PUBLIC PARTICIPATION IN WETLAND REHABILITATION WITH REFRENCE TO LONG –TERM MANAGEMENT AND SUSTAINABILITY: A CASE STUDY OF HLATIKULU AND NTSIKENI

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ABSTRACT

Within wetland rehabilitation projects there has been limited research that focuses on the level and nature of participation by local people, such as individuals from communal areas and landowners from private farms. The overall aim of this study was to analyze the level and nature of participation with specific reference to the holistic long term management and sustainability of wetland rehabilitation projects in Hlatikulu and Ntsikeni, KwaZulu-Natal Province, South Africa. Qualitative and quantitative research methods were employed in this study to examine the level of stakeholder participation in the projects. The Hlatikulu and Ntsikeni projects were undertaken on private land and government land (nature reserve) respectively. The World Overview of Conservation Approaches and Technologies (WOCAT) Framework was applied to analyze the level and nature of participation by different stakeholders that were involved in the selected projects. The study revealed that not all stakeholder groups participated in each and every phase of the projects. In Hlatikulu there was a moderate level of participation from the management of private land, but a limited degree of local participation from the Nsonge community. This, to some extent is attributed to the lack organization in the Nsonge community. There are no structures or authorities through which the process of local participation can be engaged. In Ntsikeni, although the process of continuous local involvement was limited to local Chiefs and some community representatives, the process appeared to be participatory in nature. The selected representatives report back in community meetings and other relevant forums, such as the Ntsikeni Nature Reserve Management Forum, which has been operating successfully for several years. Local people participated in the rehabilitation projects mainly as paid workers, and also in providing advice in the planning processes. For both sites, the results demonstrated that there is a need to enhance and harness active local participation in order to ensure the long term management and sustainability of the Hlatikulu and Ntsikeni wetlands. Within this study, the WOCAT framework was applied to provide insights to two sites, with different land tenure and land use contexts. The results of this study suggest that the WOCAT framework has a high potential to be applied across a diversity wetland rehabilitation sites within South Africa.

DECLARATION

The research described in this thesis was carried out at the Geography Department, School of Environmental Sciences, University of KwaZulu Natal, Pietermaritzburg, under the supervision of Dr. Sagie Narsiah and co-supervised by Dr. Donovan Kotze.

I declare that this dissertation represents my own work and has not otherwise been submitted in any form for any other degree or diploma at any other University. Where use has been made of the work of others it is duly acknowledged in the text.

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ACRONYMS

CASE	Community Agency for Social Enquiry
CBLG	Capacity Building for Local Government
CBPWP	Community Based Public Works Programme
EPWP	Expanded Public Works Programme
EEC	Entabeni Education Centre
EWR	Eastern Wetland Rehabilitation
HWR	Highlands Wetland Rehabilitation
HWRP	Hlatikulu Wetland Rehabilitation Project
IMP	Integrated Management Plan
MDTP	Maloti Drakensburg Tranfsrontier Project.
KZN	KwaZulu Natal
KZNWE	KwaZulu Natal Wildlife Ezemvelo
NGO	Non-Governmental Organization
NPS	Nsonge Primary School
NNR	Ntsikeni Nature Reserve
NNRMF	Ntsikeni Nature Reserve Management Forum
NWRP	Ntsikeni Wetland Rehabilitation Project
OECD	Organization for Economic Co-operation and Development
PAR	Participatory Action Research
PWM	Participatory Wetland Management
PRA	Participatory Rural Appraisal
PSDIADB	Private Sector Department Inter-American Development Bank
PWP	Public Works Programme
RRA	Rapid Rural Appraisal
SA	South Africa
SAGI	South African Government Information
SANBI	South African National Biodiversity Institute
SDD	Sustainable Development Department
UNDP	United Nations Development Programme
UNDPSA	United Nations Development Programme Southern Africa
UNED	United Nations Environment and Development
USAID	United States Agency for International Development
WB	World Bank
WfW	Working for Wetlands
WHO	World Health Organization
WRC	Water Research Commission
WOCAT	World Overview of Conservation Approaches and Technologies

Chapter One
Introduction

1.1 Introduction

A number of programmes and projects exist in South Africa such as the Working for Wetlands (WfWet) Programme and Mondi Wetlands Project, which seek to promote rehabilitation and management of wetlands in a manner that is sustainable. Rehabilitation has been undertaken at many wetlands around the country, including Hlatikulu and Ntsikeni wetlands. Additionally, these programmes and projects aim to involve local people in the process, thus addressing socio-economic problems and challenges facing poor households (South African Government Information, 2005). Currently, little research exists regarding the success of these programmes and their involvement of local people. It is recognized that there are a wide variety of social, physical environmental or economical factors, which either hinder or enhance project success.

In parts of the world, many development projects have failed as a result of not incorporating local communities and adhering to the principles of community participation in all phases of a project, from initiation to implementation and monitoring (World Bank, 2005). The majority of these projects are designed by external professionals, and communities normally get involved during the implementation phase where there is need for labor. Ironically, the World Bank has been involved in many of these development projects.

Public participation refers to an ongoing process of interaction between external professionals (also referred to as external service providers) and local communities where development is taking place (Slocum, 1995; World Bank, 1994). The aim of community participation is to improve community involvement in decision-making processes, not only during implementation, but also during the planning, design, evaluation and monitoring phases of the project. Yet, the aim of community participation evolves even beyond improving decision making processes. Community participation also strengthens interpersonal relations, ensures representation of a diversity of social groups, helps clarify

and stabilize communication between stakeholders, encourages local ownership, commitment and accountability (Foundation for Water Research, 2004).

The involvement of local community members is of critical significance in rural development projects as it encourages a better understanding of the relevant processes not only by the external service providers, but also by local communities who are the primary beneficiaries of development (Allen, 2001; Dahl-Østergaard, Moore, Ramirez, Wenner and Bonde, 2003; Emmett, 2000; Pimbert, 2004). This means that service providers (often the external professionals), should consider the views and opinions of community members involved in development projects. In the past, development projects were dominated by the 'we know best' mentality of 'experts'. On the other hand, community participation provides community members an opportunity to influence the decision-making process (Private Sector Department, 2001; Sanicon, 2004; Simanowitz, 1997).

This study focuses on the social dimension, namely the involvement of local communities in the Hlatikulu and Ntsikeni wetland rehabilitation projects implemented by Working for Wetlands. The proposed study investigates the level of participation of local people in Hlatikulu and Ntsikeni wetland rehabilitation projects. The investigation is premised on the following conceptualization:

> The higher the level of participation of local people in a wetland rehabilitation project, the greater will be their sense of ownership of the project which, in turn, will lead to more effective post-rehabilitation wetland management and therefore greater sustainability of the project.

1.2 Outline of research

This study focuses on the participation of local stakeholders in wetland rehabilitation projects and in the long term management of the rehabilitated wetlands. Wetland rehabilitation projects have been implemented around South Africa by Working for Wetlands (WfWet) as part of the Expanded Public Works Programme (EPWP) (Dini, 2004). The programme seeks to draw significant numbers of unemployed into the productive sector of the economy, gaining skills while they work and increasing their capacity to earn an income (Dini, 2004).

The primary objective of the Working for Wetlands programme is to rehabilitate degraded wetlands, in a manner that best helps to create short term job opportunities and fight poverty. "... the programme goes about its business through projects focused on the rehabilitation, conservation and wise use of wetlands in a manner that maximizes employment creation; creates and supports small businesses; and transfers relevant and marketable skill to its workforce" (Dini, 2004:4).

"The Working for Wetlands rehabilitation projects are intended to produce sustainable environmental outcomes, using implementation models that simultaneously contribute to employment creation and skills transfer objectives of government's Expanded Public Works Programme" (South African National Biodiversity Institute, 2005:1). There is however a tension between these objectives and investment in the long term sustainable management of wetlands. The tension is between alleviating poverty (short-term) and addressing problems and promoting the long term sustainability of wetlands. The tension is that, by their very nature, the Working for Wetlands projects need to generate outputs quickly, which makes it difficult to build on local self-mobilizing ability and governance.

This study aims to investigate how public participation in wetland rehabilitation may be improved. The projects investigated are on the national agenda of job creation and poverty reduction and as such are good case projects in this regard. This is of value not only in wetland rehabilitation projects but also to other development projects in general.

1.3 Problem statement

Some development projects have arguably failed as a result of not actively involving local people who are supposed to be the beneficiaries of such development initiatives. Therefore, there is a need to identify frameworks that are informative in describing useful types of involvement of local people.

1.4 Aim and objectives of the study

1.4.1 Aim of the study

The aim of the research project is to critically examine the nature and level of participation of local people in Hlatikulu and Ntsikeni wetland rehabilitation projects with specific reference to the holistic long term management and sustainability of the rehabilitated wetland systems.

1.4.2 The objectives of the study

The objectives of the study are to:

(i) Develop and apply a conceptual framework for analyzing stakeholder participation in the Hlatikulu and Ntsikeni wetland rehabilitation projects.

(ii) Describe the land tenure and institutional context within which the two selected case studies take place so as to characterize the general management of the Hlatikulu and Ntsikeni wetlands.

(iii) Identify the objectives of the Hlatikulu and Ntsikeni rehabilitation projects and their value as perceived by different stakeholders.

(iv) Examine the extent to which the Hlatikulu and Ntsikeni wetland rehabilitation projects are an integral part of the holistic and long term management of the wetland systems.

(v) Provide recommendations for the long term sustainability and management of Hlatikulu and Ntsikeni wetlands.

1.5 The description of study sites

The purpose of this section is to provide background information on Hlatikulu and Ntsikeni wetlands. This section describes the study sites in terms of their location, land use, and current management.

1.5.1 Hlatikulu Wetland

The Hlatikulu wetland is located 29° 15′S; 29° 41′E in the Natal Midlands and lies in the upper reaches of the Nsonga catchment about 60 kilometres west of Mooi River (Begg, 1989; Loon, 1999). Figure 1.1 shows the location of the Hlatikulu wetland. The wetland was named after the mountain called Hlatikulu, which lies immediately west of the system and rises to a height of 2000 m.a.s.l. (Begg, 1989). The wetland falls within a number of farms as shown in Figure 1.2. These farms are Northington, Gamewood and Forest Lodge. The sections of the wetland which fall in these farms are the responsibilities of the respective farmers. A large number of households of the Nsonge community are located in Gamewood. Others are located west of Gamewood farm (Figure 1.2).

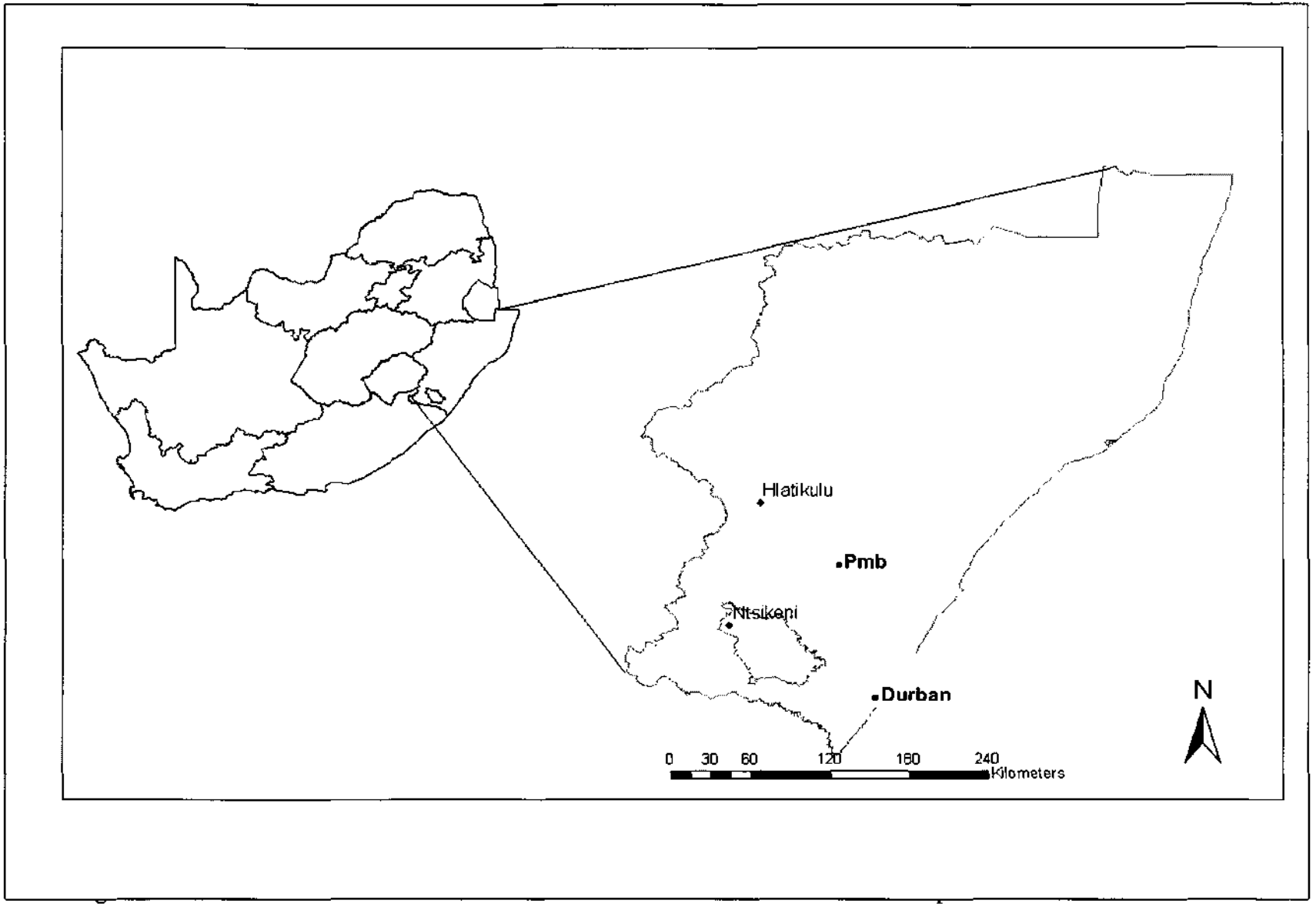

Figure 1.1: Hlatikulu and Ntsikeni Wetlands within South Africa and KwaZulu-Natal

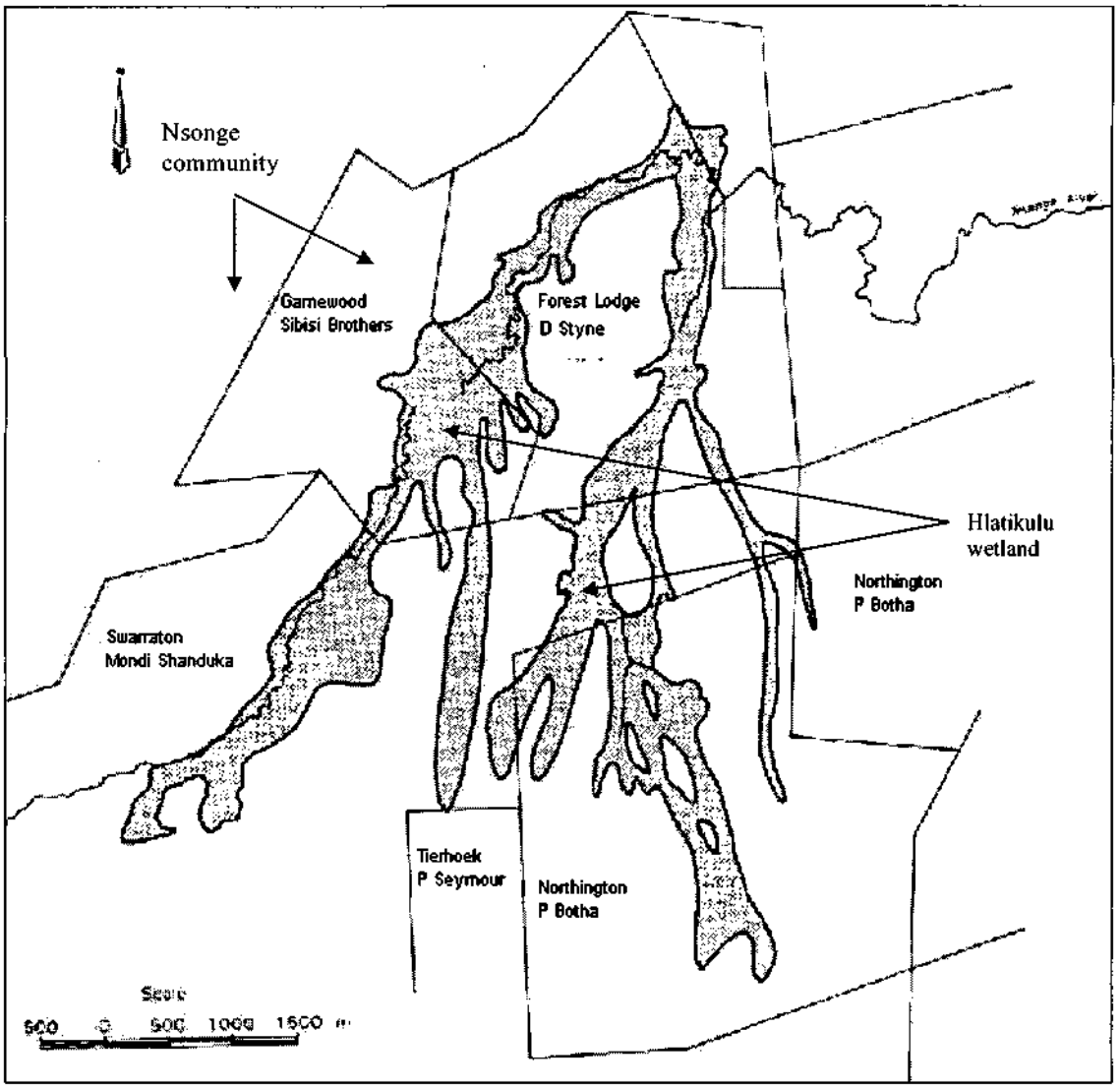

Figure 1.2: Land Ownership by Name of Farms (Source: Begg, 1989: modified)

The Hlatikulu Valley is a rural area predominantly inhabited by crop farmers and conservationists but also shared with the Nsonge community (the Sibisi brothers) (Shaw, *pers.com.*, 2006). The people of Nsonge pay an annual rent of sixty-rand (R60) to the Sibisi brothers. The Sibisi brothers collect the rent at the end of each year (Nxele, *pers.com.*, 2006). The Hlatikulu wetland feeds the Nsonge River. During dry seasons people from the Nsonge community rely largely on the water from the wetland. Loon (1999) noted that as in many rural areas of KwaZulu Natal, unemployment is severe with a significant number of the middle aged male population being migrant workers. The other significant source of income is pensions (Loon, 1999).

1.5.2 Ntsikeni Wetland

The Ntsikeni wetland was originally part of the Ntsikeni Nature Reserve situated in the northern part of the Eastern Cape (Kotze, 2003). Ntsikeni Nature Reserve was proclaimed a reserve in 1978 with its main objective being to conserve the wetland (Gxashi, undated) With the re-demarcation done in 2005, both the Nature Reserve and the wetland have been transferred to KwaZulu-Natal (KZN). Ezemvelo KZN Wildlife are the management authority of the nature reserve. It is located within the Umzimkulu catchment on the Lubhukwini River and is situated approximately 50km north of Kokstad (Gxashi, 2005a). The wetland is located 30° 08′ S; 29° 28′ E, and 20 km north of the town of Franklin. Figure 1.1 shows the locality of Ntsikeni. The wetland constitutes an area of about 1 070ha of the Ntsikeni Nature Reserve of 9 200ha (Gxashi, 2005).

The Ntsikeni wetland is neighboured by a number of poor rural communities who benefit from the wetland in terms of water provision and livestock grazing (Gxashi, unpublished; Kotze, 2003). These communities form part of the two Traditional Authorities, *i.e.* Malenge and Mabandla that border the reserve (Figure 1.3). "The wetland provides a source of water for the poor rural communities downstream of the wetland and is an important source of livestock grazing for neighbouring communities" (Gxashi, undated). The current socio-economic status of the area, *i.e.* low employment among the youth, suggests that there is a need to further strengthen development projects so as to encourage and improve economic growth in the area.

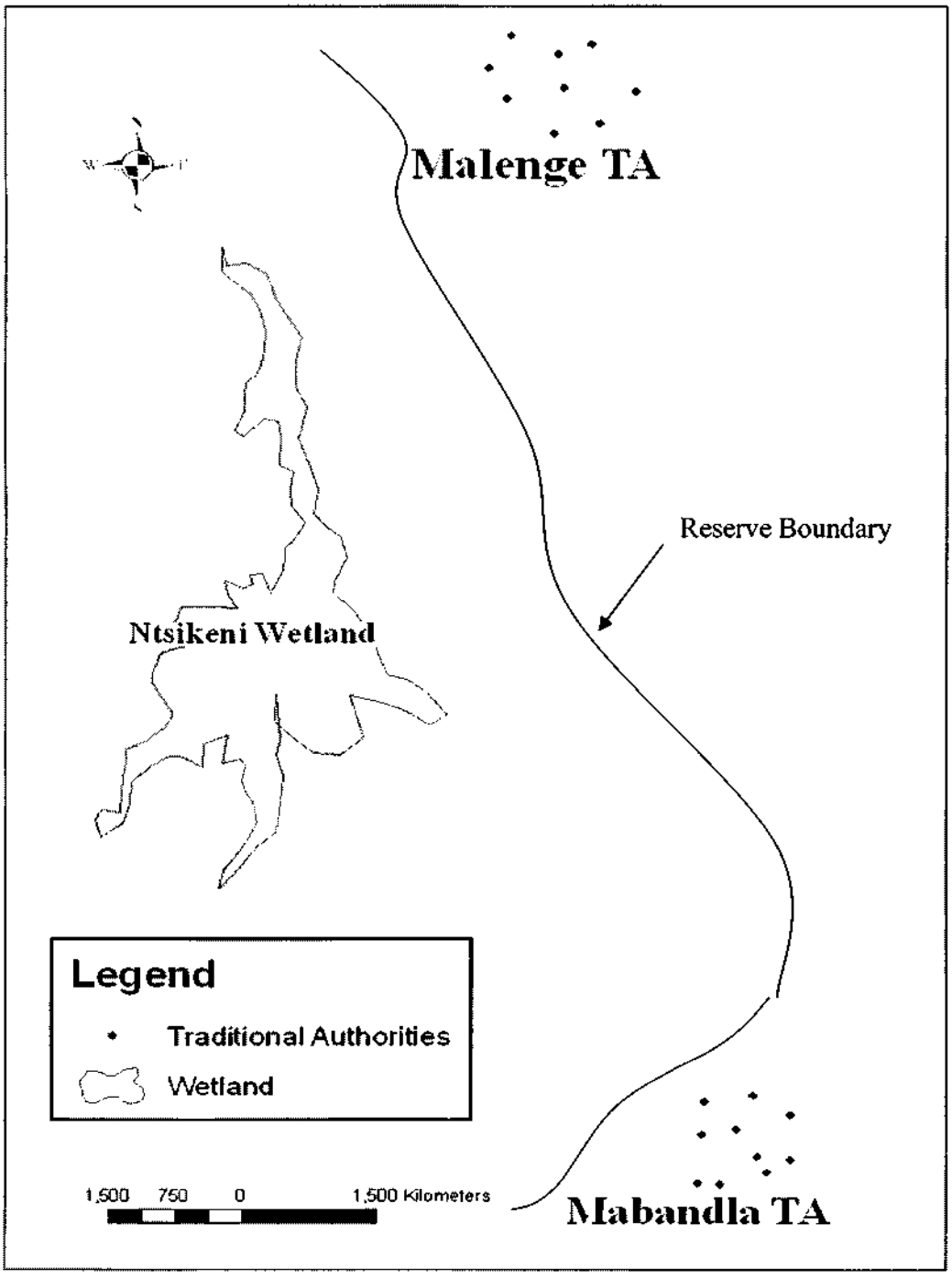

Figure 1.3: Map of Ntsikeni wetland and neighbouring Traditional Authorities
(Digitized from a 1: 10 000 orthophoto map)
(Reserve boundary is not to scale)

1.6 Thesis outline

Chapter one provides an overview of the study, the aim and objectives that will be employed. This chapter also provides information on study sites, *i.e.* locality, socio-economic status and physical description.

Chapter two reviews relevant literature and case studies that pertain to public participation in development projects. This chapter provides history, principles, approaches promoting public participation and the theoretical framework. The chapter concludes with participation in community based participatory wetland management.

Chapter three covers the methodologies employed in the research. The focus is on specific methods of data collection that were employed. Essentially, this chapter documents the theory and implementation of methods used in the study.

Chapter four presents the results and discussion of the study. The sites are individually presented and discussed to present the issues on each site. To conclude this chapter, a comparison of the two sites is made to demonstrate the similarities and differences between the two sites. Conclusions are also drawn in terms of the long term sustainability of the two wetland rehabilitation projects.

Chapter five presents the conclusions and recommendations of the study. This chapter focuses on the satisfaction of the aim and objectives of the study, the main findings of the study, the recommendations made by the researcher and the focus of further research.

Chapter Two

Participatory Development

2.1 Introduction

The chapter starts by providing a context of participation, namely, definitions and the history of participation. There is a focus on participation internationally and nationally (South African context) by local people in development projects, in particular those that have an environmental dimension. The latter part of the chapter focuses on community involvement in wetland management projects, using both international and national perspectives. This section focuses on co-management and the challenges in participatory management. In addition this review intends to identify specific lessons relating to participation, which can be learned from the way different projects are managed. At the end of the chapter, a theoretical framework is also presented.

2.2 Definitions of participation

These are the three definitions and the different approaches to it.

> ... participation in development is broadly understood as active involvement of people in decision making about the implementation of processes, programmes and projects which affect them (Slocum and Thomas-Slayter, 1995:46).

> ...process through which stakeholders influence and share control over development initiatives, and the decisions and resources which affect them (World Bank, 1994).

> Public participation is various forms of direct public involvement where people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of specific issues (Wenner and Gschwandtl, 2003:7).

In all the above definitions a common element is the involvement by people in decision-making processes while enhancing their potential to actively engage in relevant issues. The World Bank's (1994), as a working definition in this document, clearly states that all

the stakeholders involved should participate equally in the processes that affect them. This means that the focus is not only on a single specific group, in most cases local communities or external stakeholders, but rather on all affected stakeholders. Achieving equal participation may not be possible because some stakeholders may have a much lower stake than others, and it could be appropriate for them to participate less. Also, some stakeholders may choose to participate less than others because they trust that their interests are being catered for, *e.g.* by the responsible government officials.

There are some elements often left out by writers when defining the term participation (Ayee, 2000). These elements are attitudes towards participation, and participation in rural development efforts. In addition, the definitions above clearly indicate consensus among people on the definition of participation and the need for stakeholders' participation in all processes of a project.

The definitions demonstrate that participation requires the active involvement of local people who are beneficiaries of development initiatives (Jennings; 2000; Karl, 2000; World Bank, 1994). There is a view that participation is clearly a good concept to everyone (Jennings, 2000). To some it will be a goal or aspiration, to others a demand and or a description of how things are or have been done (Jennings, 2000; Karl, 2000).

2.3 History of participation

The use of the term participation dates back to the 1940s but became a dominant concern during the 1950s (Rahnema, 1992; Ayee, 2000; Hickey and Mohan, 2005). "Participation has a longer and more varied genealogy in development thinking and practice than is usually acknowledged, and has been periodically regenerated around new schools of thought, institutional agendas and changing political circumstances" (Hickey and Mohan, 2004:5). This demonstrates that participation has been and is still influenced by a wide variety of factors. The 1960s saw a significant change in the extent and type of participation that was followed. Evidence of this was the increase in the number of institutions, such as the World Bank and International Monitory Fund (IMF), which influenced how the term was viewed and implemented.

During the period 1940s-1960s, participation was defined purely in political and governance terms (Ayee, 2000; Hickey and Mohan, 2005). It was used in a wide spectrum of platforms, including voting, party membership, protest movements and in other activities that were politically oriented. In addition, the utilization of the term was characterised by different institutional and intellectual influences. Modernisation played a significant role in how people then viewed participation. During this period the dominant assumption was that the benefits of growth would trickle down to the public and stimulate their involvement in relevant processes (Deutch, 1961; Parry, 1972).

