

Empowering communities and individuals for catchment management. An investigation into the process of implementing the Inkomati Catchment Management Agency, Mpumalanga, South Africa.

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Outline

South Africa has just introduced a new approach to water resource management, which is markedly different from the highly politicised and inequitable policies of the apartheid era. The approach has been captured in the new National Water Act (Act 36 of 1998). The Act states that the main bodies responsible for the implementation of the Act will be Catchment Management Agencies (CMA). The formulation of these agencies is considered to be one of the most important and challenging innovations of the Act, as it will require considerable restructuring of present water management bodies and the empowerment of local communities to manage their own water resources.

The overall purpose of this case study is to understand how empowerment can be achieved, on both the individual and community level, in the establishment of the Inkomati Catchment Management Agency, Mpumalanga, South Africa. The study will be based on feedback from stakeholders who were involved in the consultation process, surrounding the drafting of the proposal for the implementation of the first Catchment Management Agency (CMA) in South Africa. The drafting of a proposal to the minister of catchment management is the first phase in the process of establishing these new institutional bodies and it is hoped that the results will assist in identifying how mechanisms of empowerment can be initiated into future consultative processes. The research will be based, primarily, on interviews with stakeholders as well as with the consultants and governmental officials who are running the process. Some attempt will be made to draw out principles, which could be used to guide other consultative processes that are being initiated in the other 18 catchment areas.

1 Introduction

After 42 years of apartheid rule (1948-1990), South Africa saw the dawning of a new spirit of democracy, which strove to free all South African from the oppression of an unjust minority rule. A hallmark of this process was the development of an interim constitution, which allowed for the scrutiny and reformation of legislation through the guise of a common Bill of Rights. This Bill opened the way for all government departments to initiate a reform of, the then, current legislation. Reform of water resource legislation became a priority because people's dignity, equality and freedom could not be effectively restored without allowing them access to the most fundamental of all rights.

The New South African Water Act (Act 36 of 1998) evolved out of this process. The Act offers a revolutionary approach to water management by giving priority to socio-economic development, while still recognising that aquatic ecosystems need to be protected to ensure the future sustainability of fresh water systems. The Act is also significant in its emphasis on catchment level management, and the Department of Water Affairs and Forestry (DWAF) has committed itself to a sustainable and participatory approach to water resource management.

The rest of the world has favourably received these progressive principles but there is much debate as to whether South Africa, with its scarce water resources and development constraints, is able to implement a water law of this nature. My incentive for this research is a desire to see the good principles of this legislation transformed into practical reality.

The overall purpose of this case study is to understand how empowerment can be achieved, on both the individual and community level, in the establishment of the Inkomati Catchment Management Agency, Mpumalanga, South Africa. The case study approach will be based on feedback from stakeholders, who were involved in the consultation process, surrounding the drafting of the proposal for the implementation of the first Catchment Management Agency (CMA) in South Africa. The drafting of a proposal to the minister of catchment management is the first phase in the process of establishing these new institutional bodies. The research will be based on interviews with those running the process as well as with the stakeholders who have been extensively involved in the process. Empowerment is a crucial objective of the new Water Act and it seems that there is much that can be done to achieve this on both the individual and community level. Although, there is a danger in attempting to make generalisations that are not applicable to other contexts, it is hoped that some of these conclusions will assist the Department of Water Affairs and Forestry (DWAF) in identifying mechanisms, which will encourage more community and individual empowerment in water management.

2 Definitions

The term catchment has been defined, in the National Water Act (Act 36 of 1998), in relation to a watercourse or watercourses or part of a watercourse,

as the area from which any rainfall will drain into the watercourse or watercourses or part of a watercourse, through surface flow to a common point or common points (1. iii).

This definition forms the basis for the definition that is used in the glossary of the Final draft proposal for the Inkomati CMA. They define a catchment as

an area in which all water falls as rain or is released from storage flows to a river and a network of natural groundwater storage areas (called groundwater aquifers). The boundaries of such an area can be established scientifically, and a number of such areas can be linked in what we call a River Basin. Also, small catchments, sometimes called sub-catchment, can form part of larger catchments, which, in turn can form part of river basins (p. v).

In the proposal, as in this research, the Inkomati Basin will be used to describe, collectively, the three catchments of which it comprises. Each of these main catchments can be divided into a number of sub-catchments.

The term multi-stakeholder process (MSP) will be used to describe the public participation, which is required under the Act to establish a CMA. Multi-stakeholder processes are defined by Donaldson (1994, cited in Grant, 1996) as a process,

where those affecting or those affected by a particular plan, policy, or project come together to assist the proponent with the design, planning and perhaps implementation of the plan, policy or project. The stakeholders are those affecting and those affected – basically, anyone who has an interest in the plan, policy or project in question (p. 43).

Multi-stakeholder processes are also analogous with public participation processes, community involvement and public consultation.

3 The case study¹

The case study was selected based on the fact that it is likely to be the first CMA to be established in South Africa and it is therefore particularly important, as it will set a precedent for future agencies. It seems that all other water management areas will learn from the successes and failures of the Inkomati Basin (Pers. Comm., John Reynolds, AWARD). There are other consultative processes running in other areas, such as in the Breede and Olifants, but neither of these areas is in a position, at this time, to submit a proposal for the establishment of a CMA. The selection of the case study was done in consultation with the DWAF and the consultants involved in the process.

¹ Unless otherwise stated, information on the Inkomati Basin is taken from the Final draft proposal for the establishment of a Catchment Management Agency for the Inkomati Basin (2000).

The Inkomati Basin, over which the Inkomati CMA will serve, consists of three major catchments, the Komati, Crocodile and Sabie-Sand.² The total catchment area of the basin, inside South Africa and part of Swaziland, is 31 230 km². The natural mean annual runoff is 3 432 m³ and irrigation³ is both the main consumer of water and the most important economic activity in the basin. Exotic afforestation also occurs within the area and covers 365 000ha. The total livestock and game numbers, in equivalent large stock units, is 515 000.⁴ The most important industries are sugar mills, a paper mill and power stations, which draw water from the Inkomati system. The Inkomati River system is an international system, originating in South Africa, flowing partly through Swaziland and contributing to the Incomati River, which traverses Mozambique. The present population in the basin is estimated to be 1.85 million. More than 50% of the population has poor access to drinking water and sanitation facilities. Coupled with this, the rivers have a high conservation status, with high habitat and species richness. The rivers flow through the Kruger National Park, which is one of South Africa's premier tourist destinations.

The description of the basin indicates that there are numerous stakeholders, across a wide range of sectors, who have an interest in water management in the basin; these include:

- ☞ agriculture;
- ☞ forestry;
- ☞ energy;
- ☞ mining;
- ☞ industry;
- ☞ conservation;
- ☞ local government;
- ☞ civil society;
- ☞ tourism;
- ☞ fishing;
- ☞ emerging farmers;
- ☞ traditional leaders and
- ☞ water boards.

This diverse range of sectors, active in the process, adds to the value and interest of this research.

² These three catchments each had separate representative processes running up until October 1999 when the first joint Inkomati reference group meeting was held.

³ The main crops grown are sugar cane, citrus, sub-tropical fruits, tobacco and vegetables.

⁴ A significant portion of this number is for game living in the extensive conservation areas within the basin.

