Without monitoring and evaluation, it is difficult to learn from experience. Feedback is needed to determine which actions to promote sustainability have been implemented

¹³ International Standards Organisation (ISO). This relates to certification of a company or organisation's environmental management systems, in order to facilitate management control of operating practices and to assess compliance with company policies. The company is audited in relation to these international standards to assure compliance with environmental management standards.

¹⁴ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

successfully; which failed and why; whether targets and policies were realistic, overly ambitious or too modest; and in particular, whether they were approved and supported by those they were designed to assist.¹⁵ Monitoring is also important at project level. It needs to be ascertained whether the environmental impact assessment was accurate, how the mitigation measures were adopted and even how the construction was undertaken. There is a fear that without mitigation, as is the case in many developing countries, mechanistic EIA reports will be produced, which have little or no effect on decisions. Such 'token compliance' is not likely to lead to any long-term sustainability of resources or the long-term success of such regulations and policies.

There are numerous other technical shortcomings that present themselves not simply with the way provinces are administering the applications but with the EIA procedure as it has been devised by the national Department of Environmental Affairs and Tourism. There are, for example, inherent limitations with considering the impact on the environment in the form of a list of potentially detrimental activities.

The downside of using a pre-set list of activities to determine the impact of development on the environment is that often the list is not inclusive enough, and also does not take into account the potential cumulative impacts of the individual activities. For example, some activities likely to have significant impacts, such as the construction of sports stadiums, prisons, and hospitals do not fall into the predetermined list and categories of activities and therefore do not require an impact assessment to be undertaken when they are constructed.¹⁶

There are therefore obvious deficiencies in the present list of activities, which require an EIA to be undertaken. The need to consider a more comprehensive list of activities or another method of determining how to prevent the negative effects of development on the environment is apparent. Not only is the list of activities as it exists at present inadequate,

¹⁵ Yeld, J. Caring for the Earth- South Africa. A Guide to Sustainable Living. World Wide Fund for Nature South Africa, 1997, p.70.

¹⁶ Personal comment: Leza Bothma. Senior Environmental Officer, Department of Agriculture, Conservation and Environmental Affairs, 22 October 1998, Johannesburg, Gauteng.

but added to this is the fact that some of the activities had to be removed from the original list of activities because of government's inability to implement them.¹⁷ Making the list more inclusive therefore presents its own problems.

According to the Department of Agriculture, Conservation and the Environmental Affairs in Gauteng, the EIA regulations are considered to be the result of compromise. The Department feel that if the list of activities, and what is required of provincial government as far as EIA implementation is concerned, had exceeded the demands of the September EIA regulations, capacity constraints in the Department would have restricted efficient implementation even more severely. The capacity of government would have been pushed beyond the limits of operation. The practicality of policy implementation, the department contends, is difficult enough given the constraints they face and additional activities would simply increase the burden of responsibility.¹⁸

Another limitation of using a list of activities is the failure to consider cumulative effects of developments. As opposed to the other alternative of, for instance, devising minimum standards, or identifying areas of environmental sensitivity and importance in 'state of the environment' reports, environmental impact assessments are carried out on a project by project basis with little or no consideration for strategic issues and cumulative effects.

The Department of Environmental Affairs and Tourism in their '*National Strategy for Integrated Environmental Management*' Discussion Document¹⁹ are, however, moving towards a consideration of sensitive areas as opposed to the identification of activities which may have a detrimental effect on the environment. The DEAT, together with the provinces, are currently developing Environmental Management Frameworks (EMFs) for each of the nine provinces. The EMFs are essentially a framework of spatially

¹⁷ Pienaar, V. Business Day, 1998, p. 6. 'Environmentalists declare the Department of Environmental Affairs and Tourism lacks direction and strategic focus citing the fact that government rushed through the environmental impact assessment regulations and then had to withdraw the last section because it could not be implemented'.

¹⁸ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1998, Midrand, Gauteng.

¹⁹ Republic of South Africa, Department of Environmental Affairs and Tourism A National

represented information connected to a parameter. These parameters provide a framework within which development should proceed in order for it to be environmentally sustainable. The technicalities of the EMFs will not be described in any detail here and the discussion document should be referred to for more information in this regard. EMFs are however riddled with their own technical shortcomings and difficulties as well as constraints of a more practical nature. They are based on geographical information systems (GIS) and therefore provide computer-generated information. In light of the financial, human resource and capacity constraints highlighted, the additional resources required for the effective operation of these systems will potentially limit the successful adoption and application of this tool.

Lack of monitoring and lack of consideration given to cumulative effects are, however, not shortcomings unique to South Africa. Countries where EIAs have been implemented for years are still grappling with these issues and how best to deal with them. This was highlighted in Chapter One with the NEPA process, in United States, as a case in point. The technical problems of a lack of monitoring and a lack of consideration of cumulative effects are therefore perhaps general and pervasive problems relating to the design of EIAs.²⁰ In South Africa these elements can be directly linked to the administrative and institutional constraints of environmental management and a lack of strategic focus. Although no provision is made for monitoring in the EIA procedure as set out by South Africa's national government, there is not the capacity to undertake monitoring even if it was explicitly required and defined in the process. Therefore what can be seen is the constraint the administrative process ultimately has over the technical process.

Strategy for Integrated Environmental Management in South Africa. April 1998.

²⁰ Canter, L Environmental Impact Assessment. Second edition, McGraw-Hill, Inc., 1996, p.32.

'Based upon over two decades of EIA practice in the United States, three key issues are current items of concern in relation to the NEPA requirements:

1. The need to determine the extent of mitigation-planning and mitigation-identification which an agency should undertake prior to the issuance of an environmental impact statement (EIS).
2. The need for a methodology or procedure for systematically addressing cumulative impacts of proposed actions.
3. The need for follow-up environmental auditing to document experienced impacts and compare them to pre-project predicted ones. Feedback from impact-prediction auditing could be used to improve the forecasting of impacts from future projects'.