Table 2.1 shows the different trends in the history of development of participation, different approaches that dominated the respective periods. During the 1970s the term public participation began to take a somewhat different meaning (Ayee, 2000). The term became more associated with the administrative and implementation processes and was also viewed as an alternative to revolutionary movements and uprisings (Cohen and Uphoff, 1978). More focus was on participation in projects rather than in broader political communities (Hickey and Mohan, 2004; Hickey and Mohan, 2005). This period also witnessed the introduction and implementation of participatory methodologies, including Participatory Action Research and Participatory Rural Appraisal.

There are many factors that have influenced participation across the world. One of these factors was the failure of top-down projects and planning. The serious need for involving local communities, while empowering them found its place during the 1980s. The basis of the argument was that the involvement of local communities would ensure the sustainability and efficiency of the development interventions (Hickey and Mohan, 2005). In addition, there was a strong contention that involving local communities would enhance placing local realities at the heart of development interventions (Chambers, 1983; Hickey and Mohan, 2005).

Table 2.1: Participation in development theory and practice: a selective history

Era	Phase	Rationale	Methods
1940s-1950s	Community Development (colonial)	Development requires participation and self-reliance, need for stable rural communities, cost-sharing. Participation as an obligation of citizenship, citizenship formed in homogenous communities.	*Animation rurale*, adult literacy and extension education, institution building, leadership training, local development projects.
1960s-1970s	Community Development (postcolonial)	As above, plus development of state hegemony, manage rural society, moral economy of state penetration.	As above, plus health, education
1960s	Political participation	A source of strength to the political system in 'new states', form of political education, a right and an obligation of citizens.	Voting, campaigning, political party membership
1960s-1970s	Emancipatory participation Liberation theology	Analyze and oppose 'structures of oppression' through active engagement with poor groups; social action. As above	Participatory action research (PAR), conscientisation, popular education Form base Christian communities, training for transformation
1970s-1990s	'Alternative development'	Participation as a reaction to exclusion; wide-ranging critique of 'mainstream' development; proposal of alternatives. Participation as a right of citizenship, 'citizenship' as a key objective of alternative development.	Strong civil society, social movements, self-help groups. Latterly, an inclusive state.
1980s-present	Populist / Participation in development	Failure of top-down projects and planning. Participation required to empower people, capture indigenous people's knowledge, ensure sustainability and efficiency of interventions	Participatory: rural appraisal, learning and action, monitoring and evaluation, poverty assessments. NGDO projects.
Mid-1990s-present	Social capital	Participation in trust-based networks and associations, basis for deepening civil society. Provides basis for economic growth	Local institution building, create enabling environment
Late 1990s-present	Citizenship participation	Convergence of 'social' and 'political' participation, scaling-up of participatory methods, from project participation to policy influence	Participatory governance: state-civic partnerships, decentralization, participatory budgeting, citizen's hearings

Source: Hickey and Mohan (2005:36)

From mid-1990s to the present, social capital and citizenship approaches have been dominant. Social capital advocated the building of local institutions while at the same time creating an enabling environment. This phase brought about the basis for economic growth, more especially in some of the developing states. The early stages of participation in development were characterised by social or political participation (Ayee, 2000; Chambers, 1983; Hickey and Mohan, 2005). The mid-1990s to the present witnessed the convergence of social and political participation. Also central during this period was participation, not only in development projects, but also to influence policy.

The history of participation in Africa is relatively recent. It dates back to the 1960s while the early phases of participation in some parts of the world date back to the 1940s. The history of participation in Africa can be classified into two periods, namely, 1960s-1990 (non-participation from independence) and from 1990-to date (limited or low participation) (Ayee, 2000). Until recently, most African leaders were concerned with their power, authority and hegemony. However, there is undoubted progress in the area of participation in most of the African countries. This progress is argued to be limited because of low women and youth involvement in the participation process and also because participation has been seen in terms of holding elections and installing democratic institutions (Ayee, 2000; Hickey and Mohan, 2005). There is therefore a need to speed up the involvement of women and young people in development projects.

2.4 Participation: an international perspective

Most of the projects implemented in the developing world by development institutions such as the World Bank failed because of a wide range of reasons. These range from poor planning, mismanagement of resources to failure to adequately involve every stakeholder concerned. Other writers in the field of participation feel that such projects do not succeed because they fail to actively involve local people (Rahnema, 1992). The reality suggests that there is more to successful projects than just involving local people. The large majority of projects used top-down strategies of action and as a result lacked the inclusion of participation and participatory methods of interaction (Rahnema, 1992). Participation is important for a number of reasons. It was found

that, whenever people were involved and actively participating in the development projects much more was achieved (Rahnema, 1992)

Involving people in the analysis of problems that affect them and in the design of potential solutions is a useful strategy to achieve effective and sustainable development. This may not be achieved in a rapidly changing world. It may as well remain as an aspiration. Involving local people can be done by applying appropriate participatory approaches. Although more time consuming than traditional development approaches that rely on 'blueprint' plans and development experts, participatory approaches generally lead to development efforts that are sustainable because the people themselves have their success at stake (Lammerink, Bury, and Bolt, 2001). For, participation to be meaningful, participatory approaches can be employed to use available resources.

There are three categories for the need for participation. These briefly include 'participation as a means to a specific end', 'participation as an end in itself', and 'participatory research'. Respectively, these mean that participation is in most cases used to achieve a specific aim, either implicit or intentionally concealed; is used for its own sake; and finally that participation may be used simply to extract information from people involved, mostly local people (Slocum, 1995). Participatory research is used to obtain information by researchers and also to promote a two way process whereby both the communities and the researcher benefit. Essentially, the purpose of research is to access information and develop new understandings. Participation empowers and mobilizes people as actors and overseers of their own development; it is one of the ends of development as well as one of the means. It can help create and maintain stable democracies and good governance as well as economic growth. When poor and marginalized people participate in development projects, they acquire skills and knowledge. This means that it may be inappropriate to classify a project as a failure if those who participated learned from the process, even if the intended outcomes were not achieved.

Participation improves project design by reducing the cost of obtaining accurate and site-specific data on environmental, social and cultural factors as well as stakeholders' needs and priorities. A well-designed participatory process can help resolve or

manage conflict by identifying common ground or a negotiating structure that will allow benefits to accrue to all sets of interests. An equitable sharing of benefits may require an equitable sharing of costs as well. By discovering and resolving potential conflicts early in the project cycle, participation may reduce the cost of supervision later (Dalal-Clayton and Bass, 2002).

A number of the international organizations including the United Nations Development Programme (UNDP), the World Bank (WB), The World Health Organization (WHO), United State Agency for International Development (USAID), Organization for Economic Co-operation and Development have responded to the development challenges facing the world. These organizations fund development projects around the world with a focus on the developing countries that are perceived to be lacking in terms of project planning, implementation, public participation and other aspects of development projects. An example of one such initiative is the 'Sustainable Development Strategies: A Resource Book' which seeks to provide guidance on how to develop, implement and assess national sustainable development initiatives (Dalal-Clayton and Bass, 2002).

2.5 Key principles in participation

There is a wide range of principles that have been developed as a central component in the existence of participation although different. People have different understandings about the key ingredients of participation. These principles provide an indication of what participation entails, and how it should be employed and understood.

The world's development organizations, in particular the World Bank, developed a set of principles that characterize participation. These principles are consolidated in the 'World Bank Participation Source Book 1996' (Sustainable Development Department, 2000). These principles are spelled in Table 2.2

Table 2.2: Key principles for participation

Accountability	Employing agreed, transparent, democratic mechanisms of engagement, position finding, decision making, implementation, monitoring, evaluation, making these mechanisms transparent to non participating stakeholders and the general public.
Effectiveness	Providing a tool for addressing urgent sustainability issues; promoting better decisions by means of wider input; generating recommendations that have broad support; creating commitment through participants identifying with the outcomes and thus increasing the likelihood of successful implementation.
Equity	Levelling the playing field between all relevant stakeholder groups by creating dialogue (and consensus building) based on equally valued contributions from all; providing support for meaningful participation; applying principles of gender, regional, ethnic etc balance; providing equitable access to information.
Flexibility	Covering a wide spectrum of structures and levels of engagement, depending on issues, participants, linkage into decision making, time frame etc; remaining flexible over time while agreed issues and agenda provided for foreseeable engagement
Good governance	Further developing the role of stakeholder participation and collaboration in (inter)governmental systems as supplementary and complementary vis-à-vis the roles and responsibilities of governments, based on clear norms and standards; providing space for stakeholders to act independently where appropriate.
Inclusiveness	Providing for all views to be represented, thus increasing the legitimacy and credibility of a particular process.
Learning	Requiring participants to learn from each other, taking a learning approach throughout the process and its design.
Legitimacy	Requiring democratic, transparent, accountable, equitable processes in their design; requiring participants to adhere to those principles
Ownership	People centred processes of meaningful participation, allowing ownership for decisions and thus increasing chances of successful
Participation & engagement	Bringing together the principal actors; supporting and challenging all stakeholders to be actively engaged.
Partnership	Developing partnerships and strengthening networks between stakeholders; addressing conflictual issues; integrating diverse views; creating mutual benefits (win/win rather than win/lose situations); developing shared power and responsibilities; creating feedback loops between local, national or international levels and into decision makings.

Societal gains	Creating trust through, honouring each participant as contributing a necessary component of the bigger picture; helping participants to overcome stereotypical perceptions and prejudice.
Strengthening of institutions	Developing advanced mechanisms of transparent, equitable, and legitimate stakeholder participation strengthens institutions in terms of democratic governance and increased ability to address global challenges.
Transparency	Bringing all relevant stakeholders together in one form and within an agreed process; publishing activities in an understandable manner to non-participating stakeholders and the general public.
Voices, not votes	Making voices of various stakeholders effectively heard, without disempowering democratically elected bodies.

Source: UNED (2001); Sustainable Development Department (2000)

There are other principles defined and described differently by different authors, which are included in the bullet list below. There is significant overlap and relationship between the principles provided in Table 2.2 and those below. There are nine important principles that are required particularly for community based resources management (Addun and Muzones, 1996; Erftemeijer and Bualuang, 2002; Til and Banda, 2002). These principles are:

- Empowerment (whereby economic or political power is transferred from the few to the local people). This process may take time because of the status quo, namely, there may be existing economic and political power differences. However, development projects should seek to empower local people especially in issues central to such projects. This does not necessarily mean that outside managers should be excluded but, that there should be room for ensuring learning by locals.
- Equity (the benefits should be shared in a fair manner, not just by a few individuals). The reality is that not everyone benefits from a project in an equitable manner. This remains one of the biggest challenges in development as it has been seriously difficult to ensure that the wider communities benefit from development initiatives implemented. Local people should be encouraged to share the costs (time, financial costs, *etc.*) for them to be able to share the benefits.

- Sustainability (maintaining the carrying and assimilative capacity of an ecosystem). Maintaining sustainability is often difficult and is attributed to a number of issues, ranging from the failure to involve local ideas to poor project management (including project evaluation and monitoring). This means that these issues need to be taken into consideration and addressed to enhance project sustainability.
- Systems orientation (different communities function in the context of each other and other stakeholders, just as resources are ecologically linked to wider ecosystems). Evidently, communities are not homogeneous, and this makes it difficult for them to work harmoniously no matter how they may be sharing a resource.
- Gender-fair (meaning that women are involved in the control of community resources while their needs are addressed at the same time). Largely, the type and scale of a project determines the project participants. Some projects, by their very nature attract more men than women. Undoubtedly, the trends are changing with regards to the involvement of women in development projects. In fact, there is a strong need for the involvement of all those who have interests in a resource regardless of their gender.
- Environmental and socio-economic improvements should go hand-in-hand. Sometimes the focus tends to be on addressing the socio-economic well being of the people over that of the natural environment or vice versa. In the past the nature of environmentally based projects excluded communities as part of the system. It was 'save the rhino', and the communities were treated as less important that the environments that they live in. The nature of a project determines the project needs, at least in some cases.
- Local ownership of the project by facilitating the ideas of the community, rather than those of the project staff. This will enhance the sustainability of the project. If the ideas are from the projects staff and do not filter to the people at the grassroots level, there is a possibility of a project collapsing when the staff members disappear. However, for some projects it may be necessary to have professionals driving a project but at the same time ensuring that all involved local people are abreast of the issues attached to a project. This is where learning and transferring of skills comes in.

- Effective community participation is crucial for the sustainability of changes initiated. Currently, it appears that the major challenge is to develop frameworks that will enhance and ensure effective and efficient community participation in development projects. To address this challenge requires the need to establish the reasons that motivate people to participate. It is also recognized and emphasized that community participation in management of wetlands is important and essential for better and sustainable wetland management (Ramsar, 1999).
- Focus on the process rather than on outputs (Ertefmeijer and Bualuang, 2002). This does not mean that the outputs are not important, as they may be very crucial at other times. In most developed states about 80% of the project budgets go to planning and 20% to implementation. The rationale is that it may be useless to spend a lot of resources on implementation while the actual process is not satisfactory. On the other hand, in the developing countries the priority is to provide as many jobs and eradicate poverty as possible, and as a result lots of resources go to implementation of projects.

There is clearly a wide range of principles useful for participation and community based natural resources management. These principles can be referred to as a guiding framework in participation. The application of these principles in a development initiative depends on the type and extent of the initiative. This means that some development initiatives may be characterized by more principles than other development initiatives. The practicality of the situations dictates what principles are employed and how, taking into consideration that different people may have different understandings about these principles.

2.6 Approaches for promoting community participation

There have been several approaches developed to respond to the challenges encountered during the processes of community participation. These approaches have been used to allow participation by local community members. A wide variety of methods have been used to gather (also referred to as extractive techniques) and analyse data (Dalal-Clayton and Bass, 2002). In addition, these approaches are argued

to have developed as a response to the failure of projects to meet the needs of the rural poor. This can also be referred to as a response to learning from application.

The participatory approaches that may be used to enhance active participation by local people are Rapid Rural Appraisal (RRA), Participatory Action Research (PAR) and Participatory Rural Appraisal (PRA). The RRA provides a range of methods and techniques, such as participant observation, focus groups, mental maps, principle of handing over a stick, *etc.* in order to help researchers better understand the local systems they are trying to improve. As the RRA practitioner then takes this information back to the office or field station where it is used to develop or improve a subsequent technology, this approach can be regarded as 'consultative' (Allen, 2001).

The Rapid Rural Appraisal (RRA), "was introduced as a planning approach to help minimise existing investigation biases, to provide an alternative to the limitations of questionnaire surveys, and to give timely information for externally driven planning" (Dalal-Clayton and Bass, 2002:210). The purpose behind the Rapid Rural Appraisal was to involve rural communities in their own needs assessment, problem identification and ranking, strategy for implementation, and development of a community action plan (Slocum, 1995).

Linked to Rapid Rural Appraisal as another approach to participatory development, was Participatory Rural Appraisal (PRA), which is described as "a cross-disciplinary, cross-sectoral approach to engaging communities in development through interactive and participatory processes" (Slocum, 1995:13). PRA has been used widely around the world, especially in developing countries within Africa, and is attributed to the fact that PRA uses a wide range of tools and techniques that enhance active participation by all stakeholders who are involved in a development project or initiative (Dalal-Clayton and Bass, 2002; Slocum, 1995).

The Participatory Rural Appraisal (PRA), approaches evolved in the search for practical ways to support decentralized planning and democratic decision-making, value social diversity, work towards sustainability, and enhance community participation and empowerment (Allen, 2001; Sanicon, 2004). This approach recognizes that the problems facing farmers and local communities are not solely

biological or technical, and acknowledges the value of local experience and knowledge. It advocates that the best way to incorporate this is through the active involvement of local people in a development process (Allen, 2001). PRA uses specific techniques that promote participation by not just the project manager, but also the local community members involved. These techniques include matrices and a range of other techniques.

The strength of participatory development methods, especially methods from Participatory Rural Appraisal, is their usefulness for facilitating participation in community assessment, project planning, and project implementation (Castelloe, Watson, and White, 2002). These methods provide tools for allowing that community improvement projects are planned, carried out, driven, and controlled by marginalized people. A second major strength of PRA is its emphasis on building the capacity of grassroots groups, so that the groups will be able to continue working on community improvement over the long term, with or without external support.

The Participatory Action Research (PAR) is another approach to enhancing participation by all stakeholders that share interests in development initiatives. It is defined as a spectrum of approaches that share interests in combining research and action through a series of processes by which issues are identified, addressed and considered (Parkes and Panelli, 2001). Participatory Action Research methodologies are argued to have included the multiple contexts, stakeholders and processes involved in both human and environmental systems. In addition they provide research-community relations when innovations and change are potential objectives of a study. From the definition and description of PAR it can be seen that the two main components of PAR are action and participation. Largely, the degrees of participation vary from one level to another. Certain members or even stakeholders may be more involved than others. Table 2.3 shows different levels of participation and modes of decision making, consultation or information showing of each participation type.

Table 2.3: Different types of participation

Dorcey et al (1994)	Wicox (1994)	Pretty& Shah(1994)	UNDP (1997)	Fischoff (1998)	Nature of participation
Ongoing involvement	Supporting	Self mobilization	Self management	All of below	Decisional
Seek consensus			Partnership	Make them partners	
		Interactive participation			
Test ideas, seek advice	Acting together		Risk-sharing	Treat them nicely	
Define issues		Functional participation			Consultative
Consultation reactions	Deciding together		Decision making	Show them that they have accepted similar risks in the past	
	Consultation	Participation by consultation			
Gather info perspectives			Consensus building	Explain what we mean by numbers	
Educate	information	Participation by info giving	Consultation	Explain what numbers	Informative
			Information	Tell them the numbers	
inform		Passive participation			
			Manipulation	Right numbers	

Source: Parkes and Panelli (2001); Forest Sector Co-ordination Secretariat (2002); Catley (1997)

These types of participation have different characteristics and the degree of local community involvement varies from one type to another. Some types of participation, for example, self management, ongoing involvement, and self-mobilization, demonstrate an increased level of involvement. They can be viewed as useful ways of involving local communities more in development initiatives. From the descriptions of these types of participation, communities work closely with the outsiders and with each other. This to a large extent has a positive impact regarding capacity building, providing the opportunity for local people to learn from project leaders. In addition, these types of participation possibly enhance the sustainability of the work done.

Local communities also become active partners in the process and are also involved in the decision making processes, thus feeding into a sense of ownership by local people.

In some cases there may be a necessity to adopt co-option, compliance and consultative forms of participation in a project. The nature of these types of participation, except compliance, does not allow effective involvement by local communities and as a result may not be considered as useful for community based development projects. In these types of participation, communities are consulted or informed about what is to happen during the process or simply required to implement the predetermined tasks (Dalal-Clayton and Bass, 2002). In addition, these passive forms of participation marginalize groups that have no recognized stake in the decision-making process (Rahnema, 1992). Yet, development may involve all of these types of participation, with each participation type being appropriate for a certain circumstance.

Table 2.3 provides a useful typology of describing participation (Pretty, 1995). This typology demonstrates a clear distinction between decisional and informative modes of participation. Table 2.4 describes the typology provided by Pretty (1995). Manipulative and passive participation and participation by consultation remain top-down approaches. Local stakeholders have little or nothing to say to change the predetermined goals and objectives of development initiatives. Likewise, when people participate for material incentives there is very little they do to change plans communicated to them by project managers.

Ideally, people must be able to take and implement their own initiatives with less help from the external institutions. However, there are very few development initiatives that will succeed without any external help. Critically important is the question of capacity within and among local stakeholders. Evidence shows that some communities can do well after being assisted by external institutions. This does not take anything away from communities, but facilitates activities that communities cannot perform on their own. Given this, interactive participation appears to be the most realistic mode of participation. Both external and local stakeholders work closely together to come up with what is believed to be in the best interest of all stakeholders concerned. Local stakeholders through active involvement in project

processes, take control over decisions. This is largely determined by the interest and stake that communities have in resources.

Table 2.4: A useful typology for describing participation

Typology	Characteristics of each type
Manipulative participation:	Participation is pretence with people's representatives on official boards but who are unelected and have no power.
Passive participation:	People participate by being told what has been decided and has already happened. It involves unilateral announcements by an administration or project management who do not listen to people's responses. The information offered belongs only to external professionals.
Participation by consultation:	People participate by being consulted or by answering questions. External agents define problems and information gathering processes and so control analysis. This process does not concede any share in decision making and professionals are under no obligation to adopt people's views.
Participation for material incentives:	People participate by contributing resources, *e.g.* labour, in return for food, cash or other material incentives.
Functional participation:	People's participation is seen by external agents as a means of achieving project goals, especially reductions in costs. People may form groups to meet pre-determined objectives. This participation may be inter-active and may involve shared decision making, but tends to arise only after major decisions have been made by external agents. Local people may only be co-opted to serve external goals.
Interactive participation:	People participate in joint analysis, development of action plans and the formation, or strengthening, of local institutions. Participation is seen as a right, not just as a means of achieving project goals. The process involves inter-disciplinary methodologies that seek multiple perspectives and make use of structured and systematic learning processes. As groups take control over local decisions and determine how local resources are used, so they have a stake in maintaining structures and practices.
Self Mobilization:	People participate by taking initiatives, independently of external institutions, to change systems. They develop contacts with external institutions for the resources and technical advice that they need, but retain control over how the resources are used.

Source: Michael (1997)-adapted from Pretty (1995); WOCAT (1998)

A range of approaches has been developed as a response to developmental challenges. Different types of participation have emerged as a response to describing different levels of participation by different stakeholders. Decisional types of participation,

namely, those that allow maximum participation and decision taking by local people should be encouraged for development initiatives. Interactive participation appears to be a useful type of participation for enhancing local participation. The development challenges facing communities as well as development institutions and their project managers often make it impossible to get to a stage of self-mobilization. Thus, almost all the development initiatives, even those proposed or planned by local people, require some external help from external institutions. Local people may require continuous support from external institutions, and external institutions should always be prepared and willing to accommodate this need (Joseph Rowntree Foundation, 2006).

2.7 The nature of stakeholders in participation

Usually there are many people and/or interest groups involved in development projects. These people, whether individuals or groups, are considered to be stakeholders in a project. This means that stakeholders are those who have an interest in a particular decision, either as individuals or representatives of a group. This includes people who influence a decision, or can influence it, as well as those affected by it. A result of many stakeholders coming together for common purposes, multi-stakeholder participation is necessary. This is used to describe processes that bring together all major stakeholders (Dalal-Clayton and Bass, 2002).

It is important not to overlook any stakeholders, as inclusivity allows all interest groups or even individuals to make their voices heard (Wenner and Gschwandtl, 2003). In fact there are various reasons why different stakeholders want to be involved in development initiatives. Clearly, it goes beyond just wanting to make ones voice heard, but also to make a difference in the decision-making process. Other stakeholders get involved to ensure that the processes followed are just, and some get involved to learn (Wenner and Gschwandtl, 2003).

Stakeholders involved in a project may wish to understand the process and the interests at stake; they may believe in general principles (enhanced trust, fairness, transparency, respect); and/or they may pursue economic, political, social, ecological or spiritual interests, or seek cultural identity and recognition. As projects differ from each other, people may be able to pursue more of these elements in some projects than

in others. Some stakeholders may pursue personal interests using a less transparent strategy as some people may not hide that they participate for personal benefits/interests (Dalal-Clayton and Bass, 2002; Wenner and Gschwandtl, 2003). In fact, every stakeholder involved is likely to have personal interests. It is part of the participation process to help participants sort out and express their interests, then to progressively set priorities amongst participants and identify common interests (Wenner and Gschwandtl, 2003).

Table 2.4 demonstrates how stakeholders involved in a development project should work together. This means that for a project to be well organized and successful there is a need for stakeholders to abide by the principles of working together and understanding their interests. Without any doubt, abiding by all of this in one project remains a major challenge. This means that it should be expected that some of these principles will dominate the development processes more than other principles. There should however, be a shift towards complying with as many principles as possible so as to allow all stakeholders to be effective partners in a project.

2.8 Challenges in participation: an international perspective

A major challenge in most development projects is maintaining participation and involvement of local communities. Many of the challenges result from the poor communication mechanisms between the government and the communities concerned (Dalal-Clayton and Bass, 2002). There are often preconceptions about the communities within which development is supposed to be taking place. These preconceptions often include the contention that local people are not always willing to participate in development initiatives.

One of the challenges associated with participation in development projects are the constraints encountered (Bass and Shah, 1994). These constraints include participation, especially in the initial phase, since it requires a lot of time and effort in development of human resources. In some projects, a number of people may need to be trained before projects start. Participation requires major reversals in the role of external professionals which require change in behavior and attitude. A considerable amount of time may thus be required. Participation threatens conventional careers as those professionals involved sometimes feel a loss of power if they have to deal with

local communities, especially if local communities need to be involved in decision making. As a result, forming collaborative relationships with communities may not be easy.

Participation is very difficult to measure because evaluation and monitoring systems are not well designed to address this challenge. As a result performance evaluation and impact analysis are often based on physical and financial indicators. Many development programmes are initiated and funded by external agencies, and these agencies tend to retain financial decision-making powers for themselves. This disturbs the growth of local institutions and may threaten the sustainability of projects.

These constraints suggest that alternative measures have to be employed to address the challenges in development. Critically important is an understanding that participation is not a simple process but a long drawn-out process (Bass and Shah, 1994). However, this does not necessarily mean that a simple process is a short one. Even long processes can be either complex or simple, depending on a wide range of factors. In addition, whoever is facilitating the participation process must be able to clarify the possibilities in the short, medium and long term and to work with or hire people who understand local issues (in most cases the local residents). They should also be able to respect different positions and maintain communication, enhance stakeholder involvement through face-to-face contact, and try to solve problems while they are at an early stage. They should also focus on priorities set at the beginning and ensure that all stakeholders are part of the plan and involved in all operations (Dalal-Clayton and Bass, 2002). Undoubtedly, the priorities set at the beginning of projects may change with time, as people involved learn more during their involvement.

2.9 Participation: a South African perspective

Development projects in South Africa need to have significant participation. The poor are encouraged to participate in development projects directed at improving their livelihoods. These projects range from the environmental, to the economic, to those that encompass both environment and economy. The government in South Africa and other relevant stakeholders want to ensure participation in the development process, allowing the members of local communities to use their capacity to address the specific conditions and problems.

South Africa has borrowed but still enjoys a different development approach from the internationally accepted approaches (Emmett, 2000; Simanowitz, 1997). Relationships between government and local people play a significant role in the participation process, given the political context and history of the country. This has "led to a level of awareness and sensitivity, which makes it untenable for 'outsiders' to control resources on behalf of disadvantaged communities" (Simanowitz, 1997:128).

2.9.1 Community participation in South Africa: the case of Extended Public Works Programmes (PWP)

People participate in projects for a wide variety of reasons. Some people may be involved in a project but with no clarity on what that they want to achieve (Slocum, 1995). Also, the objectives of everyone involved may differ. Some get involved because of the incentives that are attached to a project. In South Africa the majority of community development projects, like the Working for Wetlands (WfWet) Programme, seek to respond to high unemployment facing the country. The Extended Public Works Programme is a government-led initiative through which the WfWet programme is implemented.

The programme targets the rural poor with the main objectives to create short-term employment for community members by means of construction of public assets; useful assets to disadvantaged poor communities; and sustainable employment opportunities by facilitating micro-business opportunities associated with the community assets created (Community Based Public Works Programme, 2005). The primary objective of the Working for Wetlands programme is to rehabilitate wetlands and to create job opportunities for unemployed local people. A total of 2,135 jobs were created within the programme through the wetland rehabilitation projects implemented in the 2005/2006 Financial Year.

People do not participate in development programmes when benefits such as jobs are not provided. Seemingly, the provision of these benefits has somehow created a culture of dependency. Some people argue that as a result of food parcels, for example, societies have been destroyed and are therefore encouraged to become consumers of services rather than producers (Emmett, 2000). To a large extent, this

has disturbed the efforts to find solutions to the problems of the poor communities. This means that local people need to be involved, not just during the implementation stages of a project, but also before or during the initiation stages of a project. This in itself, while important, will not necessarily help in addressing the issue of dependency. More than this is probably required. The ineffectiveness of participation often appears to outweigh its effectiveness, and this suggests that there is a need to develop participatory frameworks that will improve the level of participation in development initiatives.

Public Works Programmes in general, are supposed to focus on both short and long-term development purposes. However, research on Public Works Programmes shows that particular attention has been channeled towards short-term development (Holden, *et al.,* 2004). These programmes have been characterized by a tendency to neglect the long term objectives of the PWP in terms if poverty reduction, growth enhancement and natural resource conservation (Barrett, Holden and Clay, 2004; Holden, Barrett and Hagos, 2004). This is because the design of the interventions is such that they can only bring short term relief. The focus is on short term objectives with no strategy for linking these to long term objectives. The biggest challenge is that by their very nature, the Working for Wetlands projects need to generate outputs quickly, therefore making it difficult to build local self-mobilizing ability and governance.