The concept of catchment management is a radical change for water management in the region and it has the potential to be an incredibly empowering mechanism, both at the individual and community level. At several of the meetings, which I attended over the last month, there appears to have been some concerns related to how certain sectors were represented and empowered in and through the process. There also appear to have been indications of true engagement with the process and several consultants have commented on the progress that was made with respect to stakeholder participation and support of the process. Problems were experienced in trying to reach consensus on the final proposal and, although these have finally been resolved and the proposal is now going forward, it seems that there is much that can be learnt from the process.

The following section will provide a contextual context to the wider legislative changes that have effected water management in South Africa. It will also describe consultative processes that have been initiated in the country and it will outline some of the challenges which they experienced. Finally, an extensive discussion of empowerment, both on an individual and community level, will lead to the formulation of research questions for this study.

4 Contextual context

4.1 The background to South African water law: The social and political context which influenced the reformation of the water law

The new Water Act provides a radical change from the previous management styles. The factors, which influenced this new approach, stemmed from several sources and these are discussed below.

4.1.1 The inadequacy of previous legislation

The previous Water Act (Act 54 of 1956) had fallen under constant criticism and was accused of being “un-analytical” and based on “muddled thinking” (Findlay, 1973 & Rabie, 1989).⁵ Fuggle & Rabie (1999) provide some interesting details on many of the legal inconsistencies that were evident in the act. Although it was not overtly discriminatory, it ultimately led to an extreme bias towards a minority of people, which evolved through a combination of apartheid social planning and riparian land ownership. This meant that vast sectors of the populace were denied access to water and other basic services. The system institutionalised an uneven social distribution of environmental resources, which caused serious structural scarcity for black South Africans.⁶

⁵ See Fuggle & Rabie (1997), for some interesting details on many of the legal inconsistencies that were evident in Water Act 54 of 1956.

⁶ Approximately 86% of the land was owned by the white minority while the black majority subsisted on 14% of the land base (Whyte, 1995).

The Department of Water Affairs and Forestry (DWAF) did not regard itself as being responsible for ensuring that all citizens had access to adequate water supplies and had little political mandate for such a responsibility. Furthermore, from the 1960's, the country was divided into nominally independent homelands within which the DWAF had no jurisdiction (Abrams, 1996). The land allocated to these homelands was generally more arid in nature, which required substantial agricultural inputs such as capital, fertilizers, veterinary services, irrigation and new agricultural technology. The new homelands did not have access to such services and so the black population, without political or economic power, was forced to subsist on a restricted and eroded land base, which further exacerbated the demand and supply scarcities. This structural arrangement left 12-16 million South Africans without access to a potable water supply and over 21 million people without adequate sanitation (Percival & Homer-Dixon, 1998). There were also no environmental controls within the former homelands, which lead to severe industrial pollution in rivers and ground water supplies (Abrams, 1996). The new dispensation recognised these inadequacies and made the reform of resource management a priority.

4.1.2 The arid environment

The arid nature of the country means that water resources are scarce and development, in any form, cannot occur without first giving consideration to its provision. The average annual rainfall for the country is 497 mm, which is 60% below the world average. Coupled with this, the rainfall is unevenly distributed, with 65% of the country receiving less than 200 mm. The average annual runoff⁷ represents 9% of the total rainfall, compared to a world average of 31%. This calculates to be one of the lowest conversions of rainfall to runoff in the world (Rabie, 1996). In addition, the areas of economic growth do not coincide with the available water supplies and the industrial heartland of the country is situated in an arid zone. In order to accommodate this, inter-basin transfer schemes, amongst the largest in the world, have been developed. The reality is that there are now very few rivers left to dam or divert, and there are too many people competing for a limited resource. Davies and Day (1998) estimate that South Africa, at current water demand rates, has between 10 and 15⁸ years left before it reaches a situation of permanent drought, which is the stage at which the resource cannot provide for further increases in demand. It was therefore recognised that development, in any form - be it economic or social - could not occur without giving consideration to the long-term provision of water.

⁷ This is defined as the average annual quantity of water that reaches the oceans.

4.1.3 International movements

Over the last two decades, government bodies throughout the world have begun to incorporate environmental principles into binding legal requirements. This growing global awareness helped to incorporate an environmental clause into the South African Bill of Rights and resulted in the formulation of new environmental legislation, such as the National Environmental Management Act (Act 107 of 1998). The incorporation of the environmental clause⁹ into the constitution guaranteed every person an environment that is not detrimental to his or her health or well-being and the right to claim protection over the environment (Loots, 1997). This clause needs to be read in conjunction with section 27- headed “Health care, food, water and social security”, which provides that:

1. Everyone has a right to have access to health-care services, including reproductive health care; sufficient food and water; and social security, including, if they are unable to support themselves and their dependents, appropriate social assistance
2. The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights.

Aside from changes in the domestic legislation, inspired by international movements, South Africa also became signatory to several international protocols which were important in influencing water management policy. These included the Ramsar Convention on the Protection of Wetlands, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), and the Convention to Combat Desertification. The Water Law Review panel felt a responsibility to respond to this growing wave of environmental awareness, which was emerging in the international community.

4.1.4 Commitment to sustainable development

Since the Brundland Commission in 1983, the concept of sustainable development has been readily embraced in many politically correct circles. Aside from its universal acceptance, there is much debate over what this mythical term actually means. Based on the proceedings of the World Commission on Environment and Development in 1987, Adger (1995) provides a succinct description of the term as,

8 Calculated with the slowest estimated population growth and the smallest demand for water. At worst, with the highest population growth and greatest water demand, supplies will be fully committed some time between 2003 and 2005 (Davies & Day, 1998).

9 Section 24 of the Constitution of South Africa stipulates that:

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

development which does not jeopardize future well-being through the reduction of the capacity of the environment to meet the legitimate needs of all future generations (p. 110).

O’Riordan (2000) goes on to describe the concept more explicitly as,

a triple bottom line consisting of; planetary maintenance (ecological sustainability), social equity (ethically loaded sustainability) and economic enterprises (livelihood sustainability)- in that order of priority (p. 53).

Munslow *et al* (1997) define sustainable development as moving beyond a narrow, albeit important, concern with economic growth, *per se*, to considerations relating to the quality of that growth.

Hamann (1999), after reviewing several definitions, concludes that the dominant theme on the theories of sustainable development is that natural life-support systems should not be threatened.

Dorcey (1991), in the conclusion of a volume of essays that discusses various authors’ perspectives on sustainable development in water resource management, described sustainable development as an “evolving ethic” which relates to three systems:

economic, social and environmental and includes at least five ethical elements: maintaining ecological integrity and diversity; meeting basic human needs; keeping options open for future generations; reducing injustice and increasing self-determination (p. 548).

He makes the point that the concept of sustainable development is inherently value laden and it is therefore not surprising that “there are as many definitions of sustainability as there are people talking about it” (p. 534).

O’Riordan (2000) places this ethical debate in the larger cultural realm and states that the concept is “intensely geographical in its manifestation. After all, it is a combination of culture, history, land, people and institutions, so its character conduct will be as varied as the geography of the globe” (p. 30). It is therefore important to place the concept of sustainable development within the context of this research, by recognising that an understanding of this term will be uniquely realised within the challenges of South Africa’s socio-economic climate. For this reason it is of value to understand how the term is defined within South African development circles.

