

THE ROLE OF COMMUNITY PARTICIPATION IN PLANNING THE
DELIVERY OF CLEAN WATER TO RURAL COMMUNITIES
A CASE STUDY OF JEPPE'S REEF

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF TOWN AND
REGIONAL PLANNING, UNIVERSITY OF THE WITWATERSRAND,
JOHANNESBURG, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF Msc DEVELOPMENT PLANNING.

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1998

ABSTRACT

Water is a human right and to save water is a human responsibility. Despite the very basic need for water, not everyone has access to it. However, access to an adequate supply of water, defined in terms of water quality, quantity and distance to the supply, is denied to millions of rural people in the developing countries. The ambitious goal manifested in the International Drinking Water and Water Supply and Sanitation Decade (IDWSSD) was that by 1990, all the inhabitants of the world would have access to safe drinking water. This goal has clearly not been achieved, and certainly not in South Africa.

In South Africa more than 12 million people do not have access to clean water and less than half of the rural population has a safe and accessible water supply. Communities have had little say in the provision of water and decision-making in the water delivery, agencies has reflected broader apartheid ideology.

The study attempts to investigate the problems which are faced by rural communities that hinder participation in the delivery of clean water supply. The study concentrate on aspects such as what is participation, the importance of the community in decision making, who should participate, how to ensure participation, and the role of the planner. It proposes the importance of involving communities in the planning for the delivery of clean water supply to rural communities. Emphasis is on enhancing the role of community participation in planning and implementing rural water projects. Jeppe's Reef is the case study of this discourse. In the final analysis it was discovered there is a great need for involving the community in water project decision-making.

DECLARATION

I declare that this dissertation is my own work. It is submitted for the degree of Msc Development Planning in the University of the Witwatersrand, Johannesburg. It has not been submitted before any other degree or examination in any other university.

Name: *Atwala*

17th Day of October 1998

ACKNOWLEDGEMENTS

Thanks and appreciation go to the following:

- To Mr. Brian Boshoff, for his constructive criticisms and guidance throughout the pursuit of this discourse.
- To all my friends David, Nape, John, and to all those associated with the success of the discourse, keep it up!
- Special thanks go to Brother Harry for his constructive criticisms, wish you all the best in life.
- I would like to express my indebtedness and sincere gratitude to my loving father and mother, Mr Mpini Thwala and Mrs Phahlakati Thwala who sacrifice so much for my early education. I would like to thank all my brothers and sisters for all the support they have given me.

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ABBREVIATIONS

RWSS	-	Rural Water Supply and Sanitation
IDWSSD	-	International Drinking Water Supply and Sanitation Decade
DWAF	-	Department of Water Affairs and Forestry
CBO	-	Community Based Organization
NGO	-	Non-Government Organization
JRWC	-	Jeppe's Reefs Water Committee
RDP	-	Reconstruction and Development Programme
WHO	-	World Health Organization
UNDP	-	United Nations Development Programme
SWSs	-	Statutory Water Committees
SALDRU	-	Southern African Labour and Development Research Unit
KOBWA	-	Komati Basin Water Authority

CHAPTER 1

1. INTRODUCTION

Water is a human right and to save water is a human responsibility. Despite the very basic need for water, not everyone has access to it. And the issues found at the root of water and development come not always from lack of resources but rather from a disparity of distribution. The available pollution free supply is not sufficient to meet all the demand, whilst the consequent need for treatment makes the supply of the water expensive, and indeed beyond the means of the poor.

The basic needs strategy is concerned with removing mass deprivation, a concern that has always been at the heart of development. The idea that the basic needs of all should be satisfied before the less essential needs of a few is met is in principle very widely accepted. More recently, thinkers and practitioners from many countries, international agencies, and bilateral aid donors have made meeting basic human needs a primary objective of development, and this has been embedded in many development plans (Streeten, 1984 p.8). Sufficient empirical evidence is now available to suggest that education and health services often make a greater contribution to improving labour productivity than do most alternative investments (ibid p.viii).

The World Bank (1994) states that safe water is an essential pillar of health and yet large shares of Sub-Saharan African populations are deprived of safe drinking water. Moreover, poor sanitation and disposal of faecal matter complicate matters, particularly in rural areas where seepage and run-off can contaminate ponds, streams, rivers and wells. Despite the very basic need for water, not everyone has access to it. And the issues found at the root of water and development come not always from a lack of resources but the lack of water resources and uneven distribution. There can be a conventional interpretation that water cannot be a scarce resource because of its renewability. On the other hand, however, water can be referred to as scarce in economic terms because abundant sources of free and unpolluted water are no longer available. The available pollutant free water is not sufficient to meet all the demand, whilst the consequent need

for treatment makes the supply of water expensive, and indeed beyond the means of poor people. As a result, the quality of service in poor areas is significantly low since the poor cannot afford water treatment costs.

Water is essential for life and in this respect all communities must have access to some kind of water source. However, access to an adequate supply of water, defined in terms of water quality, quantity and distance to the supply, is denied to millions of rural people¹ in the developing countries. Studies have shown that there is a positive correlation between water consumption and distance to the water source. Where standpipes or house connections are available within a village, water consumption is likely to be between 30 and 100 litres per person per day. On the other hand, when total collection time approaches half an hour, consumption falls to between 10 and 30 litres per person per day (Cairncross and Feachem, 1983). Since the latter position is descriptive of collection patterns in more than 50% of rural communities in developing countries, it suggests that average daily consumption for vast majority of rural communities is below the minimum World Health Organization (WHO) recommendation of 50 litres per capita.

Recognising the importance to public health and well-being of an adequate water supply for drinking, personal hygiene and other domestic purposes, and an adequate means of waste disposal, the United Nations declared the 1980's as the International Drinking Water Supply and Sanitation Decade (IDWSSD). The ambitious goal manifested in the declaration was that by 1990, all the inhabitants of the world would have access to safe drinking water. This goal has clearly not been achieved, and certainly not in South Africa, where the vast majority of the rural population does not have access to safe and adequate water supplies (Hollingworth, 1988; Pearson, 1991).

2. PROBLEM STATEMENT

In post apartheid South Africa, the role of community participation is becoming very important, and communities are now given more an opportunity of identifying and defining their problems. This is endorsed in the Reconstruction and Development Programme (RDP) (1994) which states that development should be people driven. The

central objective of the RDP is to improve the quality of life of all South Africans, and in particular the most poor and marginalized sections of our communities. This objective should be realized through a process of empowerment which gives the poor control over their lives and increases their ability to mobilise sufficient development resources. Jean – Claude (1985) asserts that public participation in planning and management of developmental projects is crucial to their lasting success. Water is a natural resource, and should be made available in a sustainable manner to all South Africans (RDP Document, 1994). According to the RDP Document (1994, p28) more than 12 million people do not have access to clean water. Less than half the rural population has a safe and accessible water supply. Communities have had little say in the provision of water and decision-making in the water delivery agencies has reflected broader apartheid ideology. A privileged minority dominates access to water resources while the majority of the population enjoy little or no water security. The fundamental principle of the water resources policy is the right to access clean water –“water security for all”.

In the past, development tended to be have top-down approach whereby the community did not have a say in any development initiative. Development was initiated by the state, centrally planned and was dominated by state ideology. There was no recognition at all that planning were an integral part of the whole process of government, that good or bad plans would materially alter the distribution of wealth and real income (Eversely, 1973). As a result, this approach failed to allocate adequate resources to the poor and excluded them from the planning processes.

One of the major problems facing especially rural areas in Developing countries is lack of access to basic needs such as access to clean drinking water. Rigorous appraisal and evaluation of investments, which attempt to redress this imbalance, are necessary if rural development in particular is to be promoted efficiently in an overall development programme. It is crucial that in this context the prospects for addressing the needs of marginalised and impoverished rural communities be assessed. There has been urban bias whereby a large proportion of the national budget is allocated to urban areas than rural areas. This in turn had led to rural areas not having the basic needs such as access to

clean water supply.

In community participation the values and interests of the community should be the guidelines for development processes. Communities in rural areas should be given an opportunity to identify and define their needs since they know local problems better. This would allow development that is appreciated by the beneficiaries and in turn would encourage sustainability. The research aims to conduct an explanatory investigation into the role of community participation in planning the delivery of clean water to rural communities. The research proposal would be explained as follows:

- Community participation in the delivery of clean water should begin by recognizing existing community organizations that are established to improve the conditions in these areas.
- Community participation does not only promote decision-making but it is important especially for the poor communities since it is based on skills improvement and capacity building.
- Community participation addresses a number of problems simultaneously. This means that communities can be able to voice out their needs.
- Poor communities in most cases are excluded from development processes, especially women who are uneducated, unemployed and restricted to attend formal meetings.
- To investigate whether the advent of formal democracy has promoted communities to view participation as an opportunity of being part of the decision making in development and willingness to participate in development tasks.