Environmentally focused projects have been initiated in South Africa to respond to the gap between people and their surrounding environment. Essentially, these projects seek to allow communities to become active shareholders in the projects that exist or are set to exist in their territories. The government and other sponsors, for example the WWF, drive these projects with the intention to involve the local community and conservation agencies in a programme to restore and manage community-based natural resources. Most of these projects are premised on the idea of community-based natural resource management (CBNRM). These projects attempt to address the social problems, such as poverty while simultaneously responding to issues of natural resources degradation.

2.10 Participatory wetland management (PWM)

The trend towards participatory management of natural resources is becoming acknowledged and appreciated (Critchley and Reij, 1995). Participatory Wetland Management refers to a process whereby local community members and different external stakeholders (organizations and government departments) work together to better manage wetland systems (Feyerabend, Farvar, Nguinguiri and Ndangang, 2000). Additionally, participatory management is defined as "a partnership in which government agencies, local communities and resource users, and perhaps other stakeholders, such as NGOs, share the authority and responsibility for management of a specific area or set of resources" (Galwer, 2002:2). The term 'stakeholders' includes local communities who directly/indirectly benefit from a resource, commercial direct/indirect users, government agencies as well as supporters of wetland communities such as environmental and conservation organizations and consumers of wetland products (Claridge, 1996; Feyerabend, *et al.*, 2000). All the stakeholders involved in wetland management should be subjected to the stakeholder principles as outlined by UNED (2001).

The degree of community participation varies from one community to another dependent on the local context (Pangeti, 1992; Galwer, 2002). "It varies from high levels of empowerment, to effective partnerships between governments and local communities, to situations where government remains firmly in control and stakeholders are consulted on decisions" (Galwer, 2002:2).

The role that the local communities can play in natural resources management needs to be unlocked (Pangeti, 1992). The inherent enthusiasm of the people who benefit from a resource needs to be realized. However, it is equally important to note that local people through local development committees participate in the identification and design of development programmes and projects that aim to assist and benefit them (Galwer, 2002). On the other hand, it is also certainly evident that many projects have inadequately translated the concept of participatory management into practice, hence the involvement of the community in conservation programmes has been found to be lacking in most development projects (Mota, 1992).

Development programmes or projects must be designed to allow full community participation in their planning and implementation (Pangeti, 1992). This promotes a sense of ownership as it is argued that local ownership of the development projects and effective community participation are crucial to achieve sustainable impacts (Erftemeijer and Bualuang, 2002). For some communities this requires the establishment of their interest in the long-term sustainability of projects. Accomplishing this would also require environmental awareness and educational activities to run concurrently with other project activities (Erftemeijer and Bualuang, 2002).

Additionally, any level of community involvement in wetland management requires an appropriate degree of community organization and capability (Claridge and O'Callaghan, 1996). This means that the community should possess certain skills. If not, the communities should work towards equipping their members with the necessary skills. To a certain extent this may require some external assistance, especially with regard to funding relevant initiatives such as community workshops (Claridge and O'Callaghan, 1996).

Effective community participation is described as impossible to achieve in a short space of time (Claridge and O'Callaghan, 1996). Rather, effective community participation in environmental and socio-economic rehabilitation and management is a long-term process that can only be achieved through large-scale programmes with an incremental approach (Claridge and O'Callaghan, 1996; Erftemeijer and Bualuang 2002). This is because effective community participation in natural resources management involves a wide range of activities. Additionally, community participation requires building confidence and understanding within the community. These activities may be time-consuming. Immediate measurable progress in resource restoration is hampered by time spent on these activities (Erftemeijer and Bualuang, 2002). However, this does not necessarily mean that time consuming exercises should be ignored.

2.10.1 Co-management

The term co-management has different meanings (Claridge, 1996). This is mainly because it is often confused with participatory management. Co-management is more

than just participation, which to some degree could mean that people do not co-own decisions taken in a particular activity. Claridge's argument is based on the theory that "involvement leads to co-management". "In reality community involvement in wetland resource management requires the collaboration of all parties ..." (Claridge, 1996:14). From this definition it can be seen that co-management is a particular type of participatory management. The term participatory management is an umbrella term encapsulating co-management (Galwer, 2002).

Co-management refers to the active participation/involvement in resources management by the community of all individuals and groups benefiting or having some connection with, or interest in, a resource (Claridge, 1996; Til and Banda 2002). This definition may sound idealistic as not all individual members of the community participate in projects. In addition, co-management is defined as a "situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources" (Feyerabend, *et al.*, 2000:1). From the above it may seem that the co-management is merely about two or more parties involved in a common goal. The following terms can also be used to describe co-management: 'participatory, collaborative, joint, multi-party or round table management' (Feyerabend, *et al.*, 2000).

This means that each and every party involved has a specific role. It is therefore important that all the parties involved play their agreed roles as this will increase the chances of co-management being successful (Claridge and O'Callaghan, 1996). This means that all the stakeholders/parties involved must share the management responsibilities and authority (Til and Banda, 2002). Achieving a set goal requires that all parties involved work hard. There are six concepts that need to be satisfied to better understand and practice co-management. These six concepts are adaptive management, pluralism, governance, patrimony, management of conflicts and social communication. In addition to the commitment by all parties involved to perform their respective functions, co-management goes beyond that and requires or depends upon the support and co-operation of many factors. These factors may include and are not restricted to other aspects of community life, institutions that exist with communities and rules and regulations that have to be respected (Claridge and O'Callaghan, 1996)

2.10.2 Challenges in participatory wetland management

Most natural resource management organizations and government departments are moving towards participatory natural resource management. Participatory approaches to natural resources management may sound easy to some people. However, this has proven to be not the case as the concept of participatory management has been inadequately transferred into practice (Critchley and Reij, 1995). Mainly, this is because of the challenges and other factors mitigating against participation that are often encountered in the process. Below are some of the main challenges that often hinder the process of achieving participatory natural resources management.

Involving local communities in wetland conservation involves major conceptual and operational challenges and shifts from established procedures (Gujja and Pimbert, 1996). Community participation is neither a quick fix nor is it one more dimension to conservation. It should ideally be the core of conservation, in theory and practice. This means that talking about community participation and not practicing it will be useless. Almost every individual in the field of development recognizes that participation by local people is critical to development projects, particularly when it relates to the sustainability of these projects.

Part of this difficulty is the result of a lack of trained personnel who are sufficiently familiar with the theoretical and practical aspects of working with communities in a participatory manner (Wickham, 1996). This can be a major problem in almost all the community-based natural resources management projects. In most cases people from outside the community do what they believe to be best for the communities they are working with. As a result it has been proven that in most cases local communities are not involved in the planning phase of a project but, rather during the implementation phase where there is need for labor (Claridge and O'Callaghan, 1996; Thole and Dodman, 1996).

Furthermore, most community projects, even pioneering projects, usually begin with top-down mechanisms, whereby independent organizations such as conservation organizations and government departments come up with initial proposals, which they then take to the communities (Thole and Dodman, 1996). In fact, there are few cases where communities themselves have actively drawn up their own alternative plans of

resource management without outside involvement (Thole and Dodman, 1996). Through conventional approaches or mechanisms used, communities are often not able to develop their own priorities and are rarely able to set their own agendas (Chileshe, 1996; Thole and Dodman, 1996).

Lack of environmental awareness also appears to be a challenge in community based natural resources management and natural resources management in general. In most communities one may find that there have not been formal awareness campaigns on natural resources. According to Erftemeijer and Bualuang (2002) these awareness activities need to run parallel to the other activities of the project. Essentially, communities may not realize the need to look after and manage their natural resources effectively if they are not aware of the issues that may be central to better conservation of such resources. If awareness is achieved, the understanding of natural resources conservation and management would grow over time, thus leading to a more realistic and more compatible attitudes and expectations (Erftemeijer and Bualuang, 2002). This should build on local/indigenous knowledge about natural resources, which may be considerable. Awareness does not automatically lead to a change to more sustainable practices, particularly for poor households who utilize resources in an unsustainable way purely for survival (Erftemeijer and Bualuang, 2002).

The building of confidence and understanding within the community which is often very time-consuming, remains a big challenge in natural resource management as it to a certain extent hinders immediate and measurable progress in natural resources management (Erftemeijer and Bualuang, 2002). In most cases communities would have problems with trusting the 'outsiders'. However, to a certain extent community members themselves struggle to trust one another and this also has an impact on how work intended is carried out. Building confidence and understanding between the community members is a long term pay-off because it builds a strong sense of ownership and commitment within the community, and therefore increases the chances of the long-term sustainability of the work carried out in projects (Erftemeijer and Bualuang, 2002).

Another challenge prominent in natural resources management, especially community-based natural resources management, is the fact that communities are not homogeneous. Different people within the community have different and often conflicting interests. Communities "are usually heterogeneous population clusters, stratified into sub-groups with different socio-economic interests" (Shackleton, von Maltitz and Evans, 1998:92). Communities are large with large numbers of existing local organizations, and there are often power struggles between and within these organizations. This demonstrates that working with many groups may be as difficult as incorporating all these organizations into a resource management system. It is often challenging to work with people with very diverse interests and easier to work and succeed with more homogeneous groups (Shackleton *et al.*, 1998).

Weakness within the local governance systems remains another serious challenge in addressing participation by local people in community-based natural resources management. "Local governments and communities face major challenges in dealing with decentralisation and participatory governance, especially in rural areas where local government structures and systems are still evolving" (United Nations Development Programme, 2005:1). There is therefore a need for capacity building for local governance (CBLG) that will enhance capacity in strategic planning, participatory management and community participation, and assist in linking municipalities and community groups such as local traditional leaders, councillors and officials, private sector representatives and representatives from women's groups (Ntsebeza, 2004; Sharma, 1995; United Nations Development Programme, 2005).

Ntsebeza (2004:12) argues that "A key problem facing rural development is that the main driver of this process, local government, is often very weak and poorly equipped to deal with the challenges of a development local government" The problem is further complicated by the fact that the role of traditional authorities within the local government system remains unclear, and there is often a conflict of interests and powers between the different role players in a community. To continue the support that development projects get from traditional leaders, there is a need to understand their roles and how they fit within the decision-making processes. Among other stakeholders, traditional leaders need to be actively involved in development initiatives (De Villiers, 2000). He further identifies a number of guidelines that have

been proved to have the potential of enhancing the sustainable management of wetlands. These guidelines are as follows:

- Choose a dedicated team: There will always be one or two people willing to participate. Not all people understand the importance and the role of wetlands.
- Approach all leaders: where there are no existing leaders external stakeholders can facilitate the processes through which communities can elect their representative in the committee.
- Identify all stakeholders and interested and affected parties: Knowing the uninterested stakeholders will assist in identifying why they are not interested as this may have negative impacts in the long term.
- Identify values and interests of stakeholders: It is necessary to establish the motives that drive people to participate.
- Encourage active participation: this will enhance ownership by all stakeholders involved.
- Form a representative joint management forum/committee: this may be one of the initial steps, depending on the political leadership and socio-economic protocols that exist in a community.
- Be prepared for conflict: have an accepted strategy to handle it. Not everyone will be satisfied with the outcomes of the necessary deliberations.
- Try and assist with stakeholders' needs: Poverty is the main challenge in most rural communities in South Africa. Where possible identify it is necessary to identify survival strategies. External stakeholders must not be viewed as people waiting to gain from the community without actually contributing somehow.
- Never create unrealistic expectations: Benefits from the wetlands may not necessarily be immediate in their nature. People should therefore also understand what the benefits in the long term will be. An example of this is the role wetlands play in times of drought.
- Win trust: this can be fully achieved if people understand the benefits from conserving wetlands. Socio-economic benefits that people get from wetlands often encourage people to look after a resource. It is therefore important to educate at all levels, hence learning from the local people is also critical.
- Note that continuity is important: sudden withdrawal will result in failure. Programmes such as WfWet should be willing to assist, even beyond the end

of their projects. Assistance in this regard may not necessarily be monetary but also liaising with other institutions such as government to support existing initiatives.

- Have strict guidelines: Never tolerate lawlessness as this may compromise the sustainability and management of a resource at stake, in this case, wetlands.
- Monitor and evaluate progress: people may want to see the developments or changes that might have been achieved as a result of their involvement. Monitoring and evaluation will further strengthen relationships between stakeholders. All involved stakeholder groups should devise a monitoring and evaluation strategy to ensure effective collection of results and reporting back. From this people can learn from failure and adapt to ensure success in the future.

There are many challenges in Participatory Wetland Management. If not addressed accordingly, these challenges have a potential to minimise the success of sustainable wetland management. Active community involvement has been identified as a key element required to enhance participatory wetland management. There are useful guidelines listed above as provided by De Villiers (2000).

2.11 Participation: a theoretical framework

The term public participation has many different meanings. This may be attributed to the fact that there are many factors that characterize public participation. Public participation refers to the ongoing process of interaction between service providers or project implementers and civil society, with the aim of improving decision making during the planning, design, implementation and evaluation phases of the project (Slocum and Thomas-Slayter, 1995; World Bank, 1994). Involving local people in all the processes of a project equips people involved with necessary knowledge and skills, as participation of rural communities is understood to be 'the development of the communities' own potential' (Slocum and Thomas-Slayter, 1995).

Different people's interests in a project make it difficult to achieve high participation in such projects. Yet, self-interest and a sharing of the vision of outcomes of management may be prerequisites of community participation. There is often a conflict between the two, as increased shared vision will result to reduced self interest,

and vice versa (Figure 3.1). Ideally, a shared vision is most required for participation to be sustainable.

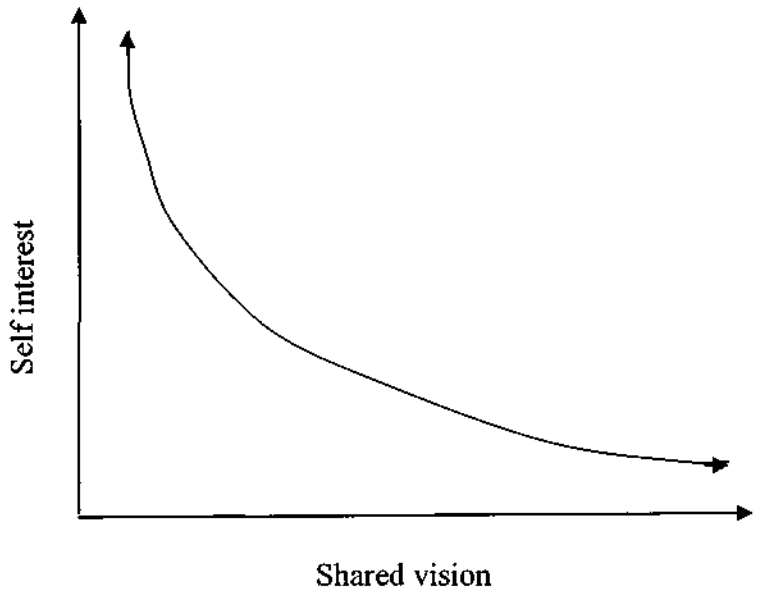

Figure 2.1: Relationship between self-interest and shared vision

There are a number of theories and rationales that have influenced participation. The theories that have influenced participation in different time periods include community development (1940s-1970); political participation (1960s); emancipatory participation and liberation theology (1960s-1970s); populist participation in development and alternative development (1970s-present); social capital and citizenship participation (mid 1990s-present) (Hickey and Mohan, 2005). In the process of changing theories and paradigms there have also been a variety of methods that have been developed. These methods include the popular Participatory Action Research and Participatory Rural Appraisal (Allen, 2001; Chambers, 1997; Dalal-Clayton and Bass, 2002). These approaches were used in the 1960s-1970s to advocate for active engagement with people at grassroots level (Castelloe, *et al.,* 2002; Hickey and Mohan, 2005).

A number of theorists have contributed to the field of participation and development. The literature demonstrates that the 1980-1990 period was significantly influenced by theorists such as Robert Chambers, Arturo Escobar and Wolfgang Sachs. Chambers (1992) focused on the development of participatory methods that have been used in the field of development since the 1960s. Chambers argued that participatory methods

enable local people and communities to take control of their own development as they are actively involved. Escobar's focus among other things, was on development and power relations. In addition, Escobar (1995) focused on development and the marginalization of the poor.

2.12 Summary

In summary, there are many challenges facing community involvement in community-based natural resources management. What is important though is addressing how communities can be more involved. According to Thole and Dodman (1996) communities must be more closely involved in the management of natural resource, especially those that are community-based, and in developing lasting solutions, but they cannot step straight into this role when policies have ignored them for so long. New programmes cannot begin by building centres and providing vehicles, but by building trust and local capacity, by beginning to develop new approaches. This may take time, but there is a need for active community participation in all stages of policy in order for an development strategy to be sought.

Other than the policy development there are other objectives that need to be achieved to address the challenges facing participatory approaches employed in natural resources management (Wickham, 1996). These include both conceptual and operational shifts. First, the examples of conceptual shifts include shifts from wetland conservation as an end in itself to a means of simultaneously improving ecosystems and local livelihoods; from local communities as part of the problem to part of the solution; from people as passive beneficiaries to recognizing them as major stakeholders; from educating the communities to learning from them.

Second are the operational shifts, which argue that they should be informed by the notion that local communities can carry out most, if not all, the planning and management functions normally undertaken by outside 'experts' in a relatively shorter time and at a much lower cost (Gujja and Pimbert, 1996). Empirical evidence from other domains of natural resource management *e.g.* forests, soil and water conservation, and watershed management, highlights the ability of local people to analyze their natural resources and understand the limits to their use very well; plan and manage the resources; come up with solutions for many conservation problems;

resolve their internal conflicts, and impose regulations and resource allocation schemes; select suitable technical options; build required local institutions for monitoring and coordinating inter-household cooperation and group action, and finally negotiate joint management agreements with government institutions (Gujja and Pimbert, 1996).

Chapter Three

Methodology

3.1 Introduction

The collection of primary data requires the selection of appropriate methodologies and techniques that will be used to collect data for the research study. This chapter looks at the methods that were used in this study. The chapter starts by focusing on the general methodologies that were used. Secondly, the methods that will be used are outlined, detailing why these methods were chosen as relevant for the study, and providing the rationale behind the methods. Lastly, the chapter pays attention to the sampling strategy for the study.

3.2 Literature search technique

A literature search was done using secondary sources namely, books, journals, and reputable internet sources. The examples of these reputable internet sources among others include the United Nations Environment and Development (UNED) and the World Bank (WB). There is a wide range of single words and phrases that were used as search words. These include 'participation', 'participation in development projects/initiatives', 'participation in wetlands project', 'participatory wetland management' (*etc.*) These words and phrases were useful in searching for general as well as specific issues pertaining to community participation in general and individual development initiatives. In light of a useful framework for analyzing participation, several frameworks were reviewed (*i.e.*) Michael (1997); Pretty (1995); Parkes and Panelli (2001); and WOCAT (1998). More than 600 books and journal articles were searched. Books and articles on community participation or participation and development were utilized for the purposes of this study.

3.3 Methodologies

Two methodologies have emerged in the social sciences, namely quantitative and qualitative methodologies (Sarantakos, 1993). The quantitative methodology is based on the positivist approach, namely, the use of scientific laws and numbers. This means that quantitative methodologies employ methods that seek the facts or causes of phenomena, which can be expressed and/or analyzed numerically. Additionally, this methodology defines and determines the relationship between categories (Hoggart, *et*

al., 2002). One quantitative method, the questionnaire survey (with closed-ended questions), was employed in this study.

The qualitative methodology, on the other hand, is very diverse and not as explicit as the quantitative methodology (Kitchin and Tate, 2000). The research procedures employed produce descriptive data (Kitchin and Tate, 2000). Qualitative methodologies employ methods that examine phenomena in detail without predetermined categories or hypotheses. Usually, qualitative methodologies rely on three types of methods, (*i.e.*) direct observations, open-ended interviews and document review (Kitchin and Tate, 2000; Sarantakos, 1993). Semi-structured interviews are a hybrid of closed-ended and open-ended survey approaches (Kitchin and Tate, 2000).

For the purpose of this study, the two methodologies were used jointly, (*i.e.*) questionnaire survey and semi-structured interviews. This is more appropriate for some studies than others (Sarantakos, 1993). Qualitative and quantitative methodologies are seen by other writers as two ideal types that can be employed simultaneously in some circumstances (Sarantakos, 1993). The type of information required in this study dictated that the two methodologies could be used simultaneously. The quantitative methods were used to determine the relationship between categories based on numbers (percentages). Qualitative methods were used to capture the explanations provided by the respondents. For this study, the qualitative techniques relied largely on open-ended questions that were used in follow up semi-structured interviews.

3.4 Discussion of data required

The purpose of collecting and analyzing data was to understand the perceptions of different stakeholders on the general and specific issues about the selected wetland rehabilitation projects. These issues included participation by local people (the main focus of this study); the value of the selected case projects to local people; and long term sustainability of the rehabilitated wetlands. It must be noted that the identification of the original objectives that were set in the beginning is done based on the perceptions of stakeholders and with reference to relevant documents rather than through direct observation. Essentially, these are basic issues this research was set to

answer. These issues and the conceptual framework played a key role in determining data collection requirements in the sense that they determined what questions were to be asked and how. Based on the nature of the study it was decided that both qualitative and quantitative data were going to be collected. Some questions needed the respondents to give closed-ended answers on how they felt about the issues and questions raised in the questionnaire. The others required the respondents, through an open-ended format, to provide details on the issues provided.

3.5 Alternative methods of data collection

This section looks at other methods of data collection that might have been appropriate for this study, if they were to be used. Apart from the two methods that were chosen for this study, *i.e.* questionnaire survey and semi-structured interviews, direct observations might have been appropriate for data collection. About four weeks were spent on each site collecting data using questionnaires and semi-structured interviews. There are advantages and disadvantages of direct observations as summarized in Table 3.1.

Table 3.1: Advantages and disadvantages of direct observations

Advantages	Disadvantages
➢ Respondents are not aware of being observed and as a result they behave naturally	➢ It is a passive form of collecting data
➢ There is a reduced likelihood of gathering biased data	➢ There is no opportunity to investigate further

Direct observations require a considerable amount of time to be spent participating in the daily lives of research subjects. Direct observations were not used in this research because of this reason. Four weeks on each site were viewed to be inadequate for the researcher to make meaningful and realistic conclusions using direct observations.

3.6 Methods used in this study

The World Overview of Conservation Approaches and Technologies (WOCAT) framework for soil and water conservation approaches was chosen for this study

(WOCAT, 1998). This choice was made because it was considered an easily applicable framework reflecting many of the elements in the reviewed literature, as well as being designed specifically for characterizing participation in soil and water conservation projects. As will be described further in the results, soil and water conservation was central to the objectives of both of the two case study sites. The WOCAT Framework alone did not provide the context for this research and the processes that were followed to involve local people at each site. Thus, a set of questions in the form of a questionnaire was developed to place the study and the processes followed on each site in context.

The specific survey techniques that were used in the study were questionnaire surveys and semi-structured interviews. These techniques were employed on both the Hlatikulu and Ntsikeni sites. During the questionnaire survey, the same set of questions was used on both sites. In addition, primary documentary sources, such as minutes of meetings and unpublished reports, were also used.

3.6.1 Questionnaire survey

A combination of both closed-ended and open-ended questions was used in this study. Closed-ended questions use rating scales, multiple choice questions and questions that are restricted to yes or no answers. Open-ended questions allow respondents the freedom to construct their own answers to the questions asked (Goodenough, 2003). Using a combination of both formats is the most popular questionnaire option as it allows a variety of answers, while at the same time it limits the possibility of irrelevant answers (Goodenough, 2003). Closed-ended questions were used because they are easy and quick to answer, while open-ended questions were used to elicit the perceptions of respondents in full depth (Nachmias and Nachmias, 1981).

A questionnaire survey was used as a first step, thereby adding depth to the information gathered from all identified stakeholders. About two weeks were spent on each site, where all participants were visited. The first visit, conducted in December 2005, was to Hlatikulu where a total of 19 respondents completed the questionnaires. The second visit, conducted in March 2006, was to Ntsikeni, and a total of 15 stakeholders completed the questionnaires. More than 15 stakeholders had been

identified for each site, but some stakeholders were not available at the time of the survey.

The purpose of meeting participants individually (one-on-one basis) was to ensure that they spoke freely and also to ensure confidentiality. The responses were recorded using pen-and-paper, since some respondents may have felt uncomfortable. Some respondents may feel uncomfortable with the use of audio or visual recorders (Nachmias and Nachmias, 1981). Other advantages that informed the choice of the face-to-face questionnaire include the fact that the researcher knows who answered the questions and that clarifications could be made if a respondent did not understand.

Although effort was made to limit difficulties in the field, some were experienced. The practical difficulties that were encountered in the field included the unavailability of some stakeholders and some stakeholders, particularly in Ntsikeni, stay about 20-30 km from the reserve. The difficulty experienced in finding some stakeholders made it necessary to fax or email questionnaires. The same facilities (fax and email) were used to return the completed questionnaires.

The information gathered using the questionnaire survey was on the nature and level of involvement of the individual stakeholders in the rehabilitation projects, their general perceptions on the projects and their value, and any key issues relating to the projects and participation of stakeholders in the projects. The questionnaires were hand delivered to some identified stakeholders and were emailed to those who were not available for the one-on-one approach and had access to email or fax.

The format and the order in which the questions are presented should be carefully considered (Oppenheim, 1996). The questions that were used in this study (Appendix A) are presented in the order of simpler questions to more detailed questions. The first section of the question looks at respondents' personal information, (*i.e.*) name (optional), age (optional) and gender. The second section deals with wetland importance and the benefits that the questionnaire survey participants get from the Hlatikulu and Ntsikeni wetlands. Section three of the questionnaire focuses on the involvement/participation of different stakeholders in the selected wetland rehabilitation projects, what motivated them to participate, and the value of the

project. The fourth and final section deals with the long term sustainability and management of the Hlatikulu and Ntsikeni wetlands.

Table 3.2: Stakeholder groups that participated in the questionnaire survey

Hlatiku stakeholders	Ntsikeni stakeholders
Farm managers	Nature Reserve Manager
Contract workers	Swartberg Farmers Association
Eastern Wetland Rehabilitation (EWR)	Highlands Wetland Rehabilitation (HWR)
Working for Wetlands (WfWet)	Traditional Authority
Community members	Maloti Drakensberg Transfrontier Project (MDTP)
	Contract workers
	Community members

Where necessary, the respondents were asked to rate the importance of the wetland. Here the respondents had to select one of five options (given below) which they thought best represented their views. Next, they were asked in an open-ended question to explain their rating

Is the wetland important to you? Please rate its importance.

very important	importance	not sure	unimportant	very unimportant

Explain why....

A number of aspects were taken into consideration when phrasing the questions for the questionnaire survey. Particular consideration was taken for content, structure, format and sequence of questions (Nachmias and Nachmias, 1981). The questions were made short and easy, and limited to as few as possible so that the respondents would not find it too onerous to respond to.

3.6.2 Semi-structured interviews

Semi-structured interviews are described as a form of questioning that employs verbal questioning (Kitchin and Tate, 2000). They are controlled by the researcher to avoid bias and distortion, and are related to a specific question or purpose (Sarantakos,

1993). Even though there are predetermined questions (interview guide) that were used, the interviewees might choose deviate from the schedule. This makes it possible to probe points of interest (Sarantakos, 1993; Kitchin and Tate, 2000). Semi-structured interviews are useful because they place emphasis on depth and detail, and the data that are gained through interviewing are often of great value (Hoggart, Lees, and Davies, 2002). Semi-structured interviews were used in this study as a second step in the collection of data following the questionnaire survey. The interview guide was used to assist the researcher to obtain comparable data. This makes interviews appropriate as a means of probing issues to a greater depth following the initial questionnaire survey.

Semi-structured interviews were chosen for this study for a number of reasons. The ability to probe further (in this case following the analysis of the questionnaire survey) into points of interest, allowed the researcher to collect any additional information that might have been of significance in the analysis of results (Bailey, 1978; Hoggart, *et al.*, 2002). Largely, the questions asked in the semi-structured interviews were follow-ups on issues raised in the questionnaire survey analysis. The semi-structured, in-depth interviews were used to cross-check data from documentary sources and questionnaires. The guiding questions for the interviews were divided into three sections. Section A focused on the nature and level of participation by each stakeholder group. Section B dealt with general community participation in the selected wetland rehabilitation projects, while section C focused on the long term sustainability of the selected rehabilitated wetlands.