Finally, consideration has to be given to the fact that few environmental standards have been set in South Africa. This is a serious barrier to effective environmental management, as there is no general agreement on the distinction between acceptable and unacceptable behaviour by polluters and resource users.²¹ This also impacts on the effectiveness of EIAs and on the issue of standardisation. At present the EIAs only determine how to constrain the negative effects of development on the environment, but no specific standards are applied and no minimum standards, criteria, values and norms exist for guiding the process.

As experience in the United States has suggested, these technical constraints do not reflect a weakness of science. Rather, they reflect the reality that environmental impact assessment has evolved as an ongoing political process within development planning. Practitioners can only refine the technical aspects of the impact assessment process within the institutional constraints of the adjudication process. Improving the science of environmental analysis *per se* does nothing to reform the political processes of resource management that govern how that information is utilised.

To reiterate. In the broader context of policy and politics, it is not enough that EIA may have a sound scientific basis. If the manpower, finances, or general capacity and institutional infrastructure do not exist to implement EIAs properly, they run the risk of failing to meet their full potential. EIAs therefore are foremost prey to the political and administrative forces that control their implementation. Only then does the soundness of their scientific, technical and theoretical design need to stand up to scientific criticism or technical refinement. As with environmental impact assessment in the US, where the implementation of environmental impact assessment has improved considerably since the passage of NEPA, so too will EIAs be refined in the South African arena. It is, however, useless to have a technically sound design if EIAs cannot be implemented with any success. This therefore leads to a consideration of the institutional dynamics in the South

²¹Republic of South Africa, Department of Environmental Affairs and Tourism A National Strategy for Integrated Environmental Management in South Africa. April 1998, p. 21.

African arena that hinder or promote the implementation of EIAs.

As highlighted, the technical and institutional considerations are not mutually exclusive. The implementation and adoption of streamlining and coping mechanisms, while a direct result of the institutional constraints faced by departments in terms of funds and capacity, is also important from a more technical, procedural and practical angle. How do the institutional limitations faced by provincial departments affect their ability to implement the procedures? And in light of this what impact does it have on the efficiency and effectiveness of EIAs?

The EIA regulations were gazetted in September 1997 but the Department of Traditional and Environmental Affairs in KwaZulu-Natal only received their first application in December 1997. In Gauteng while the sub-directorate for assessment was set up as early as in 1994, in September, October and November of 1997, very few applications were received, and it was only towards the end of 1998 that applications were received in earnest. In both provinces those involved had yet to familiarise themselves with the requirements of the regulations.²² The delay in receiving EIAs to administer can possibly be attributed to at least two realities: the rapid political decision taken to implement the EIA regulations and also the institutional constraints faced by provincial government in carrying out the bidding of national decision making. Developers also had to be made aware of the legal obligations they now faced and some simply sought to and still seek to circumvent the requirements.

The delay in processing applications, while not of too much concern in the provinces considered in this case study, does have larger ramifications as many provincial governments have not found their footing in quite the same way. Many provinces are still grappling with the concept of EIAs, their function, purpose and how to employ them and

²² Personal comments: Sarah Allan and Harold Thornhill, Department of Traditional and Environmental Affairs, 3 September 1998, and 8 March, 1999, Pietermaritzburg, KwaZulu-Natal and Leza Bothma, Department of Agriculture, Conservation and Environmental Affairs, 22 October 1998, Johannesburg, Gauteng.

have therefore experienced even greater delays thus leading to the ineffectiveness of EIAs in many respects.

As highlighted in Chapter One and by the delays just described in processing EIAs, it is not simply the legal provisions that determine implementation or compliance, but it is the institutional structures that have a large role to play. Recent reports from the national Department of Environmental Affairs and Tourism suggest that although the Department is undergoing restructuring, its capacity to enforce legislation is weak.²³

It is not the aim of this thesis to focus on the issue of capacity and to use it as an excuse for lack of effective management. However, the issue of capacity constraints, in the form of both financial and human resources impacts directly on the overall effectiveness of EIA implementation. It is an all pervasive issue in the consideration of implementation as it affects not simply the ability of provincial government, but it also relates to the how environmental management is structured to support provinces in dealing with the mandate of implementation as both national and local government have environmental responsibilities.

It is of no help or consequence to analyse the fact that there are severe capacity constraints within the environmental departments across the country and extending from national level down to local level. It is a harsh reality that those in the environmental field have to deal with. That is not to say that the plight is not real and that environmental budget allocation is not unacceptably low, but it is to say that issues of capacity cannot be allowed to constrain the functioning of departments if the environment is to be conserved. Rather it is essential that means of surviving and adapting to these limitations are found in order that the environment receives the best management possible. It is suggested that a way of doing this is through the integration of duplicating procedures and the

²³ O'Grady, J. 'Fund Shortages Cause EIA Backlog' Natal Witness. 13 March 1999, p.2. 'The Department of Environmental Affairs and Tourism's Chief Director for Integrated Pollution Control and Waste Management, stated in March 1999, that while the National Environmental Management Act 107 of 1998 is a statement of intent by the Department, they are still experiencing inefficiency on provincial/local authority levels regarding the implementation of

development of real and effective partnerships that are mutually supportive. Co-operative governance in environmental management may depend, in practice, on convening intergovernmental fora, dragging periodically all interested and affected parties around a table in order to promote partnerships within government and to offer a focus for continuing, but pressing issues.

Fora, however, run into precipitous obstacles. They add to the burden of meetings, so unless they are viewed as crucial gatherings senior personnel of whatever description delegate them to underlings.²⁴ An environmental officer in the environmental impact assessment chief directorate declares that he spends three quarters of his time doing environmental impact assessment adjudication and the rest of his time is taken up with policy meetings and policy issues. These policy meetings are continually taking up more and more of his time.²⁵ This shows the importance of policy issues in the implementation of EIAs as government is also involved in remaking and redefining policy.²⁶ There is much concern about how the processes are being conducted and how they should be conducted. These policy meetings although time consuming are an important element in the efficient and effective management of the EIA process. It is therefore imperative that intergovernmental structures and fora are encouraged and supported. They are critical components of effective environmental management and efficient implementation of EIAs.