4.1.4.1 Sustainability in SA

The socio-economic climate of South Africa offers particular challenges to our understanding of sustainable development. These challenges are the same ones that are faced on the global scale. The country has been described as a microcosm of the globe,¹⁰ representing the global North-South development debate. The exploitation of raw materials and cheap labour by those in the Western first-world allowed them to enrich themselves, while placing a high social and environmental cost on third-worlders (Ngobese & Cock, 1997). The great challenges which are faced on the global scale of overcoming inequalities is indicative of the enormous development challenges that lie

¹⁰ See also Bremner and Visser (1997); Ngobese and Cock (1997) and Maganya (1994).

ahead, in South Africa, which incorporates some of the starkest elements of North–South development. For this reason, Jacobs (1994, cited, in Ngobese & Cock, 1997) criticises sustainable development, for amongst other things, the way it has become open to political manipulation. He argues that the concept is used with political convenience in the developed sectors because the realisation of the concept is often placed far into the future but it fails to relate to the “structural inequalities in the global economy, which are major impediments to the attainment of sustainable development here and now” (p. 256).

Regardless of these challenges, like many countries in the developing south, South Africa has embraced the mythical concept of sustainable development into many of its environmental policies and objectives. One of the founding blocks to this policy initiative is the National Environmental Management Act (NEMA), which forms a framework for the reform of South African environmental legislation (Hamann & O’Riordan, 1999). Within this is a commitment to Agenda 21 by enforcing an “annual performance report on sustainable development,” which is to audit the government’s performance in respect to Agenda 21 (NEMA section 26).¹¹ The National Environmental Management Act provides a definition of sustainability, which offers the first grounding in how we understand sustainability in South Africa,

Sustainable development means the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations (xxix).

Ngobese & Cock (1997) offer a criticism of sustainable development as being too focused on the life-sustaining services of the natural environment. This is particularly important in South Africa where many disadvantaged communities perceive environmental issues and conservation to be focused purely on the “conservation” of the playgrounds of Western lifestyles, with little concern for the livelihoods of the communities within those playgrounds. For many citizens in South Africa, conservation has come to mean the dispossession of people’s lands, without sufficient compensation or concern for community well being (Khan, 1996 and Ngobese & Cock, 1997).

What is required, as described by Hamann & O’Riordan (1999), is an acknowledgement that goes beyond the biophysical dimensions but to accept that

societies rely on socio-political processes, norms, and expectations for survival and it is these processes, related to networks of communication and trust, that allow communities to engage with their local environment, as well as institutional structures in government and private economy, in order to enhance their livelihoods (p. 1).

The emphasis on the social aspect of sustainable development has not always been at the forefront of its conceptualisation and it was first placed on the agenda at Rio, where Agenda 21 initiated

strongly orientated, bottom-up approaches. Within this approach, there was a need to strive towards global citizenship which was defined as a community that is both knowledgeable and that has the tools to alter their societies and economies towards greater sustainability (O’Riordan, 2000).

O’Riordan (2000) provides an insight into sustainability which is very relevant to the South African context:

at the heart of sustainability is self-regeneration and self-reliance –of the soul , as well as of the economy, ecology and society. When the soul embraces the recognition of caring and sharing so that enterprising livelihoods are enabled to flourish in millions of cultures and spaces, then the transition might move forward. One of the main stumbling blocks to this objective, is human supremacy over people and places (p. 52).

Tolba (1987, cited in Munslow *et al*, 1997) describes the need for “people-centred initiatives” in sustainable development. While Hart (1992), emphasises the need to recognise the way in which environmental management needs to “engage the many social and political issues that are salient globally, across religions, within individual countries and sub-populations” (p. 53). This approach is supported by Sandercock (2000) in her new book, *Towards Cosmopolis*:

building on the strength of people’s histories and cultures, that’s what sustainability is about. Building capacities, seeing their collective wisdom. Enabling. Making one’s expertise available. Mentoring. People seeing their potential in my eyes, reflected back at them...NO-one cares what colour or age, or class I am, because I’m not trying to take over. I want to say “we” not “I” (Sandercock, 2000, quoting Gilda Haas, p. 135).

Based on the human centred approach described above, I would like to make use of a term, which is used by Munslow *et al* (1997) in their volume of essays entitled, *Managing Sustainable Development in South Africa*. They refer to “human resource sustainability” as the key to a more sustainable future for South Africa. Cook (1997), in a contribution to the same volume, argues that,

people are at the heart of the quest for sustainability, both as the means by which development activities are carried out, and as the reason why development happens in the first place. So it is not really possible to think about sustainable development without thinking about building human capacity in order to achieve development, and to think about building human capacity as at least one of the key outcomes of development activities (p. 275).

It is this understanding of sustainable development, which was one of the many influences reflected in the drafting of the new Water Act. At the centre of the process of achieving sustainable human resources is the need to empower individuals to initiate sustainable practices in all sectors of South African society. The relationship between sustainable development and empowerment is captured very aptly by Cook (1997):

¹¹ Agenda 21, outlined an action plan and blueprint for sustainable development, this was one of the documents adopted at the United Nations Conference on Environment and Development (UNCED) in 1992.

Sustainable development is dependent on the empowerment of people to sustain their own development in order to be the sustainers of development in their communities (p. 289).

This section has described many of the influences which set the stage for the drafting of a new approach to water management in South Africa. The following section will discuss the outcome of this new approach.

4.2 The new National Water Act (NWA).

In 1995, the Minister of Water Affairs and Forestry, Kader Asmal, used a new wave of policy reformation and environmental awareness to completely revise the country's approach to water resource management. This process began in May 1995 with the publishing of a set of principles,¹² which were open to public comment. Consultative meetings were held in all of the nine provinces, organised in such a manner that the voices of the rural poor and the disadvantaged would be heard and included the interests of all sectors such as agriculture, mining and environmental groups. These consultations culminated, in October 1996,¹³ and led, subsequently, to Cabinet approval of the Fundamental Principles and Objectives for a New Water Law for South Africa.¹⁴ Eleven technical task teams were then appointed to translate these principles into practical proposals, which informed the policy positions of the White Paper.¹⁵ A National Water Bill was then drafted, on the basis of the White Paper, and in August 1998 the new National Water Act.

The introduction of the NWA provided a refreshing approach to water resource management, which was born out of a commitment to sustainable water resource management. Not only does the Act seek to comply with the principles within the New Constitution but it also seeks to comply with international trends. The DWAF undertook several catchment studies, which were aimed at identifying the needs of different water use sectors, considering future developments and devising holistic approaches to management. The studies identified a number of common interests or concerns that they felt needed to be addressed:

- ☞ the need to improve the processes of public participation, including the clear definition of roles and responsibilities of all participants;
- ☞ the need to develop appropriate institutional structures which could facilitate communication, promote and allow the definition of clear responsibilities and accountabilities for implementation;
- ☞ the need to involve all water users in the planning and implementation phases of water resource management; and

12 This began with the distribution, in May 1995, of the booklet *You and Your Water Rights* for public comment.

13 The consultations ended in a Water Law Review National Consultative Conference in East London in October 1996. This consultation discussed the practical approaches to implementation as well as the principles that would guide the drafting of the law.

14 Submitted in a Report to the Minister of Water Affairs and Forestry of the Water Law Review Panel, January 1996.

15 See South Africa, Department of Water Affairs and Forestry, *White Paper on Water Policy*, (30 April 1997). This paper represents the policy of the South African Government, as approved by Cabinet on 30 April 1997. The document forms an important part in the review and reform of the Water Law in South Africa.

☞ the need for the department to take responsibility for leadership and the provision of technical guidance and a management framework for water resource management (DWAF, 1996, p. 17).