There are some disadvantages and other considerations associated with the use of interviews. The costs of personal interviews are higher than any other form (Nachmias & Nachmias, 1981; Oppenheim, 1996). There is more time spent conducting interviews, travel time and time spent processing data. It is also important to take other aspects of the interviews into consideration and these include literacy, language and expectations both from the researcher and the respondents and the community whose views they represent. Some of the respondents could read or write, and in Ntsikeni all the respondents spoke IsiXhosa as their first language. To some extent this had a negative impact on communication as there may have been a loss of meaning or context in some cases. Two weeks were spent on each site conducting

semi-structured interviews with respondents who had been identified as 'key informants'.

3.6.3 Triangulation

Triangulation is often of validating different perspectives that could have been collected, all using the same methods (Hoggart, *et al.*, 2002). As a form of triangulation, researchers often combine different methods of data collection when studying a similar social issue and are often to the benefit of the research undertaken (Kitchin and Tate, 2000). Triangulation is therefore useful in social research because it acknowledges that confidence is often best established by collecting and presenting a number of viewpoints (Hoggart, *et al.*, 2002). A combination of methods was employed in this study. The basic questionnaire and interview methods were used from a methodological perspective. Additionally, information from unpublished reports and minutes of meetings was used to obtain a variety of information on the same issues, so as to validate the reliability of information gathered from the questionnaire survey and semi-structured interviews.

3.7 Study sample

Sampling enables the researcher to study a targeted population from the entire population. The type and number of respondents to be included in the study should be taken into consideration when designing a project (Hoggart, *et al.*, 2002; Nachmias and Nachmias, 1981; Sarantakos, 1993). Non-probability sampling was seen as an appropriate sampling approach for this study. This type of sampling makes no claim for representativeness (Goodenough, 2003). Both purposive and accidental sampling methods were employed in this study. Purposive sampling was used for all known stakeholders that participated in the selected wetland rehabilitation projects and have a stake in the holistic long-term management of the rehabilitated wetlands. Accidental or convenience sampling was used on samples that were convenient, but were not necessarily representative of the population at large (Trochim, 2000). This latter sample consisted of community members that were not involved in the rehabilitation projects but could still provide useful information on the issues investigated in this study.

3.8 Data analysis and presentation

The WOCAT Framework is applied throughout the study to analyze the nature and level of stakeholder participation in Hlatikulu and Ntsikeni wetland rehabilitation projects. The results obtained in this study were discussed in relation to a number of topics from the literature. These topics included approaches for enhancing community participation, typologies for participation, challenges in participation, and the nature and level of participation in development projects.

Data analysis allows the researcher to manage the presentation of information collected during the study so as to assess and evaluate the findings and arrive at some valid, reasonable and relevant conclusions (Sarantakos, 1993). This process is relatively clear for quantitative data, but it can be confusing and subjective for qualitative data. It is argued that the majority of qualitative researchers undertake analysis while still collecting data (Sarantakos, 1993). However, in this study, particularly the questionnaire survey, all data collected were analyzed after collection. Following the collection of data using both questionnaires and semi-structured interviews, the data collected were analyzed using relevant techniques described below.

3.8.1 Qualitative data analysis

Content analysis was used to analyze qualitative data. All the responses on each open-ended question were read and re-read to fully understand their meaning. From this a scheme of categories under which each response was going to be categorized, was developed (de Vaus, 1986). All the responses were analyzed because of the relatively small sample this study used (Bernard, 2000). For example, all respondents were asked 'why is the wetland important to you?' A wide range of responses were obtained from this question. All the responses were coded by first identifying how the wetland is important to them. The initial codes used were: drinking water, water storage, wildlife conservation, ecological values, water filtering, harvesting of *ingcobosi*, drinking water for livestock, habitat for animals, aesthetics, water retention, harvesting of wetland plants for sleeping mats and hats, and educational purposes. From this list three possible categories emerged and these included hydrology; conservation; and socio-economic values. Some codes were arranged in more than one category, *e.g.* drinking water and water storage were categorized in the

socio-economic and hydrology categories. The same process was employed for each relevant question. These responses were then quantified to allow graphical representation, *i.e.* to establish how many people said the wetland was important for hydrological, conservation and socio-economic reasons. Data obtained from the follow up semi-structured interviews were categorized into the first set of categories, *i.e.* they were used to further support or discuss the initial responses obtained from the questionnaire survey.

3.8.2 Quantitative data analysis

Quantitative data were handled and analyzed using Microsoft Excel. All responses collected from closed-ended questions were coded and entered into MS-Excel for analysis. Descriptive graphical techniques that are available in MS-Excel, namely, bar charts were used to summarize data as percentages (Warrack, 2003). Some questions required the questionnaire survey and interview participants to rate or order things or issues presented. The different rating options were used as codes and it was these codes that were used to calculate percentages.

3.9 Ethical Issues

This research included interviews, and the greatest challenge was to protect human subjects from harmful or undignified treatment. Therefore, particular attention was paid to the following:

Anonymity and confidentiality: Anonymity and confidentiality may impact negatively on the quality of investigation process. Confidentiality must be assured as the primary safeguard against unwanted exposure (Christian, 2000). These concepts were discussed with the questionnaire survey and interview participants to ensure that they understood what these terms mean. Even some of the respondents themselves said they did not want their names to appear on the final document. They however, did not have problems with providing their names for the purpose of identification during the survey and interview processes. Data collected were handled carefully, so that information about individual people and even institutions cannot be used in ways that would harm or embarrass them.

Informed consent: An informed consent form was compiled for the respondents to read. This document covered issues of benefits, indication of payments, use of recording material, confidentiality and anonymity, the respondents' decision to participate or not to participate, and how gathered data would be disposed of. It was explained to the respondents that they were at liberty not to participate and that they were free to terminate interviews at any point without fear or sanction.

Accuracy: Ensuring that data were recorded and represented accurately is a cordial principle in social codes (Christian, 2000). The combination of research techniques, namely qualitative and quantitative, literature search, and information from unpublished reports and minutes of meetings assisted in the validation of data and the obtained findings.

3.10 Summary

This chapter has covered fundamental issues of research. This study employed both qualitative and quantitative methodologies to fulfill the objectives as set in the introduction. The qualitative and quantitative methods that were used in this study have been described in relation to the methodologies. This chapter has also covered the other fundamentals of research that involves human beings, *i.e.* ethical issues such as anonymity and confidentiality, and informed consent.

Chapter Four

Results and Discussion

4.1 Introduction

The main aim of this chapter is to present the findings of the questionnaire survey that was conducted among stakeholders who were involved in the Hlatikulu and Ntsikeni wetland rehabilitation projects. In the survey a questionnaire and semi-structured interviews were used. This chapter starts by presenting the original objectives of the two selected wetland rehabilitation projects. It is followed by the results on wetland importance; motivation to participate; nature and level of participation by survey participants; the value of the two wetland rehabilitation projects; long-term sustainability and management of the rehabilitated wetlands; strategies and commitment towards achieving long-term sustainability; processes that were followed to involve local people; and recommendations on how the involvement of local people can be enhanced. The presentation and discussion of the results is done separately for Hlatikulu and Ntsikeni.

The two selected wetland rehabilitation projects were implemented by the Working for Wetlands Programme (WfWet). According to the respondents the objectives of the Hlatikulu wetland rehabilitation project (HWRP) were to raise the water table so as to rewet the wetland; deactivate and stabilize the headcut that was eating its way into the wetland; restoration of the habitat for wildlife *e.g.* wattled cranes (*Grus carunculatus*) and to create job opportunities for local people. The majority of the Hlatikulu respondents knew what the objectives of the wetland rehabilitation project were. Most of these respondents said the main objective was to rewet the wetland. Only one respondent from the community members that were not involved in the wetland rehabilitation project had an idea of what the project was about.

According to the Ntsikeni respondents the objectives of the wetland rehabilitation project were to address soil erosion by stabilizing the active soil erosion sites; to plug the drains in the wetland so as to spread water flow; to assist in the burning programme of the reserve; destroying a wattle forest; and poverty relief through the creation of short-term employment for local people.

At both sites, according to respondents there appears to have been a significant degree of achievement of objectives that had been set at the start of the rehabilitation project. In Ntsikeni, "About 75% of the wetland has been rehabilitated with the installation of gabions and cement structures to stop the continuity of headcuts that might have resulted into serious soil erosion and the complete drying out of the wetland" (Gxashi, 2005:1). In Hlatikulu "about 80% of the original objectives set for the rehabilitation project have been achieved (Shaw, *pers. comm.* 2006). It can be concluded therefore that according to respondents the primary objective of the WfWet Programme, namely to rehabilitate wetlands, appears to have been satisfactorily achieved.

4.2 Hlatikulu wetland rehabilitation project

4.2.1 Stakeholders involved

There are four groups of stakeholders involved in the Hlatikulu wetland rehabilitation project that participated in the questionnaire survey. The first group constituted of 11 contract workers including the local contractor (contracted to Eastern Wetland Rehabilitation, who implements rehabilitation on behalf of Working for Wetlands). After the appointment of the contractor, the contractor than appointed his workers. The second group consisted of four farm managers. These are the people who manage the pieces of land owned by the landowners, and also take managerial decisions on their behalf. The third group consisted of five members of the local community. These are the people who were requested to participate in the survey to establish how the people who were not involved in the wetland rehabilitation perceived the project. The final group of stakeholders consisted of three external stakeholders namely, Working for Wetlands, Eastern Wetland Rehabilitation (EWR) and Mondi Shanduka. WfWet is responsible for the implementation of the wetland rehabilitation project. EWR implements the actual work on behalf of WfWet, *i.e.* designs and builds concrete structures. Mondi Shanduka was leasing land, *i.e.* Gamewood and Swarraton, to one farmer, and currently owns plantations in the area. Mondi Shanduka is identified as an external stakeholder because it has an externally based management structure.

4.2.2 Importance and benefits of Hlatikulu wetland

The Hlatikulu wetland is important to the respondents for a number of reasons. First, the survey demonstrated that the wetland has significant importance for conservation. The Hlatikulu wetland supports wildlife such as birds (notably wattled cranes, which

are a critically endangered species) and other animals that live in the wetland. Second, it is of hydrological importance for water storage in the area. Some respondents mentioned that they there will be a drought problem around Year 2020 and that the Hlatikulu wetland will play an important role in storing water for such times. Respondents, particularly the contract workers may have mentioned this as something that was communicated to them by project managers. The respondents also said that besides storing water, the Hlatikulu wetland filters and cleans water. From the following quotes it is evident that the Hlatikulu wetland is not only important to the farmers but also the members of the Nsonge community.

> It [Hlatikulu] stores water from the mountains and retains it [water] for a long period of time (Contract worker, Hlatikulu).

> The wetland is important for its ecological values, water filtering reasons and water tables (External stakeholder, Hlatikulu).

Third, the Hlatikulu wetland has socio-economic importance. Some of the contract workers said their families harvest *ingcobosi* (*Schoenoplectus brachycerus*) to make sleeping mats. They also said the water, that is stored in the wetland is used for drinking water by human beings and animals. Fourth, this wetland provides an opportunity to educate people. The environmental education centre is the main means through which this is achieved. People learn about animals and plants that inhabit the wetland. They also learn about the ecological value of the wetland. There are people from the Nsonge community who assist in the educational excursions that are facilitated by Entabeni Education Centre (EEC), a centre administered by a farm owner.

The nature of the importance of Hlatikulu wetland to the different stakeholder groups questioned is illustrated in Figure 4.1.

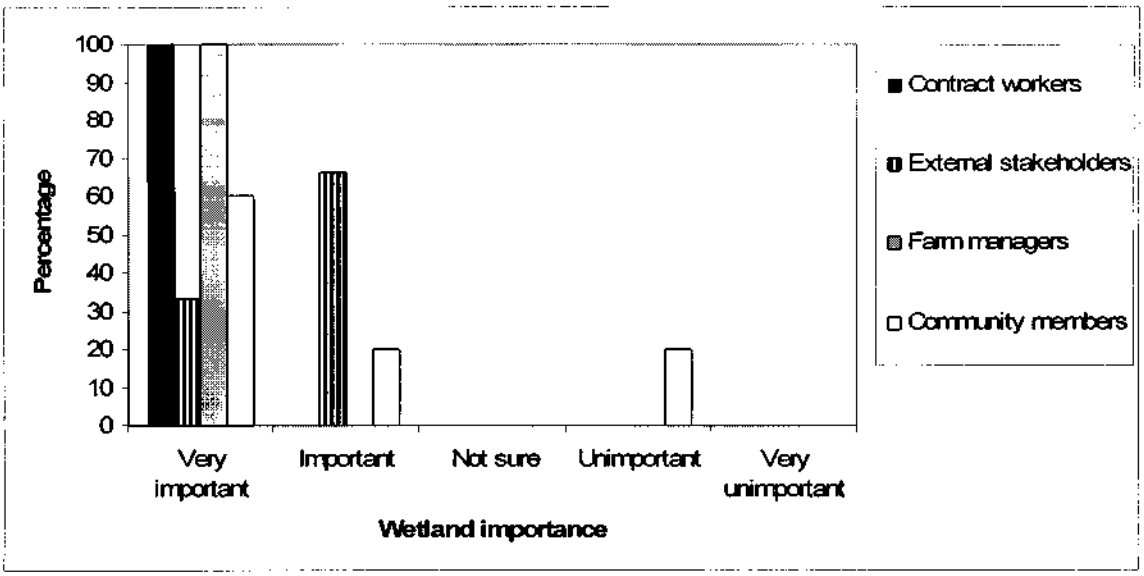

Figure 4.1: Overall wetland importance to the Hlatikulu respondents

Figure 4.2 demonstrates that for a large percentage of the contract workers the wetland is important for conservation. Generally, the survey demonstrated that the wetland is of high importance to the respondents (Figure 4.1). Fifty-four percent said the Hlatikulu wetland is important for hydrological reasons. About 45 percent of the contract workers said the wetland is important socio-economically. All the farm managers indicated that the Hlatikulu wetland is important to them for hydrological reasons. Half of these farmers said the wetland is also important to them for conservation purposes. None of the farmers and other community members felt that the Hlatikulu wetland is important for socio-economic reasons. The external stakeholders shared different views on how the wetland is important or not to them. Thirty-three percent said the wetland is important to them for conservation, the other thirty-three percent said it is important for socio-economic reasons and the last one said there is benefit for her. No one from the external stakeholders felt that the wetland had hydrological importance to them.

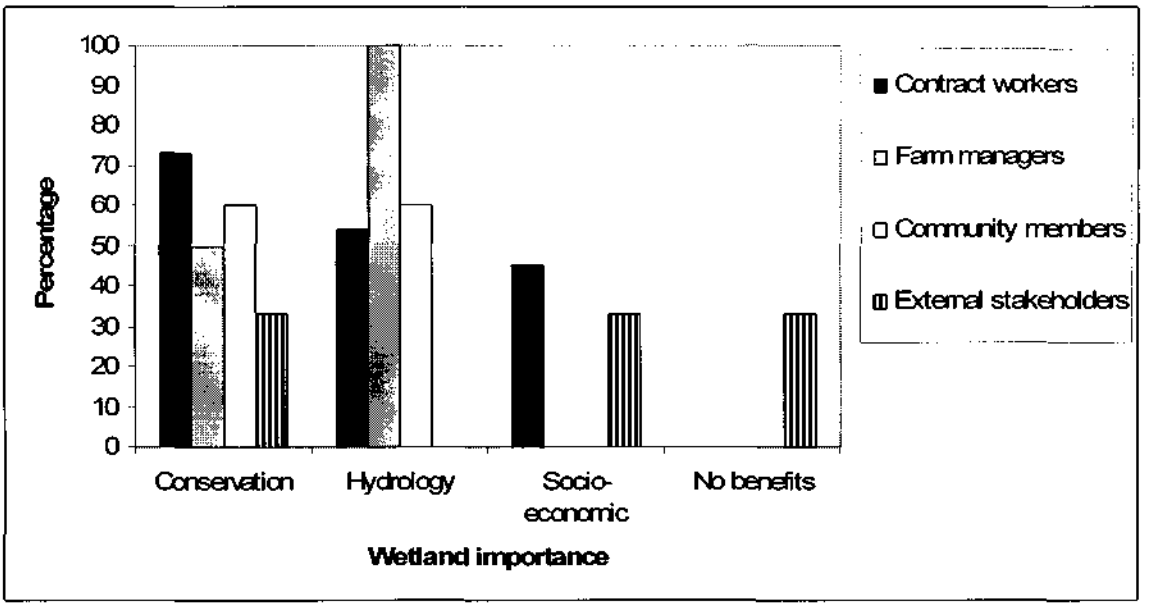

Figure 4.2: Nature of importance of the Hlatikulu wetland

Although, some community members were not involved in the wetland rehabilitation project, they felt that the wetland was important to them. Sixty percent of these community members said that the wetland is important to them for conservation reasons. Also about 60 percent of this stakeholder group felt that the Hlatikulu wetland is important to them for hydrological reasons (Figure 4.2).

The people who said the wetland is important for conservation said that the wetland provides habitat for wildlife such as the critically endangered wattled crane and bittern and as such, carries a high ecological value. Those who said the wetland is important to them for hydrological reasons said the wetland serves to store and filter water. It also provides drinking water for wild animals and the Nsonge community's livestock. The Hlatikulu wetland feeds the Nsonge River which provides the Nsonge residents and their livestock with water, for washing and drinking respectively (McVeigh, 2004). This is particularly the case during the dry season where other sources of water dry up and only the wetland can provide clean water that is safe to drink.

The respondents said the Hlatikulu wetland is important to them socio-economically because people harvest wetland plants to make sleeping mats, brooms, and other craft. According to some respondents, some medicinal plants grow in the wetland, and are used for a wide variety of reasons. This demonstrate that wetlands are important and

valuable for different reasons, mainly because of the resources that they provide and also the vital functions that they are known to perform. The importance of the Hlatikulu wetland to the respondents to a large extent demonstrates the incentive for them to participate in initiatives that that seek to improve the wetland from which they benefit. This is further supported by an indication that some respondents would participate in development initiatives without having to be paid. At the time of conducting this study, there was no information that was available to show that this has happened in the Hlatikulu wetland rehabilitation project.

Although the wetland has proved to be important to respondents, the existence of the wetland is said to have reduced the options for economic development of the Nsonge community because the wetland was fenced to prevent livestock from grazing on the wetland (Shaw, *pers.com.,* 2006). While recognizing that promoting particular benefits for local communities (in the case of Nsonge, grazing land) the state of health of the wetland may be compromised to some extent, it is also acknowledged that local communities are particularly important because they are most directly positioned to influence the state of health of the wetland, either positively or negatively (Kotze and Breen, 2005)

4.2.3 Motivation for Hlatikulu respondents to participate in the project

People participated in the Hlatikulu wetland rehabilitation initiative for a wide range of reasons. These reasons range from employment opportunities to capacity development and networking skills to other interests that the respondents have at stake. A large percentage of respondents from the local Nsonge community participated in the Hlatikulu wetland rehabilitation project because of their own 'other' interests. The 'other' interests that the respondents have at stake include the importance of the wetland to them, love for nature and, animals from the local Nsonge community benefit from the presence of the wetland, *e.g.* drinking water for stock. The following was the reaction by some of the respondents, when asked what motivated them to participate.

> I love nature, so I wanted to assist in bringing that nature back (Contract worker, Hlatikulu).

> The wetland is important to me. It does not matter whether or not I get paid. I have participated in some projects where I was not getting paid (Contract worker, Hlatikulu).

These quotes confirm that some contract workers did not necessarily participate in the project because of employment. However, a high percentage of the contract workers were motivated by employment opportunities that were created by the Hlatikulu wetland rehabilitation project, as confirmed in the following quotes.

> I was not employed before the project came (Contract worker, Hlatikulu).

> I had no job, so this [project] offered me a job opportunity (Contract worker, Hlatikulu).

For these people employment was the reason they participated in the rehabilitation project. This is referred to as active participation (WOCAT, 1998). These quotes may also suggest that the rehabilitation project is addressing the issue of unemployment by creating jobs for some unemployed people (Community Based Public Works Programme, 2005). It is evident in the Nsonge community that the creation of job opportunities for people by outside agencies or government creates dependency (Emmett, 2000). Some respondents participated to gain knowledge and learn more about wetlands. In the process they acquired skills, which may enhance their understanding of wetlands. About 18 percent of the contract workers said they were motivated by some reasons other than employment and vested interest.

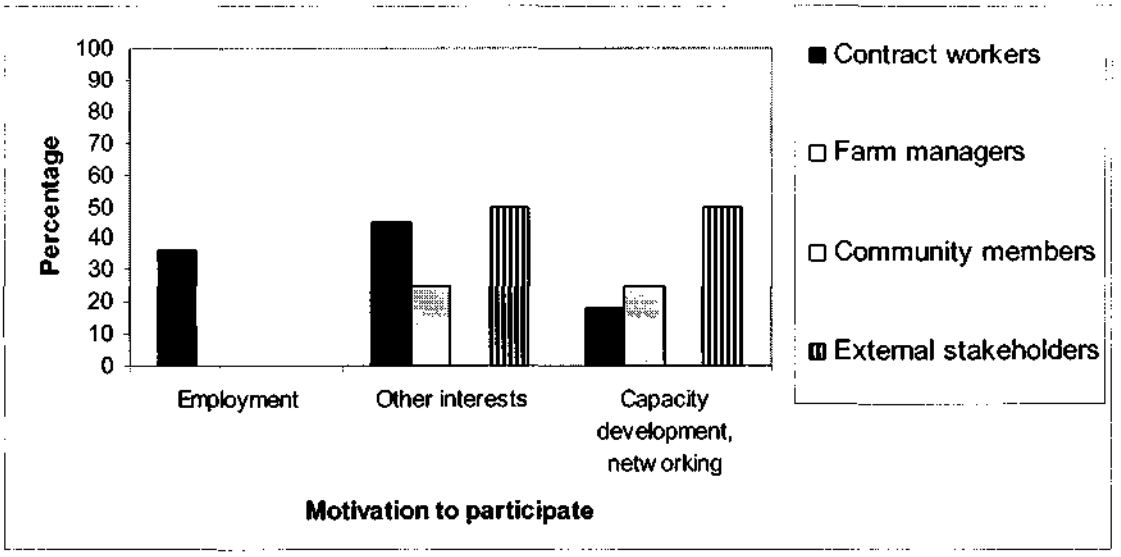

Figure 4.3: Motivation for Hlatikulu respondents to participate

Figure 4.3 demonstrates that no farm managers and external stakeholders were motivated to participate in the project by employment. From the four farm mangers, fifty percent of them said they were not involved in the wetland rehabilitation project. The 'community members' are not reflected on the above figure because they did not participate in the wetland rehabilitation project. The majority of respondents who said they were motivated by their other interests at stake said they would participate even if there was no employment provided. However, another respondent said people only attend meetings if they are going to get something, *e.g.* jobs and handouts. This calls to question the response that workers would participate even if there was no employment. Additionally, this means that the sustainability of projects where there are no handouts or jobs is left to be desired. To some extent, the provision of jobs and handouts encourages societies to become consumers of services rather than producers (Emmett, 2000).

The follow-up interviews revealed that there is generally a lack of motivation or self mobilizing ability to participate from the Nsonge community. Even those that have been part of the project still lack motivation as expressed in the following quote. It appears that some external stakeholders doubt the capacity and motivation of local people. This may have some negative impact on the working relationships, and potentially on the objectives that different stakeholders have.

> Contractors lack leadership, dreams and are not taking advantage of the skills they have acquired (External stakeholder, Hlatikulu).

The lack of motivation and leadership from the contractors may be as a result of growing dependency on government initiated opportunities.

Half of the farm managers were motivated by the other vested interests, *e.g.* game farming and creation of crane habitats. The external stakeholders were similarly motivated as the farm managers. About thirty percent of the external stakeholders were motivated by other interests, *e.g.* that the wetland is one of the priority wetlands in KwaZulu-Natal. About another thirty percent were motivated by both employment and other conservation knowledge acquired through the rehabilitation project. The remaining thirty percent were motivated solely by employment. These are the people who were involved in the rehabilitation project as part of their jobs. Other respondents were motivated by more than one reason. For example, one respondent was motivated by the reason that:

> The wetland is important to me and also my motivation to participate in development initiatives (Contract worker, Hlatikulu).

The quote demonstrates that some people value the wetland as an important asset to them. This motivates them to participate in wetland related development initiatives. Although, no formal assessment was done to ascertain this, it would appear that there are few people in Nsonge who are motivated to participate in development initiatives. Other respondents were initially motivated by the job opportunities that were provided by the project and along the way got motivated by the skills and knowledge, *e.g.* mixing concrete, constructing gabions, importance and the role of wetlands, that the Hlatikulu wetland rehabilitation project provided to them. The Hlatikulu wetland rehabilitation created job opportunities for unemployed local people, but most importantly equipped them with some technical skills that the people can use to make income even after the project is complete.

The respondents said they are looking into using these skills in the future, although this would seem to be contrary with what is presented above. The contract workers

have attended training workshops on health and safety, financial management, business management, plastering and other skills. When asked how they hoped to use these skills in the future when the project ends, none of the contract workers knew what they wanted to do. There is an indication that the EPWP may need to facilitate opportunities that will allow project employees to utilize the skills that they have acquired from the project. This will enhance the sustainability of the employment opportunities as expected by the government (Community Based Public Works Programme, 2005).

4.2.4 Nature and level of participation in Hlatikulu rehabilitation project

The nature and level of participation of respondents who participated in the Hlatikulu wetland rehabilitation project was determined by what each respondent did during their involvement. For example, some contract workers said they were involved in the initiation phase of the project, but only through a community meeting that was called. At this meeting, all those who were present were informed about what was to happen. All the contract workers participated in the implementation of the project, where they constructed and installed concrete structures that involved physical labour such as mixing concrete, pushing a wheelbarrow, fetching water, and digging. The type of work that they were doing was informed by the plans from the project managers and contractor and they were not involved in the planning of rehabilitation measures. Although the majority of the contract workers were solely involved in the implementation phase, some were also passively involved in the initiation phase. Mostly, in the initial phase, local people are told by project managers about what was to happen. This was also evident in the Hlatikulu wetland rehabilitation project. Table 4.1 shows the nature and level of participation of respondents in the Hlatikulu wetland rehabilitation project.

Table 4.1: Nature and level of participation by Hlatikulu respondents

Types of participation	Phases of the project				
	Initiation	**Planning**	**Implementation**	**Monitoring**	**Evaluation**
Passive participation	[CW]	[EWR]	[CW] [EWR]	[EWR]	
Participation in information giving	[MS]	[FM] [MS]	[FM] [EWR] [MS]	[EWR] [MS] [FM] [WfWet]	[MS] [WfWet]
Participation by consultation	[EWR] [FM]				[FM]
Participation for material incentives	[EWR]	[EWR]	[CW] [EWR]	[EWR]	
Self mobilization	[FM]	[WfWet]	[WfWet]	[FM]	

Source: WOCAT (1998) Note: FM=Farm Managers; CW=Contract Workers; WfWet=Working for Wetlands; EWR=Eastern Wetland Rehabilitation; MS=Mondi Shanduka

The nature and level of participation by external stakeholders and some of the farm managers differed from that of the contract workers. The external stakeholders and some local farmers participated in the very early phases of the project, *e.g.* initiation and planning. The external stakeholders participated through consultation, in information giving, and for material incentives. Eastern Wetland Rehabilitation (EWR) together with a landowner facilitated the site visits and the community meetings that were called as part of initiating the project and also facilitated the installation of erosion control structures.

Some farm managers were involved from the initiation phase as they are the ones who invited Working for Wetlands to come and work on rehabilitating the wetland sections which fall within their properties. The farm managers are often consulted for monitoring and evaluation that is done by Working for Wetlands on a regular basis. This is particularly important for the broader management and long term sustainability of the rehabilitated wetland. Table 4.1 confirms some arguments presented by different writers, that project managers are usually the only people who get involved

in the early stages of the project, such as initiation and planning (Pretty, 1995; Michael, 1997; WOCAT, 1998).