In the face of these institutional complexities, the provincial environmental departments faced with implementing EIAs have had to adopt a number of streamlining and coping strategies in order to deal with the implementation of EIAs efficiently. The need to adopt such procedures speaks volumes about the nature of the institutional structures within the

legislation where money problems still exist'.

²⁴ Lawrence, R. *et al.* The Reality of Intergovernmental Relations. Environmental Management in South Africa. Centre for Government and Policy Studies, University of Natal, Pietermaritzburg. Paper presented at the South African Political Science Association, Biennial Congress, Military Academy, Saldhana, 29 June-2 July 1999.

²⁵ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

²⁶ Parsons, W. Public Policy. An Introduction to the Theory and Practice of Policy Analysis. Edward Elgar, 1995, p. 324.

departments themselves. As highlighted the number of staff and the amount of funding allocated to environmental management within these departments is woefully inadequate. What has resulted is a need to adapt the EIA process and to structure its implementation bearing in mind the limitations of the institutional structures.

The adoption of coping strategies is not always in keeping with the technical ideal of how EIAs should be undertaken, but is necessitated by a concern for practicality. As can be seen in the table, detailed scoping and detailed application are processes unique to KZN. As in Gauteng where they have ‘issues’ reports and ‘mini-EIA’s’, KZN allows for detailed documentation to be included at either the application stage or the scoping stage of the application process. If these are done professionally and adequately and it can be determined that the effects of development are to be negligible, this is as far as the process needs to be taken.²⁷ Other developments simply have to submit an application for approval to be granted. A consultant is not necessary if the application simply goes to application level and is considered to be of a small scale and a low sensitivity. Of the 338 applications that have been registered in KwaZulu-Natal, eight have been exempt from appointing consultants.²⁸

It is important from the perspective of efficient implementation to note that detailed scoping and detailed applications have therefore become streamlining processes by means of which to cope with the numbers of applications they receive. Very few relatively go to full EIA. While this may enable the department to facilitate development and pass the EIA through more quickly, is it at the cost of protection of the environment and the containment of environmentally destructive development? These are not questions easily answered and possibly only time will tell.

Gauteng as illustrated have put time frames for adjudication into the national guideline framework. The fact that Gauteng has been able to manage the implementation of EIAs in this structured manner can in part be attributed to the manuals they have devised. In

²⁷ Refer to the table on page 53.

²⁸ Again this is a process unique to the KZN EIA procedure.

Gauteng with DANCED foreign funding there has been considerable focus on the administration of EIAs and how to manage the complex application process. With this funding Gauteng developed manuals to help those adjudicating the process do so more effectively. A clear procedure has been laid out in them which, not only clarifies the procedure to be undertaken when an EIA application is received, but also enables the department to make the most productive use of the limited staff they employ.²⁹

At interprovincial meetings held to facilitate communication between provinces concerning the issue of environmental impact assessment implementation, these manuals have been shared amongst provinces in an attempt to co-ordinate to some degree the functioning and implementation of EIA regulations. The manuals have also been adopted by Mpumalanga, but different provinces need different processes as their environmental departments have different fund allocations, are of different sizes, have different staffing levels and have general differences in skills and capacity.

4.2 INSTITUTIONAL SHORTCOMINGS

Mitchell and Pigram's institutional framework highlighted in Chapter One of this thesis depicts accurately the institutional reality of environmental management in South Africa. In their institutional framework they assume that responsibility in resource management is fragmented and shared among several different agencies, resulting in boundary problems, overlapping jurisdictions and multiple mandates. In South Africa attempting to control environmental management from the centre has proved difficult. Not least of all because of the past ineffectiveness of the Department of Environmental Affairs and Tourism. In a central policy vacuum, the approach to the environment has been sectoral with different departments developing their own mechanisms and regulations for dealing with the environment. In addition, many of the environmental and developmental applications that need to be undertaken either duplicate the application processes or

²⁹ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1988, Midrand, Gauteng.

requirements of other departments, or in many cases operate within different spheres of government. South Africa's three spheres of government, (national, provincial and local) have also created highly complex administrative and political structures with sophisticated and intricate power relations. Each sphere is concerned with protecting its relative autonomy from encroachment by the others, which operates against centralised control.³⁰ The reality is that spheres need to support each other so as to achieve effective governance and effective environmental management in light of and despite these constraints.

According to this framework, the institutional arrangements must counter these problems if they are to facilitate integrated and effective resource management. This is imperative regarding South Africa's environmental management structures and institutions. Because of the history of ineffective enforcement of provisions, and fragmentation between departments, EIAs were hastily regulated without regard for the mechanisms to deal with this integration or interdepartmental co-operation. The intergovernmental relations and institutions set up are therefore critical components of the institutional framework that needs to be established for EIAs to be effectively and efficiently implemented.

Chapter Three of the Constitution recognises co-operative governance and intergovernmental relations to be vital for effective governance and the EIA guidelines declare it is the responsibility of the environmental departments in both national and provincial spheres to establish their own mechanisms for consultation and co-operation with other government departments.³¹ There is clearly a need for co-operative governance in the administration of EIAs. Not simply because of the all encompassing nature of the environment and its impact on other departments, but also because of the structure of governance and the involvement of all three spheres in environmental management.

³⁰ Pycroft, C. 'Integrated Development Planning or Strategic Paralysis? Municipal Development During the Local Government Transition and Beyond' Development Southern Africa (15)1998.

³¹ Republic of South Africa, Department of Environmental Affairs and Tourism. Guideline Document. EIA Regulations. Implementation of Sections 21, 22 and 26 of the Environment Conservation Act. April 1998, p.15.

A central focus in the environmental management and environmental impact assessment field is therefore not simply intergovernmental co-ordination but interdepartmental co-ordination as well. As all spheres need to act as a cohesive whole, so all departments need to open up communication channels and ensure co-ordination. This communication needs to be effectively facilitated either formally through defined structures or informally on an *ad hoc* but viable basis for effective environmental management to be a reality.³² In the provinces considered in this analysis, this communication and co-operation is evolving in and of itself, not necessarily only to achieve the constitutional aim of good governance, but also as a coping mechanism in light of the institutional constraints that departments face.