The Department of Water Affairs and Forestry has now committed itself to a more sustainable approach to water resource management. This approach is founded on guidelines of inclusivity and participation, which is a trend observed in similar institutions elsewhere in the world. The importance of this approach is illustrated by Litke & Day (1998), in response to their experiences in community based watershed management in Chilliwack, British Columbia. They identified five goals, which should be met in community based watershed management:

- a) Adopt a watershed-based approach
- b) Increase communication and collaboration
- c) Raise awareness and understanding
- d) Raise collective will and commitment
- e) Build capacity (p. ?).

The DWAF accepts that “world wide there is evidence that people do not support decisions which they feel they have not been able to have some influence or participation in” (DWAF, 1996, p. 28).

The DWAF has taken steps to rectify the issues outlined above:

South Africa’s history has lead to a general disempowerment and marginalisation of many communities, which needs to be addressed through the public participation process. This includes changing people’s behaviors, tapping into their energy and resources, empowering them to take control of their neighborhood environment, and owning the catchment process and its implications. Together with involvement, capacity building of the stakeholder representatives is of paramount importance to the process, because informed participation will lead to understanding and informed decision-making, which will facilitate effective implementation and administration (Görgens *et al*,1998, p. 7).

4.2.1 Catchment management

In order to effectively initiate sustainability through participation, all decisions and administration have been delegated to the catchment level through Catchment Management Agencies (CMA). The 19 catchment areas will be responsible for the management of the watercourses within their area. The Department has decided to revolve more of the day-to-day management function down to the local level so as to “relieve pressure on the available manpower resources at central government level” (DWAF, 1996, p. 48).

The main functions of the agencies, summarised from section 80 of the National Water Act, include:

- ☞ acting as an advisory body on the management and control of water in the area;
- ☞ developing a catchment management strategy;

- ☞ the co-ordination of water users and institutional bodies;
- ☞ the co-ordination of the Act's implementation with other policies which are currently in place;
- ☞ the promotion of community participation in all aspects of implementation.

The process of CMA implementation is taking place in a three-phased approach, so as to allow for the development of new skills and capacity. It will take some time before all 19 catchments are fully operational.¹⁶ In the DWAF's investigation into international experiences in the implementation of Integrated Catchment Management, they noted that the major difficulties in implementing this approach were the lack of appropriate experience and the inadequate involvement of all necessary stakeholders. For this reason, the DWAF is enthusiastically encouraging empowerment through the multi-stakeholder processes required for the establishment of the CMA's. However it seems that much needs to be done to achieve this on both the community and individual level. This research hopes to assist in the realisation of this important objective.

Multi-stakeholders processes (MSP's) have been called for in many different steps within the new environmental legislation; these new decision-making procedures form the medium through which empowerment in catchment management can occur. The following section will discuss some of the problems already experienced in MSP's, particularly in South Africa, over the last ten years. This will then lead to a discussion on integrating empowerment into these processes.

4.3 Experiences in public participation in South Africa

In July 1992, over a three day period, analysts and practitioners of public participation in the United States and Europe came together to address one of the most pressing issue in contemporary environmental politics: "How can environmental politics be designed in a way that achieves both effective protection of nature and and adequate representation of public values?" They agreed on one fundamental principle: 'For environmental policies to be effective and legitimate, we need to involve the people who are or will be affected by the outcome of these policies' (Renn *et al*, 1995, p. 13).

Rosenbaum (1978) argues that "public involvement is morally and functionally integral to the emergence and the sustenance of the two central values of democracy: popular sovereignty and political equality" (cited in Renn *et al*, 1995 p. 21). In order to secure a strong link between public participation and a healthy, robust democracy, participation by citizens on various levels is essential (Roefs & Liebenberg, 1999). These principles have not always been embraced within South Africa and this has created a set-back in the acceptance and understanding of multi-stakeholder processes.

4.3.1 Public participation in the legislative process

Before the first democratic elections, in 1994, there was virtually no public participation in the drafting of policy. At best, a White Paper would be published for comment in the government gazette, a publication that would have been inaccessible to the majority of South Africans (Greyling, 1997). South Africa has now committed itself to fostering a more participatory democracy; in order to achieve this, it has recognised that decisions need to be measured by the soundness of the decisions reached in light of community needs and the extent of the public participation in reaching them (Roefs & Liebenberg, 1999 and Bachrach 1967, cited in Renn *et al*, 1995). In light of this, the policy-making process emphasised the establishment of numerous consultative bodies and other mechanisms for public participation, at all levels of the political structure (Houston *et al*, 1990).¹⁷

4.3.2 Public perception on consultative processes

Considering the legacy of the past, it is expected that this new approach will take considerable time and effort to be realised amongst practitioners and members of the public. Evidence of this is found in research conducted by Houston *et al* (1997). They conducted a survey to assess the levels of public knowledge and acceptance of participation processes.¹⁸ They found that “the lack of knowledge about public institutions and participation processes is an important factor underlying low levels of participation” (p. 10). There was an overall willingness to participate but a general sense that their input would not be given adequate consideration and would therefore have little influence in government decision-making. This is not surprising, considering the legacy of non-democratic political decision-making, in all levels of government.

Hart (1992) emphasises that there are particular difficulties, in the South African context, with respect to the co-operative management of the environment between the state, civil society and the private sector. This stems from the governments’ oppression of a variety of political and non-governmental organisations under apartheid rule. One of the less recognised environmental impacts of apartheid is the extent to which it supported top-down, highly centralised, control-orientated bureaucracies, which sought to polarise institutions and stunt institution building outside government. These institutions were completely removed from the realm of citizen participation and accountability (Hart, 1992 and Latib, 1997).

¹⁶ The Inkomati CMA is currently submitting a catchment management proposal to DWAF and it hopes to be established sometime next year.

¹⁷ Houston *et al* (1999) provide a useful examination of the constitutional provisions pertaining to public participation processes within legislative procedures.

¹⁸ They administered a survey to random clustered national probability samples of 2 200 throughout the Republic of South Africa in March 1999.

4.3.3 Participation in EIA

There was also, previously, very little consideration of public involvement in environmental impact assessments (EIA) (Greyling, 1997). The system of accomplishing EIA's in South Africa is known as Integrated Environmental Management (IEM) and a detailed description of this process can be found in Preston *et al* (1992). The procedure evolved in 1984, under the auspices of the Council for the Environment, after an extensive period of research and consultation. The procedure is designed to "ensure that the environmental consequences of developments are understood and adequately considered in the planning process" (Preston, 1992, p. 749).

The IEM process has received some criticism (Ngobese and Cock, 1997; Weaver, 1992) for its serious neglect of social impacts and public participation. Although Hamann (1999) maintains that the principles within IEM resonate with criteria of fairness and social learning. The process has been described as "elitist" in that it "emphasise[s] objective data, ignore[s] social tensions, and give[s] only a token nod to public involvement in the process" (Ngobese & Cock, p. 262). It arises out of a positivist stance, which presumes that communities have monolithic, discernable social goals, which can be measured.

In a more recent version of IEM, from the Department of Environmental Affairs, there is a new emphasis on notions of participation and accountability. According to Fuggle (1999), the IEM procedure is currently subject to review and it is hoped that inclusive, participatory processes will be given adequate attention before it is given extensive statutory basis. The procedure will have to comply with the requirements of the recently passed National Environmental Management Act (NEMA), which puts extensive emphasis on public participation and community empowerment. Chapter 1 of the NEMA states that:

2.2(f) the participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

(g) Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.