3. PURPOSE OF THE STUDY

The study is based on problems affecting the rural communities in having access to clean water supply. Water is essential to life, we need it for drinking, cooking, washing and for our crops. People, animals and industry all pollute water, making it unsafe to drink and spreading communicable diseases such as cholera, typhus, malaria, bilharzia and many illness which cause diarrhoea. The study aims at looking at rural water supply from a phenomenological point of view. The study seeks to identify the problems faced by rural communities which hinders participation in the delivery of clean water. Jeppe's Reef

Water Supply Project is used as a case study mainly through understanding the values and perceptions of the community. At the end one will seek to come up with a process that attempts to involve participation at all levels of decision making based on the values of the community. It works from the premise that it is the people on the ground that understand their problems better than any policy maker. Hence the people are in a better position to advise and inform outside helpers on how to solve their problem in a satisfactory manner.

Participation therefore, is defined as an organized effort to increase control over resources and regulating institutions on behalf of or on the part of groups and movements that have been excluded from such control. Moving from the above premise it is thus important to include rural communities in decision-making for exclusion is seen as the major cause of social breakdown and of project failures. The study is in line with Friedmann's ideas of community participation, and has its foundation on the idea of public interest and public good. The research is built on the premise that civilised life is not possible without moral foundations rooted in some concepts of community involvement. Furthermore, if the planners throw away the common good, what is left is no good at all (Friedmann, 1973). Therefore, in this light, the study seeks to build a public philosophy that lays its emphasis on moral integration of decision-makers, planners and disadvantaged communities.

The study also seeks to provide a way forward to address future rural water delivery strategies. However this does not imply that the study will be a panacea for delivering clean water to rural disadvantaged communities. Rather the study will be one of the many approaches planners and decision-makers can resort to, when faced with problems of water delivery in rural communities in South Africa.

In sum, the study attempts to:

- Identify problems faced by rural communities which hinders participation in the delivery of clean water.
- Make the communities aware that through self-help projects they have a competitive advantage, which if exploited would promote effective development, and improve the

standard of living.

- Effect change in the community groups relations and distribution of decision-making powers.
- Formulate a planning process that may enhance participation in planning for the delivery of clean water to rural communities.
- Identify the opportunities available to mobilise local community strengths and potential (knowledge and skills) in project management, problem and dispute resolution, the dissemination of information and to develop these (knowledge and skills) not only in order to deal with the problems of the delivery of clean water and needs but to prevent them too.

It seems unquestionable that effective community participation provides the key to effective development. The promotion of effective development requires that planners should mobilise and have direct consultation with people they are working with through community involvement. Participation is seen as a means of gaining a say in and having a measure of influence over the allocation and uses of power in the process of governance; and also sharing in the wealth of the community and in the outcomes of the system of governance.

4. METHODOLOGY

Below is a brief outline of the research approach. A detailed research methodology is to be presented in Chapter 4. To have a broader picture of what is happening in the rural water supply projects, a literature review of international policy and experience is undertaken. This covers the achievements and lessons from the International Water Supply and Sanitation Decade and the current South African situation. Furthermore in order to understand the concept of participation in planning theory a literature review is undertaken.

The aim of the study is to initiate a community-based approach to water supply delivery in particular and planning in general. It is thus of particular importance to study community thoughts and perceptions on participation in relation to water supply delivery.

The data were collected by means of participant observation and also informal interviews. This will be supported with interviews of key experts and also through using government and non-government water documents. The informal interviews in the community will be directed at the community figures (key informants), selected households and also selected groups (focus groups interviews). A questionnaire for interviews was used for interviewing the people. Chapter 4 will give a detailed discussion of the methodology used.

CHAPTER ORGANIZATION

Chapter one covers the problem, aim and the importance of the study. The latter part of the chapter covers the research methodology. Chapter two is the literature review where the achievements and lessons of the International Drinking Water Supply and Sanitation Decade are dealt with in detail. Furthermore the discourse looks at the current South African situation. Chapter three is the literature review where the whole concept of participation will be analysed in terms of theory and practice. Chapter four is a detailed description of the research approach to the study of participation in the delivery of clean water to rural communities. Furthermore, this chapter deals with data analysis and research findings of the study. The methodology that was adopted was qualitative in nature. Chapter five is the planning recommendations and summary. The recommendations will focus on how the water delivery may be addressed with the involvement of communities.

CHAPTER 2 INTERNATIONAL POLICY AND EXPERIENCE

2.0 THE INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE IN PERSPECTIVE

In the late-1970s the world was faced with a critical situation with regard to the availability of safe water supplies and sanitation. Approximately 1.6 billion people possessed no drinking water and 1.4 billion people had no adequate sanitation (Kalbermatten et al. 1992). In addition a large part of the world's population suffered from water borne diseases. It was estimated that 50 000 people died per day from waterborne diseases (Schalekamp, 1992). (see appendix 1 for various waterborne diseases).

In response to this situation, the International Water Supply and Sanitation Decade (IDWSSD) was called into existence in 1977 by the United Nations Water Conference in Mar del Plata, Argentina. The main aim of the Water Decade 1981-1990 was that all countries draw up plans for water supply and sanitation so that water-borne diseases by the end of the decade, no longer afflicted all human beings. The following resolutions were passed :

- All "men", poor or rich, of whatever colour, have the right to be supplied with clean drinking water, with respect to quality as well as quantity, to cover their basic needs.
- It is recommended that all nations give priority to water supply and wastewater disposal.
- All governments of United Nations member states were requested to draw up programmes, enabling them by 1990 - if at all possible - to supply towns as well as villages with sufficient impeccable water.

2.1 ACHIEVEMENTS

The IDWSSD was neither a complete success nor a complete failure. The achievements of the IDWSSD as reported to the United Nations General Assembly at the end of the decade, showed that an additional 1 billion people in rural areas world-wide were provided with safe water supplies and additional 434 million were provided with

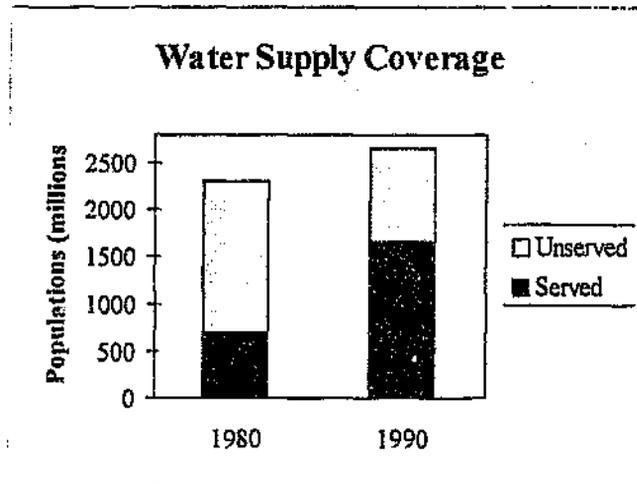
adequate sanitation (Kalbermatten et al. 1992). The achievements of the Decade are illustrated in Figure 1.1. As can be seen from the graphs, the advances of service coverage barely kept pace with the population growth. The goals which were set at Mar del Plata were only partly achieved because by the end of the decade there were still approximately 1 billion people who were unserved by safe water supplies and 1.4 billion who were unserved by adequate sanitation. This meant that at the end of the IDWSSD, one in every three people in the developing world still lacked safe and adequate drinking water and sanitation (World Water Institute, December 1990).

The IDWSSD experience showed that to supply everyone in the world with safe drinking water and adequate sanitation, taking account of a rising world population growth rate, would require immense effort and commitment from the government of the world. To achieve full coverage by the year 2000 using conventional technologies and approaches would require five times the level of investment at that time (World Water Institute, December 1990). And even if the levels of investment can be met, there is no guarantee that quality of service and sustainability of the systems built would be achieved using conventional approaches. An alternative scenario would be to reduce costs substantially through increased efficiency using new approaches to Rural Water Supply development and by the use of appropriate technologies. If costs were halved and investment doubled, full coverage could be achieved by the year 2030 (World Bank, 1992).

Pearson (1991) asserts that in South Africa it has been estimated that 6.1 million people in rural areas lack access to safe drinking water. According to the Saturday Star (15 August, 1998) about 8 million in South Africa depend on water sources that are not reliable because of contamination and recurring drought. To provide adequate RWS services for these people is a huge task and if the new Government is to succeed it is vitally important that the lessons learnt from initiatives in other countries are incorporated into any local RWS development programme.

FIGURE 1.1

THE ACHIEVEMENTS OF THE INTERNATIONAL DRINKING WATER AND SANITATION DECADE.