Table 4.1 shows that there is a limited degree of self-mobilization in Hlatikulu. The farm managers developed contacts with external institutions (in this case WfWet) for resources and technical advice. Developing contacts with other institutions is, among others, a characteristic of self mobilization (Michael, 1997; WOCAT, 1998). It should be noted, however, that the Nsonge community members were not actively involved in the process of developing contacts with external institutions. This may be because of the nature of the tenure system that is in place, *i.e.* the land on which the rehabilitation work was undertaken is privately owned. As a result of the tenure system, the Nsonge people may not be considered influential in decision-making. The lack of influence that Nsonge people have on the management of the wetland may have a negative impact on their nature and level of participation in the broader management and sustainability of the wetland. The broader management and sustainability of the wetland may be compromised as a result of the lack of participation of local people. This is based on the assumption that if the level of co-operation between all involved stakeholders is high, then the likelihood that the wetland is well managed will be increased (Kotze and Breen, 2005).

It is however acknowledged that there is no structure or authority through which engagements with the community may be channeled. There is no *Inkosi* (local name for Chief) or *Izinduna* (local name for headmen) as the heads of the Nsonge community. Even at the time when this research was conducted there was no evidence to show that at least such authorities or structures were evolving. This poses major challenges in the development of rural communities (United Nations Development Programme, 2005). Challenges in this regard are further complicated by the fact that the roles of the traditional authorities are to some extent unclear.

4.2.5 Process of involving local people

In the Hlatikulu wetland rehabilitation project, a community meeting was one of the strategies that were used to involve local people. Sixty-four percent of the contract workers and twenty percent of the community members indicated that a community meeting was called to invite local people into the Hlatikulu wetland rehabilitation

project. Only a small percentage of the contract workers disagreed and said that no such meeting was called. Based on Figure 4.5, it can be seen that there was a wide range of feelings about the process that was followed regarding community participation. Although some respondents indicated that no meeting was called, responses across the different stakeholder groups confirmed that a meeting was called.

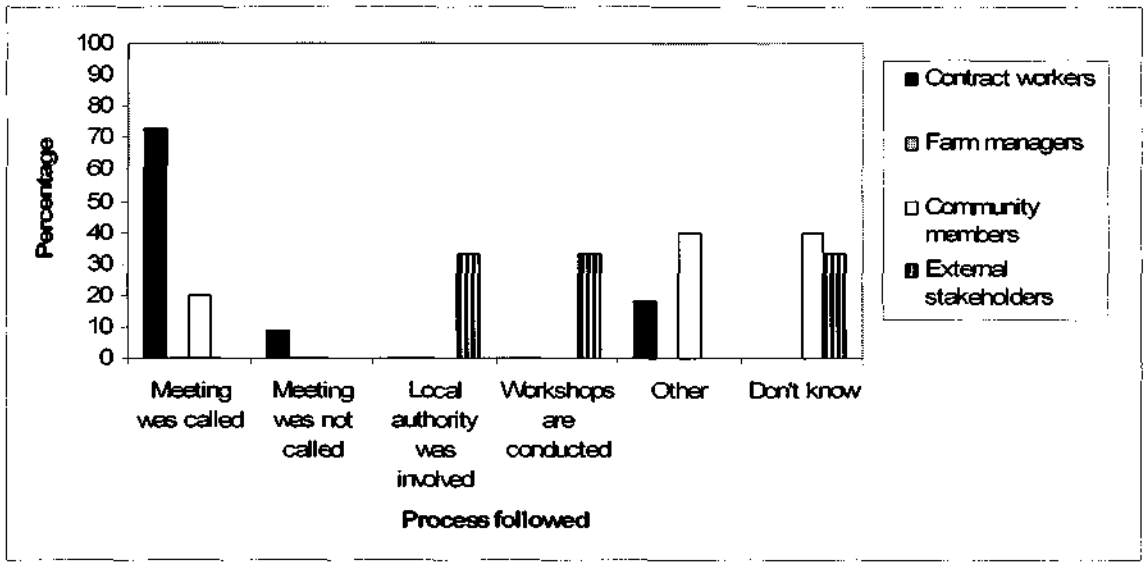

Figure 4.4: Processes for involving local people in the Hlatikulu rehabilitation project

Some of the external stakeholders said the process involved the local authority (from Hlatikulu/KwaMkhize) and that workshops were conducted before the rehabilitation project started. The people who said a community meeting was called to invite local people into the project highlighted that all present had an opportunity to present their views. The meetings were organized with the farmers first and then with the Nsonge community, where a contractor was appointed. The follow-up interviews confirmed that a community meeting was called, although it would appear that very few people attended this meeting.

> A meeting was organized and about one hundred people attended that meeting (Farm manager, Hlatikulu).

> The message was sent through the school [children] and this has worked (Contract worker, Hlatikulu).

Although no minutes of meetings were reviewed, responses from all stakeholder groups confirmed that a meeting was used as a mechanism to involve local people (Figure 4.4). The process of engaging the community was a difficult one under the circumstances highlighted in section 4.3.4. Attempts to get a representative from the community to participate in the project advisory committee were unsuccessful as a result of these conditions. It further needs to be noted that, although a community meeting was used as a mechanism of Nsonge community involvement, it was a difficult process as highlighted by one external stakeholder.

> "It was difficult to work or engage the community. It is even more difficult to report to the community" (External stakeholder, Hlatikulu).

This quote demonstrates that it is difficult for government and external stakeholders to work in the Nsonge community as a result of the lack of organization in the community. Beyond the mechanisms of community involvement, it is the heterogeneity of communities that makes it even more difficult to work with communities, in general (Shackleton, *et al.*, 1998; Shaw, *pers.com.*, 2006). The same people who said a community meeting was called indicated that not everyone attended the meeting. One contract worker (Hlatikulu) said "it is hard to involve everyone, and some people lost interest because they were not employed".

Except stating that a meeting was called, some contract workers mentioned other things as parts of the process of involving local people into the project. These people said the process was good in the sense that it provided training for local people. They also said the process included the local contractor and employees. The follow up interviews revealed that the contractor was granted the prerogative to appoint his workers according to the severity of poverty. This may suggest that local people may not have approved if the contractor was someone not from the Nsonge community. The local Traditional authority from Hlatikulu (not Nsonge) located about 10-15km from the wetland was involved. What is interesting to note, is that this authority has no power in the decision-making processes that pertain to the developments taking place in Nsonge. The challenges that exist in Nsonge, in as far as the organization of the community is concerned, suggests that there is a need to form a regulatory structure or body through which the necessary engagement can be channeled.

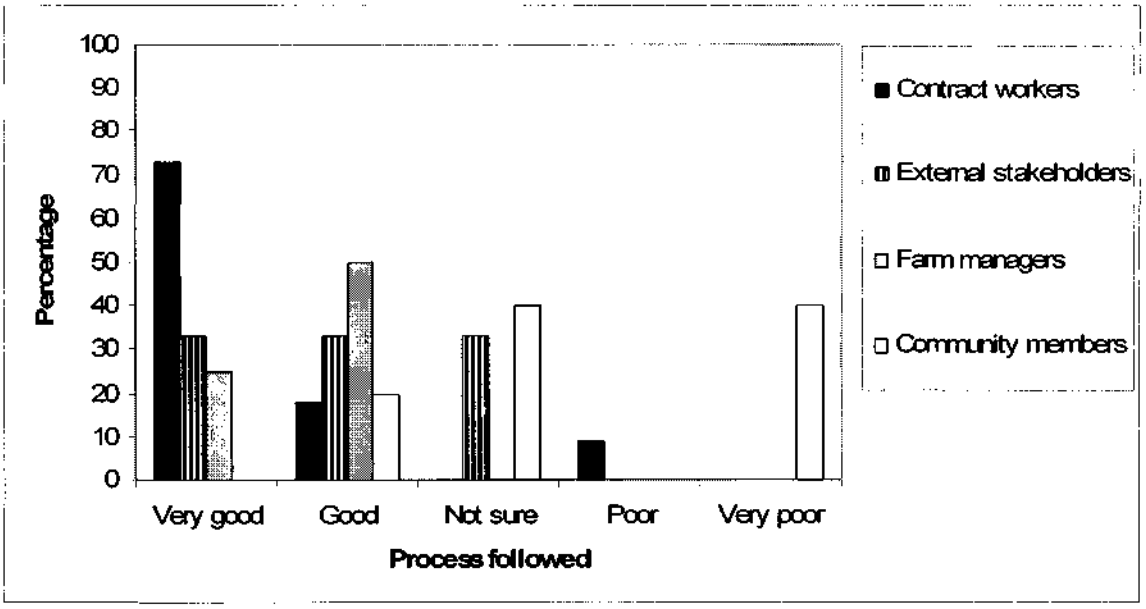

Figure 4.5: Nature of the process followed to involve local people

The majority of the respondents said the process that was followed to involve local people was generally good (Figure 4.5). More than three-quarters of the local contractor workers said the process followed to involve local people was very good, while about 50 and 25 percent of the external stakeholders and farm managers respectively felt the same way. Half of the external stakeholders and farm managers, respectively, said that the process that was followed was a good one. Approximately 20 percent of the contract workers and community members said the process was good. Some respondents were not satisfied with the process of involving local people with about 10 percent of the contract workers saying it was poor and about 40 percent of the community members saying it was very poor. This means that the majority of the community members considered the process to be very poor or were unsure. This contrasts with all of the other groups where the majority considered it good or very good.

Another forty percent of the community members were not sure/did not know about the process that was followed to involve local people. None of the external stakeholders and farm managers said the process was poor or very poor. Different mechanisms, *e.g.* a community meeting and sending the message via the school children, were tried in order to involve local people in the rehabilitation project, even though some said nothing was done. Each mechanism that was used has advantages

and disadvantages in term of encouraging participation of local people. Mostly, it is the local conditions that dictate a useful mechanism at a particular time. Involving local people is not an easy option as it involves compromise, sharing power, learning to cope with diversity, adjusting organizational cultures, understanding different styles of work, handling conflict constructively, and adjusting priorities and timetables (Bass and Shah, 1994; Joseph Rowntree Foundation, 2006). These take time to achieve but can be beneficial if persistence prevails. Involving local people also pays off in the long term because it strengthens the sense of ownership and commitment within the community, and increases the chances of the long-term sustainability of the work carried out in the form of projects (Erftemeijer and Bualuang, 2002).

4.2.6 Alternative strategies for enhanced and sustainable local participation

The respondents suggested a wide range of strategies for enhancing local participation in the communities within which the wetland rehabilitation projects took place. Some survey participants suggested, as a recommendation, that jobs should be rotated. They say this will mean more people getting jobs and also acquiring the necessary skills. One respondent recommended that,

> There has to be a way of developing strategies or incentives that will be used to motivate the local authorities to be of assistance to the project (Contract worker, Hlatikulu).

The development of relevant strategies in turn, will mean more involvement of not only the local people but the local authorities, in development projects. Local authorities are critical in development and therefore must be equipped with the necessary skills to make sure that they become useful in local development initiatives (Ntsebeza, 2004). Additionally, motivation of local authorities will mean further mentoring and gaining of knowledge in understanding projects better, in this case wetlands and their eco-services. To achieve a harmonized way of rotating jobs, one survey participant suggested that the starting point should be making sure that a community is a "unit", *i.e.* local people understand what one another's needs and problems are. This may be difficult to achieve as communities are argued to be heterogeneous (Shackleton, *et al.*, 1998). This can also be very impractical as a result

of the different agendas that may arise from a community. People will always have different intentions, political agendas, and economic status.

Other respondents suggested that strengthening local participation requires project training sessions on relevant issues (in this case wetlands), additional mentoring and incentives for sustainable long-term management of projects, and improved communication at all levels. It is important to educate at all levels, and a dedicated committee that believes in development can facilitate the necessary sessions in which relevant issues are discussed (De Villiers, 2000).

"Communication has improved particularly between the farmers themselves" (Farm manager, Hlatikulu). The respondents also suggested that to ensure that all potential stakeholders are aware of developments taking place, such developments need to be advertised through community forums *e.g.* local municipal offices, schools, clinics and hospitals, *etc.* In this way the broader local people, other than just the farmers, can get a chance to get involved and voice their concerns where and when necessary. There is a need to develop the potential of local people to understand their own development so as to enhance participation (Soriano, 1986). Many of the challenges in development projects result from poor communication between government, project implementers and local communities (Dalal-Clayton and Bass, 2002). Usually, communication from outside staff (both government and project implementers) to local communities is at a standard not acceptable to at least a certain percentage of all community members. It is even more difficult in Nsonge, where there is a lack of authority- either Traditional or elected structures.

Shackleton *et al.* (1998) have shown that the approaches or mechanisms utilised in a development initiative to involve stakeholders may not satisfy everyone equally; this has occurred at Hlatikulu. This is particularly the case when people have very different and diverse objectives on what should and should not happen. It is indicated above that some people lose interest in projects simply because that they do not get employment or handouts that may potentially motivate people to participate in development initiatives.

It is necessary to adopt another strategy to enhance and sustain local participation. These improvements revolved around establishing or forming a regulatory body or committee (as discussed above) through which the necessary engagements and announcements may be made. Currently, the school is used as a central point, where school children are used as messengers. This is not necessarily the best way but it is useful as most parents from the community send their children to the Nsonge Primary School (NPS). The elected and dedicated committee, through using participatory methods such as the PRA methods, can facilitate the processes that will ensure that the local community takes control of their developments and are also actively involved. Active involvement of local people enhances project sustainability and proficiency (Chambers, 1983; Hickey and Mohan, 2005).

4.2.7 Hlatikulu Wetland rehabilitation project value

The Hlatikulu rehabilitation project was of high value to the stakeholders who participated in the questionnaire survey (Figure 4.6). All the contract workers felt that the project was very valuable, with a much lower proportion of the farm managers, external stakeholders and community members expressing a similar opinion. None of the respondents felt that the project was of little or no value. Even though the other community members who were not involved in the project felt that the project was valuable in one way or another, they still valued the project less than the other groups. Only twenty percent of this group was not sure whether the project was valuable or not. This twenty percent did not know anything about the rehabilitation project. The Hlatikulu wetland rehabilitation project created job opportunities for local people.

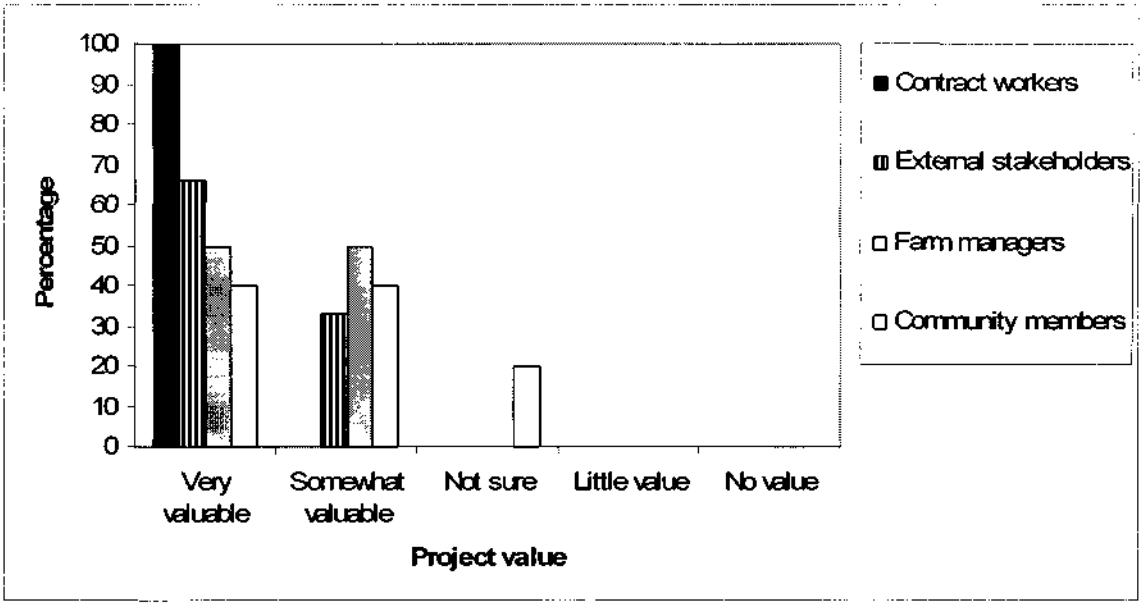

Figure 4.6: Value of the Hlatikulu rehabilitation project

The different stakeholder groups varied according to the particular types of value they considered important (Figure 4.7). All the contract workers said the project had a socio-economic value to them. The study demonstrated that the creation of job opportunities for unemployed local people was the principal socio-economic value. About 20 percent of the contract workers' group acknowledged the impact that the project has on the hydrological functioning of the wetland, *i.e.* water spreading as a result of the rising water table. The project also showed some value in that the wetland is regenerating, which means that plants and animals that depend on wetlands can be saved. A total of fifty-five percent of the contract workers said the project had great conservation value.

The farm managers felt that the project was important from conservation, socio-economic and hydrological perspectives. Seventy-five percent of the farm managers said the project has had a conservation value, while fifty percent said the project was of socio-economic value. All the farm managers said the project had value from the hydrology perspective.

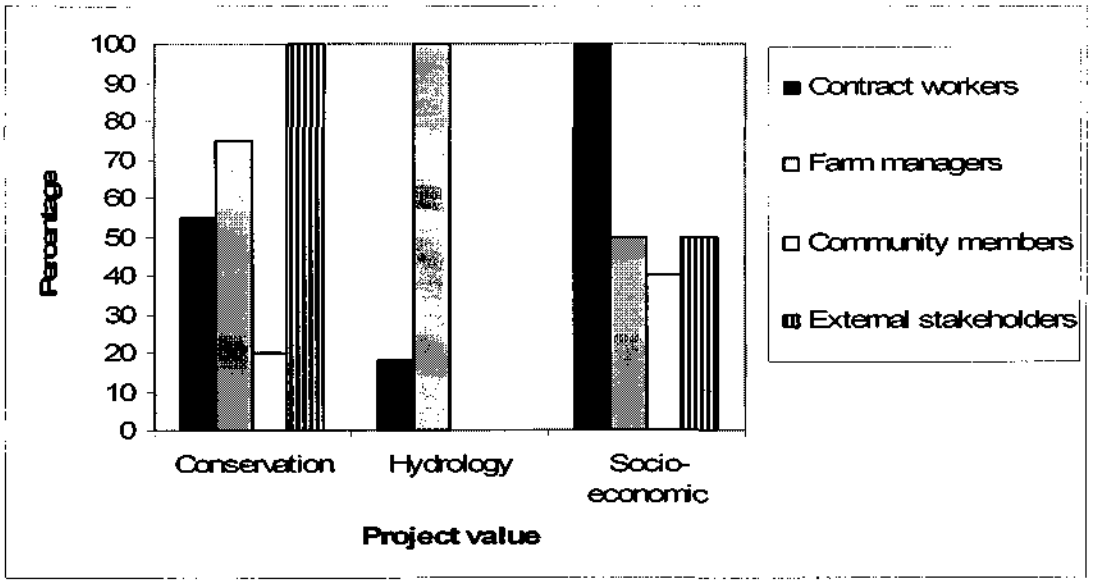

Figure 4.7: Nature of value of the Hlatikulu Wetland rehabilitation project

All external stakeholders felt that the project was of great conservation value, while only fifty percent said the project was of socio-economic value. No external stakeholders felt that the project had a hydrological value. The interviews revealed that the project has addressed and hopefully will continue to address the key management issues that face the wetland. Gully erosion and drains cutting through the wetland were the main threats to the wetland (Grenfell, *pers.com.,* 2005). The rehabilitation project has assisted in stopping these gullies and blocking the drains to subsequently spread the water across the wetland. The project has hopefully changed the attitude among farm managers and contract workers on the importance and benefits of wetlands as mentioned by some respondents. From responses such as those given below, it appears that the respondents have learned different things that may have changed their attitudes towards wetlands and their benefits.

> All the farmers in the valley are going conservation and recognize that the wetland is important for a number of reasons (Farm manager, Hlatikulu)
> Initially people were confused and the attitude of farmers has changed from 'dam idea' to conservation (External stakeholder, Hlatikulu).

> I can now explain to other people why and how wetlands are important (Contract worker, Hlatikulu).

If the attitude among stakeholder has changed, as demonstrated in the above quotes, it means that these stakeholders are likely to work together for the better in the future. This further requires ongoing awareness among stakeholders as this will allow for growing understanding of natural resources conservation and management (Erftemeijer and Bualuang, 2002). Once the understanding has grown, participation is likely to improve. In light of an attitude change, it is acknowledged that increased awareness does not necessarily lead to a change in the way that people behave. The above quotes also suggest that people who have been involved in the project, such as this contract worker, can be used as 'peer educators' so that they can utilize their knowledge from participation in the project and spread it to those in the community to enhance understanding and awareness. The community members who were not involved in the wetland rehabilitation also expressed their views on the value of the project. Twenty percent of these community members said the project had some conservation value. Forty percent said the project had a socio-economic value. None of the community members said the project was of value from a hydrology perspective.

The majority of people who said the project had a great socio-economic value highlighted the employment opportunities that were created for local people. Development projects such as the wetland rehabilitation project provide an alternative source of income for local people. They also highlighted that a lot of people in the Nsonge community are unemployed, and that the wetland rehabilitation project employed some of these people. Those who said the project had a conservation value mentioned that the wetland is slowly regenerating, habitat is being created, and that plants and animals found in the wetland can be saved. Some respondents said the project was of value because of a combination of reasons.

Clearly, people who participated in the wetland rehabilitation project benefited in the form of job opportunities. Whether they also benefited in such a manner that they are able to help themselves remains to be seen. "If participation is to be a self-sustained process, one that will not wither away once the development team departs, the people have to be taught certain skills" (Ayee, 2000:14). It may however, be argued that the skills that these people acquired may not necessarily enhance their will to participate and their self-mobilizing ability. There are skills identified as major skills which can

help in building the local capacity for participation. These are managerial, internal organizational management, economic resource management, technical and political skills (Ayee, 2000). The contract workers were largely equipped with the technical skills, *e.g.* concrete mixing and constructing concrete structures, with potentially only the contractors acquiring the managerial skills. Even though the contract workers attended some training workshops, *e.g.*, finance management, health and safety, it is acknowledged that equipping people with some of the 'major' skills may be outside the WfWet scope but WfWet can still liaise with other organizations and government departments to facilitate the necessary developments. Furthermore, training and skills development may include among other skills, contractor development, business management, and leadership skills. These are particularly important in areas such as Nsonge where there is a very low self-mobilizing ability and motivation to attend and participate in meetings.

4.2.8 Rehabilitation of Hlatikulu wetland as part of the long term sustainability and management of the wetlands

To ensure that the rehabilitated wetlands are sustainable, there are a number of things that the respondents suggested need to be done. At Hlatikulu there is generally no clear or overall approach to collect monitoring results to ensure the long-term sustainability of the wetland and its management. There are no resources specifically allocated for the management of the wetland (Shaw, *pers.com.*, 2006). This increases the likelihood of the wetland being ineffectively managed (Kotze and Breen, 2005). There is, however, a management plan that is currently being compiled, and there is *ad hoc* monitoring and evaluation of the completed work. The management plan that is being compiled is for the entire valley and not just the wetland, and has not been implemented as yet. The focus of the Hlatikulu Integrated Management Plan (IMP) at this stage is on conservation threats and priorities. It does not pay any particular attention to or single out the wetland (Shaw, *pers.com.*, 2006). Potentially, this will increase the prioritization of the wetland as part of the holistic management of the valley.

There are also ongoing meetings, discussions on and monitoring of work done and problems that the WfWet rehabilitation project experiences. Farm managers also do monitoring on structures and communicate with WfWet if there are any problems. In

fact "once WfWet has finished with a structure, it becomes the responsibility and obligation of the farmer to maintain the structure" (Dlamini, *pers.com.*, 2006; Shaw, *pers.com.*, 2006). This means that management at Northington farm and Mondi Shanduka should be responsible for the maintenance of structures built on Northington and Swarraton farms respectively. None of the farm managers disagreed with this arrangement. Instead, they said WfWet can assist where they can, but are not necessarily compelled to do so.

There is also ongoing eradication of alien plants that pose a threat to the rehabilitated wetlands. Clearing is funded and carried out by the landowners, rather than by outside agents such as Working for Water, which is positive from a long term sustainability perspective. This is evident in the following quote.

> I am trying to get GIS data that will help me to monitor alien plants on the wetland (Farm manager, Hlatikulu).

According to some respondents, wattle trees, pine plantations and bramble are the main threats to the health of the wetland. The quote reveals that there is not a formal monitoring system in place. There is therefore a need to monitor and curb these through appropriate mapping and bio-chemical techniques. These monitoring techniques would provide information on the extent to which the alien plants are occurring and potentially destroying the wetland. Mondi Shanduka; the farmers and representatives from the Nsonge community need to devise the necessary mechanisms to curb the potential destruction of the wetland.

Participation in the rehabilitation project by many survey respondents (even though employment-based for some) has increased their commitment to biodiversity. Some respondents indicated that they now understand and respect that there are animals and plants in the wetland that are important for conservation and biodiversity reasons. The understanding of these aspects is not enough alone, but also requires ongoing commitment from all the stakeholders. Through the rehabilitation, many respondents have learned a lot about wetlands and birds that live in wetlands. A closer relationship between private farmers and Nsonge people will also strengthen the potential for long term sustainability and management of the rehabilitated wetlands. It is true that the

majority of the land is privately owned, however, the Nsonge community can still be actively involved in the decision-making processes that are likely to affect their livelihoods. The Nsonge community has lived in the area for years, and for land owners and government to ignore them, might in the long term have negative impacts on how local people view development initiatives in the area, including those on privately owned land. In summary the strategies, according to respondents that need to be adopted include ongoing and meaningful monitoring of the rehabilitated wetland; discussions of relevant issues; and eradication and monitoring of alien plants. The participants of the questionnaire survey also expressed their views on the likely effectiveness of the suggested strategies towards enhancing long term sustainability and management of the rehabilitated wetland (Figure 4.8).

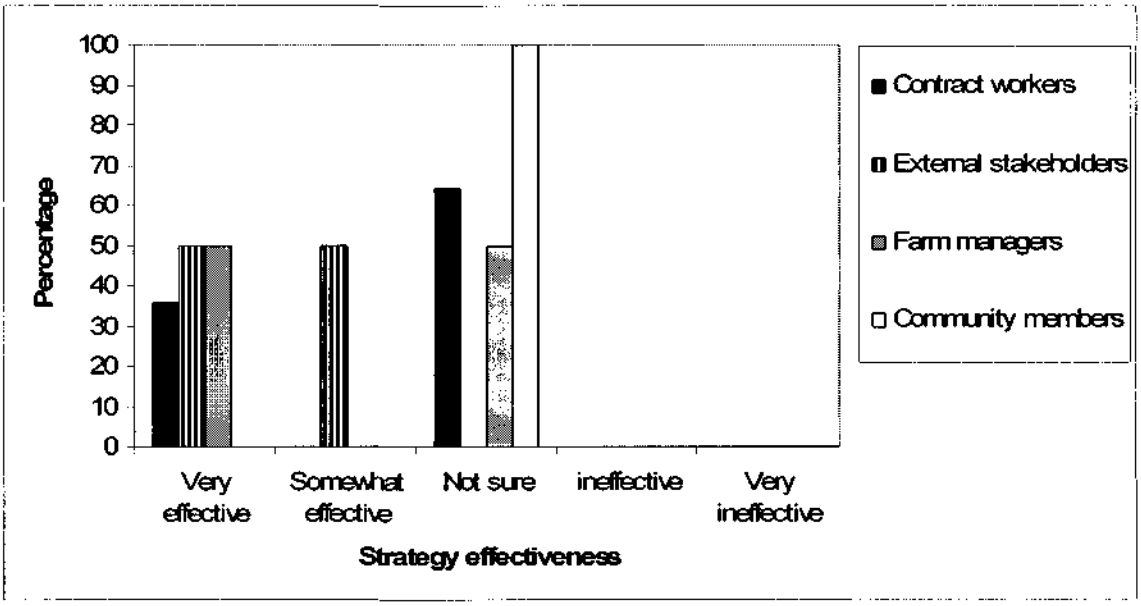

Figure 4.8: Effectiveness of long-term management strategies for Hlatikulu Wetland

In Figure 4.8 it is apparent that a significant percentage of the stakeholders felt that the above mentioned strategies are likely to be very effective. From their explanations, it appears that these strategies will only be effective if there is commitment from all sides, *i.e.* the external and the local stakeholders, such as when project managers come to inspect the completed work, they should provide contract workers and their employees with a chance to learn from their successes and challenges. A smaller percentage felt that the suggested strategies are likely to be somewhat effective without actually providing any reasons why they felt this way.