South Africa's lack of effective integration between EIA regulations and planning legislation is an example of the fragmentation and lack of co-ordination between departments. There are numerous similarities between the requirements of EIAs and the requirements of planning legislation. There are also a number of differences. The ultimate result however is duplication, confusion and a waste of resources. Both processes look at the integration of social and economic aspects, both involve decision making for land development, they both have an application procedure and are formal processes, advertise and have room for appeal, and both should ideally be dealt with by local government.³³ (In fact, environmental impact assessments are not dealt with by the local level at all, as there is simply no skill or capacity at this level to do any adjudicating. It is therefore critical that capacity building in local government is developed.) The different departments should therefore ideally integrate a number of their procedures and thereby end the duplication that is a present characteristic of the application processes. It is in cases such as these that it is more cost effective for both government and individual actors to address issues at a policy level rather than at an individual project level.

³³Audouin, M. 'Land Use Planning and EIA Regulations: Aligning the Processes' 1998 Conference Papers and Notes International Association for Impact Assessment South Africa, September, 1998.

This is a case where departments need to co-ordinate their functions. Because the protection of the environment is not a tangible deliverable in the sense that housing, water supply and electrification for example are, it is not a pressing concern for many and gets overlooked if it is not integrated into existing structures. Hence the importance of streamlining the development and environmental processes, so that one is not foregone in the furtherance of the other.³⁴

In order to combat the situation of fragmentation and the resulting duplication of many environmental functions, it has to be realised that as important as political integration in the form of institutional co-ordination is a process of procedural integration. Integration for example with land use planning, EIAs and resource management; and sectoral permitting and licensing processes integrated with the environmental impact assessment processes. If EIAs are determined to be an important environmental management tool, in an endeavour to ensure sustainable development, then it is important that EIAs integrate themselves effectively into existing structures. A fragmented and duplicating legislative environment is far from desirable and therefore environmental considerations need to be incorporated into already entrenched development programmes and policies. This will aid in conquering problems of fragmentation and will enable a more coherent, constructive and efficient application procedure to be adopted and applied.³⁵

³⁴ McDonald, G.T. and Brown, L. 'Going Beyond Environmental Impact Assessment: Environmental Input to Planning and Design.' Environmental Impact Assessment Review 15 (1995), pp. 484-495.

'The separation of the planning/design activities from the environmental assessment activities is a structural weakness in current EIA procedures, inhibiting the effective utilisation of the wide range of biophysical and social disciplines brought by EIA into the planning process. Administrative systems must be developed that avoid marginalisation of environmental professionals from the real planning process and encourage and not discourage, creative interaction between environmental aspects and project design. To integrate the environment into planning, environmental goals must be incorporated into plans. Planning legislation in the past has tended to make only incidental reference to conservation and environmental matters and conservation as a use in its own right is still not well recognised in plans'.

³⁵ Bray, E. 'Towards Sustainable Development :Are We on the Right Track?' South African Journal of Environmental Law and Policy 1 (1998). To achieve sustainable growth and long term welfare, sustainable development must be recognised as an overall national (horizontal) policy with proper integration into individual policies vertically.

The Department of Traditional and Environmental Affairs in KwaZulu-Natal see their role as facilitating co-operative governance between different authorities and stakeholders. As has become apparent, there are a multiplicity of government departments dealing with some aspect of the environment. The role of the Department of Traditional and Environmental Affairs as they see it, is to co-ordinate all the departments. The degree to which they have been able to accomplish this has been dictated by the level of co-operation the other departments have offered. The instances where they have not managed to pull departments together have been in their opinion as a direct result of a lack of commitment on the other departments' behalf.³⁶

This issue of integration with development planning has been addressed in KwaZulu-Natal through the integration of environmental impact procedures with the planning procedures of the Department of Local Government and Housing. In line with facilitating development rather than impeding it, the Department of Traditional and Environmental Affairs in KwaZulu-Natal, has adopted certain streamlining procedures between these departments. This is particularly important from the point of view that Local Government and Housing has responsibility for physical planning and hence has direct bearing on activities with a potentially detrimental effect on the environment. While this is possibly an example of mutual co-operation between departments in an endeavour to eradicate unnecessary duplication and fragmentation, the Department of Traditional and Environmental Affairs suggest that it was their initiative that provided the impetus behind the adoption of this streamlined process.³⁷

The EIA regulations require that anyone wishing to undertake an activity listed in the regulations must apply for authorisation to do so. While many of the activities listed are not regulated by any other procedures, a number of the activities listed already require

³⁶ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

³⁷ Personal comment: Marita Thornhill, Department of Traditional and Environmental Affairs, Intergovernmental Relations Workshop held by the Centre for Government and Policy Studies (CENGOPO), 25-26 May 1999, University of Natal, Pietermaritzburg.

planning approval. In these cases applicants are required to obtain two approvals, one in terms of the EIA regulations and one in terms of the Planning Approval Procedures.

In the interests of good governance, the Department of Traditional and Environmental Affairs and the Department of Local Government and Housing have agreed to establish streamlined procedures for activities that require authorisation by both Departments.

The streamlined procedures have the following advantages:

- The applicant is only required to submit one application form
- Some of the requirements of the two Departments overlap and in terms of the streamlined procedures, the applicant only has to fulfil these requirements once, and
- Other government departments will no longer be requested to comment on the same application twice.

The streamlined procedures are to be implemented for applications in terms of any of the following pieces of legislation:

- Section 11(2) and 12 of the Town planning Ordinance, No 27 of 1949; and
- Chapters 1 and 11 of the Less Formal Township Act, No 113 of 1991, which also requires approval in terms of Environmental Impact Assessment Regulations.³⁸

The Department of Traditional and Environmental Affairs in KwaZulu-Natal is also in the process of finalising a combined process with the Department of Water Affairs and Forestry with regards to afforestation applications. They have determined that it is useless in terms of good governance to go through two major procedures. Rather they are trying to develop and adopt a 'one-stop shop' approach where the two processes are catered for in one. They have had a test run with the combined forestry process as its final implementation is complicated by the fact that it necessitates a combination of provincial

³⁸ Department of Traditional and Environmental Affairs and the Department of Local Government and Housing Environmental Impact Assessment Regulations and Planning Approval Procedures Training Manual. 17 July 1998, pp.A-1.

functions with national ones. They will however implement this streamlining process in mid-1999.³⁹

Another streamlining process, which is presently being considered by the Department of Traditional and Environmental Affairs, is with the national Department of Agriculture. The types of issues that need consideration are very similar to those dealt with in the combined procedure with forestry, which took a year to devise. The forestry and catchment management procedure will therefore be used as a base from which to streamline with the Department of Agriculture.