SOURCE: KALBERMATTEN et al 1992

2.2 LESSONS FROM THE IDWSSD

Three major World conferences were convened to examine the experiences of the IDWSSD. The conferences were held in Recife, Abidjan and New Delhi. A summary of the lessons learnt and the policy statements emanating from these conferences is provided in the following sub-sections.

2.3. 1 The Recife Statement

In October 1988 representatives from the Latin American countries met in Brazil for the UNDP/World Bank seminar on water supply and sanitation for low-income populations. At the end of the seminar the "Recife Statement" was issued with the aim of transforming the health of the region's poor. The statement made the following recommendations for the governments in the region (SALDRU, 1993):

- Take action to address the pressing needs of the low-income populations;
- Give priority to water conservation and pollution control;
- Adopt procedures facilitating popular debate before implementing water and sanitation programmes;
- Adopt low cost and simplified technologies to assure better and faster provision of improved services;
- Highest priority should be given to communities who have received little or no help thus far;
- Support institutional development, training, fair tariffs and strict payment collection;
- Use existing infrastructure more effectively to attain more equitable sector services and postpone new investment;
- Establish mechanisms to ensure the participation of women at all stages of project design and implementation;
- Make use of existing information networks more effectively.

2.3.2 The Abidjan Accord

In May 1990, delegates from 45 African countries met in Abidjan, Ivory Coast. The aim of the conference was to formulate strategies to tackle the problems of meeting the Continent's water supply and sanitation needs of the 1990s. The delegates drafted a

document entitled "Guidelines for the Development of Country Strategies for the 1990s". Based on the lessons learnt from the previous decade the document suggested the formulation of a strategy that would help accomplish long term improvements in the management and operations of the sector, increasing its efficiency and its ability to finance a greater proportion of investments from its own resources.

The recommended strategy to be adopted by the various governments should specify the following, (African Conference statement, The Abidjan Accord, 1990):

- Effective demand should be the basis of project and programme design, in order to ensure the long term sustainability of supply;
- Credit and repayment mechanisms gradually leading to financial self-sufficiency of the sector must be established;
- Technology choice should be based on appropriateness and meeting effective demand at least cost;
- Training and applied research activities must continue to contribute to the development of appropriate technology;
- Community management of peri-urban and rural Water Supply and Sanitation is required to achieve long term sustainability;
- Hygiene education and the promotion of community participation should always be included in the development of peri-urban and rural WSS programmes;
- Replicability on a large scale is essential;
- Sensitisation of communities to the needs for and benefits of improved water supply, sanitation and hygiene education is an important prerequisite of programme planning based on effective demand;
- Exchange of experience at a regional and national level should be encouraged.

2.3.3 The New Delhi Statement

At the "Global Consultation on Safe Water and Sanitation for the 1990s" conference held in New Delhi in September 1990, the United Nations Development Programme (UNDP) presented the following eight key lessons learnt during the Decade (UNDP, 1990):

- Future initiatives must focus on poverty. It is generally the poor that remain unserved;
- Reaching these communities and sustaining services requires a special emphasis on

helping them to help themselves;

- There is a need for governments to concentrate less on direct intervention in providing services and more on enabling public and private institutions to deliver them;
- Meeting demand requires a greater understanding of the household itself: its micro-environment, communications, decision-making processes, perceived needs and expectations. This aspect is essential in determining the level of service to be provided and maintained;
- The policy of free water has often failed. With government subsidies limited, emphasis on cost sharing has to be increased;
- Selecting the right technical option to solve the problem is one of the greatest ways of increasing coverage, particularly when demand levels are correctly matched;
- Focusing on the role of women in the community as prime water users can enhance the sustainability of improvements in supply and sanitation services;
- Achievable targets have to be set. At current rates of coverage, the prognosis for extending water and sanitation services to the unserved over the next 20 years is poor; Monitoring systems are a key part in this. Collaboration must start at national level, with support from regional and global networks.

The participants of the conference drafted a statement, known as the New Delhi Statement. The statement consisted of a four-point programme for countries taking up the challenge "Some for all, rather than more for some". The programme proposed four guiding principles:

- Protection of the environment and safeguarding of health through the integrated management of water resources and liquid and solid wastes;
- Institutional reforms promoting an integrated approach and including changes in procedures, attitudes and behaviour, and the full participation of women at all levels in sector institutions;
- Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes;
- Sound financial practices achieved through better management of existing assets, and

widespread use of appropriate technologies.

The successor to the IDWSSD was declared at the conference to be Safe Water 2000 (UNDP, 1990).

2.4.0 Key Lessons from the IDWSSD Experience

One of the most important contributions of the Decade was that it resulted in an improved awareness of RWSS issues and a better understanding of the mechanisms for achieving successful and sustainable projects. A number of key components were identified at all three conferences (Recife, Abidjan and New Delhi) as important for the successful implementation of RWSS development programmes, viz. there was a need for:

- Targeting the poor;
- Targeting women;
- Institutional training;
- Appropriate technology;
- Community participation;
- Community management; and
- Cost recovery.

Much of the success during the Decade in improving water supply coverage was achieved by using appropriate technologies and community-based approaches to projects (Kalbermatten et al.1992). The conventional approach to infrastructural development adopted from urbanised, western, developed countries was found to be unsuitable because it was overly centralised and did not reflect local traditions and the needs for community participation. These and other constraints of the conventional approach to RWS projects are discussed in the following section.

2.4.1 Institutional Constraints

The realisation that technological and institutional approaches imported from the "First World Countries" to RWSS projects were inappropriate was one of the main lessons from the IDWSSD. The general approach referred to here is that governments design and construct the systems in the conventional manner, using standard tender procedures, forms of contract and administrative structures (Green, 1995). This approach was

originally developed for capital-intensive service delivery systems, and is unsuitable for community-based projects which typically take time to develop because they require a high level of community involvement. Furthermore, the tendering system is geared towards getting the cheapest work possible in the shortest time, through incentives to cut costs and produce a tender in the quickest possible time, rather than on an understanding of the most appropriate structure required. The result is that the contractor will stick to things he knows, as there is no incentive to innovate or suggest alternative methods of construction. There is also no forum within the system to include the contractor's views. The contractor has no direct relationship with the beneficiary community. Thus the approach often promotes a conservative approach which may result in the implementation of systems that lack practical considerations. The sustainability of the infrastructure built also comes into question because the people involved in the design and construction are not those who will eventually be responsible for operation and maintenance.

Despite the evidence of the IDWSSD inappropriate imported models are still prevalent in the RWS sector. This is because of a resistance to change that some analysts have called the "unintentional conspiracy" (Kalbermatten et al. 1992). Some of the underlying reasons for this resistance to change are:

- Engineers have been trained to design and apply sophisticated solutions. There is a serious lack of materials and training devoted to alternative and more appropriate solutions.
- Engineers tend to overlook aspects such as employment creation in low-income areas, or the use of simple solutions so that local mechanics and suppliers can develop the capacity to provide maintenance and spares.
- Engineering fees are often determined in ways that do not minimise project cost (e.g. a percentage of the project cost).
- The design and construction specialists often push for higher standards to protect their reputations against the possibility of poor maintenance.

It may be necessary therefore for the pressure for change to come from the individual governments by way of legislation and monitoring. Many governments involved in the

IDWSSD have adopted community participation approaches.

2.5 POLITICAL ISSUES

The debates around which agency should provide and maintain water supply and sanitation services have raged for years. Some have vouched for the private sector on the basis of its perceived efficiency. On the other hand, however, considerations of higher costs usually associated with private sector provided services, have given impetus to the arguments of those vouching for the public sector. The onus of providing these services is put on the public sector on the additional grounds that these are social services which should be promoted on public health grounds, which is essentially the domain of the public sector.

Consequently, local councils have often been involved in the administration of water supply services. Problems have cropped up out of this. For instance, distance which tends to prevail between the authorities and users creates payment problems and a lack of understanding of services by users. Hence, there has been an acknowledgement that, although authorities remain imperative, they would be better placed playing supervisory and mediatory roles for users, thereby recognising the importance of user organisations as the main administrative structures.

Suffice it to say that community involvement in administration can be limited by the lack of sufficient community interest and lack of capacity in matters relating to water supply. The training of people by local authorities will, in the long run, reduce costs for the authorities as the likely use of local labour might be cheaper and knowledge about services can enhance efficiency in use (thereby reducing the risks of damage to the services). User payments can also be enhanced as users identify more closely with services provided.