Figure 4.8 shows that all the community members were not sure of how effective the strategies were going to be. This may be due to the fact that they were not involved in the project and they did not even know the strategies themselves. The doubt that community members have about the suggested strategies will potentially make the community members less committed to the project. This suggests that there is a lack of confidence and understanding that community members have about the sustainability of the project (Erftemeijer and Bualuang, 2002).

The majority of the contract workers were also not sure about the effectiveness of the strategies, with half of the farm managers expressing a similar point of view. Across all the stakeholders groups, none of the respondents felt that the strategies were likely to be ineffective or very ineffective. Evidently, different stakeholders have shown commitment towards the long term management and sustainability of the wetland. The discussions between the land owners and Maloti Drakensburg Transfrontier Project (MDTP) have identified the need to engage local people and make sure that they understand what happens in the area. More community meetings may be organized to enhance the level of participation by the majority of people who live in the area. This will require strong organization from the Nsonge community.

4.3 Ntsikeni Wetland

4.3.1 Stakeholders involved

There were three groups of stakeholders involved in the Ntsikeni wetland rehabilitation project that participated in the questionnaire survey. The first group consisted of 10 contract workers including the two local contractors [contracted to Highlands Wetland Rehabilitation (HWR)]. The two contractors came from the two Traditional authorities neighboring the Ntsikeni Nature Reserve, namely Mabandla and Malenge. Following the selection of the contractors, the contract workers were selected using a 'pick a card' system. The second group consisted of seven other stakeholders. These stakeholders included the management authority for Ntsikeni Nature Reserve, Highlands Wetland Rehabilitation, The Traditional Authority, Research consultant, Maloti Drakensburg Transfrontier Project, and Swartberg farmers. Working for Wetlands (WfWet) did not respond to the request to participate in the survey. The Ntsikeni Nature Reserve is where the wetland is located. The management of the reserve has a responsibility to conserve the wetland. Working for

Wetlands forms part of the Expanded Public Works Programme (Dini, 2005). There were two representatives from Highlands Wetland Rehabilitation who participated in the questionnaire survey. The Traditional Authority consisted of the two local authorities (Malenge and Mabandla) and both of them participated in the study. Maloti Drakensburg Trans-Frontier Project is involved as a facilitator in the management plan of the reserve. Swartberg farmers adjoin the Nature Reserve and are directly affected by the decisions taken in the Reserve. The third group consisted of 9 community members who did not participate in the wetland rehabilitation project.

4.3.2 Ntsikeni wetland importance and benefits

The results of the Ntsikeni questionnaire survey showed that the wetland is important to the majority of the survey participants for hydrological, conservation and socio-economic reasons. Although the majority of the respondents confirmed that the wetland is important to them, some respondents said the wetland was either unimportant or very unimportant to them (Figure 4.9). From this figure it can be seen that the contract workers appear to see the wetland as being much more important than do the general community members.

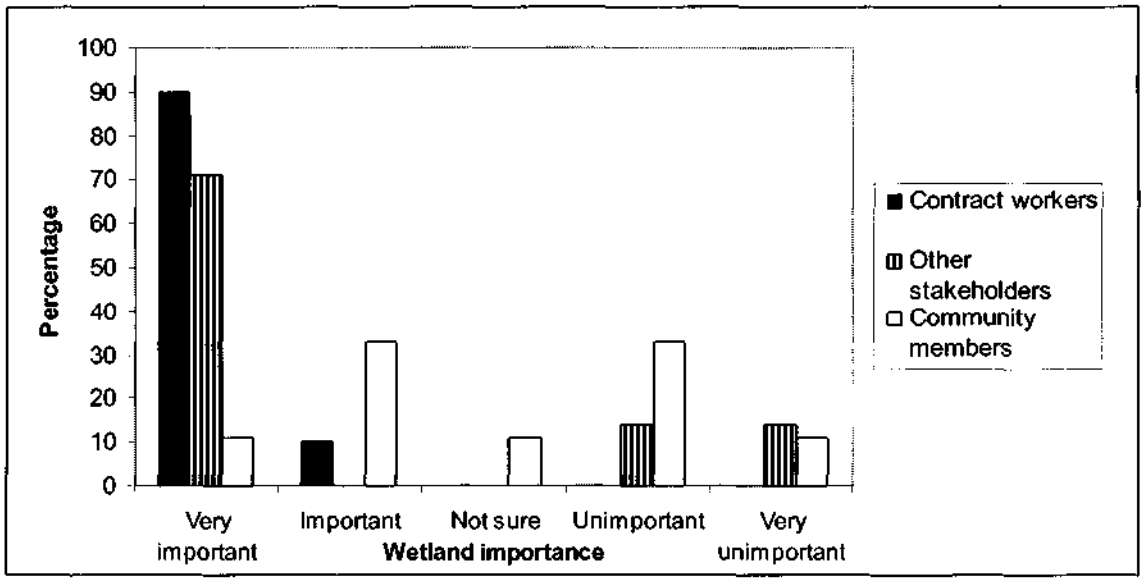

Figure 4.9: Overall wetland importance to the Ntsikeni respondents

Those who said it was important for hydrological reasons said the wetland stores water for livestock, wildlife and human beings. Some respondents mentioned that the wetland stores water for future use, especially during times of drought. These

respondents made reference to the Year 2020, which according to some respondents has been predicted as a year of drought for South Africa. Year 2020 may have been used by project managers as part of the awareness programmes, as none of the respondents perceived the wetland to be important to them specifically for Year 2020.

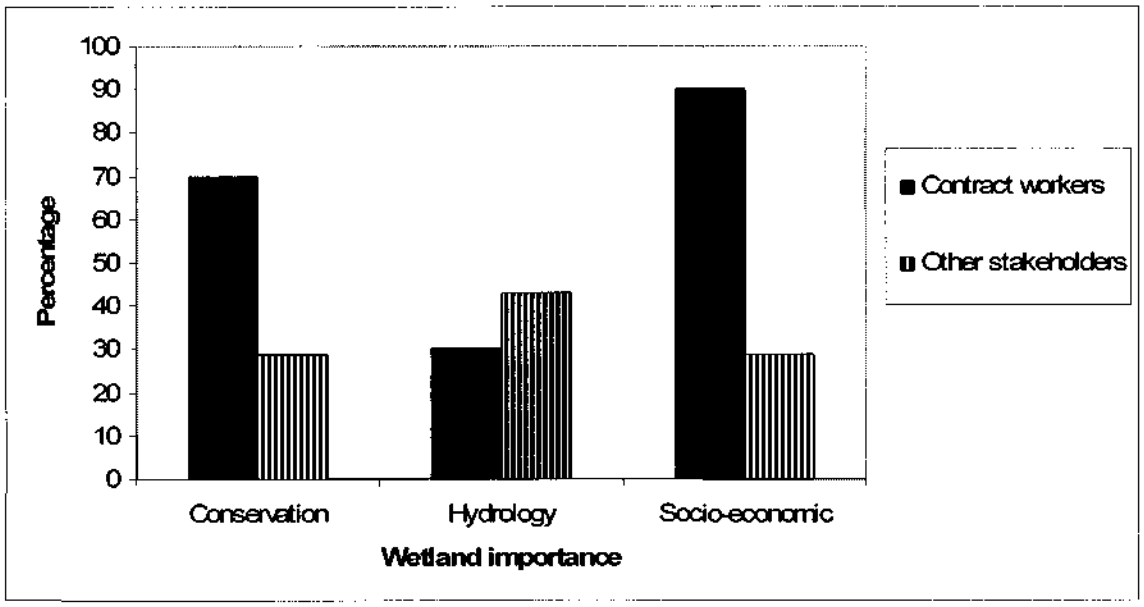

Figure 4.10: Nature of importance of the Ntsikeni Wetland

A large percentage of the contract workers said the wetland is important to them for socio-economic reasons. A large proportion of this percentage said the wetland is important for conservation and about thirty percent said the wetland is important for hydrological reasons. Those who said it is important for socio-economic reasons said the wetland, through the Working for Wetland project, provided them with job opportunities. The wetland provides drinking water for their livestock. The wetland also "provides a source of sustained potable water for poor rural communities downstream of the wetland and an important source of livestock grazing for neighbouring communities" (Kotze, 2003:7).

The contract workers who said the wetland is important for conservation said the wetland provides a breeding area for wattled cranes. Almost all the contract workers who said the wetland is important for hydrological reasons highlighted that the water from the wetland benefits the wildlife animals found in the area. People living downstream also benefit from this water.

The responses of the other stakeholders demonstrates that the majority of these stakeholders said the wetland is important to them for hydrological reasons. Out of the total of seven other stakeholders 43 percent said the Ntsikeni wetland is important to them from a hydrological perspective. These stakeholders said the wetland is important for water conservation in that it cleans and stores water for a long period of time. Twenty-nine percent of the other stakeholders said the wetland is important to them for socio-economic and conservation reasons respectively. Those who said it is important for conservation highlighted that the presence of the wetland contributes to biodiversity conservation. They said the biodiversity in the reserve has improved as a result of the wetland regenerating.

The twenty-nine percent who said the wetland is important for socio-economic reasons said the presence of the wetland provides job opportunities for local people and that the wetland, through the wetland rehabilitation project, has brought the surrounding communities and the reserve closer to one another. Generally, the two groups of stakeholders mentioned above had different perspectives on the importance of the wetland. The wetland is very important as it performs a number of functions (Gxashi, 2005b; Ntsikeni Nature Reserve Planning Committee, undated). For example, the wetland provides water for down-stream users, the majority of whom are poor. The results suggest that local people could somewhat depend on the wetland mainly for water (Gxashi, 2005a).

4.3.3 Motivation to participate: Ntsikeni stakeholders

The respondents that participated in the questionnaire survey were motivated by a wide range of reasons to participate in the Ntsikeni wetland rehabilitation project (Figure 4.11). The contract workers were motivated by either employment or other reasons.

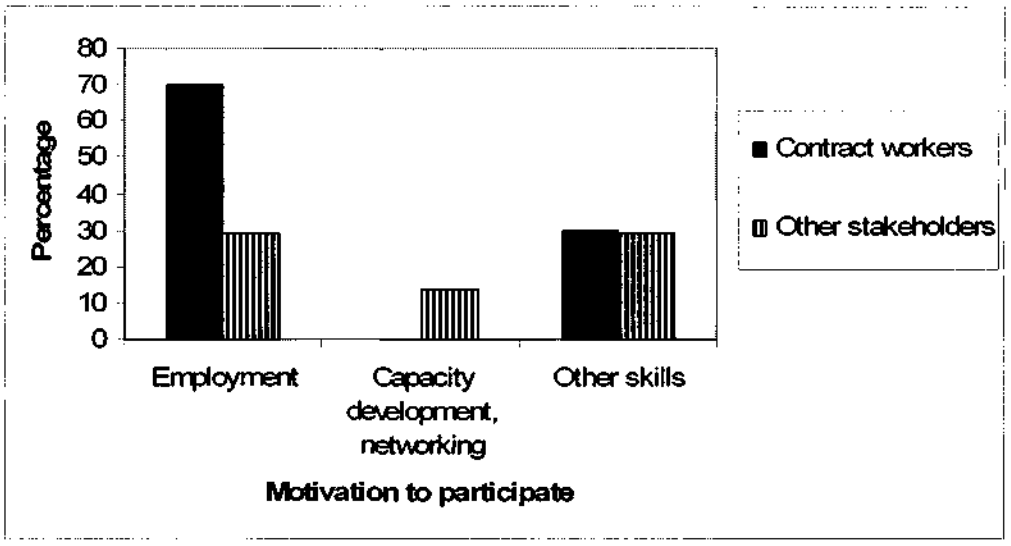

Figure 4.11: Motivation for Ntsikeni respondents to participate

Seventy percent of the contract workers who participated in the Ntsikeni wetland rehabilitation were motivated by the employment opportunities that were created by the rehabilitation project.

> I was sitting at home not employed before the project (WfWet). I was not even able to support my family before the project (Contract worker, Ntsikeni).

This concurs with the statement that the Ntsikeni Reserve is surrounded by poor communities who benefit from the wetland in a number of ways (Kotze, 2003). The people from Ntsikeni "prefer projects that will offer job opportunities" (Minutes of Ntsikeni Management Forum Meeting, 1999). The remaining thirty percent of the contract workers were motivated to participate in the project by other skills. Some of these workers were motivated by the knowledge they were going to gain from the project, as quoted below. As shown in Figure 4.11, it appears that not everyone who participated in the project was motivated by employment.

> I went to see what the project was all about before I was even employed (Contract workers, Ntsikeni).

> I realized that there was something new I could learn from the project apart from cooking for the workers (Contract workers, Ntsikeni).

None of the contract workers said they were motivated to participate in the project by skills gained in the project. This is not to say that they did not gain any skills from the project. From the follow up interviews, the contract workers mentioned that they acquired some technical skills, such as concrete mixing and installation of gabions. In addition to this they attended training sessions on finance management, *i.e.* budgeting.

> We have acquired some business finance skills and we have been given certificates for attending the training (Contract workers, Ntsikeni).

Among other skills, these are important skills that can enhance local capacity (Ayee, 2000). When asked about the role of these skills in enhancing their capacity in communicating and self reliance, some contract workers denied that the skills they have acquired have improved their self-reliance. They probably said this because none of them have tested their skills as they do not have funds to start their own businesses. The quote below provides evidence that funding is a challenge that the Ntsikeni workers are encountering in this regard.

> It would be great if funding was available to us to start our own businesses (Contract workers, Ntsikeni).

This confirms the results of the study conducted by CASE that revealed that, "those who had these skills failed to recognize them and thereby not viewed as skills they could depend on" (Nkoko and Macun, 2005:31). The study also found that although the programme provides some technical (*e.g.*, construction skills) and life skills (*e.g.*, First Aid, Health and Safety, *etc.*), they did not feel outright that these skills were likely to improve their employment prospects. This has however, not been the case with the past contractors who have managed to secure themselves contracting work with some farmers.

> Once the WfWet project has finished the contractors with their employees go on to do some contracting work for the farmers. Initially they work under the farmer and if they do well they are then given independence (Other stakeholder, Ntsikeni).

As argued in the CASE report, the above quotes by the contract workers and the other stakeholders respectively indicate "that there are two worlds created by the programme. On one hand, the ordinary workers feel that they would not be able to sustain their livelihoods after the programme completed while, on the other hand, the contractors have indicated that they have already started planning ahead" (Nkoko and Macun, 2005).

In addition to the employment opportunities that were created by the project and the skills acquired, some of the contract workers were motivated by certain expectations that they hope will be achieved in the long term (*e.g.*, the case of the tourism project, as discussed later on). To try and realize these expectations local people in Ntsikeni have always been involved (through elected representatives) in the general management of the nature reserve. The role of the Ntsikeni Management Forum is critical is this regard.

Twenty-nine percent of the other stakeholders were equally motivated by employment opportunities created by the project and other skills respectively. Those who were motivated by other reasons or skills mentioned opportunities for research and learning, working with a wide range of people, interest in wetlands, and working under Working for Water as the reasons that motivated them. Fourteen percent of the other stakeholders were motivated by capacity development and networking skills. These skills included improvement in the assessment of the wetland, people management and project co-ordination skills.

> These skills have been central in our response to the need to conserve Ntsikeni wetland as a special wetland (Other stakeholder, Ntsikeni).

It is important to note that not all the external stakeholders who took part in the survey participated in the wetland rehabilitation project, hence the total of seventy-five percent of other stakeholders shown in Figure 4.11.

There was a fairly wide range of reasons that motivated people to participate in the Ntsikeni wetland rehabilitation project. This to a large extent will provide a platform for stakeholders involved to engage and discuss their interests. For contract workers,

getting a job might be an opportunity for capacity development and networking as opposed to research or knowledge for the other stakeholders. This necessitates the need for all involved to understand what other people's interests are so that others' interests are not undermined.

4.3.4 Nature and level of participation: Ntsikeni stakeholders

None of the contract workers for Ntsikeni were involved in the initiation and planning of the wetland rehabilitation project. All of them were involved during the implementation phase where they constructed and installed gabions and concrete structures; digging; destroying the wattle forest; and mixing chemicals. Even the contractors themselves were not involved in the initiation and planning phases of the Ntsikeni rehabilitation project. They worked with the plans and specifications provided by the project managers and as such had little or no influence on the planning phase. Even during the follow up interviews they confirmed that during the implementation phase they were actively involved for material incentives (jobs) and passively involved in the sense that they have no influence in decision making, *e.g.* even if they see that the plan on paper might not work well, as confirmed in the quote:

> There are times where you can see that a certain plan is not going to work, but you are not afforded the opportunity to say a thing (Contract workers, Ntsikeni)

About seventy percent of the other stakeholders were involved from the initiation phase of the Ntsikeni wetland rehabilitation project. Some of the other stakeholders were involved in the identification of the damage, planning and implementation of corrective measures, evaluation and on-going monitoring of completed work. There is a gap that exists between the involvement of local people, including, but not limited to, contract workers and the other stakeholders. This gap can be bridged by allowing active and on-going representation of local people through the Traditional Authorities and/or other organization or committees that may exist in the community. This will allow for participation whether direct or indirect, not only during the implementation phase but, also in the early stages of the project (Allen, 2001). To determine the level and nature of participation by different stakeholders, reference was made to the WOCAT framework.

Table 4.2 shows that some respondents were involved in the first three stages of the project. The survey demonstrated that none of the contract workers participated in the first two (initiation and planning) phases as they were only appointed for the implementation of the project. The contract workers are also not involved in the last two (monitoring and evaluation) phases of the project. This may be due to contract workers working on a rotational basis. It may be concluded that the processes that were adopted to involve local people were top-down and consultative in this regard, indicating little influence by general members of the neighbouring communities. It also needs to be noted that, by their nature, the WfWet rehabilitation projects do not provide a platform for self-mobilization. This is because there are set objectives that need to achieved within a short space of time as defined by the involved stakeholders, such as WfWet; Highlands Wetland Rehabilitation; Reserve Management, Traditional Authorities; and other stakeholders that may have been involved.

Table 4.2: Nature and level of participation by Ntsikeni respondents

Types of participation	**Phases of the project**				
	Initiation	**Planning**	**Implementation**	**Monitoring**	**Evaluation**
Passive participation	[HWR]	[HWR]	[CW] [HWR]		
Participation in information giving	[RM]	[RM] [TA]	[RM]		
Participation by consultation		[RM]	[TA]		
Participation for material incentives	[HWR]	[HWR]	[CW] [HWR]	[HWR]	[HWR]
Self mobilization	[TA] [RM]	[RM] [WfWet] [WRCP]		[WRCP] [WfWet]	[WRCP] [WfWet]

Source: WOCAT (1998) Note: TA=Traditional Authority; RM=Reserve Management; CW=Contract Workers; HWR=Highlands Wetland Rehabilitation; WRCP=Water Research Commission Project; WfWet=Working for Wetlands

Notwithstanding the challenges and the shortfalls of the Ntsikeni wetland rehabilitation project, it is important to note that the project has been of value in as far

as the development of local people's potential is concerned. Evidence from the questionnaire survey and the follow-up semi-structured interviews indicates that people have gained the knowledge and skills that will hopefully be of significant help in the future. The involvement of the Traditional Authorities through self-mobilization is good indication of local participation. As a result of active participation of local structures such as the Traditional Authority, there is less likelihood to undermine the involvement of local people.

4.3.5 Process followed to involve local people

A number of processes were followed to involve the local community in the Ntsikeni wetland rehabilitation project (Figure 4.12). The majority of the contract workers said the meetings that were called and the workshops that were conducted with local people were useful a means of involving local people in the project. Twenty percent of the contract workers said that another process that was followed involved the local authorities (chiefs and headmen). Only ten percent of the contract workers and none of the other community members said selecting a committee that would represent the community was another process that was followed to allow local community participation.

Even people who did not participate in the rehabilitation project were satisfied with the processes that were followed to involve local people in the project (Figure 4.12). About eighty percent of the community members that participated in the questionnaire survey said community meetings were organized, where all members of the community were invited to attend.

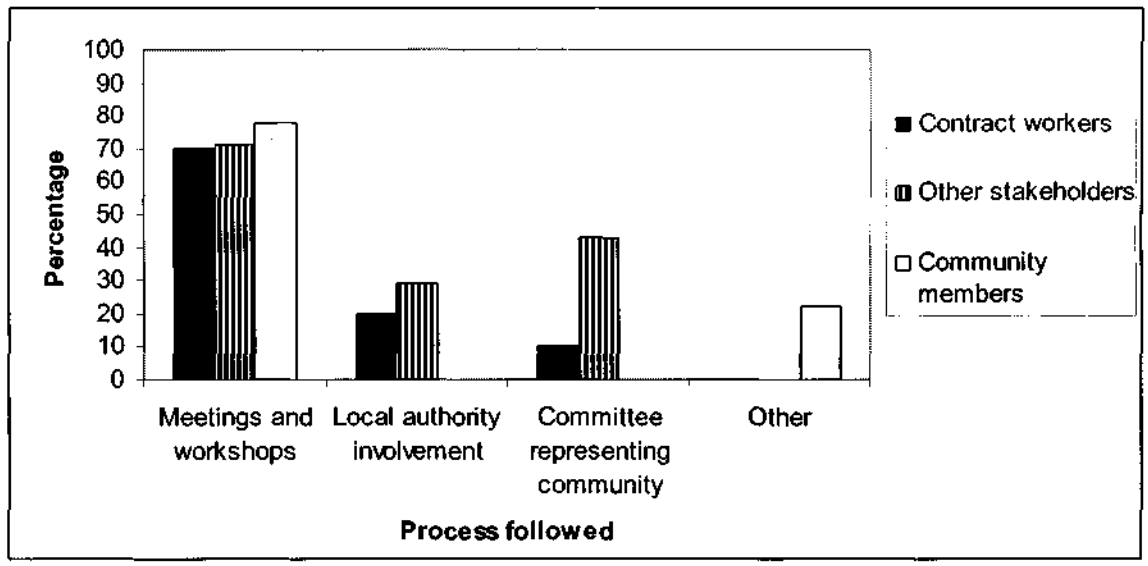

Figure 4.12: Processes for involving local people in the Ntsikeni rehabilitation project

Almost the same percentage of other stakeholders and contractor workers said meetings were called and workshops were conducted to involve local people in the Ntsikeni wetland rehabilitation project. This is confirmed by the quotes presented below, which show that the community meetings were organized through the chiefs as the heads of the two Traditional authorities surrounding the nature reserve.

> Community meetings, in which a steering committee was elected, were called (Other stakeholder, Ntsikeni).

> The Chiefs were consulted and called community meetings (*Izimbizo*), which a lot of people attended (Other stakeholder, Ntsikeni).

> Only community meetings have been called and they are working. We got employed in these community meetings and the majority of people attend these meetings (Contract worker, Ntsikeni).

About forty percent of the other stakeholders said a committee (steering committee) including local members was elected to represent the community. This committee reported back on the progress of wetland rehabilitation to the community in general community meetings. This committee was also actively involved in the appointment of contract workers, in the sense that they facilitate meetings when necessary.

Interestingly, a much lower percentage of the local community respondents considered the committee to be a useful mechanism of involving local people compared with other stakeholders (Figure 4.12), which suggests that it may be of limited effectiveness in reporting back. Another stakeholder (Ntsikeni) said that due to the nature of challenges that were faced by the Reserve Management together with the Ntsikeni Management Forum, the steering committee used to meet at least twice a month but, this has changed as most of the challenges that were facing the wetland before the rehabilitation project have been addressed.

Only thirty percent of the other stakeholders said the involvement of the local authority was used as another means of facilitating the involvement of the local people in the Ntsikeni Wetland rehabilitation project. Two local authorities from the two surrounding communities with representatives from each community participate as community representatives in meetings. The chiefs are usually in charge of the meetings or gatherings as these meetings (usually referred to as *Izimbizo*) are held at the chiefs' places.

It is based on the above three processes (meetings, local authority involvement and a community committee) that the respondents said the process was either very good or good (Figure 4.13). The majority of both the contract workers and other stakeholders said the process that was followed to involve local people was a very good one. Overall, the community members that participated in the questionnaire survey also said the process was good to very good.

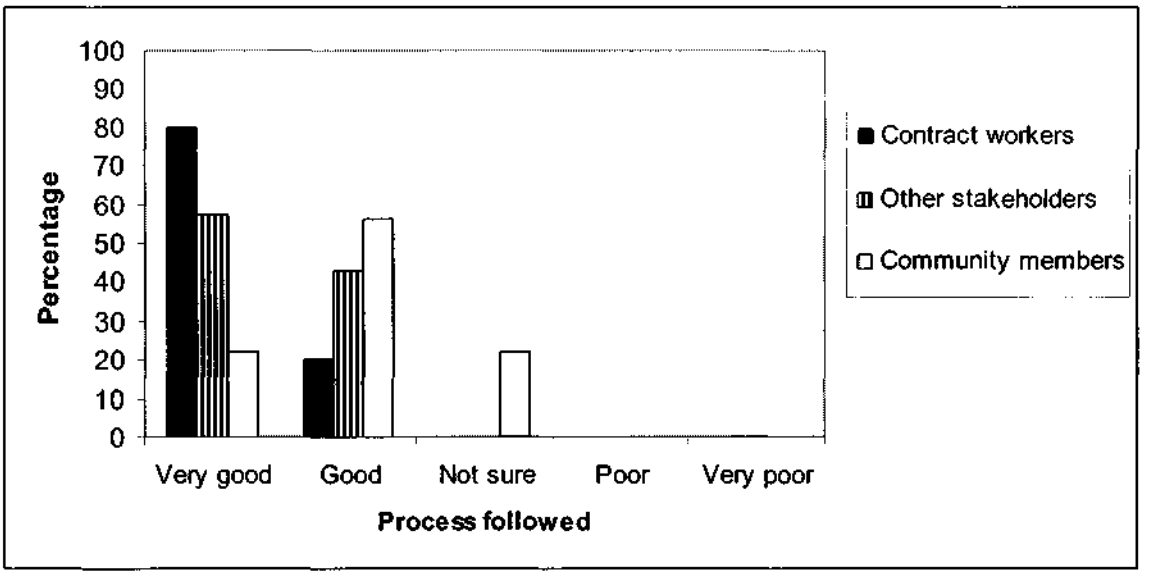

Figure 4.13: Nature of the process followed to involve local people

None of the respondents said that process was poor or very poor. Although the respondents appeared to be satisfied with the processes followed, they still believed that participation by local people can be enhanced. About 20 percent of the respondents said they were not sure, and these are the people who said they did not even know there was a rehabilitation project being carried out in the reserve.

4.3.6 Alternative strategies for enhanced local participation in the NWRP

A range of strategies were suggested by survey participants as ways of enhancing local people participation in local development initiatives, including the wetland rehabilitation project. The survey participants suggested that local people need to be trained in relevant issues. These people would acquire skills that can be transferred to other members of the community. According to one respondent this may be achieved through building capacity among the relevant people to ensure effective reporting back to the community.

> There is a need to organize workshops for committee members to ensure effective reporting back (Other stakeholder, Ntsikeni).

This will ensure that the community is on par with the other stakeholders in terms of understanding the issues at stake. The survey participants said there is also a need to improve the relationship between outside stakeholders and local ones. This

strengthens partnerships and organizational capacity necessary to sustain development initiatives (Rahnema, 1992; Sustainable Development Department, 2000). "The relationship between the Reserve Management and the surrounding communities has been strengthened" (Other stakeholder, Ntsikeni). This has assisted in drawing in other stakeholders such as the local municipality

One survey participant suggested that there is a significant need to educate all stakeholders about the importance of wetland rehabilitation projects and the benefits that such projects are likely to have in the future. As suggested by another survey participant, this requires external stakeholders to know and understand what affects local people before addressing their problems. This will further assist external stakeholders to win the trust of local people. A survey participant said local people generally appreciate external stakeholders who are willing to assist with other local problems. External stakeholders should accept that communities and community organizations need continuous and long term support (Joseph Rowntree Foundation, 2006).