(h) Community well-being and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.

Participation is now seen as a prerequisite to environmental management and all members of society must be able to contribute, meaningfully, in unconstrained discussions over political and

policy issues. The extensive use of technical language within the IEM processes was successful in excluding a large proportion of communities. This is due to the fact that the language was often unintelligible and its scientific nature gave it a perceived legitimacy, which carried immense power in comparison to indigenous “ways of knowing.” The ultimate result was that the process served the interests of those in power. Although these processes have been reformed under NEMA, it will take some time before these principles are realised within the mindset of policy implementers, engineers and environmental managers.

4.3.4

4.3.5 Participation in land use planning

Hamann (1999) evaluated aspects of the public participation processes in environmental evaluation and land use planning along the Garden Route, one of the most popular tourist destinations in South Africa. He evaluated how the participatory process contributed to achieving sustainable goals, based on criteria of technical competence, efficiency, government synergy, fairness and social learning. His conclusions give a critical insight into current South African approaches to public participation:

- ☞ Public participation is embedded in the local socio-political context and in this relationship social capital plays an important role. He emphasises the lack of capacity in relevant institutions, particularly, in their guidance of the MSP’s. He also concluded that personal relationships and the evolving social capital had a significant impact on the decision-making process.
- ☞ Public participation is plagued by prevalent, diverging perceptions. He noted that there were divergent views on the effectiveness of the process and that there was a perception that it was controlled by affluent, white citizens.
- ☞ Applied public participation procedures tended to be unfair. He distinguishes between substantive (who participates) and procedural fairness (what are the opportunities for participation) and it is the latter that he identified as requiring the most explicit consideration. The socio-political context and the institutional framework tended to create unfair processes.
- ☞ Public participation must be made fairer and he offers some suggestions in this regard.
- ☞ Public participation should allow for social learning, which should consist of two aspects: cognitive enhancement and moral development.

He argues “public participation should ideally build social capital in such a way that the groups’ engagement in the decision-making processes is focused on the collective benefit rather than narrow group interests” (p. iii).

4.3.6 Experiences in water supply and sanitation projects

Schoeman *et al* (1996) undertook a research project to assess the communication between stakeholders in development projects related to water supply and sanitation. The research was based on case histories and sought to establish the level of understanding between the developers, represented by the engineers, and the communities. The results showed that there was a significant miscommunication between stakeholders, related to the use of technical jargon and inadequate public participation. There was a sense that many of the rural communities were unfairly treated during the processes. Although many of the engineers felt that the projects were successful, a significant proportion of the community members expressed doubt over their success. None of the engineers saw issues of training or empowerment as integral to the project. There seemed to be a one-way flow of information and insufficient attempts at creating effective communication through a shared dialogue.

Following the move to democracy, the DWAF committed itself to a water supply policy which was “demand-driven and community based” (Water Services Act, 108 of 1997, p. 8). However, since 1995, there has been a slight shift in government priorities towards strengthening the capacity of local government,¹⁹ due to the fact that Department officials have found that “communities lacked the capacity to participate fully in partnerships with the government” (Friedman, 1998, p. 7). There has not been a complete shift away from participatory processes as local government still chooses to engage community involvement (Friedman, 1998). However, it is clear that both local government and community focused capacity building have not achieved the desired effect of ensuring community commitment to local services. Friedman examines some of the reasons for this failure and he was particularly concerned with investigating the factors, which reduced consumers’ willingness to pay for infrastructure, particular water supply.

Friedman’s chief conclusion, was that:

local participation can enhance the achievement of infrastructure investment goals, but considerable effort, skill and understanding of grassroots dynamics is needed to achieve it. And, where vigorous participation is required, technologies and standards must remain fairly modest-many contemporary approaches still assume that consumers have an unlimited capacity to decide upon, and contribute to the development of complex technologies (Friedman, 1998, p. 20).

¹⁹ See Swilling & Boya (1997), for a description of the changes that have occurred within local government. It focuses particularly on the transition in the Greater Johannesburg sub-region.

In his results, he attributed the failure of participation, in part, to the fact that the processes rest on the assumption that “communities are a homogenous entity who have a single set of interests and a defined claim that can easily be refuted” (p.7). This argument is extensively supported by Agrawal & Gibson (1999),²⁰ who challenge the belief that communities are small, homogenous structures with distinct social norms. Instead they advocate a community approach, which recognises the divergent interests of multiple actors, the political interactions between them and their relations with external actors.

Friedman emphasises that there needs to be a better relationship between decision and policy makers and those they are representing. He calls on a greater understanding amongst representative government of the interests of those they are trying to serve. Their decisions need to be based on a firmer base of knowledge as to the effects of their decisions and the desires of those who will be affected by them.

Dryer (1998) undertook six research projects, which sought to identify problems with respect to water supply schemes, which had failed due to a lack of community support. She identified some of the main reasons for the failure as contributed by:

- ☞ weak community leadership
- ☞ a lack of communication between the water committee and the community
- ☞ a lack of project management expertise
- ☞ impatient and ill-advised engineering consultants
- ☞ unequal benefits from the water scheme to community members
- ☞ projects proceeding without contribution from all community members
- ☞ a lack of means to force the community members to pay
- ☞ complex schemes which were too difficult to manage locally
- ☞ lack of trust within the community and political influences from external institutions.

She noted that there seems to be a tendency to plan for people instead of encouraging and empowering the people to plan for themselves. Professionals must learn how to pass on their roles to the people and allow them to facilitate and take hold of the process.

It seems that experience in public participation, in various sectors, indicate that the government has not been completely successful in implementing these new participatory

²⁰ See also Dreyer, 2000; Gibson & Kroon, 1998; Kepe (1999) and Leach et al (1997).

approaches. It is also apparent that much more can be done to improve these processes for all involved.²¹ As Taylor (1997) describes,

Now a new emphasis on good governance has led to a fundamental change: a sudden emphasis on transparency and accountability has created a democratic space, which needs to be filled by participation at all levels of society. The public must now learn how to use this space (Taylor, 1997).

A means of “filling this space” is to encourage MSP’s to place extensive emphasis on the empowerment of those within the process and therefore the empowerment of the community at large. The following section will define empowerment, based on an investigation into what it means on an individual and community level. This investigation will result in the drawing up of a set of criteria, which will be used to understand how empowerment can be integrated into MSP’s for catchment management in the Inkomati Basin.

4.4 Empowerment

4.4.1 Definition

Empowerment is a term, like sustainable development which has been given a disparate set of definitions this is particularly the case in South Africa, where, as described by Cook (1997), it is one of those popular terms that has suffered from “semantic inflation, in which it has been used to represent almost anything, and so has come to mean almost nothing” (p. 281). However, instead of abandoning this term, a definition will be constructed which hopes to provide a firm understanding of its use within this research.

4.4.1.1 Socio-economic empowerment

Rocha (1997) provides a comprehensive analysis of empowerment, inspired by the realisation that the empowerment literature is “diverse and incoherent”. She attempts to explore variations in empowerment, through the development of a ladder of empowerment that will allow practitioners to “clarify their goals and methods in their empowerment initiatives.” Her paper seeks to discover the elusive definition of empowerment, a concept with its core rooted in the 1960 social movements and the 1970 self help movements. She emphasises the need to understand power experiences and uses McClelland (1975)’s classification of the four frames of power experience, to offer five ways of thinking about empowerment. These are constructed along an axis of individual and community empowerment and are considerate of four dimensions: locus, process, goal, and power experience. The five different ways of understanding empowerment are summarised in the table below.