2.6 The Reconstruction and Development Programme (RDP)

From the international experience I will now move to the South African situation. In 1994 the African National Congress produced the final draft of their RDP. Later that

year, after having won the elections the RDP was redrafted in the form of a White Paper and brought before parliament. The RDP is a programme that seeks to redress the inequities and deprivation caused by the former government's apartheid policies. The programme is founded on six basic principles (African National Congress, 1994), namely:

- The use of all available resources in a coherent and purposeful effort that can be sustained into the future;
- a people driven process
- peace and security for all
- nation building
- reconstruction and development
- democratisation of South Africa

These principles are indicative of the strong emphasis the RDP places on community participation methods. With regard to RWSS the RDP outlines the following:

- The community must receive training in water management
- Short term objectives : To provide all households with a clean safe supply of 20-30 litres per capita per day (lcd) within 200m, and an adequate/safe sanitation facility.
- Medium term : To provide an on-site supply of 50-60 lcd and improved on-site sanitation. Water supply to nearly 100% of rural households and sanitation facilities to 75% of rural households should be achieved in the medium term
- Long term goal : To provide every South African with accessible water and sanitation

The RDP is the framework within which all of the present governments policy and legislation is to be based.

2.7 Water Legislation

Most of the legislation pertaining to water in South Africa is contained in the Water Act of 1956 (Act 54 of 1956). The Government is committed to reformation of the country's water law in line with the requirements of the country's Constitution of fairness and equity. As part of these initiatives the Department of Water Affairs and Forestry (DWAF) has produced two White Papers. The 1994 White Paper: DWAF produced its White

Paper on water supply and sanitation policy entitled "Water - an indivisible national asset" in November 1994.

2.8 The 1997 White Paper on National Water Policy

A White Paper on national water policy for the country was produced by DWAF in April 1997. The main emphasis of this document is on the management of the country's water resources and proposes a framework for the regulation of the country's water resources.

Some of the key proposals contained in the 1997 White Paper are:

- to abolish the riparian system of water rights, and introduce a system whereby water allocations will no longer be permanent and provision will be made to enable transfer of these rights between users;
- the establishment of water management areas, largely but not entirely catchment based, with the phased establishment of catchment management agencies, subject to DWAF authority and with priority areas targeted first, to undertake resource management in these water management areas;
- all water use, wherever in the water cycle it occurs, will be subject to a catchment management charge which will cover the actual costs incurred; and where there are competing beneficial uses or where such use significantly affects other uses, the water use will be subject to an additional resource allocation charge;
- existing water courts will be replaced with more appropriate legal institutions (possibly a specialised Natural Resources Court to deal with all natural resource and environmental matters); and
- to support the development of a system of international law to guide the management of shared river systems.

The White Paper concludes by stating that the policy and legislation that will arise from it will, provide the Government with the tools required to fulfil its role as custodian of the nation's water resources and to achieve the national goal of ensuring that there will be some water for all who need it, for ever.

2.8.1 General Policy

The White Paper sets out the following key policy principles for water and sanitation (Department of Water Affairs and Forestry, 1994):

- Development should be demand driven and community based.
- Basic services are a human right.
- "Some for all" rather than "all for some".
- Equitable regional allocation of development resources.
- Water has economic value. The way in which water services are provided must reflect the growing scarcity of good quality water in South Africa in a manner, which reflects their value and does not undermine long-term sustainability and economic growth.
- The user pays.
- Integrated development.
- Environmental integrity.

Based on these policy principles, the DWAF aims to ensure that all South Africans have access to a basic water supply within seven years or less. The White Paper defines basic water supply standards in terms of six criteria:

- Quantity: 25 litres per person per day is considered to be the minimum required for direct consumption, the preparation of food and for personal hygiene.
- Cartage: The maximum distance between a standpipe and any one household should be 200 metres.
- Availability: The flow rate of water from the outlet should not be less than 10 litres per minute, and the water should be available on a regular, daily basis.
- Assurance of supply: The water supply should provide water security for the community. In other words, the service should not fail due to drought more than one year in fifty (on average); moreover, the operation and maintenance of the system must be effective.
- Quality: Water quality should be in accordance with currently accepted minimum standards with respect to health related chemical and microbial contaminants.
- Upgradability: The desire of many communities to upgrade a basic service to provide for household connections should be taken into account during planning.

The overall management of the nation's water resources and the provision of adequate water and sanitation services is the responsibility of national government (i.e. the Department of Water Affairs and forestry) in conjunction with local government. Provincial government plays a supportive role in the development of local government capacity. The White Paper envisages a broad role for the private sector, whose resources must be harnessed towards:

- capital investment - as designers of systems, contractors and suppliers of goods and services.
- operation and maintenance - from short term plant management contracts to the complete privatisation of full water supply and sanitation systems.
- training, capacity building and organisation development - the skills required to undertake service development, operation and maintenance will require the commitment of many sectors of society, including the private sector.
- financing and commercial services - as providers of market finance to complement government grants.

2.3.2 Water Bill 1998

The main object of the Bill (see appendix 2) is to provide for the management of the nation's water resources so as to enable the achievement of sustainable use of water for the benefit of all water users. To that end it is necessary to provide for the protection of the quality of water resources and for the integrated management of water resources with delegation of powers to institutions at regional or catchment level so as to enable everyone to participate in the process. The Bill seeks provide for the protection, use, development, conservation, management and control of the nation's water resources. The National Government has overall responsibility for and authority over water resource management, including the equitable allocation and beneficial use of water in the public interest, a person can only be entitled to use water if the use is permissible under the Act. The Act provide that after public consultation, the Minister can regulate land-based activities which reduce stream flow, by declaring such activities to be stream flow reduction activities. (Water Bill, 1998).

2.9 Community Participation

The White Paper places renewed emphasis on community-based approaches to water and sanitation development projects. In this regard the White Paper recommends legislation to establish Statutory Water Committees (SWCs) as a means of developing capacity at local community level for the sustainable operation and maintenance of projects. Regulations to this effect were published in the Government Gazette on 12 July 1995 (Abrams, 1996). However, despite these regulations not one single Statutory Water Committee has been established to date. This is because the establishment of SWCs is a controversial issue. A country-wide survey of national, provincial and local authorities (Abrams, 1996) found that in general most people interviewed felt that the establishment of SWCs would undermine local government and cause confusion and tension.

2.10 Funding and Subsidy Policy

The White Paper states that the basic policy of government is that services should be self-financing at a local and regional level. Where poor communities cannot afford basic services, government may subsidise the construction cost of basic minimum services in the form of grant finance to cover the full capital cost of providing a basic level of service, as described in the White Paper. Thus no contributions from users are required and there is no specified limit to the grant amount per capita. Subsidies will only be available to cover the cost of minimum service provision and will not cover operating and maintenance costs. These subsidies will normally be paid to local authorities or statutory Local Water Committees, rather than direct to a service provider. Other subsidies provided by the Department of Water Affairs and Forestry for water supply and sanitation provision will be phased out, particularly in respect to operation and maintenance costs, except in cases where subsidies are required in the public interest such as for the protection of the environment. Where service levels beyond basic minimum standards are required these must be paid for by the communities, with local authorities or water boards playing a role.

2.11 CONCLUSION

It is quite true that one can learn from other countries' experiences, but one needs to bear in mind certain factors and constraints which might prevent replicability. Firstly, one has to consider the population of the country and the resources available. It becomes very problematic for a country with a high population growth rate like South Africa to replicate some of the strategies used in small communities or country with less population. The resources at the disposal of the government may not be able to fulfil the basic requirements of all South Africans. Therefore in order to overcome this, there should first be a creation of sustainable society which will work together with the government and other institutions for the development of the country, so as to achieve the highest goal possible (in this case: the sustainable supply of water).

CHAPTER 3 COMMUNITY PARTICIPATION

3.0 INTRODUCTION

"Participation is a process through which stakeholders influence and share control over development initiatives, and the decisions and resources which affect them" (World Bank, 1994:135).

3.1 THE THEORETICAL BASE OF PARTICIPATION

A proper evaluation and understanding of public participation can be better achieved when it is viewed against a theoretical framework built on decision-making. The background includes social organisation, political process (which includes decision-making), planning theories, urban management and ideologies in light of society.

Planning theory is perceived as the vehicle through which planners engage in introspection about what they do as planners. Planning theory focuses on the very nature of the planning process. It examines what distinguishes planners from other fields that also deal with public policy issues, and it entails a continuous search for ways to improve planners' effectiveness in society (Hemmens, 1980).

Currently planners are suffering from the scarcity of compelling and useful theories of planning process. The rational comprehensive planning model has been attacked from all angles, though it remains intact because of the absence of competitive set of ideas that can attract sufficient support to supplant it (Hemmens, 1980). This does not mean, however, that the rational comprehensive planning model was or is anti participatory. As a matter of fact, participation goes hand in hand with the concept of 'public interest' upon which the rational comprehensive planning was based. Planners prior to the 1960's were concerned with helping to guide urban decision-making to reflect "community values" through rational planning (Oosthuizen in Soen, Lazin and Neumann, 1986). This was based on the assumption that the public interest was the embodiment of community values and that the public interest could be identified.