The Department of Traditional and Environmental Affairs states that one would imagine that the Department of Minerals and Energy could learn from the combined processes especially those that have involved different spheres of government. Trying to coordinate any processes with the Department of Minerals and Energy Affairs has, however, been very difficult.⁴⁰ The reasons for this are twofold: mining is not a listed activity although some of the activities within mining necessitate the undertaking of an EIA; and the central policy vacuum that existed in environmental management under the Environment Conservation Act, meant that the Department of Minerals and Energy Affairs developed their own environmental procedures. The Department of Mineral and Energy Affairs therefore see themselves as not having to comply with the Department of Environmental Affairs and Tourism's environmental controls. The different levels of process, the one being a national issue and the other a predominantly provincial consideration in terms of administering EIAs, further exacerbates this situation.

The same integration is needed in the other provinces. The Department of Agriculture, Conservation and the Environmental Affairs while streamlining and adapting their administrative procedures have not attempted to streamline their departmental processes. They declare that the EIA requirements are in addition to any other requirements and they do not have the capacity to consider issues that should have been dealt with by another

³⁹ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

department's regulations.⁴¹ They declare that it is the applicant's responsibility to co-ordinate his/her application with the other departments that might also be concerned or involved. The environmental department co-ordinate with the other departments before it allows the environmental impact assessment to be accepted, but it declares it is the consultant's responsibility to do so from the beginning of the application process.⁴²

In Gauteng, however, because the environmental department includes conservation and agriculture, there is a very strong intra-departmental linkage between the sectors that comprise the department in its entirety. The department also consults with the national Department of Environmental Affairs and Tourism in terms of its scoping reports, and incorporates their input into the final decision. This has been established on a political level as the Ministers of the Executive Committees have insisted on this consultation process. They also have an arrangement with the national Department of Health who give input and are involved throughout the process.⁴³

There is no doubting the importance of co-ordination between provincial environmental departments and between departments undertaking developmental procedures that can be streamlined with the application procedures for EIA. This effective integration will not only allow for standardisation of procedures in the environmental field but will also go a long way towards easing the capacity constraints felt by departments undertaking duplicating procedures. It is therefore crucial that the Department of Environmental Affairs and Tourism take a lead agent role and develops strategic plans so that the environment has a better chance of being effectively managed and integrated into the other management structures, and the policies of other departments and other spheres. Having said this it is vital that the Department co-ordinates and communicates its decisions and intentions with the other spheres of provincial and local government. This

⁴⁰ *Ibid.*

⁴¹ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1998, Midrand, Gauteng.

⁴² *Ibid.*

⁴³ Personal comment: Leza Bothma. Senior Environmental Officer, Department of Agriculture, Conservation and Environmental Affairs, 22 October 1998, Johannesburg, Gauteng.

is important in order to avoid a situation replicating that of the decision to implement the environmental impact assessment regulations where the 'strategic' decision was taken to implement the regulations with little consideration for, or communication with, the other spheres and departments.

What is equally important is co-ordination between spheres of government in South Africa and it is a form of intergovernmental relations that needs considerably more attention in the environmental field as it has been sadly neglected to date. This is especially true where local government is concerned. Since the advent of democratic national government in 1994 and democratic local government in 1995, efforts have been made to strengthen and empower local government. Municipalities are seen as being in the front line of service delivery and development. At the heart of developmental local government is the concept of integrated development planning, where municipalities co-ordinate all development activities within their area of jurisdiction. The final stage of local government transition ushered in by the White Paper on Local Government will further entrench this trend towards developmental local government, an important function of which is control over land use.⁴⁴

The provincial sphere of government potentially has an important role to play in the implementation of local environmental management policy. This is both in terms of its constitutional responsibility for environmental management, which it shares with national government, and its role in development planning and management. Provincial structures have not been able to influence environmental management at local level to any meaningful degree, due to a lack of resources.

In terms of the institutional structures and capacity of provincial government, the regulation of EIAs meant that training had to be undertaken. The need for training according to the Department of Traditional and Environmental Affairs, is not simply because of the inexperience of staff but also because of the nature of environmental

⁴⁴ Pycoft, C. 'Integrated development planning or strategic paralysis? Municipal development during the local government transition and beyond' *Development Southern Africa* 15 (1998), pp.

management in the past. The emphasis was on conservation and the preservation of ecological areas. Many of the staff in the environmental departments it is contended are therefore ex-conservation officials and have had to undergo a whole paradigm shift in the face of the move to ‘sustainable development’.⁴⁵

At the sphere of local government strategies to educate and create awareness of the requirements of environmental impact assessments also had to be undertaken. The Department of Agriculture, Environment and Conservation met with all the local authorities in Gauteng after the EIA regulations were gazetted. The meetings were initiated to inform local authorities of the existence of the new regulations and to try and develop their ability to play an active role in their implementation.⁴⁶

The local governments do not have the capacity to deal with EIAs and communication between the provincial environmental departments and local government is poor as there are no formal channels set up to facilitate this. The municipalities communicate with environmental affairs in an *ad hoc* manner when issues arise that need to be dealt with. The consultation that occurs is therefore issue/application dependent. While local government not only has a crucial role to play in relation to the administration of EIAs, they also have a constitutional responsibility towards the environment.

The Department of Agriculture, Conservation and Environmental Affairs in Gauteng is in contact with the local authorities but generally at present this only occurs around specific issues and where the need arises. They are primarily consulted on issues of service provision as they relate to the impact assessments received. The provincial department feels that local government is better able to pick up flaws in the planning and scoping stages of the EIA process because of local government’s involvement in development and planning procedures. It is essential that local government is aware of the procedures in

151-162.