²¹ See also Auerbach (1997), for a description of Integrated Catchment Management projects in the Ntshongweni catchment, Natal.

Table 1. Five types of Empowerment (Rocha, 1997, p. 35).

	Atomistic individual	Embedded Individual	Mediated	Socio-political	Political
Locus: the intended arena of change.	1. Individual	1. Individual	1. Individual 2. Community	1. Individual 2. Community	1. Community
Goal: the intended outcomes .	2. Personal satisfaction 3. Increased coping ability	2. Personal satisfaction 3. Competence in negotiating daily environment	3. Knowledge and information for proper decision making	3. Individual development 4. Expanded access to community resources	2. Expanded access to community services, goods and rights
Process: the actual method used to obtain empowerment.	4. Therapy 5. Daily living skills 6. Self-help	4. Organizational participation	4. Professional /client relationship	5. Organizational participation 6. Collaborative grass-roots action	3. Political action, voting, protest 4. Political representation
Power Experience: all four stages in varying combinations.	7. Nurturing support	5. Nurturing support 6. Direct and control self	5. Support 6. Strengthen self 7. Control by helping 8. Moralized action	7. Support 8. Strengthen self 9. Influence, coerce others 10. Togetherness	5. Influence, coerce others 6. Assertion

Socio-political empowerment seems to offer the most desirable outcomes for empowerment in South Africa. Its locus of emphasis is first on “developing the people who comprise the community as the first priority, then the neighbourhoods in which they live” (p. 37). The apartheid regime created oppressive structures, which were directed at taking away people’s physical power within the political environment, but it was also extended into the individual psyche through racism and prejudice. It may be relatively easy to allow for a political revolution that brings an end to the “power-snatching” structures of apartheid but it is a much more difficult to entrench, within the individual, the realisation that power is now equally shared between all citizens.

Hamann (1999) considers empowerment in his research on public participation and sustainability and he quotes from O’Riordan & Preston-Whyte (1998):

Empowerment refers to procedures that ensure that groups at the local level are treated with self-respect, with dignity and with a capability to reach consensus decisions that fully take into account the legitimate needs and aspirations of others. To achieve this there has to be a network, or networks of communication and trust that allow the few to speak on behalf of the many. But there has to be an educational and civic consciousness-raising process that provides those formerly disenfranchised and marginalized to gain the capacity and self-confidence to form alliances and to participate meaningfully and authentically, i.e. in a manner that is true to their needs and objectives (p.20).

The marginalised communities in South Africa experience what Rocha (1997) describes as both subjective and objective powerlessness. “This refers to both an internal sense of powerlessness (subjective) and the actual experience of powerlessness (subjective)” (p. 38). Socio-economic empowerment strives to reach for empowerment on the individual level while at the same time, initiating community empowerment and social restructuring. Socio-political empowerment allows for development on two levels:

The community is transforming itself from the inside into a powerful actor, capable of gathering resources for local benefit; at the same time, members-of-the-community are transforming themselves from bystanders into actors in and through this process (Rocha, 1997, p. 38).

This research will look at how empowerment is achieved both at the locus of the individual and that of the community.

4.4.2 Community empowerment

Arnstein’s seminal paper on public participation placed much emphasis on the understanding of power relationships within the context of public participation. She states that citizen participation is citizen power and it is the redistribution of power that “enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future” (p. 216). The power of the “have-nots” increases as they are able to induce significant social reform, which “enables them to share in the benefits of the affluent society” (p. 216).

She does not explicitly use the term empowerment but it is clear that she seeks to redistribute power to the powerless, thereby empowering them to initiate social reforms. Without power redistribution, participation remains “an empty and frustrating process for the powerless” (p.216). She described eight rungs on a ladder, which lead to “increasing levels of citizen power and decision-making clout” (p. 217). The underlying issue along the 8 rungs of her ladder is that “nobodies in several arenas are trying to become ‘some bodies’, with enough power to make the target institution responsive to their views, aspirations, and needs” (p. 216). She seems to imply that more power in the decision-making process will intimately lead to social reform, but there is a presumption here that the decisions that are made will be implemented. This may not be the case in situations where governments are unable or unwilling to confer the power, which will allow the

reform to happen. This issue is taken up by Choguill (1996), who challenges Arnstein's ladder by applying it to participation in underdeveloped contexts.

4.4.2.1 Community empowerment in underdeveloped countries

Choguill (1996) sees community participation as an important instrument towards empowerment and that the process should deal with aspects of power sharing and seek to foster an increase in people's political awareness and strength. She defines empowerment as "the development of community awareness through participation" (p. 434).

She argues that there are two objectives in the development arena: to build or up-grade, by mutual help, the basic needs and infrastructure of the community; and the other is to influence decisions in the political arena. She argues that concern for both of these is needed to invoke permanent changes to the status quo. In the developing world, obtaining power in decision-making does not necessarily guarantee a successful process, as it must be complemented with the support of government, who will respond appropriately to community decision-making initiatives.

For this reason, the highest rung on Choguill's ladder is empowerment, where "community members have a majority of seats or genuine specified powers on formal decision-making bodies over a particular project" (p. 435). The possibilities of actually controlling the situation and making allies, with governmental support, constitute the main characteristics of empowerment. At the bottom of the ladder is self-management, where communities initiate projects without any assistance or support from government political processes. By placing empowerment and self-management on opposite sides, she illustrates that basic needs can be achieved with or without government support. However in self-management, they are unable to achieve any influence in the political arena and therefore fail to meet one of the two objectives of community development. This type of participation may achieve temporary results, but long-term, successful projects are rare, and it often results in a demoralised community, with no further influence in the political arena.

Both participatory ladders emphasise the need to empower those involved and that this is a crucial factor in ensuring a successful change in the status quo. However, Choguill illustrates that for true empowerment and social change to occur, there must be support and encouragement from within government institutions. Government attitude is essential in determining the potential results of the community effort. In order to achieve true empowerment, through participation, it is essential that political opportunities for meaningful participation are identified and encouraged through government attitudes and development initiatives.

With respect to catchment management in South Africa, there appears to be extensive government support of community-based initiatives. This is particularly the case when it comes to

encouraging public ownership of projects; this support has been illustrated through the sections above, which outline government policies and commitments to catchment management.²² It seems, therefore, that community empowerment, based on Choguill's ladder, has great potential for success within the CMA institutions. The issue is to determine how the government will be able to design a process that facilitates community empowerment. There may be much support of the concept in principle, but little knowledge of how this can be achieved within the MSP. The following section will describe mechanisms, which can be used to actively overcome power barriers and give the communities a more empowered voice.

4.4.2.2 Overcoming power imbalances in multi-stakeholder processes

Leach *et al* (1997) indicate that there is a general neglect of the pervasive feature of power in social relations. Institutions might appear to be acting for a collective good but are actually only serving to shape and reproduce relations of unequal power and authority, marginalizing the concerns, for instance, of particular groups of disadvantaged people. There is a need to actively understand institutions, in a way that "takes an analysis of difference and an appreciation of power relations seriously" (Leach *et al*, 1997, p. 6).

In order to facilitate community empowerment, MSP's must be designed around principles that explicitly recognise power imbalances and seek to overcome them. In a world of severe inequalities in power, strategies that treat all parties as "equal" ultimately end up reproducing the very inequalities which they sought to overcome. Strategies must be employed and put into practice that anticipate and counteract structural inequalities of power.