3.2 FROM RATIONAL COMPREHENSIVE PLANNING TO PARTICIPATION

Consistent with the history of planning theory, the rational model is adopted and used as the base for decision theory of policy analysis (Anderson, 1979) and of planning methodology (Muller, 1992). In line with Lindblom (1959), Etzioni (1967) and Muller's (1994) point of view, decision-making methods and planning processes are treated as the same in this discourse.

The concept of rationality was formally introduced into the planning discipline by Meyerson and Banfield in the mid 1950's. Rationality is based on the premise that planning is an undertaking aimed at achieving desired goals. Thus efficient planning will seek to maximise the securing of relevant ends. Therefore a planned course of action which rationality selected is most likely to maximise the achievement of relevant goals (Alexander, 1985). The rational decision is based on the following:

- The decision-maker in an attempt to achieve the desired goals or solve the problem will consider all courses of action opened to him.
- The decision-maker predicts the likely effects of each course of action.
- She / He then selects a course of action in which the consequences are more preferable to the desired end or the problem is most nearly solved or most benefits are derived from equal cost or equal benefits to the cost.

The rational model is thus based on principles of reasoning. The rational planning model requires the systematic consideration and evaluation of all alternative means in light of the desired ends. The rational planning model is a tool that enables the decision-maker to make choices according to certain standards of consistency and logic to help the decision-maker to communicate the reasons of his actions (Conyers, 1989). It is evident that the rational planning model is built with empirical aspects and thus it can be equated with scientific method. The rational planning model is not ambiguous in giving all responsibilities to the decision-maker. According to Muller (1994) the consideration of alternatives, consequences and selection, are placed within the domain of the decision-

maker, and the assessment is made with reference to the objectives the decision-maker wishes to meet .

It is thus clear that the rational planning model or decision-making accommodates the interest of the people or organization occupying a position of authority to the total exclusion of the interest of the target group or community (Muller, 1994). The rational model is consistent with an autocratic, dictatorial, attitudinal and functional stance, under the pretext that it encourages efficiency. Horkheimer and Abrno (1972) are of the idea that the logic underlying the Enlightenment's notion of rationality is a logic of domination and oppression, of exclusion or suppression of other modes of thoughts. An attempt to build on the shortcomings of the rational model was the addition of the rational comprehensive method. This approach broadened the base of the planning methodology.

The rational comprehensive planning model became the dominant planning model especially around the 1950's and 1960's (Lindblom in Faludi, 1973). The rational comprehensive model was consolidated as a new branch of knowledge such as operations research, cybernetics (that is the science of communication and control in machinery and animal, including man), and systems analysis were incorporated into the planning process (Muller, 1994). The systems approach gave an enhanced theoretical scientific dimension, thus increased authority to the rational decision-model. It was not until Catenese and Steiss (1970) came at the peak of systems analysis and showed the limitations of the systems approach to planning that the systems approach was rejected on the basis that it was a matter of methodology rather context. In so doing they exposed the rudimentary problem related to the rational decision-making procedure. This was the problem of formulating methodologies capable of accommodating the demand that had arisen in the Western World for planning practices with improved democratic and participative properties (Muller, 1994).

Hall (1993) identified three key issues underlying the protest of the time, which challenged the legitimacy of systems planners. Firstly, there was the growing mistrust of planning experts and the top-down approach, which was predominant in the First World

and is still dominant in the Developing Countries. The mistrust was not based only on urban development issues but covers a wide spectrum of life in general like war and peace strategies. Secondly, there was increasing mistrust of the systems approach in military applications. The systems approach was seen as using false science and incomprehensible jargon to create a smoke-screen, behind which ethically reprehensible policies could be pressed.

Lastly, the protest was triggered by the riots that devastated American cities. According to Hall the riots were proof that systems planning had done nothing to improve the poor conditions of cities, rather it contributed to the plight of the urban dweller. Bolan (1988) slams systems planning as old-fashioned comprehensive planning, dressed up in fancier garb which ignored political reality.

Civil riots in the USA and social commitments in Great Britain facilitated the engagement of the public in more democratic decision-making. Many of the early scholars in public participation put more emphasis on the real or actual issues concerning public participation. This group includes Arnstein (1966), Godschalk and Mills (1966), Burke (1968). Others like Fagance (1977) focussed on the procedural concepts. Burke (1968) identified five strategies of public participation: education therapy, behavioural change, staff supplement, co-optation and community power. On the other hand, Arnstein (1966) uses the ranks of citizen participation. According to Godschalk and Mills (1966) they propose a collaborative approach to planning through urban activities. They see planning as a collaborative process where the planner works in collaboration with his client community.

McConnell (1981) identified the formulation of goals, the testing, refinement, reduction of alternatives and the evaluation of alternatives as phases in the process that are particularly responsive to public input. McConnell puts forth that participation must start at the beginning of the planning process. McConnell's process incorporated an interface between the public and the planner at the plan proposal, goal requirements, survey, hypothesis formulation, alternative consideration and plan proposal stages. Most of the

participatory approaches use the element structure of the rational process, on which the involvement of the public is appended (Muller, 1994).

The inclusion of the public in the planning process adds credibility to the judgement exercised by the decision-maker. Muller (1994); sees this approach as a *“verification of the top-down routine of the rational planning model. Hence, even though participation is added on the former rational approach – the participatory procedures are seen as still confined in the naturalist framework of scientific method. As a result thus such approaches are susceptible to the anti-naturalist critique which holds that the methods of the natural sciences are inappropriate and inapplicable to the social sciences. The complexity and character of human behavioural patterns mitigates against the use of methodological naturalism. Therefore an alternative approach to decision-making is needed in general and in particular in the Third World Countries whom South Africa is part of where the general public have been subjected to top-down rational planning approach during the apartheid period for a long time.”*

What then are planners left with if the inclusion of participation in the planning process remain top-down and far from serving the interest of the public. Boland and Forester address the question in new concrete ways that demonstrate the possibilities of a renewal of rational planning theory. Boland draws on phenomenology for analysis while Forester rests his approach on the critical theory of Habermas and both indirectly on work in philosophy often labelled ordinary language analysis (Hemmens, 1980). The two scholars argue that to make sense of human behaviour, planners must understand intention as well as behaviour and that it is possible to develop reliable knowledge of planners's actions through communication about our behaviour, and shared agreements on its meaning.

If planners are to understand human behaviour, then it is imperative to find ways to develop systematic, reliable knowledge of what planners mean by what they do. This line of planning analysis brings in the concept of phenomenology in planning which many planning scholars like Muller (1994) Hemmens (1984), Healey (1992) and many others have emphasised the importance of phenomenology in planning. The present study too

favours a phenomenological approach in general but with reference particularly to the Third World Countries which includes South Africa.

The study will give an overview of the concept of phenomenology. It is very important to note that phenomenology does not necessarily displace participation or empowerment but acts as a foundation upon which the two can be developed and practised more effectively in real life planning.

3.3 PHENOMENOLOGY: THE BASE FOR PUBLIC PARTICIPATION

Phenomenology was originally developed as a way to make positivist science even more scientific and better grounded by understanding the nature of the observer. The concept tries to explain how the world comes to make sense to us in terms of how it is organised and structured, and how the decision-makers organise it, where the world that is studied is our ordinary everyday one (Krieger, 1974). Muller (1993:341) described phenomenological knowledge as “knowledge is acquired in the experiences of life and is consequently largely unstructured, informal and intuitive”.

This use of informal knowledge has led theorists to describe phenomenology as an approach which engages scientific and non-scientific sources of knowledge, disclosing the world as it shows itself, prior to misinterpretation by scientific enquiry. Phenomenology is therefore not a science in the true sense of the term, it is rather a ‘descriptive’ science. Phenomenology does not provide a philosophical premise, instead it reverts to entire field of cognitive experiences as the starting point of primordial phenomenon.

It emphasises the subjective meanings of the problems to the actors. It is based on the notion that knowledge is constructed in a community rather than having an independent existence. The baseline is that information is shaped by perceptions. Phenomenology as a guide to planning can link knowledge to action because:

- the concept offers more realistic models of what many practitioners do;
- the concept deals with issues in forms more recognisable to decision-making; and
- it engages the decision-maker in the information production process so that they are

more prepared to act on results.

As a result such an approach can be seen as a major breakthrough from the rigid positivist model. Phenomenology adopts an interpretative approach which focuses attention on different kinds of knowledge and different processes for deciding what is true (de Neufville, 1978). The central objective of the interpretative approach is the understanding of particular phenomena in their own terms and contexts. It is grounded in the everyday world and pays attention to ordinary language and beliefs. It is holistic because it tries to see all the influences at work, rather than to examine an abstract subset of variables. The aim is to make sense of particular situations rather than to generalise. The research undertaken is both qualitative and investigative and it avoids hypothesis testing and measuring.