The majority of the contract workers said more jobs will encourage local people to participate. They said they wished the rehabilitation project was a permanent thing as this will mean continued direct benefits for local people, especially those that are employed in the project. The rehabilitation work is now drawing to a close, and therefore, the expectations of permanent employment from rehabilitation will not be met. Thus, alternative sources of employment from the wetland need to be sought. The survey results revealed that the tourism project that has been started in the Ntsikeni area provides an avenue through which local people could continue to derive direct benefits from the Ntsikeni wetland. "The project was envisaged by the management forum as the best option to generate profit from the Nature Reserve for the community and government" (Gxashi, 2005b:6). This will be critical in maintaining local interest in the Nature Reserve and the wetland. There are some key things that need to be noted about the eco-tourism project as part of the assessment of its capacity to deliver on the expectations of different members of local communities. Undoubtedly, the eco-tourism project is critical to the management and the sustainability of the wetland. However, there are problems with economic sustainability of the project. Very few people have visited the tourism lodge and this

suggests that there is a necessity to market the project. MDTP has shown commitment towards a detailed assessment of the tourism project, including marketing and viability. There is also a need to build capacity of local people, such as catering and management skills. If these issues are addressed, the eco-tourism project will hopefully become a successful self-sustaining business.

It was also suggested that local participation could be maintained in the form of various committees that have been formed, such as the Ntsikeni Nature Reserve Management Forum (NNRMF) and Steering Committee. The NNRMF, for example, was formed to ensure that all stakeholder groups are represented in discussion pertaining to the management of the Nature Reserve. The role of the Forum, which is to facilitate discussions between the neighboring communities and management of the Nature Reserve, has proved to be worthwhile. Through the Forum a number of decisions have been taken, including removal of cattle from the Nature Reserve and drafting of the management plan for the Nature Reserve.

4.3.7 The value of the Ntsikeni rehabilitation project

The results of the questionnaire survey demonstrate that the Ntsikeni wetland rehabilitation project was of great value to the stakeholders, particularly the contractors (Figure 4.14). In fact except for about twenty percent of the community members, respondents said the Ntsikeni Wetland rehabilitation was important in one way or another. About sixty percent of the other stakeholders felt that the project has been of conservation value (Figure 4.15). They said the Ntsikeni wetland rehabilitation project has improved the integrity of the wetland and that the wetland has already shown that it has benefited biodiversity, as shown by the increase in wattled crane pairs and other endangered birds utilizing the Ntsikeni wetland. The following quotes demonstrate the extent to which the rehabilitation project has addressed the key issues that were facing the Ntsikeni wetland:

> The wetland is conserved for diversity and when the project started we had indicator species (cranes). Now the wetland is a good habitat for these birds (Other stakeholder, Ntsikeni).

> The wetland is in a better state for wildlife (Contract worker, Ntsikeni).

There was no animal life before we came in and the structural work is addressing soil erosion and bring back the functioning of the wetland (Contract worker, Ntsikeni).

It would appear that the rehabilitation project has not only addressed the erosion problems that were facing the wetland, but also some conservation problems, although, several conservation problems are not problems addressed through rehabilitation measures but rather through other measures (*e.g.*, better control over human use).

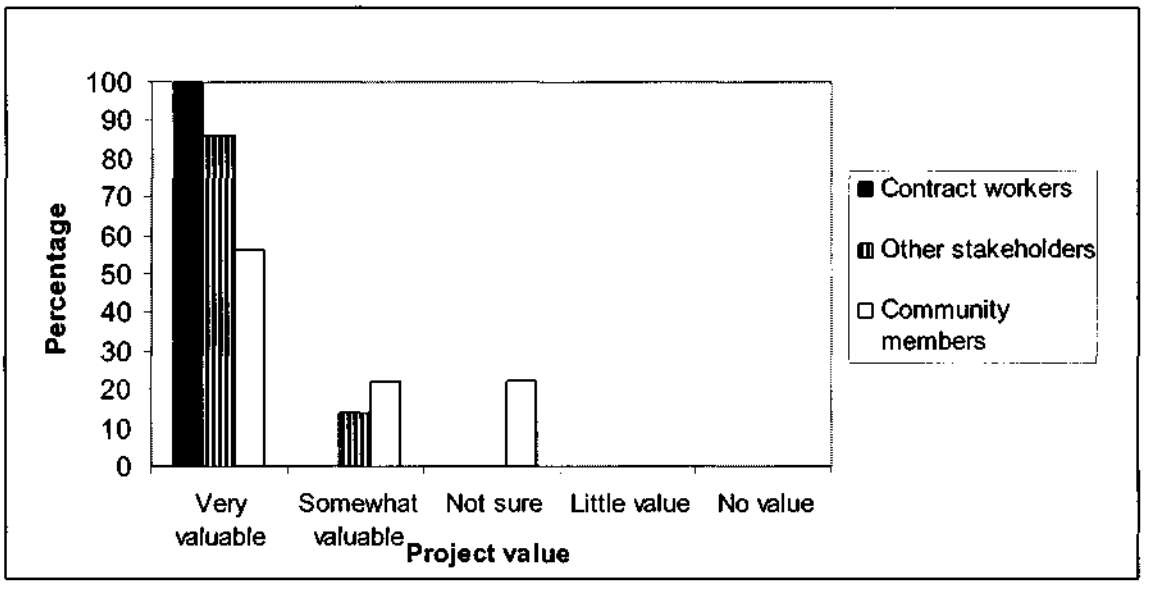

Figure 4.14: Value of the Ntsikeni Wetland rehabilitation project

All the contract workers said the project was of great socio-economic value to them (Figure 4.15). The contract workers said the project created job opportunities for the unemployed local people. None of the contract workers and community members said the project had been of value because of hydrological reasons. This may be due to the fact that community members do not fetch water from the wetland as they say the wetland is far in the mountain. In the study conducted by CASE, it was evident that there is no direct benefit by some community from the wetland, as highlighted in the following quote by Nkoko and Macun (2005).

> Not in this area that we are in, not in this place, we are not using wetlands, how can you use nature because it is something that is up there in the mountains and far from where we live (Ntsikeni, male workers).

Only thirty percent of the contract workers said the Ntsikeni wetland rehabilitation project was of conservation value. They said the wetland provides habitat for nesting birds and stopping of veld fires. The majority of contract workers gave a combination of the reasons as referred to above.

The trends of the other stakeholders indicate something different from those of the contract workers. From the other stakeholders about fifteen percent said the Ntsikeni wetland rehabilitation project was of hydrological value.

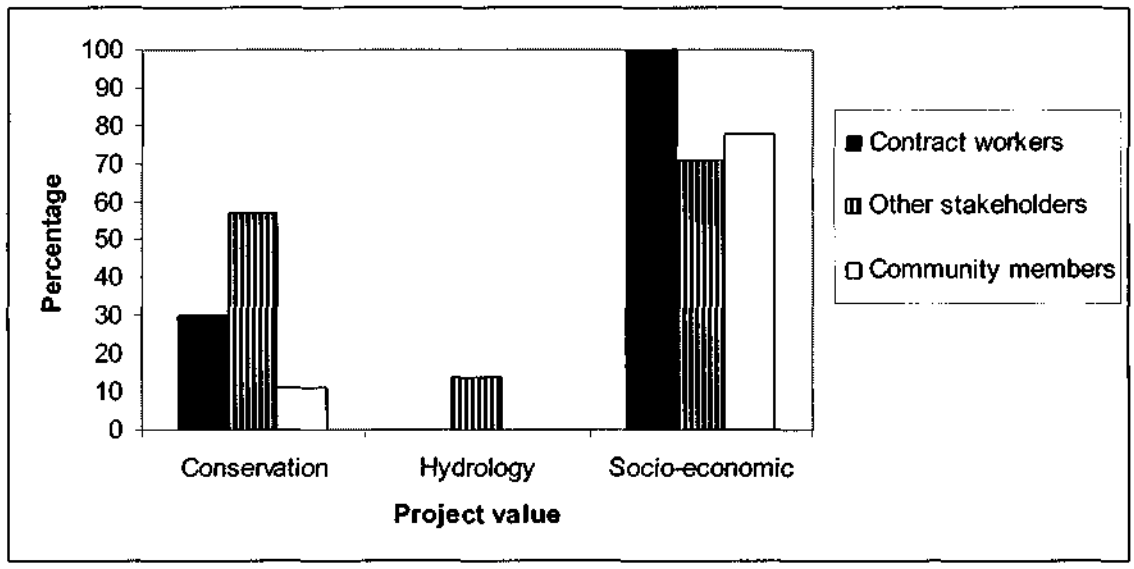

Figure 4.15: Nature of the value of the Ntsikeni Wetland rehabilitation project

A high percentage of the other stakeholders and about eighty percent of the community members felt that the project was of socio-economic value. They said the project created job opportunities for local people and also equipped them with some skills including mixing concrete and constructing gabions. They also said the project has contributed in changing peoples' mindsets about a range of issues relating to wetlands and their management. The contribution of the Ntsikeni wetland rehabilitation project has hopefully made local people more positive about the wetland and its protection even though it may be difficult to measure. "I think that through the

rehabilitation project the wetland has addressed poverty to some extent, and people now realize that the wetland is very important" (Other stakeholder, Ntsikeni). However, the interviews revealed some respondents still doubt whether people are more positive about the wetland. "There is still limited knowledge in this community about wetlands and education initiatives are needed to make a difference" (Contract worker, Ntsikeni).

Clearly, the wetland is important to the different stakeholder groups for various reasons. The fact that the wetland is important to each stakeholder group for at least one reason, provides an incentive for the stakeholders to protect the wetland. This will hopefully improve the sustainability and the lifespan of the rehabilitation measures in the wetland. This requires all the parties involved to play their agreed roles so as to strengthen the chances of wetland management being successful (Claridge and O'Callaghan, 1996). Obviously, some stakeholders have more interests than others, *e.g.* the reserve managers in the Ntsikeni Nature Reserve. Their interests are holistic in nature as the wetland is not only important for hydrology or conservation or socio-economic reasons, but a combination of these reasons.

4.3.8 Ntsikeni wetland rehabilitation as part of the long term sustainability and management of the wetland

There were numerous management challenges that were facing the Ntsikeni wetland and the Nature Reserve before the implementation of the wetland rehabilitation project. These challenges included scarcity in animal life; run-away fires on the wetland and the Nature Reserve; soil erosion in the wetland as a result of animals (cattle) trampling the soil; and wattle infestation. According to the interview respondents, the wetland rehabilitation has addressed these challenges. The wetland has now become a good habitat for birds such as the wattled cranes, which were used by the Reserve Management as an indicator of wetland health. Over the period of the last three years runaway fires have been curbed through firebreak burning. Soil erosion has been stopped in some areas using the relevant rehabilitation structures.

The survey participants were asked about what they think needs to be done by different stakeholders to achieve long term sustainability of the Ntsikeni wetland. The survey participants suggested a wide range of things that can be done to promote the

long term sustainability of the Ntsikeni wetland. The majority of the contract workers suggested the removal of livestock from the reserve. According to an interviewee, cattle numbers have been reduced and will be even more controllable once the Reserve has been fenced. They said the cattle trample the wetland and the structures that have been installed as part of rehabilitating the wetland. It was based on this that the other participants suggested the fencing of the wetland as this will stop animals from getting onto the wetland and the installed rehabilitation structures. Although the contract workers suggested these mechanisms for the long term sustainability of the wetland, nothing relating to such mechanisms had been formally communicated to them by the project managers at the time of the survey and follow up interviews.

Another suggested mechanism towards ensuring the long term sustainability of the rehabilitated Ntsikeni wetland was monitoring of completed structures. Some participants said these structures can hold up for thirty years or more if monitored appropriately and continuously. They said local people can be employed to do this work, *e.g.* inspecting installed structures, and clearing of the wattle forests neighboring the Ntsikeni wetland. KZN Ezemvelo as the management authority of the Reserve may take responsibility for the implementation of these recommendations.

The survey participants also suggested that it is important to form more teams (*e.g.* fire fighting) to work on the broader management of the wetland. These teams may have different priorities and responsibilities, but they should continue to work together. It was also suggested that there is a need to educate at all levels, even government officials. Different stakeholders co-operating will further enhance the resourcing of the reserve. One participant suggested that KZN Wildlife needs to take up the mandate through adequately resourcing the reserve and meeting the expectations of the community in terms of fencing, game introduction and the tourism project.

The tourism project for example, is expected to result in significant tangible benefits to local people. The project has been started as a key means of increasing benefits that the reserve provides to the local communities (Gxashi, 2005b). The survey indicated that there is, however, a general concern about the well being of the wetland and its natural assets that may quickly be lost if the tourism project cannot deliver these

benefits. This concern is genuine because the tourism project is not fully operating (suggestions to curb this challenge have been provided above). It was clear from the respondents' suggestions that the different stakeholders can work together to resource the reserve and also to continue to implement the management plan as compiled by the MDTP and other involved stakeholders.

Despite a wide range of strategies that were suggested by the respondents, their effectiveness is also contestable (Figure 4.16). Different respondents had different opinions about the effectiveness of the suggested strategies. The majority of both the contract workers and other stakeholders said the suggested strategies are likely to be effective given the type of outside support the implementation has received. This suggests that the effectiveness is likely to decline if this support also declines. According to one respondent "it must be emphasized that there has been a lot of outside support for the implementation, and in the future as this declines effectiveness may also decline".

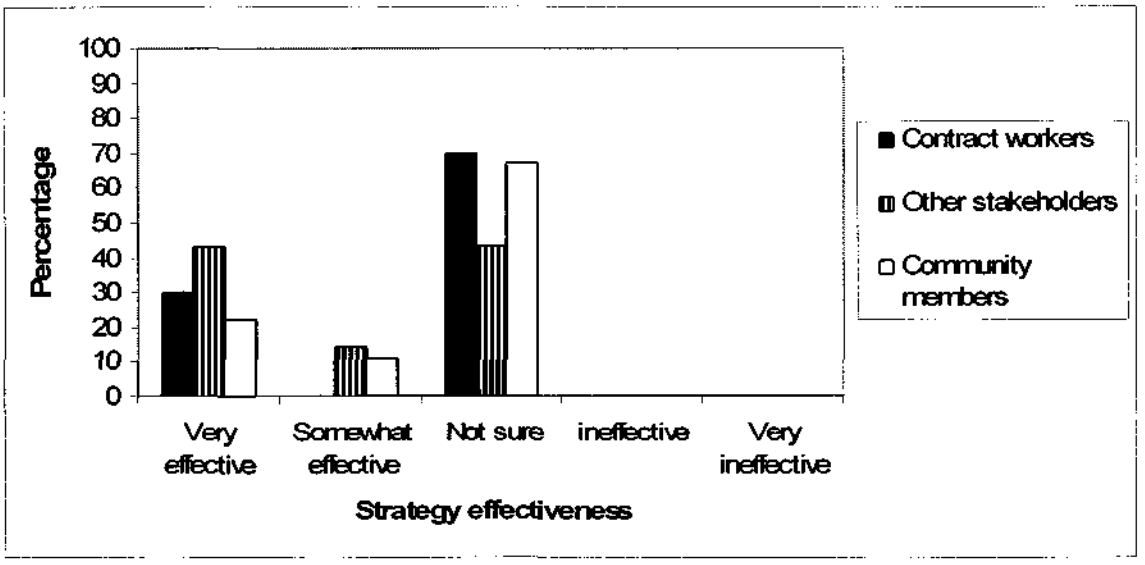

Figure 4.16: Effectiveness of long-term management strategies for Ntsikeni Wetland

Only a small percentage of the other stakeholders said the suggested strategies are likely to be somewhat effective in ensuring that the Ntsikeni wetland rehabilitation project becomes part of the broader and long term management of the wetland. No respondents believed that the strategies were going to be ineffective or very ineffective. Undoubtedly, for these strategies to be effective one way or another there

must be strong commitment towards implementing such strategies. The Ntsikeni stakeholders have shown significant commitment in this regard.

4.4 Comparison of the sites

The Ntsikeni and Hlatikulu wetlands show some similarities and differences in the way things were done, the processes that were followed to involve local people in the rehabilitation project, and how people perceive these projects in as far as participation in the two sites is concerned. Both wetlands showed a high level of importance to the survey participants. Local people benefit from these wetlands hydrologically, socio-economically and environmentally. These wetlands provide drinking water for down stream users and livestock, create short-term job opportunities (in this case through the WfWet project) and has contributed towards saving the endangered wattled crane.

In Ntsikeni the majority of the respondents viewed the project as important for socio-economic reasons and conservation, with fewer respondents mentioning hydrological importance. This may be due to the fact that communities are located far away from the wetland and do not necessarily believe that they benefit directly in this regard. In Hlatikulu the results showed a different trend with the majority saying that the wetland is important for hydrology and conservation reasons. Only a few respondents felt that it was important for hydrological reasons. Although none of the farmers felt that the wetland was important for socio-economic reasons they may still be benefiting in this regard through tourism ventures taking place in the area. The results show that there are some people who do not benefit directly from the selected wetlands yet they still participated actively in the wetland rehabilitation project and possibly the long-term sustainability of the selected wetlands.

As a primary objective, the two wetlands have been rehabilitated using gabions and concrete structures. In Ntsikeni, there are obvious improvements in the health of the wetland, *i.e.* pairs of wattled cranes have increased. In Hlatikulu soil erosion on Northington and Gamewood is being stopped using concrete structures. On both sites, the WfWet project has assisted in addressing the management challenges that were facing the wetland before rehabilitation. Apart from soil erosion control, the project has assisted in dealing with run-away fires, clearing of wattle forests and raising awareness among different stakeholder groups.

In light of the processes that were followed to involve local people and how the different stakeholders viewed these processes, there is a notable difference between the Hlatikulu and Ntsikeni rehabilitation projects. At Hlatikulu, the different stakeholder groups indicated that different processes were used in promoting participation, while at Ntsikeni the different stakeholder groups indicated that similar processes were used. Furthermore, at Ntsikeni the majority considered the process good or very good while at Hlatikulu a lower percentage considered it good or very good, and nearly half of the community members considered it poor.

The nature and level of participation in Hlatikulu was not as high as in Ntsikeni, where local people have been actively involved activity not related only to the implementation of the project. In Ntsikeni, local people were also represented in the Ntsikeni Nature Reserve Management Forum and the Steering Committee (as described above). In Hlatikulu there was currently no formal forum where both the farmers and local people discussed the issues pertaining to the management and sustainability of the wetland. There are some discussions between the farmers and other external institutions, and through these discussions it has been noted that there is need to engage the local community. This demonstrates that there needs to be more involvement of, and participation by, all stakeholders involved, particularly other farmers or their managers.

In Ntsikeni local people are part of, or are represented in, the broader management of the wetland. This may be because of other interests that local people have at stake, such as the tourism project. A wide range of strategies for enhancing participation by local people on these and other projects have been presented above. In both case studies, the involved stakeholders have shown commitment towards ensuring that the wetland rehabilitation projects become part of the broader management of these wetlands and contribute to their long term sustainability. Through the selected wetland rehabilitation projects, people involved, and possibly even those that were not involved, have gained significant knowledge and had awareness raised on wetlands and their functions.

Comparatively, Ntsikeni provides a useful model in terms of continuous involvement of local people in development initiatives. What stands out for the process followed,

for example, is that at Ntsikeni, the perceptions on the relative importance of the different processes were fairly similar for contract workers compared with other stakeholders, whereas in Hlatikulu, perceptions were widely divergent amongst the different stakeholder groups. The majority of the Ntsikeni survey and interview participants confidently said the meetings between the communities, Chiefs, Reserve Management and other external stakeholders have worked as a mechanism of involving local people in the two selected rehabilitation projects. In Hlatikulu very few other community members knew about the meetings that were called. Other community members went on to say that no community meetings were called to involve local people in the rehabilitation project.

4.5 Recommendation for improving participation in the two sites

In the process of rehabilitation (as the primary objective), short-term employment opportunities were created for unemployed local people. In Ntsikeni, jobs were rotated on six months basis and this created jobs for a larger number of local people. Hlatikulu is a different case as the same people have worked in the project since it was started. Also, in terms of skills development, more people have benefited in Ntsikeni than in Hlatikulu. This is based on a larger number of people that may have been involved in Ntsikeni as a result of job rotation. This may have increased the number of participants in Ntsikeni compared to Hlatikulu, as more stakeholders were involved in the Ntsikeni wetland rehabilitation.

Considering the role that NNRMF has played in addressing the challenges that were facing the Ntsikeni Nature Reserve before the rehabilitation project began, and also in enhancing the relationship with the neighboring communities, it may be a good idea for the Hlatikulu stakeholders to adopt a similar approach by forming a management forum or committee in which all stakeholders will be represented. This may not necessarily be the best approach but certainly can be useful in identifying different stakeholder groups and their values and interests.

In the light of the involvement of all stakeholder groups, the community meetings and workshops have been identified as the main form of involving local people in the selected rehabilitation projects. Some of the Hlatikulu participants denied that the meeting was ever called and thus concluded that the process was poor. Possibly

because of the lack of authority and poor institutional organization in the area, the supposed meeting may have not been coordinated in a manner that best represented the majority of the local people. It is acknowledged that the heterogeneity of the communities is a key factor that needs to be taken into consideration in most development initiatives (Shackleton, *et al.*, 1998). Nevertheless, where project planning and design is top-down, participation by local people is generally ignored (Chileshe, 1996; Thole and Dodman, 1996).

Community meetings are usually a useful way of involving local people in development initiatives. It is through these meetings that different stakeholder groups and organizations get the opportunity to understand one another's priorities and skills (Joseph Rowntree Foundation, 2006). It has proved necessary to spread information about the two projects to the community as this could enhance the support that the project receives from the members of the community, whether they are employed by the project or not.

It is therefore recommended that where some stakeholders were not involved in the beginning, there should be sessions or platforms where all relevant stakeholders discuss issues pertaining to a project. This will ensure that all the stakeholders involved understand the project in its entirety.

4.6 Summary

Chapter four has presented the results on the Hlatikulu and Ntsikeni wetland rehabilitation projects. This chapter presented the importance and benefits of the two wetlands and the reasons that motivated people to participate in the rehabilitation projects. The results demonstrated that the two wetlands are viewed as important for hydrological, conservation and socio-economic reasons. They also demonstrated that employment was the main reason that motivated respondents to participate in the wetland rehabilitation projects. This chapter further looked at the two wetland rehabilitation projects as part of the long-term management and sustainability of the two wetlands. In light of local participation in the two rehabilitation projects, the wetlands will hopefully be sustainably managed in the future.

Chapter 5
Conclusion and Recommendations

5.1 Introduction

This chapter presents the conclusions and recommendations of the study. It focuses on the satisfaction of the aim and objectives of the study and the main findings of the study. Some comparison between Hlatikulu and Ntsikeni is done for results relating to each objective. This chapter also presents the recommendations made by the researcher for further research.

5.2 Revisiting the aim and objectives of the study

This study used the Hlatikulu and Ntsikeni wetland rehabilitation projects to critically examine the effectiveness of participation of local people in two wetland rehabilitation projects with specific reference to the holistic long-term management and sustainability of the rehabilitated wetland systems. To achieve this aim the following objectives were used as a guiding framework.

- **Objective 1: To develop and apply a conceptual framework for analyzing stakeholder participation in the selected wetland rehabilitation projects**

Chapter two provided the theoretical background on the history of participation, demonstrating that participation is not a new undertaking. It dates back to the 1930s and during this period to the 1950s, it was mainly motivated by political agendas of the time. Different approaches have been attempted to analyze stakeholder participation in development projects. The WOCAT framework was identified and applied in this study as a useful framework for analyzing participation by different stakeholder groups that were involved in the Hlatikulu and Ntsikeni wetland rehabilitation projects. It was considered useful and relevant because it provided clear descriptions of different types and levels of participation and was designed specifically for assessing participation in soil and water conservation. Although the WOCAT framework was useful for the study, it raised some concerns. It required some interpretation for the respondents who did not understand some of the categories. It also did not explicitly provide criteria on how each category can be

achieved, as there are no specific guidelines for interpreting results from the perspective of promoting long-term sustainability of development initiatives. A questionnaire was then used to contextualize the WOCAT framework, with some questions specifically looking at mechanisms that were used to involve local people in the rehabilitation project.

Based on the application of this framework, it was evident that the nature and level of participation differed from one stakeholder group to another. The framework demonstrated that even though the majority of the Hlatikulu contract workers were involved in the implementation phase for material incentives, some were involved during the initiation phase for no direct benefit. In Hlatikulu, the rest of the 'other stakeholders' were involved in each phase of the project. The farm managers participated by inviting Working for Wetlands to come and initiate a project on their farm land. The farm managers were also involved in the maintenance and monitoring of rehabilitation structures. In Ntsikeni, the framework showed that the contract workers were involved only in the implementation phase but not in the initiation phase. It may be difficult to change this as contract workers are only employed once the project has started. The Traditional Authority as a local structure was involved in the initiation of the project and some respondents felt that its presence was critical in encouraging local participation.

It was evident that Working for Wetlands relied largely on local mechanisms for community involvement. In Ntsikeni, the Traditional Authorities were used as the main means of engaging the local community, while the local school was used in Hlatikulu. The WOCAT framework showed that there was a sharing of authority and responsibility among the different stakeholder groups. This is very important as it allows stakeholders to play their respective roles (Galwer, 2002). Based on the results of the application of this framework, for both sites it was concluded that there is a need to enhance and encourage local participation in early phases of the project, *i.e.* initiation and planning. It is acknowledged that it is practically impossible to involve every member of the community in a project because of diversity and heterogeneity in communities (Shackleton, *et al.*, 1998; Galwer, 2002). However, this may be addressed through electing representatives from all stakeholder groups through which communication can be channeled. This is not always possible hence other ways of

disseminating information may be used, including the use of flyers and local municipal offices.

- **Objective 2: To describe the land tenure context within which the two selected case studies took place so as to characterize the general management of the selected wetlands.**

The two selected wetland rehabilitation projects were characterized by different land tenure systems. The Hlatikulu and Ntsikeni wetland rehabilitation projects were undertaken on privately owned and state land respectively. At Hlatikulu work was carried out on Northington and Gamewood farms, which are owned by a farmer and Mondi Shanduka respectively. The results further demonstrated the context within which the rehabilitation project took place stretched beyond the privately owned land as it also involved the Nsonge community. People from this community depend on the wetland that is located within the privately owned land, for water, which is utilized for household use and livestock drinking water. The lack of leadership in the Nsonge community had a negative impact on the organization of the community and subsequently on local participation in the rehabilitation project. It is acknowledged that rehabilitated wetland areas fall within the privately owned farms. However, the neighboring Nsonge community also has a significant role to play not only during project implementation, but also in the general long term sustainability of the rehabilitated wetland.

In Ntsikeni, the wetland rehabilitation project was carried out in the Nature Reserve and its institutional context differs from that of Hlatikulu. The land on which the rehabilitation was carried out is held by the state. There are more stakeholder groups involved. At the start of the rehabilitation project very few stakeholders were involved but with time more stakeholders became involved through other projects related to the wetland rehabilitation and Nature Reserve management projects. Even local people are actively involved through the Ntsikeni Nature Reserve Management Forum Steering Committee and the Tourism Trust, in which representatives from the two Traditional Authorities participate. Feedback is usually done in community meetings or in the Tourism Trust meetings when necessary. Clearly, the existence of some structures such as the Traditional Authority, has played a fundamental role in

enhancing local participation. The two Chiefs from the neighboring communities provide leadership to their constituency and this plays a role in encouraging participation among local people. The Chief is viewed and respected as the head of the community.

- **Objective 3: To identify the objectives of the Hlatikulu and Ntsikeni rehabilitation projects and their value as perceived by different stakeholders.**

The study revealed that the primary objective of the two wetland rehabilitation projects was to rehabilitate the wetlands by stopping soil erosion and re-wetting artificially drained areas. This corresponds with the objectives of Working for Wetlands at different sites in general. The objective of WfWet is to rehabilitate wetlands that have been degraded or irreversibly lost as a result of human activities (Dini, 2004). This research project revealed that the selected wetlands have been rehabilitated initially using gabions and concrete structures. These structures are designed and installed to plug existing drains. This raises the water table and reduces soil erosion. In Hlatikulu some parts of the wetland have shown significant improvements. The wetland is regenerating and there are now areas that comprise good habitat for endangered wetland animals such as wattled cranes. In other areas it is still going to take time before the wetland recovers. In Ntsikeni the wetland has also improved significantly and has a potential to become a Ramsar site.

The results of the study showed that the two rehabilitation projects were of great value to the involved stakeholders. The project has been of socio-economic, conservation and hydrological value. Mostly, the rehabilitation projects were of greater socio-economic value for contract workers than any of the other stakeholders, *e.g.* community members. This was largely because contract workers were officially employed on the projects and as a result received wages. The contract workers may not necessarily have directly experienced the hydrological and conservation value of the project, however, their perceptions suggest they have developed an understanding of these issues.