South Africa's recent history of struggle and mobilisation of people places a responsibility on all sectors, not only government, to find ways to address the needs of the most excluded people (Taylor, 1997, p. 241).

Forester (1989) exemplifies this approach as he seeks to consider the complexity of real-world, community-based decision-making. He emphasises the need to address power imbalances with a specific emphasis on the manner in which misinformation can be used to establish and maintain positions of power. He repeatedly encourages the identification of issues of power and to actively take steps to manage and control the way in which participants in the process use this power.

If planners ignore those in power, they assume their own powerlessness. Alternatively, if planners understand how relations of power shape the planning process, they can improve the quality of their analyses and empower citizen and community action (Forester, 1989, p.21).

22 See Schrijver & MacKay (1998), for a description of the MSP training workshops which were initiated to encourage community involvement in water management.

Hillier (1998) argues that it is not enough to follow the, oft quoted, principles of Jürgen Habermas,²³ which seek to abstract away from the concrete individual identity of other participants and enable everyone to treat all others as equal, rational beings, entitled to the same rights and duties as they would wish for themselves. Habermas annuls differences (in identities, values, mindsets) between people, and they become equal by bracketing their difference. Hillier states that “we can and must do better” (p. 16) and encourages those instigating public participatory processes to embrace a more procedurally just practice. For this to happen, there must be a defence of difference as integral to identity and a commitment to sensing things together in a reasonable and fair manner. Waltzer (1994, cited in Hillier, 1998) states that justice is “intrinsicly related to the socially constructed idealism of the people themselves, to the things which they value and to the personal qualities that they cultivate and mean to respect” (p. 14).

4.4.2.3 *Procedurally just practices.*

There is a gradual shift from a traditional form of consensus to the idea of “con-sensus,” reached through a procedurally just conversation between participants that everyone is prepared to deem reasonable and fair (Hillier, 1998). Procedurally just practices focus on the process, which seeks to overcome power inequalities and allow those involved to be treated fairly. The severe structural distortions in the South African situation call on strategies “that work toward effective equality, substantive democratic participation and voice, and strategies that work away from the perpetuation of systematic racial, sexual, and economic domination” (Forester, 1989, p. 61).

The key components of a procedurally just practice, as identified by Hillier, are displayed in Table 2.

Table 2. Some principles of procedural justice (Hillier, 1998, p. 20).

Procedural Components	Interactional Components
Fairness <ol style="list-style-type: none"> 1. Confidence in the process 2. Clarity of /confusion about the process 3. Flexibility/rigidity of the process 	Respect and dignity <ol style="list-style-type: none"> 1. Consideration of differences of belief and culture 2. Equity 3. Active listening 4. Trust 5. Concern for well-being of others 6. Seeking of mutual understanding 7. Recognition and valuing of difference

²³ See Habermas (1994) and Habermas (1984).

<p>Voice</p> <ol style="list-style-type: none"> 4. Amount 5. Timing 6. Inclusiveness 7. Equity/equality 8. Affirmative action 9. Free expression/emotions given value 10. Possible methods of communication 11. Opportunity to question others <p>Information</p> <ol style="list-style-type: none"> 12. Availability 13. Accuracy 14. Language 15. Completeness 16. Comprehensibility 17. Relevance 18. Facts versus values acceptance 19. Different forms acceptable <p>Consistency and impartiality</p> <ol style="list-style-type: none"> 20. Across participants 21. Across time 22. Affirmative action across participants <p>Feedback</p> <ol style="list-style-type: none"> 23. Comprehensiveness 24. Justification 25. Timeliness 26. Sincerity <p>Process control</p> <ol style="list-style-type: none"> 27. Institutional constraints 28. Facilitation/mediation involved 29. Opportunity to initiate new topics 30. Power imbalance 31. Safeguard against bias 32. Appeal possibility 33. Ability to generate alternative options 	
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These principles form the bases for establishing a just MSP, which will help to overcome the structural inequalities of power that exists so vividly within the South African context. These principles also form the bases for the criteria to guide the understanding of how empowerment was addresses in the MSP in the Inkomati Catchment. However, in order to achieve socio-economic empowerment, emphasis must also be placed on the other locus of power, the individual. The principles of procedurally just practice do, to some extent, address this locus of power, particularly in the interactional components, but there is still more that can be added to contribute to individual empowerment. These mechanisms will be discussed below.

4.4.3 Individual empowerment

Cook (1997),²⁴ like Rocha, states that empowerment can occur on various levels –within a person, between people and between groups. He emphasises that all three dimensions are important and that the “empowerment of an individual seldom succeeds without awareness that individuals belong to groups, and that sometimes individual empowerment is dependant on group empowerment”(p. 283). However, his discussion of empowerment deals principally on the individual level and he uses the concept of a “development cube” to provide a useful way of understanding individual empowerment. The three dimensions of individual empowerment are analogous to the three sides of the cube and all sides need to be given attention to ensure the balanced development of the person.

4.4.4

The three dimensions of individual empowerment are described in table 3.

Table 3. The three dimensions of individual empowerment (based on Cook, 1997).

Subjective power	When the subject grows in the subjective sense of feeling able to do things, hitherto out of his/her reach.
Competence	When the subject develops the ability to do things, which were not previously within his/her competence
Objective power	When the doors of opportunity, which were previously closed, swing open to the subject to allow access to information, influence and opportunity.

These three elements need to work together to ensure individual empowerment. They can be achieved by actively striving to educate and build capacity throughout the process. This is particularly the case in the restructuring of water management institutions as the process is complex and foreign to many of those who are being called on to be a part of these new institutions. Coupled with this, there needs to be an active role played in teaching people the principles of procedural justice, which are described above. Dorsey (1987) comments that,

participants in water resources management often have serious weaknesses in these interaction skills, and that as a result mechanisms for cooperation and conflict resolution fall short of their potential (p. 11).

In the efficient running of a CMA, an ability to effectively facilitate a meeting is just as important, if not more so, than being able to understand technical, engineering jargon. The importance of this aspect of capacity building is illustrated in a review of a decade of catchment management in New South Wales, Australia.²⁵ They comment that people are the key to effective integrated resource management and that,

²⁴ Cook (1997) supports this tri-dimensional approach with work done by Human (1991) and Blumberg & Pringle (1982).

²⁵ The approach to catchment management in Australia is similar in many respects to South Africa’s approach. In fact, many of the principles in the South African legislation were based on Australian experiences (DWAf, 1996).

active participation requires skills, leadership and commitment. Selection processes should target people with these qualities. Investment in skill enhancement and leadership development is needed to strengthen the benefits of competency-based participation (p. xi).

Individual empowerment and confidence in one's ability are crucial to both the establishment of CMA's as well as the attainment of the larger objective of social reform. This is captured, aptly by Taylor (1997), who drawing from an analysis of the mass democratic movement in South Africa, noted that,

when people began to understand that to address their physical/material conditions they have to liberate "their minds" ... against propaganda and misinformation. When people change their thinking about themselves they are able to mobilise from a deep conviction. This happens through a process of education (p. 232).

The structure of the MSP must be empowering to those involved both collectively and individually. For the community to be empowered through the process, it must be structured within a framework that will ultimately allow for effective social change. However, at the same time, significant emphasis must be placed on how the individuals, particularly those who will be on the executive board of the CMA, can be empowered through the process. The process should be actively focused to include those who have previously been excluded from participation in such processes. Within this dimension, there must be an active awareness of the interactional components, which do, to some extent, strive to empower the individual. While at the same time, mechanisms must be initiated that allow for education and the building of competence.