The focus of attention in the interpretative tradition is on meaning. Behaviours and voiced opinions are to be taken seriously rather than at face value as is the case in the positivist approach. Concepts, measures, and language are recognised as indicators of something more elusive and subjective. Since human behaviour since can only be understood in terms of its meaning to the actors, beliefs themselves are constitutive of facts.

The interpretative model offers planning much stronger ways to link knowledge and action than the positivist approach for two main reasons:

- * the model of knowledge offers opportunities to engage and motivate policy makers and the citizens so that they will be prepared to act on the knowledge produced.

The inclusion of policy-makers, clients and citizens in the process of deciding values, assumptions, concepts and methods, means these participants can feel part of the knowledge produced as their own.

- * this kind of knowledge is more reflective of the world that policy makers and planners live in. It deals with concerns that are recognisable and it provides knowledge in a way that match the task that have to be done. Thus it offers a more realistic model of what planning professionals and their clients now do.

3.3.1 LIMITATIONS OF THE PHENOMENOLOGICAL APPROACH

The phenomenological approach has much to offer as a model for many aspects of professional practice but equally so it is important to highlight its limitations. The phenomenological approach is important because it helps to ensure and enhance the participation of all stakeholders in both the planning and implementation stage, but the major limitation is that it does not provide a way to address the different ideologies the various stakeholders may share. Ideology in this case refers to the inhibitions that may blind stakeholders to more useful or productive ways to seeing a problem. Furthermore the phenomenological approach assumes that consensus can be achieved, and it allows no place for basic conflicts in power and interest.

Phenomenology fails to account for the constraints of social action, other critics claim that the approach does not ascertain the structures or forms of experiences. Another criticisms of phenomenology relate to the limitations, which are imposed by ill-defined methodology. Phenomenological reductionism is a very subjective process. As such Buttimer proposed that phenomenology should be regarded as a perspective rather than a methodology because it does not offer clear operational procedures to guide the empirical investigator (Pickles, 1985: 65).

Methodology, which necessitates researchers leaving behind their prejudice and preconceptions, are problematic as Seamon admits when he speaks about phenomenological intuiting which he cautions must be approached with care; the natural attitude is left behind only with difficulty (Pickles, 1985:65).

Other critics of phenomenology have highlighted the contradiction in research, identified by Wood that research which purports to observe the life world but which distinguishes between thought, action, people and environments are inadequate ways of investigating the lifeworld (Pickles, 1985:66).

The shortcomings of phenomenology have been overcome to some extent by ideas promoted by De Neufville (1987) who advocated phenomenology as more effective guide to link knowledge and action because;

- (i) it deals with issues in forms more recognisable to decision makers;

- (ii) it offers a more realistic model of what many practitioners actually do; and,
- (iii) it engages decision makers in the information production process so that they are more prepared to act on the results.

De Neufvil : acknowledged the limitations of phenomenology but stressed that it could usefully focus on the particular circumstances instead of looking for generalisations.

Researchers would then observe specific situations and how communities behave and react in these situations. De Neufville pointed out that behaviour is related to values, perceptions and interpretations of the community which has meaning for the actors in the community, therefore "beliefs themselves are constitutive of facts...if the results are to be taken as true, they must reflect values, expectations and theories shared by the community" (de Neufville, 1987:88).

The phenomenological approach encourages maximum participation, *throughout* the planning process, instead of at specific points in the procedure. This illustrates that communities are the most appropriate people to define problems and suggest possible solutions for these problems. Phenomenological planning approaches focus on the importance of communication and dialogue in the planning process and the barriers to effective communication through language. The approach consists of strong principles and ideological frameworks, which guide the planning styles, but it, appear to lack effective guidelines for action on methodology.

The phenomenological perspective on participation requires that the values of the community, of those least powerful elements of the community, be at the bedrock of the process. Muller (1994) argues that ultimately this means that the disempowered sector of society upon whom decisions are conventionally inflicted should decide in the decision procedure to be pursued, thus his community-decision model. In this case, the planner provides information, advice and recommendations and the community issues instructions and makes the decisions.

3.4 SUMMARY

The societal values underlying public participation are many. These include protecting public's rights, guard the public interest, maintaining the stability of the society and reduce the alienation of individuals within a large technical society. It is certainly the case that the idea of public participation is here to stay, and when its benefits to society are considered, it becomes important to make all possible efforts to include public participation in the local planning process. On the other hand there are many arguments against public participation which includes economic waste, government inefficiency, increased political conflict, weakening of representative governments and parochialism. In reality these are primary problems of appropriate administration, proper role assignment, and effective participatory tectonics.

The importance of adopting public participation lies in the nature of contemporary society. Currently the world order is changing socially, technologically, politically and economically. Liberalisation of trade and flexible specialisation, democratic structures and globalisation are part of the new structure in the post modern period. Everywhere around the world autocracy and absolutism is being challenged. Planners need to take note of these changes. As a result, a planning theory, which may recognise these changes, will be of great value to planning. Though it is difficult to come up with a clear-cut theory, the proposal is for a theory based on the ethics of participative democracy, sustainability and empowerment.

This is so mainly when one considers the following:

- Planning is part of a political process and like the rest of the Southern African states South Africa had entered a democratic era, characterised by growing concerns and campaigns for participative democracy and empowerment;
- Planning is a service profession that cannot continue to ignore the frustrations, expectations and demands of the communities planners seek to serve;
- People are being trusted to make decisions for themselves and are encouraged to solve their own problems and to take responsibility for their situations;
- Conflict resolution and joint problem solving are more effective than the former top-

down decision-making approach. The public should be the primary arbitrator of what constitutes the public interest.

The planning process is often a simultaneous interaction between its various steps. Considerations in implementation do not form the last step in the planning process, but they are essential to each and every step along the way as planners try to help communities solve their most pressing problems. It must be noted that it is under the above observation and consideration that a theory based on the ethics of participative democracy, sustainability and empowerment is seen relevant in today's planning. The public must be empowered as to be able to solve their own problems. As put forward by Dalton (1993) one subscribes to the idea that a theory based on participative democracy, sustainability and empowerment ethics will be a better position to guide the profession in the post-modern era of planning. The aim will be putting people in control of their environment and destiny. By doing so, planners will be promoting self-respect, self-reliance and self-determination. The vision of empowering the disadvantaged communities will be an exciting challenge as planners help to solve today's problems to achieve the promised vision of a better tomorrow.

3.5 Community Participation Approaches

The concept of community participation originated about 40 years ago from the community development movement of the late colonial era in parts of Africa and Asia. To colonial administrators, community development was a means of improving local welfare, training people in local administration and extending government control through local self-help activities (McCommon et al. 1993). However, during this era, the policy failed to achieve many of its aims primarily due to the bureaucratic top-down approach adopted by the colonial administrations (ibid. 1993). Out of these experiences various approaches were developed that have been more successful and have gained broad support from all the major players in the development field (Abbott, 1991).

3.6 WHAT IS PARTICIPATION

Participation has many meanings. According to Wolf (1997), at a minimum, it means that

people simply use a service. At a middle level, it means that decision-makers consult the community or the people involved, and take their views into account; that people contribute labour, skills, material or funds, and or that they get involved in delivering a service. Finally, full participation means that communities identify their own problems, assess their options, make decisions, and carry them out. Milton and Thompson (1995), argue that community participation can be regarded as a double-edged sword. On one hand, he claims, community participation brings increased assess and control over vital resources and decision making process by local people, cutting away the bureaucratic red tape and institutional constraints as it proceeds. On the other hand it can be used to justify government social relationships of power.

Participation may be a means or an end, but in reality it is usually both. Involving people in order to increase awareness, empower, build capacity, or expand rights and duties may be an end in itself, but it may also function as an instrumental means for accomplishing a specific task. Similarly, working with people to accomplish a specific task may enable them to expand their confidence and ability to address other issues in their lives. But it is important to understand that frivolously involving communities simply for the sake of involvement can be dangerous: when people become involved, they are contributing time, money, ideas, trust, and goodwill. Their expectations are raised, and follow – through is essential. Understandings with communities should be clear, and if promises are made, they should be kept (Wolf, 1997).

Community participation generally is more successful when the community takes over much of the responsibility than when higher level public agencies attempt to assess consumer preferences through surveys or meetings. In order for community participation to work, projects must include special components addressing it. Villagers can be recruited to help in all phases of designing, implementing, maintaining, supervising, and evaluating new water supply and sanitation systems, but only if the time, effort and money is spent to do it right. Special attention must be paid to the development of local committees and governance structures that can adequately oversee local participation.