The study also revealed that secondary to the rehabilitation of wetlands was the creation of job opportunities for unemployed local people for poverty relief as part of the EPWP. This confirms the information provided by Dini (2004), that the wetlands are rehabilitated in a manner that creates job opportunities for unemployed local people. In Hlatikulu, only a few people benefited in this regard because of the employment system that was followed. Unless someone who was employed in the project leaves the project, the same people will work in project. Ntsikeni presented a different case with more people being employed in the project as a result of the job rotation system they adopted. Unlike in Hlatikulu, where a contractor appoints contract workers, in Ntsikeni people are employed using a 'pick a card' system. The latter system may be considered as a fair system as all that come to meetings have an equal opportunity to be employed. This system can be used to reduce bias in the process of employing workers. The wetland rehabilitation project has arguably relieved poverty in the communities neighboring the selected wetlands. Little has been done to ensure that the contract workers do not get trapped in poverty once the project has ended. In Hlatikulu, very few people had considered how they would utilize the skills they had developed to find further employment once the project has ceased. In Ntskeni, some people hope that the tourism project, fire burning and clearing of wattle forests, will continue to create opportunities for local people. This will hopefully encourage local people to participate, thus enhancing the sustainability of projects. It has been proven that whenever local people participated in development initiatives, a lot more is achieved (Rahnema, 1992).

- **Objective 4: To examine the extent to which the selected wetland rehabilitation projects are an integral part of the holistic and long term management of the wetland systems.**

Chapter four presented a set of mechanisms that have been implemented as management strategies to sustain, in the long term, the positive outcomes that have been achieved through wetland rehabilitation. The Ntsikeni Nature Reserve management realizes that there is a need for casual workers. This will hopefully contribute towards sustaining the support that the reserve receives from the local community. The new management authority of the Nature Reserve, KZN Wildlife Ezemvelo (KZNWE), has a central role to play in the management and long term

sustainability of the wetland. The relationship between the reserve management and the neighbouring communities has been strengthened mostly through the long term engagement within the community forum established for the Ntsikeni Nature Reserve several years ago, and through the opportunities that communities see in their involvement such as job opportunities. This suggests that if these opportunities are lost (*e.g.* if the community-based tourism project fails), the support from the local community may fade away.

Through representation in the necessary meetings, local people now understand the need to protect the wetland. The study revealed that local people have gained invaluable knowledge on the need to conserve wetlands through participating in the rehabilitation project. It is stated in chapter four that the cattle numbers have been reduced not only as a response to the negotiation between the reserve management and the local community, but also due to other contributing factors such as stock theft. There is a management plan that is being finalized by stakeholders involved and this plan recognizes the presence of the wetland, the functions it performs, and the benefits it provides to the Nature Reserve and local people.

In Hlatikulu there was no clear plan to show that the wetland will be managed and sustained in the long term. There is however, an integrated management plan (IMP) for the entire valley that is in the process of being finalized. The wetland therefore, may be sustainably managed provided that the IMP caters for the management of the wetland. The IMP identifies environmental threats in the entire valley, including the wetland. This is likely to contribute positively to the long term sustainability of the wetland if there is willingness and commitment from all stakeholders to address the identified threats. In terms of long term sustainability, Ntsikeni is more assured because it has a specific plan for the wetland. In Hlatikulu the plan contributes to the long environmental management, but does not necessarily deal with the wetland explicitly. Ownership and long term sustainability may be greater in Ntsikeni because of the conservation management plan and the tourism initiative.

The initiatives taken by the farmers in Hlatikulu to invite WfWet to come and work on their properties is an indication that the wetland is likely to be protected and sustained in the long term. This demonstrates that the farmers acknowledge that the

wetland is important, for reasons mentioned in Chapter Four. The farmers and Mondi Shanduka need to take responsibility for the management of the wetland. Parallel to rehabilitation and drafting of the IMP, is the eradication of wattle and bramble. Wattle trees and bramble have had a negative impact on the health of the wetland as they out-compete indigenous vegetation and, in the case of wattle, consume large amounts of water that wetlands can utilize. In light of these strategies, there is no clear indication of the support that wetland management is likely to receive from members of the Nsonge community.

- **Objective 5: To provide recommendations for the long term sustainability and management of the Hlatikulu and Ntsikeni wetlands**

Chapters Two and Four documented the key strategies that can be adopted for the long term sustainability and management of the selected wetlands. Participatory Wetland Management (PWM) is viewed to be a useful mechanism for achieving long term sustainability and management of wetlands around the world, and South Africa is no exception (Feyerabend, *et al.*, 2000; Galwer, 2002). This approach is recommended because it allows for diverse stakeholder participation and engagement. Stakeholders can participate and engage one another though committees or forums that may have arisen as a response to issues at stake. Participatory Wetland Management also focuses on aspects such as environmental awareness of value and importance of wetlands (Erftemeijer and Bualuang, 2002).

The guidelines outlined by De Villiers (2000), although based on what happened in Ntsikeni, provided a useful approach for the management and sustainability of wetlands. Some of these guidelines are particularly important for the long-term management of the wetlands as they extend beyond the physical rehabilitation of wetlands. These include setting realistic goals (in the context of the Ntsikeni Tourism Project), continuity (as the project ends in the beginning of the Year 2007), and monitoring and evaluation of all work done, and progress.

This set of guidelines may be applied in other areas such as Hlatikulu. They are not particularly specific to any site. It is apparent that there is no existing Traditional Authority, Management Forum or committee representative of all the potential

stakeholders in Hlatikulu and this may have had a negative impact on the initiatives that seek to enhance the sustainable management of wetlands. This limited community organization is likely to negatively impact on sustainable wetland management as it is not participatory (Claridge and O'Callaghan, 1996). Local development on structures is therefore important because local people participate through these structures in the identification and design of development projects that aim to benefit them (Galwer, 2002). Local government has a role to play in ensuring that local communities are organized in a manner that allows for enhanced local participation (Shackleton, *et al.*, 1998; Ntsebeza, 2004).

As useful as they are, the guidelines by De Villiers (2000) still require some form of elaboration on how each guideline can be achieved. For example, how can active participation and self-mobilization be encouraged, and how can one go about forming committees where there are no Traditional Authorities such as at Hlatikulu? Self-mobilization is desirable because it is characterized by active and self-started participation of local people. Committees such as the Management Forum and Steering Committees provide the necessary support for the proper management of a resource. At times these committees may be found to be of limited effectiveness in terms of reporting back to all stakeholders. This, to some extent, compromises communication between committees and project managers

5.3 Recommendations for future research

There is no doubt that all stakeholders need to be actively involved in development initiatives that affect them. A lot has been written about the need to encourage local participation, but less has been said about *how* this can be achieved. The challenge is that communities differ from one another and as a result it has been challenging to develop a universal framework for encouraging local participation. Future research needs to focus on developing measurable characteristics that can be used to identify whether communities are self-mobilized, passive participants, participate through consultation, or participate for material incentives. In addition, such research will also need to focus on how self-mobilization can be achieved, particularly in communities that have been characterized by passive participation for a long time, such as Nsonge.

In the context of the EPWP and WfWet, there is a need to establish the type of support that the wetland rehabilitation projects get from the general community, not only the people who now directly benefited from these projects. This is necessary because understanding how the wider community feels about these projects would assist in identifying areas for improvement. The nature and type of support that the wetland rehabilitation projects receive from the community are critical towards sustaining wetland related intervention. This necessitates the assumption that the greater the support that the projects receive from the community, the better will be the long term sustainability of rehabilitated wetlands.

Both qualitative and quantitative research methods should be encouraged to analyze the type of participation and support in the selected case projects. In this study, the WOCAT framework was identified and applied to analyze the type and level of participation in the two study sites. Although the WOCAT framework was useful, there is a need to develop a framework that can be used with or without supervision by a researcher. This is based on the fact that the WOCAT framework required interpretation for some of the research respondents. It also required a different set of questions to characterize the context of the study. This means that when developing a framework, these issues will need to be taken into consideration. There is a need to expand upon the WOCAT framework by developing a set of questions and guidelines for interpreting the results from the perspective of promoting the long term sustainability of the interventions. This framework will need to focus among other aspects, on how each level and nature of participation affects a sense of ownership and long term sustainability of projects.

5.4 Summary

The purpose of this was chapter was to revisit the aim and the objectives of the study. Five objectives were developed in response to the aim, which was to examine the nature and level of participation by local people in the Hlatikulu and Ntsikeni wetland rehabilitation projects. The responses from the questionnaire survey and follow-up interviews were used to satisfy the objectives. Objective number one, *i.e.* developing and applying a conceptual framework for analyzing stakeholder participation, was viewed to be central to the analysis of collected data. The WOCAT-based framework applied in this study provided valuable insights to two different sites, each with very

different land tenure and use contexts, and having a diversity of stakeholders. Therefore it is likely this framework could be widely applied across sites in South Africa with a diversity of land tenure and management contexts.

References

Addun, R.P. and Muzones, D.M. 1996. Community-Based Coastal Resource Management (CBCRM): Tambuyog's Experience in the Philippines. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.htm Accessed: 23/07/04.

Allen, W. J. 2001. Working Together for Environmental Management: The Role of Information Sharing and Collaborative Learning. Online. http://nrm.massey.ac.nz/changelinks/thesis_contents.html Accessed: 12/10/04.

Ayee, J. R. A. 2000. Participation. Online. http://archieve.idea.int/df/2000df/word_documents/participation.doc Accessed: 23/05/05.

Bailey, K. D. 1978. Methods of Social Research. New York: The Free Press.

Barrett, C. B.; Holden, S. and Clay, D. C. 2004. Can Food-for-Work Programmes Reduce Vulnerability. Dicussion Paper. Online. http://www.nlh.no/ior/ Accessed: 01/10/05

Bass, S. and Shah, P. 1994. Participation in Sustainable Development Strategies. In:Dalal-Clayton, B and Bass, S. 2002. Sustainable Development Strategies: A Resource Book. London: Earthscan.

Begg, G. 1989. The wetlands of Natal. Part 3, The location, status and function of the priority wetlands of Natal, Natal Town and Regional Planning Commission

Bernard, H. R. 2000. Social Research Methods: Qualitative and Quantitative Approaches. Thousand Oaks, Sage Publications, Inc.

Castelloe, P.; Watson, T. and White, C. 2002. Participatory Change: An Integrative Approach to Community Practice. Journal of Community Practice. 10 (4), 7-32. Online. http://www.cpcwnc.org Accessed: 10/10/05

Catley, A. 1997. Methods on The Move. A Review of Veterinary Uses of Participatory Approaches and Methods Focusing on Experiences in Dry-land Africa. London: IIED.

Chambers, R. 1983. Rural development: putting the last first, Longman Scientific & Technical

Chambers, R. 1997. Whose Reality Counts? Putting The First Last. London: Longman.

Chileshe, J. 1996. Approaches to Local Community Participation in the Conservation of Wetland Resources. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.htm. Accessed: 23/07/05.

Christian, C.G. 2000. Ethics and Politics in Qualitative Research. In: N.K. Denzin & Y.S. Lincoln (Eds.), Handbook of Qualitative Research Thousand Oaks: Sage. pp. 133-155

Claridge, G. 1996. What Do We Mean by Community Involvement. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.htm. Accessed: 23/07/05.

Claridge, G. and O'Callaghan, B. 1996. Making Co-management of Wetland Resources Work. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online.

http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.htm Accessed: 23/07/04.

Cohen, J. and Uphoff, N. 1978. Rural Development Participation. Washington DC, AID. In: Ayee, J. R. A. 2000. Participation. Online.

http://archieve.idea.int/df/2000df/word_documents/participation.doc Accessed: 23/05/05.

Community Based Public Works Programme, 2005. What is the CBPWP? An Overview. Online. http://www.cbpwp.org.za/ Accessed: 13/09/05

Critchley, W. and Reij, C. 1995. Recent Trends in Natural Resource Management in Sub-Sharan Africa: Illustrated by Experiences from The West African Sahel. In: Critchley, W. and Turner, S. (eds). Successful Natural Resource Management in Southern Africa. Amsterdam: Vrije University Press.

Dahl-Østergaard T., Moore D., Ramirez V., Wenner M. and Bonde, A. 2003. Community Driven Rural Development: What Have We Learned? Online. http://enet.iadb.org/idbdocswebservices/idbdocsInternet/IADBPublicDoc.aspx?docnum=353899 Accessed: 16/04/05

Dalal-Clayton, B and Bass, S. 2002. Sustainable Development Strategies: A Resource Book. London: Earthscan.

Deutch, K.1961. Social Mobilization and Political Development. American Political Science Review, Vol. 55: 493-514.

De Vaus, D. A. 1986. Surveys in Social Research. London: George Allen & Unwin.

De Villiers, D. 2000. A Recipe for Success: Conservation Partnerships at Ntsikeni, East Griqualand. African Wildlife, Vol. 54:17-20.

Dini, J. 2004. Restoring Wetlands and Healing a Nation: South Africa's Working for Wetlands Program. Online. http://www2.eli.org/nwn/nwnarchive/26-03articles.cfm Accessed: 11/10/04.

Emmett, T. 2000. Beyond Community Participation? Alternative Routes to Civil Engagement and Development in South Africa. Development Southern Africa. 17(4), 501-518.

Erftemeijer, P. L. A. and Bualuang, A. 2002. Participation of Local Communities in Mangrove Forest Rehabilitation in Pattani Bay, Thailand: Learning from Success and Failures. In: Galwer, M. (ed). Strategies for Wise Use of Wetlands: Best Practices in Participatory Management. Proceedings of a Workshop Held at The 2nd International Conference on Wetlands and Development (November 1998, Dakar, Senegal).Amsterdam: Wetlands International IUCN WWF Publication No. 56.

Escobar, A. 1995. Encountering development: The making and unmaking of the Third World. Princeton NJ: Princeton University Press.

Feyerabend, G. B.; Farvar, M. T.; Nguinguiri, J. C. and Ndangang, V. A. 2000. Co-management of Natural Resources: Organising, Negotiating and Learning-by-Doing. Mönchhofstr: Kasparek Verlag.

Forest Sector Co-ordination Secretariat , 2002. Community-based Service Delivery: A Review to Develop Guidelines for The Forest Sector in Uganda. Online. http://www.khanya-mrc.co.za/documents/CW%20Review.doc Accessed: 15/05/05.

Foundation for Water Research. 2004. A Review of Public Participation in The Rural Water and Sanitation Setting.
Online. http://www.fwr.org/wrcsa/1381104.htm Accessed: 24/02/05.

Galwer, M. 2002. What are best practices? Lessons in Participatory Mangement of Inland and Coastal Wetlands. In: Galwer, M. (ed). Strategies for Wise Use of Wetlands: Best Practices in Participatory Management. Proceedings of a Workshop Held at The 2nd International Conference on Wetlands and Development (November 1998, Dakar, Senegal). Amsterdam: Wetlands International IUCN WWF Publication No. 56.

Goodenough, C. K. 2003. The Local Global Nexus: A Case Study of Richards Bay. Pietermaritzburg, University of Natal.

Gujja, B. and Pimbert, M. P. 1996. Community-Based Planning for Wetland Management: Lessons From the Ucchali Complex in Pakistan. In: : Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management:

Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.htm.

Accessed: 23/07/05.

Gxashi, M. 2005a. Half Year Report (01 April to 30 September 2005. *(Unpublished).*

Gxashi, M. 2005b. Report on International Wetland Management Course in Kenya. *(Unpublished).*

Gxashi, M. undated. Liaison Mechanisms Status Report: Ntsikeni Nature Resserve. *(Unpublished).*

Hickey, S. and Mohan, G., 2004. Towards Participation as Transformation: Critical Themes and Challenges. In Hickey, S. and Mohan, G. (eds). Participation: From Tyranny to Transformation. London: Zed Books. pp 24-38.

Hickey, S. and Mohan, G., 2005. Relocating Participation Within a Radical Politics of Development. Development and Change. 36(2): 237-262.

Hoggart, K., Lees, L., and Davies, A. 2002. Researching Human Geography. London. Arnold.

Holden, S.; Barrett, C. B. and Hagos, F. 2004. Food-for-work for Poverty Reduction and the Promotion of Sustainable Land Use Can It work? Discussion Paper. Online. http://www.nlh.no/ior/ Accessed: 01/10/05

Jennings, R. 2000. Participatory Development as New Paradigm: The Transition of Development Professionalism: Prepared for the "Community Based Reintegration and Rehabilitation in Post-conflict Settings" Conference, Washington, DC. Online. http://www.usaid.gov Accessed: 28/06/05.

Joseph Rowntree Foundation. 2006. Developing Effective Community Involvement Strategies: Guidance for Single Regeneration Budget Bids. Online. http://www.jrf.org.uk/knowledge/findings/foundations/169.asp Accessed: 11/03/05.

Karl, M. 2000. Monitoring and Evaluating Stakeholder Participation in Agriculture and Rural Development Projects: A Literature Review. Online. http://www.fao.org/sd/PPdirect/PPre0074.htm Accessed: 01/06/05.

Kitchin, R., and Tate, N. J. 2000. Conduction Research in Human Geography: Theory,Methodology and Practice. Harlow: Pearson Education.

Kotze, D.C. 2003. A Conservation Management Plan for Ntsikeni Wetland and Nature Reserve. Pietermaritzburg, University of Natal, Centre for Environment and Development (*Unpublished).*

Kotze, D.C. and Breen, C.M. 2005. A Framework for Assessing the Effectiveness with which Wetlands are Managed (*In preparation*).

Krugman, P. 1998. The role of Geography in Development. Unpublished Paper prepared for the Annual World Bank Conference on Development Economics, Washington, D.C., April 20–21, 1998.

Lammerink, M.; Bury, P. and Bolt, E. 2001. An Introduction to Participatory Action Development(PAD).Online. http://www.iied.org/sarl/pla_notes/pla_backissues/documents/plan_03506.PDF Accessed: 12/09/05

Loon, R. M. 1999. Community Participation in Integrated Conservation and Development Projects: A Case Study in The Hlatikulu Valley, KwaZulu-Natal. Pietermaritzburg: University of Natal Press.

McVey A D, 2004. An Institutional Analysis of Wetland Rehabilitation on Communal Land in South Africa. MSc Thesis. Bangor, University of Wales.

Michael, K. 1997. Participation in Development: The Question, Challenges and Issues: A Symposium Background Paper.

Minutes of Meeting. 1999. Minutes of the Stock Theft Meeting Held at Ntsikeni Community Centre (*Unpublished).*

Mota, N. 1992. Community participation and rural development in natural resources conservation practices in Lesotho. In: Matiza, T. and Chabwela, H.N. (eds). Wetlands Conservation Conference for Southern Africa. IUCN

Nachmias, C. and Nachmias, D. 1981. Research Methods in The Social Sciences. London: Arnold.

Nkoko, M. and Macun, I. 2005. Rapid Evaluation of the Socio-Economic Impact of Working for Wetlands. Community Agency for Social Enquiry (CASE). *Unpublished Report.*

Ntsebeza, L. 2004. Rural Development, Traditional Authorities and Democracy in South Africa. Pietermaritzburg, University of KwaZulu Natal.

Oppenheim, A. N. 1996. Questionnaire Design, Interviewing and Attitude Measurement. London: Pinter Publishers.

Pangeti, G.N. 1992. Community Participation in Rural Development and Natural Resources Conservation. In: Matiza, T. and Chabwela, H.N. (eds). Wetlands Conservation Conference for Southern Africa. IUCN

Parkes, M and Panelli, R. 2001. Integrating Catchment Ecosystems and Human Health: The Value of Participatory Action Research. Online. http://nrm.massey.ac.nz/changelinks/Parkes_Panelli_2001.pdf Accessed: 12/10/04.

Parry, G. 1972. The Idea of Political Participation. In: Parry, G. (ed) Participation in Politics, Manchester, Manchester University Press.

Pimbert, M. 2004. Institutionalizing Participation and People-centered Processes in Natural Resource Management Research and Publications Highlights. Online. www.iied.org Accessed: 12/05/05.

Pretty, J. N. 1995. A trainer's guide for participatory learning and action. London, International Institute for Environment and Development

Private Sector Department Inter-American Development Bank, 2001. Guideline for Public Participation in Environmental Impact Assessments. Online. http://www.iadb.org/pri/PDFs/B_EIA_Participation.pdf Accessed: 22/05/05.

Rahnema, 1992. Participation. In: Sachs, W. 1992: The Development Dictionary: A Guide to Knowledge as Power. London: Zed.

Ramsa, 1999. Guidelines for Establishing and Strengthening Local Communities' and Indigenous Peoples' Participation in the Management of Wetlands. Online. http://www.ramsar.org/key_guide_indigenous.htm Accessed: 11/09/04

Sanicon. 2004. Participatory Approaches: What is Participation and What is A Participatory Approach? Online.

http://www.sanicon.net/titles/topicintro.php3?topicId=23 Accessed: 12/10/04.

Sarantakos, S. 1993. Social Research. Basingstoke: McMillan Press.

South African Government Information (SAGI). 2005. Environmental Programmes: Working for Wetlands. Online.
http://www.info.gov.za/issues/govtprog/environ.htm#wet
Accessed: 10/06/05.

Shackleton, S; von Maltitz, G and Evans, J. 1998. Factors, Condition and Criteria for The Successful Management of Natural Resources Held Under a Common Property Regime: A South African Perspective. In: Shackleton, S and Tapson, A. (eds). Proceedings of The Mini-Symposium on Common Property Resource Management. Nylsvley Nature Reserve, *4-5 August 1998*.

Sharma, K C. 1995. Critical Issues in Local Government Management and Development Related to Central-Local Government Relations in Botswana: Lessons of Relevance for Restructuring of Local Government in Post-Apartheid South Africa. In: Reddy, P. S. (ed). Perspectives of Local Government Management and Development in South Africa. Durban, Department of Public Administration, University of Durban Westville.

Simanowitz, A. 1997. Community Participation/Community-Driven. Online.
http://www.lboro.ac.uk/departments/cv/wedc/papers/23/groupc/simanowi.pdf
Accessed: 16/07/05.

Slocum, R. 1995. Power, process and participation: tools for change. London Intermediate Technology Publications.

Slocum, R. and Thomas-Slayter, B. 1995. Power, Process and Participation : Tools for Change. London, Intermediate Technology.

South African National Biodiversity Institute, 2005. Working for Wetlands Programme. Online. http://www.nbi.ac.za/research/wetlandprog.htm Accessed: 16/09/05.

Sustainable Development Department, 2000. Building a Framework For Consultation and Public Participation. Online. http://www.iadb.org/sds/doc/sds-participationE.pdf Accessed: 11/06/05.

Til, J. B. and Banda, M. G. 2002. Co-managing the Bangweulu Fishery. In: Galwer, M. (ed). Strategies for Wise Use of Wetlands: Best Practices in Participatory Management. Proceedings of a Workshop Held at The 2nd International Conference on Wetlands and Development (November 1998, Dakar, Senegal).Amsterdam: Wetlands International IUCN WWF Publication No. 56.

Thole, L.S. and Dodman, T., 1996. Traditional and Modern Approaches to Community Wetland Management in Zambia. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.ht m Accessed: 23/04/04.

Trochim, W., 2000. The Research Knowledge Base (2nd edition). Cincinnati, Atomic Dog Publication.

United Nations Development Programme, 2005. Poverty Reduction Through Local Governance. Online. http://www.undp.org.za/povertyreduction.html Accessed: 07/11/05

United Nations Environment and Development, 2001. Principles for Multi-Stakeholder Processes. In: Dalal-Clayton, B and Bass, S. 2002: Sustainable Development Strategies: A resource Book. London: Earthscan.

Warrack, K. 2003. Statistics for Management and Economics. South Melbourne: Thomson.

Wenner, M. and Gschwandtl, I. 2003. Raising Awareness of Forests and Forestry: Building Bridges Between, Forests and Forestry. Geneva, International Labour Office. Online. www.ilo.org Accessed: 11/10/05

Wickham, T. 1996. Community-Based Participation in Wetland Conservation: Activities and Challenges of the Danau Sentarun Wildlife Reserve Conservation Project, Danau Sentarum Wildlife Reserve, West Kalimantan, Indonesia. In: Claridge, G. and O'Callaghan, B. (eds). Community Participation in Wetland Management: Lessons from The Field. Wetlands International. Online. http://www.wetlands.org/pubs&/pub_online/KL_wkshp3/PDFcontents.ht m Accessed: 23/04/04.

WOCAT, 1998. A Framework for the Evaluation of Soil and Water Conservation: Questionnaire on SWC Approaches. Switzerland, WOCAT.

World Bank, 1994. Report of The Learning Group on Participatory Development. In: Dalal-Clayton and Bass (eds). Sustainable Development Strategies: A Resource Book. London: Earthscan.

World Bank, 2005. Designing Community-Based Development: The World Bank Participation Source Book. Online. http://www.worldbank.org/wbi/sourcebook/sba211.htm Accessed: 22/05/05.

Personal Communications

Dlamini, S. 2006. Eastern Wetland Rehabilitation, Escourt.

Grenfell, M. 2005. Department of Geography and Environmental Sciences, University of KwaZulu-Natal, Howard College Campus, Durban.

Gxashi, M. 2006. Ntsikeni Nature Reserve, Kokstad.

Nxele, T. 2006. Nsonge community (resident).

Shaw, N. 2006. Entabeni Communications, Hlatikulu Valley.

Appendix A

Questionnaire for the Questionnaire Survey

Purpose of the questionnaire

The purpose of this questionnaire is to gather information on the perceptions of different stakeholders (including community members) about the wetland rehabilitation projects in Ntsikeni and Hlatikulu wetlands. It will also be used to gather information on the nature and level of participation in these rehabilitation projects. The information gathered will be used for academic purposes. Any conclusions made will be made available to questionnaire survey and interview participants for comments.

Research questionnaire: project participants

Site:.....

Date:.....

Name (optional)----------
(for follow-up purposes)

Age group	20-30	31-40	41-50	51-60	61-70	71<

Gender	M	F

1. Is the wetland important to you? If yes please rate its importance.

very important	importance	not sure	unimportant	very unimportant

Explain----------

---

2. What gains do you get from the wetland?

3. Were you involved in the wetland rehabilitation project?

4. Could you briefly describe what you did during your involvement in the project?

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5. What motivated you to participate in the project?

employment	your interests at stake	other (specify)

Please explain----------

---

6. What was/is the nature and level of your participation in those phases of the project that you were involved? Tick where appropriate.

Phases of the project	**initiation**	**planning**	**implementation**	**monitoring**	**evaluation**
Passive participation					
Participation in information giving					
Participation by consultation					
Participation for material incentives					
Self mobilization					

7. Could you briefly state what you understood to be the objectives of the project?

---

8. Do you think the project has been of value? Please tick the appropriate box

very valuable	somewhat valuable	not sure	little value	no value

Explain---

---

9. What do you think needs to be done by different stakeholders to achieve long term sustainability of the Wetland?

---

10. Are there any management strategies and commitment to doing things mentioned in question 10 above? If yes, briefly explain

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12. How effective are these strategies likely to be in promoting the long term sustainability of the wetland?

very effective	somewhat effective	not sure	ineffective	very ineffective

Explain----------

---

13. How was the process that was followed to involve local people?

very good	good	not sure	poor	very poor

Explain----------

---

14. Are there any other issues that you would like to mention/discuss pertaining to the rehabilitation project and stakeholder participation?

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15. Taking the process (of involving local people) that was followed into consideration what would you recommend needs to be done in the future to enhance involvement of local people?

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Appendix B

Interview Questions for the Follow-Up Semi-Structured Interviews

Section A: Stakeholder involvement

1. When did you first hear about the project and what did you do during your involvement?

Section B: Community participation

1. What are the community involvement mechanisms/approaches that have been used worked for your community in the rehabilitation project and why do you think they have worked?

2. What mechanisms do you think have not worked and why?

3. Do you think you can still improve on these mechanisms (those that have worked and those that have not), and if so how?

Section C: Long term sustainability of the wetland

1. The rehabilitation is soon going to end, has it addressed key management issues facing the wetland?

2. Are there management mechanisms in place to sustain, in the long term, the positive outcomes achieved through rehabilitation? If yes what are they?

3. Given the above mentioned situation (first question), how do you think you can improve?

4. To what extent has the rehabilitation initiative contributed to the increased capacity of the stakeholders to manage the wetland sustainably? (e.g.) fire burning and communication with outside stakeholder