5 Research questions

The overall question being proposed in this case study is:

How can individual and community empowerment be achieved in the establishment of the Inkomati CMA?

The literature described above has suggested aspects of procedural justice as a useful framework for analysis. The principles in Table 2 helped to formulate the following questions, which are phrased in terms of how the stakeholders perceived these aspects to have been met. This research does not attempt to assess, quantifiably whether these criteria were met. It is more important, in this context, to understand how the stakeholders perceived these principles to have been met. This will prove just as valuable, in designing future MSP's, as an objective assessment of whether these aspects were addressed, if such an assessment were possible. However, in order to understand the dynamics of the process, the consultants and government officials, who are running the process, will be asked whether they attempted to address these issues.

The principles in Table 2 have been used as a basis for the formulation of six sub-questions. In order to fully explore aspects of individual empowerment, a question relating to personal growth and capacity building will also be explored.

- ☞ How fair did stakeholders perceive the process to be?
- ☞ How important did the stakeholders feel their voice was in the process?
- ☞ How did the stakeholders understand the information? Was it comprehensive, accurate and relevant?
- ☞ How did the stakeholders perceive feedback to be dealt with? Was it encouraged and acted on appropriately?
- ☞ How much control did the stakeholders feel that they had over changing aspects of the process?
- ☞ Did the participations feel that they were listened to with respect and dignity?
- ☞ How did the stakeholders perceive their own growth/education through the process? Did they feel that they learnt any skills, which they did not have before hand?

6 Methodology

6.1 *Triangulated approach*

I will be using a triangulated approach, as recommended by Fielding & Fielding (1986), and used by Grant (1996), in order to develop rich data, which will help to validate my results (This process is summarised in Figure 1). The research will be based, primarily, on interviews with stakeholders involved in the process but it will also be supplemented with academic literature and policy review.

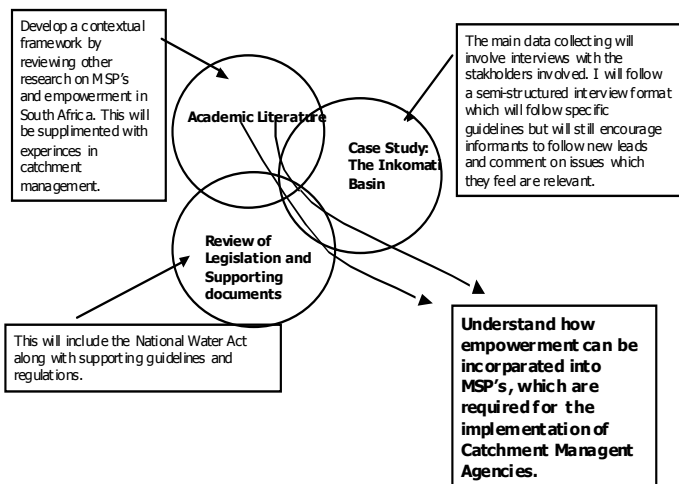


Figure 1. An overview of research triangulation approach used to answer the research questions (adapted from Grant, 1995).

6.1.1.1 Data collection

The “bounded system” of the Inkomati Basin will be explored so as to understand, as Stake (1994) suggests, “what is common and what is particular about the case” (p. 237) in comparison to the other catchment basins. The purpose of the case study is “not to represent the world, but to represent the case” (p. 238). Stake also provides a useful insight into the steps to be taken by the case study researcher. These include, briefly:

1. Bounding and conceptualising the case
2. Selecting the themes or issues which lead to defining the research questions
3. Seeking patterns of data to develop the issues
4. Triangulating key observations for interpretation
5. Selecting alternatives for interpretation
6. Developing assertions or generalisations about the case.

Stake recommends collecting data on some or all of the following components:

1. the nature of the case
2. its historical background
3. the physical setting
4. other contexts, including economic, political, legal and aesthetic
5. other cases through which this case is recognised
6. those informants through whom the case can be known (p. 238).

The main data collecting for this research will involve interviews with the stakeholders involved in the formulation of the CMA. However, the research will also be based on a comprehensive understanding of particular aspects that make this case unique from other catchment areas. This information will be drawn from my own experiences, during the fieldwork, as well as making use of detailed reports, which have been written during the drafting of the proposal to establish the CMA.

6.1.1.2 Selection of candidates for interviews

Those who have been involved in the extensive discussions, which began in 1997, around the establishment of the CMA, will be interviewed in order to obtain their feedback on the process. The DWAF has provided me with a list of the approximately 150 stakeholders. It will not be possible, within 2 months, for me to interview all those involved. Over the last 6 weeks, I have begun, through my attendance at various stakeholder meetings, to identify those who have been most involved in the process. The consultants and the DWAF have also been very helpful in identifying interview candidates and it is envisioned that they will be of great assistance in assuring that I do not overlook any important contributions. I will also try and interview candidates who, for whatever reason, have declined to be involved in the process or who attended very few of the meetings. This may provide an interesting critical perspective.

On the 15th September I introduced myself and my research to the stakeholders at their final meeting, before they submitted the proposal to the Minister. I appealed to all those in attendance to contact me if they would like an interview to express their feedback on the process. The response was most encouraging and I have already begun my own list of people who would like to be interviewed.

I also envision utilising a “snowball or chain effect,” as described by Creswell (1998), which will involve asking each participant who else they feel should be involved. The final decision on how many people to interview will be determined by how much information each informant is able to provide.

6.1.1.3 Interview format

I will follow a semi-structured interview format which will follow specific guidelines but will still encourages informants to follow new leads and comment on any issue that they find important or interesting and related to the process (Grant, 1996, p. 228; Bernard, 1994, p. 6).

7 Validity checks

Creswell (1998) describes verification as a “process which should occur throughout collection, analysis and report writing” (p. 194). Within my research I will use several methods to address issues of validity. I have summarised these approaches in the Table 4.

Table 4. Validity concerns and my approach to over coming them.

Validity concern	Approach
How will I ensure that the informants suggested by the DWAF are the right people to interview?	Verify their suggestions with my own experience in the catchment Use a chain/snowball approach to interviews
How will I know that the informants are telling me accurate information?	Use of triangulation method.
How will I know that I have interpreted the interviews correctly?	Use member checks by providing informants with a copy of the transcribed interview.
How will I prevent informants from simply telling me the positive aspects of the process?	Relate to them some of the incidents, which I observed in the meetings so as to encourage them to comment on them.
How will I ensure that those involved have knowledge of the process?	Ask them to comment on their involvement in the MSP. Verify their attendance at meetings with the information collected by the DWAF.

8 Time line

	2000											2001									
	A P	M A	J U	J U	A U	S E	O C	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	O C		
1. Analyse case studies and theory on implementation Complete course work	■	■	■	■	■																
2. Set up contacts in the DWAF and within the Catchment				■	■	■															
3. Decide on Catchment after consultation with the DWAF	■	■	■																		
4. Conduct Interviews with stakeholders in the Inkomati.						■	■	■													
5. Analyse results and transcribe interviews									■	■	■	■	■	■	■	■	■				
6. Submit draft																	■				
7. Defend, submit thesis																	■				
8. Take a holiday before starting my first job																	■	■	■	■	

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