During the IDWSSD most governments and development organisations supported the idea of community participation, although there were various interpretations of what the approach entailed. These ranged from the perspective that saw the approach as the means by which communities could take control of the political and economic issues affecting their lives, to the views that it was merely a way of mobilising community support for a project, or for improving project performance (Abbott, 1995). It has been proposed (Paul, 1987) that the different interpretations of community participation are not necessarily in conflict with each other but are part of a broad framework for defining optimum participation. Paul (ibid, 1987) offers the following definition:

In the context of development Community Participation refers to an active process whereby beneficiaries influence the direction and execution of development projects rather than merely receive a share of project benefits. The objectives of Community Participation as an active process are:

- a) empowerment;
- b) building beneficiary capacity;
- c) increasing project effectiveness;
- d) improving project efficiency; and
- e) project cost sharing.

The framework identifies four levels of intensity of participation, namely:

- information sharing;
- consultation;
- decision making; and
- initiating action.

This framework has been largely accepted by development agencies worldwide. However, a criticism of the model is that it is "project based" and does not include the full spectrum of Community Participation approaches. As such, the framework can be defined in planning terms as "means" orientated (Abbott, 1991). The "means" approach views community participation as a form of mobilisation to achieve a specific, generally project related goal (Moser, 1983). The alternative paradigm is the "ends" approach. This

approach views community participation as a process whereby control over resources and regulative institutions by groups previously excluded from such control is increased.

However, despite the fundamental differences between the two approaches, they are not necessarily mutually exclusive (Abbott, 1991). Abbott provides evidence that the two approaches are derived from different situations in different parts of the world, and that the approach adopted depends on the local situation, and particularly two fundamental issues; namely:

- the legitimacy of the authorities;
- the nature of development.

In other words, situations in which the legitimacy of the authorities is in question, will result in projects where participation is identified as an "end". Situations in which the development of services and housing is the main objective and require meaningful participation at a grassroots level are more likely to adopt the "means" approach. It is also possible that a situation will require a combination of the two approaches; such as in South Africa prior to the democratic elections in 1994. The government was not seen as legitimate by the majority of the population, however the provision of services and housing were key issues to be addressed; (since South Africa now has a legitimate national government it is now moving towards a "means" approach, but this is still complex at community level).

Thus it can be seen that Community Participation embraces a range of approaches. The mix of objectives and intensity and the approach adopted will vary depending on the nature of projects and the local context. Common constraints to community participation which should receive attention when considering any community participation program are (Moser, 1983):

- an unwillingness by the governments to share control;
- bureaucratic inflexibility to community requirements;
- the lack of suitably trained personnel to work at the level of community participation;
- the stage at which community involved in the project;
- provisions to stimulate grass-roots action, formulate corporate identity and create long

term organisation capacity;

- measures to ensure a "learning process" to reduce suspicion and mistrust that community participation is a disguise for exploitation of cheap labour;
- mechanisms to ensure project benefits majority not simply leaders of community.

Skilled implementers are necessary to ensure the appropriate approach and to create favourable conditions of community participation, especially in countries that do not have a culture of grass roots involvement. When implementers do not have the skills or the incentive to rectify conditions such as those mentioned above, it is unlikely that the full potential of community participation will be realised.

The IDWSSD experience found that one of the main issues relating to project sustainability is the management of the projects after completion, and not just involvement (or participation) in construction. As an attempt to articulate the responsibilities and management requirements necessary to promote local management of projects, the community management approach was developed

By the 1970s, several facts about development were becoming all too clear (Wolf, 1997). First, supply side economic inputs and technology transfer alone were not creating economic and social development. A more holistic approach had to be taken – the environment, the economy, politics, and social factors are all interrelated, and all have to be taken into account in working toward practical, meaningful change. Not only that, all the voices have to be taken into account. Each partner in development has a unique perspective to contribute. The views of the donors, national governments, development workers, technical experts, and researchers have always been recognized. But various projects failures around the world have made it clear that the participation and perspective of local people are as essential as any other "expert" contribution (Wolf, 1997).

In practice, and for a variety of reasons, planning cannot be left totally to officials, socialists, administrators or experts. Some form of participation in planning is essential

(Atkinson, 1992). Development is not about the delivery of goods to a passive community, it is about active involvement and growing empowerment. Development is satisfying basic needs such as housing, water, health care, jobs and recreation in a way that changes economic, social and power relations (SANCO, 1994). Community participation has proved to be a success in a number of countries such as in Kenya, Botswana and Ghana where community participation was promoted in roads constructing, stormwater drainage, etc (McCutcheon, 1992). In Tegucigalpa (the capital of Honduras) the community is involved in planning to meet their own needs and then take on management function which ensures that the neighbourhood has safe water at a price they can afford (Choguill, 1994). Therefore community participation in South Africa would also play a major role in alleviating the enormous lack of services such as sustainable clean water to rural communities.

It is argued that conventional services have not been or cannot be extended to the poor, as quickly as required. Therefore communities will have to organize to meet their own needs (Crook, 1991). If participation is pursued there will be greater possibilities for self-reliance, which will lead to self-perpetuation of initiating projects. In addition, participation means services can be provided at a lower cost (Crook, 1991). Therefore community participation should be promoted, especially for poor communities who have nothing to offer but their labour. According to Citicon (1992 : 19) "experience has taught us that decisions arrived at in boardrooms and applied at grassroots level are not usually received positively by target communities. We at Citicon have therefore developed mechanisms aimed at ensuring consultation". Citicon is committed to the principle that the masses of the people must participate in all the processes involved in their development. Structures with the necessary expertise to formulate mechanisms that will guarantee the involvement of the community in decision – making with regard to projects aimed at alleviating the plight of the people have been created. As a result, a string of successes has resulted from applying these mechanisms.

3.7 TYPES OF PARTICIPATION

Arnstein distinguishes eight forms of participation, which may help in the analysis of public participation. The eight types of participation are arranged in a ladder form, with

each rung representing a participation level and the extent of citizen power to influence the end result (Figure 3.1). The bottom rungs of the ladder are manipulation and therapy. These two rungs are levels of non-participation. The main aim is to allow people to participate in the planning process, but the power holders educate or cure the participants to their way of thinking, or what they believe should be done.

The rungs of informing and consultation, progress to the level of tokenism, which allows the people to have a say. The participants may indeed be involved and be heard, but there is no clear condition that the community has the power to ensure that their views are recognised by the power holders.

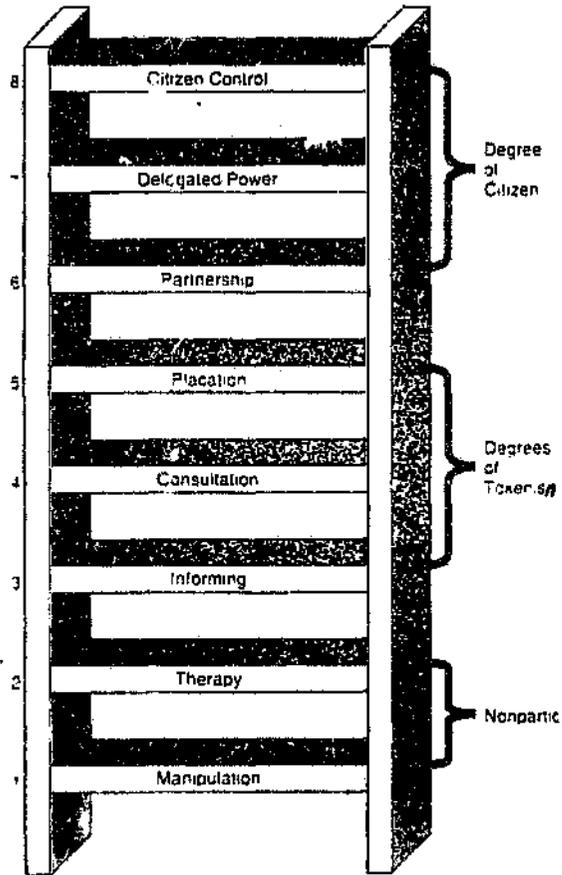
Placation is a higher level of tokenism as the participants may give advice, but there is no guarantee that their wants and needs will be put forward by the power holders. The highest three rung- partnership, delegated power and citizen control, allow the people to obtain the majority of decision making power.

The eight rung ladder set up above is a simplification of citizen participation, but it shows the significance of the gradual change in power. Understanding these levels helps to clarify the increasing demand for participation from the people, as well as the confusing responses that the power holders may provide. However this eight rung ladder for participation has limitations. There is no distinction in the locus of power between the different rungs, the power always remains in the hands of the authority or person instigating the participation process. on the other hand it is a useful tool to enable us to assess various forms that participation can take, and which areas we must attempt to stay clear of, where little or no power is given to the people.