⁴⁵ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs, 8 March 1999, Pietermaritzburg, KwaZulu-Natal.

⁴⁶ Personal comment: Bryan McCourt, Department of Agriculture, Conservation and Environmental Affairs, EPPIC Conference, 21 October 1998, Midrand, Gauteng.

place and of their role in environmental management particularly in terms of their relationship to the provincial environmental department. It is crucial that local government's capacity is developed. To ultimately achieve local government capacity will be a positive step for environmental management as local government functions at a level ideally suited to monitoring development, especially smaller developments which by virtue of their size often slip through the net of EIAs. Local government's involvement at this stage is to set up by-laws concerning environmental impact assessments and to ensure compliance with these laws.

The only local authorities in the two provinces that have applied for competency status are the Durban Metro Council in KwaZulu-Natal and Germiston and Midrand in Gauteng. At present while the Durban Metro has not been awarded competency for the administration of EIAs, many of the preliminary stages in the EIA procedure are conducted by them, and are then referred to provincial government for review and approval. One of the primary concerns with delegating authority to local government is the uncertainty that surrounds which activities can be delegated. The regulations themselves do not determine which activities how much of the procedure can be delegated. Delegation therefore needs to be considered with respect to provisions in the Constitution and determined by local government's capacity. The provinces have all the power at the moment to adjudicate EIAs. Devolution of responsibility will only occur when the Transitional Local Councils (TLCs) have the adequate capacity to deal with the activities that get devolved.

Ultimately the devolution of power is a very complex issue. Rich and poor TLCs have very different capacities and tax bases and this dictates to what extent they can get involved in environmental issues. Umhlanga in KwaZulu-Natal for example has a rich tax base and they have the money to appoint the appropriate staff and specialists in the environmental field. If the KwaZulu-Natal province were to devolve some responsibility to them it would not be a major concern. If the poorer TLCs are given too much authority, however, the worry is that they will be too easily swayed by developers and sustainable and responsible development will not be the ultimate result. The TLCs

therefore still need to develop their capacities and KwaZulu-Natal is in the process of determining how it can aid them in their capacity development.⁴⁷

What is hampering the development of such interdepartmental co-ordination is in fact the intergovernmental dimension and the fact that while local government should be involved in the environment and in EIA processes, a lack of capacity and development in terms of skills and efficiency has meant that no local government to date has successfully applied to be the competent authority dealing with the adjudication of environmental impact assessments although it can be argued they may very well be the best structure to deal with such a process. At the level of planning the integration of environment and development should occur but the fact that they operate on different structural and governmental levels means that integration and intergovernmental co-ordination is somewhat hindered.

It is apparent in the environmental arena that spheres of government do not function on the same horizontal plane. The realities of the past hierarchical structure of governance still exist and to a large extent still frame the workings of environmental management. Local governments do not have the capacity to implement EIAs themselves yet are arguably the sphere that should be doing so. Why is this the case? Largely perhaps because of the hierarchical legacy of governance that still exists and the reality that these management structures are hard to replace in practice with many of the same officials in existence in the departments. Previously under apartheid local government only enjoyed powers delegated from on high. Local government does not have the capacity to implement EIAs yet national and provincial government should be facilitating, helping and developing local government capacity in order to facilitate co-operative governance. Little in fact done in this regard as each sphere of government grapples with its own limitations and deficiencies, at not only the cost of practical co-operative governance but also in many cases at the cost of effective environmental management.

⁴⁷ Personal comment: Harold Thornhill, Department of Traditional and Environmental Affairs 8 March, 1999, Pietermaritzburg, KwaZulu-Natal.

Having looked at the issues of co-ordination and integration it cannot however be stressed enough that co-operation is a partnership particularly as concerns capacity building and shared procedure. All departments are constrained by a lack of capacity what needs to be developed are effective partnerships. What needs to occur first and foremost is a process of consultation and capacity building between departments and spheres of government so as to determine how they practically see their roles, and how they can support each other. The proper structures need to be set up before there can be any hope of effective co-ordination.

CONCLUSION

The issue of whether and how EIAs can be used to yield environmentally sound decisions has taken on increasing significance globally as governments attempt to use EIA to foster sustainable development. As highlighted throughout this thesis these attempts range from the refinement of the technical and scientific elements of procedure and design, to consideration of the institutional constraints on effective implementation. While there is little doubt that EIAs are in fact an important tool that can go a long way to aiding the attainment of sustainable development, it is important that one does not lose sight of the fact that these are indeed simply a tool. There are many instances in which EIA has proven seriously deficient as a mechanism for attaining environmental policy goals. Those who see EIA as a linchpin in the quest for sustainable development may be disappointed, as an EIA is nothing more than an administrative aid. Experience with EIA has highlighted the fact that it is not a magic wand to solve all environmental problems, but it needs to be applied in combination with other management and administrative tools, and within the framework of sound and implementable environmental policy.

There is therefore far more to the attainment of sustainable development than simply the adoption of this much revered tool. As valuable as an EIA has the potential to be, there are also many shortcomings with the implementation of EIAs and many refinements that have to be made. Not least of all to the institutional and organisational structures that govern how they are adopted and implemented. Determining the benefits EIAs may provide has to move beyond a simple consideration of their technical merits. EIAs are constrained first and foremost in their effectiveness by the institutions and organisations that govern how the environment is managed. The ability of EIA to contribute to sustainable development requires at the outset, an unambiguous conceptual definition of sustainable development and a translation of that definition into operationally meaningful criteria for decision making. A second condition required is the existence of a governmental body (or process) that ensures that criteria for defining sustainable development are used as a basis for decision making. As experience with NEPA in the United States demonstrates, if there is no governmental body responsible for

stopping environmentally unsound projects, EIA alone may not prevent unsustainable development.

Ideally many foundations need to be laid before EIAs can be effectively adopted. For many the pressure to adopt them is, however, strong and the ability to lay all these foundations rather idealistic. It remains for those countries attempting to adopt EIAs in a system not yet suited to their requirements to determine whether capacity should inform policy or whether the process should be put off until the foundations are in place realising, though, that increased environmental damage and unsustainable development are a potential shortfall.

In South Africa, there is little doubt that an EIA system is needed to help resolve contentious environmental protection/development clashes. The case studies of Gauteng and KwaZulu-Natal demonstrated that according to the number of applications they have received and the number of records of decisions they have passed both provinces are implementing the EIA regulations with a degree of effectiveness and success. It is, however, only a relative success. Only two provinces have been considered here and during the course of the research undertaken it became explicitly apparent that the same findings cannot be presumed for provinces nationally. Many provinces are still grappling with the concept of EIA, what they are designed to achieve, and how to tackle the complexities of implementation.

Throughout the research conducted it became an accepted realisation rather than a profound revelation that EIA in South Africa is in its infant stages and is for various reasons far from a perfect model of how they should be carried out. The concept is new to those using it, and those who are adjudicating them have the added difficulty of dealing with skills deficits and financial constraints, plus the political decision to implement the EIA regulations before any capacity building was undertaken. These limitations make it explicitly apparent that EIAs in South Africa function in the context of 'real' as opposed to 'ideal' circumstances. There is, however, a broadly recognised need for the existence

of EIAs and a need to develop and improve their implementation rather than to forgo them completely.

The central tenet of the argument, that institutions constrain the implementation of EIAs, is borne out by the South African case studies. In the provinces able to implement the EIA regulations, as is the case for Gauteng and KwaZulu-Natal, this has only been as a result of, in Gauteng's case, additional funds and in the case of both provinces has depended on the adoption of streamlining and coping mechanisms. It is the institutional structures of provinces themselves and environmental management in general that have dictated the need to adopt these processes. While good environmental assessment has to be at the heart of any sound environmental management process because of the various complexities and difficulties faced by those implementing them and consultants working with them in South Africa, EIAs have met with a very mixed reception. Unless they can be implemented with some form of standardisation nationally, EIAs will also be met with very mixed success.

What the analysis of EIA implementation in the United States has highlighted and can be applied directly to the situation in South Africa, is the need for a strong national environmental management strategy and co-operative and integrated environmental management. Unless these exist, the EIA process alone cannot be expected to alter or influence in any significant way the decision-making processes that determine how environmental sustainability is to be achieved. This focus on integrated and co-operative management will also help fill the gap, which existed in environmental conservation, and complicated the administration of the environmental regulations. A shift in organisational behaviour in line with this has occurred. Eliminating the fragmentation that is the hallmark of this country's environmental practice has been addressed with the development of the National Environmental Management Act. The success of this Act, however, remains to be seen as it is yet to be implemented.

It is, therefore, the duty of both central and regional governments in South Africa to ensure an effective national approach to integrating conservation and development, so

that a culture of promoting sustainable development for the country as a whole takes root at all levels of government. In order for the importance of the environment and sustainable development to be realised, capacity building needs to take place, not simply among government, but in the general political arena too. The importance of the environment has often been overlooked in the drive behind industrial expansion and economic growth. In order to increase the level of political will amongst key decision-makers so as to ultimately influence the budget allocation process, Cabinet, the Ministers of the Executive Councils in the provinces as well as the private sector, need to be better informed as to the importance of the environment and the need to achieve sustainable development.¹

Clearly then, new challenges still face the use of environmental impact assessment as a planning and management tool, and particularly in countries like South Africa where governance, ineffectual institutional frameworks and shortages of financial and human resources make environmental management a difficult undertaking, thereby compromising the attainment of sustainable development.²

¹ Personal comment: Howard Benkenstein, Department of Environmental Affairs and Tourism, EPPIC Conference, Midrand 21 October 1998, Midrand, Gauteng.

² Wood, C. Environmental Impact Assessment: A Comparative Review. Longman, 1995.

LIST OF APPENDICES

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I. APPENDIX ONE

**List of activities in terms of section 21 of the Environment Conservation Act,
1989.**

REPUBLIC
OF
SOUTH AFRICA



REPUBLIC
VAN
SUID-AFRIKA

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GOVERNMENT NOTICES GOEWERMENTSKENNISGEWINGS

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM DEPARTEMENT VAN OMGEWINGSAKE EN TOERISME

No. R. 1182

5 September 1997

ENVIRONMENT CONSERVATION ACT, 1989 (ACT No. 73 OF 1989)

THE IDENTIFICATION UNDER SECTION 21 OF ACTIVITIES WHICH MAY HAVE A SUBSTANTIAL DETRIMENTAL EFFECT ON THE ENVIRONMENT

I, Zweledinga Pallo Jordan, Minister of Environmental Affairs and Tourism, after consultation with the Minister of each department of State responsible for the execution, approval or control of such activities, the Minister of Finance and the competent authorities of the provinces, hereby under section 21 of the Environment Conservation Act, 1989 (Act No. 73 of 1989), identify the activities in Schedule 1 in general as activities which may have a substantial detrimental effect on the environment.

I further determine that this notice will commence in respect of different activities on the dates indicated in Schedule 2.

Z. P. JORDAN

Minister of Environmental Affairs and Tourism

SCHEDULE 1

1. The construction or upgrading of—
 - (a) facilities for commercial electricity generation and supply;
 - (b) nuclear reactors and installations for the production, enrichment, reprocessing and disposal of nuclear fuels and wastes;
 - (c) transportation routes and structures, and manufacturing, storage, handling or processing facilities for any substance which is dangerous or hazardous and is controlled by national legislation;
 - (d) roads, railways, airfields and associated structures outside the borders of town-planning schemes;
 - (e) marinas, harbours and all structures below the high-water mark of the sea;
 - (f) cableways and associated structures;
 - (g) structures associated with communication networks, other than telecommunication lines and cables, as well as access roads leading to these structures;
 - (h) racing tracks for motor-powered vehicles and horse racing, excluding indoor tracks;
 - (i) canals and channels, including diversions of the normal flow of water in a river bed and water transfer schemes between water catchments and impoundments;
 - (j) dams, levees or weirs affecting the flow of a river;
 - (k) reservoirs for public water supply;
 - (l) schemes for the abstraction or utilisation of ground or surface water for bulk supply purposes;
 - (m) public and private resorts and associated infrastructure;
 - (n) sewage treatment plants and associated infrastructure; and
 - (o) buildings and structures for industrial and military manufacturing and storage of explosives or ammunition or for testing disposal of such explosives or ammunition.

2. The change of land use from—
 - (a) residential use to industrial or commercial use;
 - (b) light industrial use to heavy industrial use;
 - (c) agricultural or undetermined use to any other land use;
 - (d) use for grazing to any other form of agricultural use; and
 - (e) use for nature conservation or zoned open space to any other land use.

3. The concentration of livestock in a confined structure for the purpose of mass commercial production.
4. The intensive husbandry of, or importation of, any plant or animal that has been declared a weed or an invasive alien species.
5. The release of any organism outside its natural area of distribution that is to be used for biological pest control.
6. The genetic modification of any organism with the purpose of fundamentally changing the inherent characteristics of that organism.
7. The reclamation of land below the high-water mark of the sea and in inland water including wetlands.
8. The disposal of waste in terms of section 20 of the Environment Conservation Act, 1989.
9. Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965).

SCHEDULE 2

<i>Item number in Schedule 1</i>	<i>Date of commencement</i>
1 (a) (b) (d) (e) (f) (h) (m); 7	8 September 1997
1 (g) (o); 3; 4; 5; 6	5 January 1998
1 (c) (i) (j) (k) (l) (n); 8; 9	2 March 1998
2 (a) (b) (c) (d) (e)	1 April 1998

No. R. 1182

5 September 1997

WET OP OMGEWINGSBEWARING, 1989 (WET No. 73 VAN 1989)

DIE IDENTIFISERING KRAGTENS ARTIKEL 21 VAN HANDELINGE WAT WAARSKYNNLIK 'N WESENLIKE NADELIGE INVLOED OP DIE OMGEWING KAN HÊ

Ek, Zweledinga Pallo Jordan, Minister van Omgewingsake en Toerisme, na oorleg met die Minister van elke Staatsdepartement wat verantwoordelik is vir die uitvoering of goedkeuring van of beheer oor sodanige handeling, die Minister van Finansies en die bevoegde gesagte van die provinsies, identifiseer hierby kragtens artikel 21 van die Wet op Omgewingsbewing, 1989 (Wet No. 73 van 1989), die handeling in Bylae 1 in die algemeen as handeling wat waarskynlik 'n wesenlike nadelige invloed op die omgewing kan hê.

Ek bepaal voorts dat hierdie kennisgewing in werking tree met betrekking tot verskillende handeling op die datums soos in Bylae 2 aangedui.

Z. P. JORDAN

Minister van Omgewingsake en Toerisme

II. APPENDIX TWO

An example of the declaration form the Consultants are required to complete, to ensure that there are no vested interests in the proposed activity.

Appendix 1: An example of a declaration form for the consultant to declare that there are no vested interests in the proposed activity.

DECLARATION OF INTEREST BY CONSULTANT

I/We as Environmental Consultant to:
 Proponent:..... on Project.....
 do hereby declare the following interests.

1. This consultancy is/is not* a subsidiary, legally or financially, of the proponent.
 (*delete what is inapplicable and give details on what is applicable)
 Details.....

2. Remuneration for services by the proponent in relation to this proposal is/is partly/is not* linked to approval by decision-making authorities responsible for permitting this proposal (* delete what is inapplicable and give details on what is applicable)
 Details.....

3. My/our consultancy has the following interest in secondary or downstream developments as a result of the authorisation of this project.
 Details.....

4. What percentage work have you received from the above proponent in the previous twelve months?

Use additional pages for furnishing explanations if necessary.

I hereby declare that I am fully aware of my responsibilities in terms of Government Notice No. R.1182 of 5 September 1997 and that failure to comply with it fully may constitute an offence in terms of the Environment Conservation Act (Act No. 73 of 1989).

Signed..... Date:

Witness..... Date: Witness Date:

DECLARATION OF INTEREST BY CONSULTANT (continued)

I certify that before administering the oath/affirmation I asked the deponent the following questions and wrote down his/her answers in his/her presence:

Do you know and understand the contents of the declaration?[^]

Answer:

Do you have any objections to taking the prescribed oath?

Answer:

Do you consider the prescribed oath to be binding on your conscience?

Answer:

I certify that the deponent has acknowledged that he/she knows and understand the contents of the declaration which was sworn to/affirmed before me on this day of 19.... and the deponent's signature was placed thereon in my presence.

Commissioner of Oaths

Designation (Rank):

Ex Officio Republic

Full name:

Business Address:

III. APPENDIX THREE

A list of figures obtained from the department of Traditional and Environmental Affairs highlighting the number of applications the Department has received. This list accompanies the provincial register that is produced.

DEPARTMENT OF TRADITIONAL AND ENVIRONMENTAL AFFAIRS

ENVIRONMENTAL IMPACT APPLICATIONS

Applications to undertake activities controlled under section 21 of the Environment Conservation Act , Act 73 of 1989.

Total No. of applications received : 338

Breakdown :

Approved : 181

Under review : 50

Awaiting further information : 71

BREAKDOWN SHOWING ECONOMIC SIGNIFICANCE.

Sectors / Types	Total Project Values	Number
Telecommunications	R 72,5 mil	145
Dams and RDP water projects	R 168 mil	21
Airports	R 1 mil	1
Commercial (incl. Service Stations)	R 180 mil	18
Afforestation	R 14 mil	28
Construction (incl. Bridges , Sports facilities)	R 60 mil	6
Industrial (incl. Chemical , Fuels , Bulk Supply)	R 2,0 Bil	40
Harbours	R 1,8 Bil	9
Tourism	R 54 mil	36
Sewage	R 30 mil	3
Roads	R 1,94 Bil	13
Residential excl PTB's(ex DLGH)	R 910 mil	10
Power	R 800 mil	4
Miscellaneous	R 25 mil	5
TOTAL ESTIMATED VALUE :	R 7,794 Bil	338

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