In South Africa in the past there was low degree of citizen participation in developmental community projects. Decision making was highly centralised and advice from citizens was either discouraged or closely managed by officials. Community involvement often means 'manipulating' people into accepting the professionals point of view, or 'therapy' is used to ensure the passive acceptance of decisions made. At best, more formal attempts at participation often only provide for: 'informing' the public in a one way

FIGURE 3.1

ARNESTEIN'S LADDER OF CITIZEN PARTICIPATION



SOURCE: ARNESTEIN, 1969: p. 216

communication process; 'consultation' with no attempt made to allow the public to influence decision making; or 'placation' to make the public think they are making a contribution. There should be a move away from non-participation and tokenism to a higher state of public participation and hence involvement in developmental projects. These issues thus relate to the factors that make participation either good or bad. The next section will look at promoting community participation in Guinea-Bissau rural water project.

3.8 PROMOTING COMMUNITY PARTICIPATION IN RURAL WATER SUPPLY IN GUINEA-BISSAU

As a means to better project planning, socio-economic studies have been carried out in the preparatory phase of large and long-term projects. These studies serve to identify the interest, willingness, and capacity of community members to participate in water supply projects. In the course of the project, if it is discovered that some components are not serving community interests, projects may be redesigned, as indicated in the observation of a program in Guinea-Bissau. To prepare its community participation component, a socio-economic study was carried out on water use patterns and perceived problems. The study showed that women applied different criteria to water use for different purposes, and that considerable differences existed in perceived problems and priorities, social organization, and water culture. Experience with non-use of handpumps in (one) area also showed the importance of involving the community, especially the women, in the project period. A team of one male and one female promoter consulted the villagers before site survey and construction took place. After the construction, visits were continued to organize local maintenance and health education. For maintenance, the community selected a team consisting of a man responsible for the technical tasks and a woman for upkeep of hygiene (World Bank, 1992).

3.9 HOW TO ENSURE PARTICIPATION

Community participation requires that planners have direct contact with the community. This requires additional skills, skills to negotiate and organize. Planners cannot merely

respond to requirements or preferences articulated by a community group, they must engage in a process to ensure that they are responding to articulated needs of the community (Friedmann, 1993).

3.10 THE ROLE OF THE PLANNER

According to Friedmann, planners play an interchangeable and inter-dependent role with the "people", so that it can not always be determined who wears the hat of a planner and who does not (Friedmann, 1987). Planners play the following roles, as identified by Friedmann:

- * mediate encounters with technocracy; that is, technical experts and government officials.
- * ensure the widest possible participation of all members of the group during the entire process.

The planner can bring to the planning or development process in terms of skills the following skills:

- * Communicative skills;
- * Group process skills;
- * Familiarity with the social learning paradigm, its requirements, and its applications;
- * Familiarity with planning theory (history, problems, pitfalls);
- * Analytical skills (particularly skill in analyzing complex and dynamic situations);
- * Synthesizing skills in devising solutions;
- * Substantive knowledge (historical, theoretical, institutional); and
- * Experiential (tacit) knowledge in social transformation.

(Friedmann, 1987).

3.10.1 THE ROLE OF A PLANNER: FACILITATOR OR CHANGE AGENT

Friedmann (1987) defines *social learning* as: a certain style of linking knowledge to action which begins and ends with purposeful activity. A purposeful activity is an activity

which has a specific aim, or a deliberate intention. As such, social learning is linked to social practice, which has four elements: action, political strategy and tactics, theories of reality, and values. He further asserts that the social learning process is iterative and recursive: that is, it “feeds” on its own practice. But Friedmann argues that this is never direct; it must be passed through a theoretical and ideological “filter” where experience is sifted for what it has to teach, and be available only in this refined form.

Friedmann sees a role for planners in the social learning approach process methods of “filtering” so that the group itself may learn from its own experience. These methods may involve:

- open discussion;
- self – criticism;
- role playing;
- maintaining a collective memory, and other devices for this purpose.

Friedmann’s *social learning approach* makes room for planners as change agents who would encourage, guide, and assist an actor in the process of changing reality. These change-agents are generally professionals who bring certain kinds of formal knowledge to the ongoing social practice of their “client group”. To be effective, Friedmann says that change agents must develop a transactive relationship with their client, conducive to mutual learning. The change agent is seen as some one who can “teach” and organize both a new awareness and the necessary skills for a self-reliant practice. This “teaching” is necessary because the community must go beyond just acquiring a critical consciousness of its own conditions of oppression, but must also learn to engage in direct action, to negotiate, and to translate its passions into realizable, effective programs for structural change (Friedmann, 1987).

This view coincides with Batten and Batten’s (1967) non-directive practitioner. They identified the following function ... a facilitator or change agent in practice; he/she will have the following functions:

- * try to strengthen incentives for people to act, for example, when they are weak, by stimulating them to discuss their needs hoping that they will come to see them more

specifically as wants;

- * help by providing information -- if people need it -- about how similar groups have organized action;
- * help people systematically to think through and analyze the nature and causes of any problem they may encounter in the course of their project, and to explore the pros and cons of each and every suggestion for solving it;
- * help by suggesting sources from which the group may be able to obtain any material help or technical advice in addition to what they can provide themselves; and
- * to help resolve and mediate conflict situations.

Barber (1992) contends that a facilitator's role is to encourage a climate conducive to group inquiry:

- * Permissiveness: tolerance, acceptance of others,
- * Communalism: allowing close relations to develop, encourage sharing, informality and free communication to unite the community together at a pace and time appropriate to those involved.
- * Democratization: encouraging all members to equally share in the exercise of power and decision -- making via regular community meetings and face -- to -- face discussion.
- * Reality confrontation: presenting individuals with the consequences of their actions while emphasizing that they are responsible to their peer community.

3.11 CONCLUSION

Phillips et al (1995) assert that community participation is required for work to be done which is required by the community. Although a technology may be appropriate to the available funds and the social conditions and operating and maintenance capacity in the community, the community may reject it as inferior because it differs from that used in wealthier areas. The community should participate in assessment of its resources and subsequently in the choice of technology. Communities are highly complex and not single cohesive units. In the absence of legitimate and effective local government, other representatives of the community have to be identified. It may be difficult to determine whether an individual or organisation is representative of the community. A community

organisation which is unrepresentative can cause resentment and conflict which may curtail a programme. Alternatively a development committee may be formed. Problems may also arise if the leadership of organisations representing the community changes or if other organisations become more powerful during a programme.

Some of these problems in rural water projects in South Africa might be avoided by a careful approach to community participation. The validity of claims to be representative must be tested as early as possible. All interest groups in the community should be identified and consulted. Holding public meetings or advertising in newspapers may do this. Publicity material about a proposed programme can be distributed at public meetings. It should not be assumed that spokespeople at public meetings represent the majority or all of the community. Spokespeople may also say what they think outsiders want to hear in order to further their own positions or to be polite.

What must be realised is that in practice, planners may find that they play both roles interchangeably, depending on where they are in the planning process. However this would require the planner to strike a balance and Batten and Batten's non - directive approach provides important guidelines to ensure this. Linking learning situations to the planning processes is one way in which one can ensure that what people learn is relevant to their situation and to ensure that what is learnt is applied and reflected upon as something that can be adapted or re-applied. Friedmann (1992:70) believes that social learning approaches are appropriate to community self-empowerment since they require substantial departure from traditional planning practise which is typically imposed from above rather than generated within the community of the disempowered themselves. This has been evident in the kind of planning practised during apartheid.

CHAPTER 4 RESEARCH APPROACH

4.1 INTRODUCTION

The aim of the study is to highlight the problems faced by rural communities that hinder participation and significance of community participation in planning for the supply of clean water to rural communities. The study is conducted against the background of the ever-growing demand of basic services to disadvantaged rural communities. Rather than blaming the government for failure to provide clean water to rural communities, the aim was to make the community aware of the role and importance of participation. The gist is to sell the idea of participation at all levels of decision-making. The government is committed to provide services to rural communities as to uplift the standard of living of the people. In this regard it is felt that if the government can involve the target population at all decision-making level perhaps a common vision and common dedication can be mobilised. People know their problems very well, thus they need to be empowered to solve them in a way conducive to their needs and ex-patriation.

Since the study is based on information, which reflects people's thoughts, aspirations and ideas, the methodology adopted is a qualitative research approach. This is so because it is difficult or impossible to quantify human efforts, not to mention human thoughts and behaviour. According to Babbie (1992), qualitative research methods can be usefully applied in planning for a diversified target group. The study relied mainly on participant observation and interviews (formal and informal).

The qualitative approach becomes very important in planning for the delivery of clean water to rural communities because plans should be a reflection of the user perspective more than others. In the qualitative approach, data collection techniques selected were not only appropriate to meet the ends of the study, there was also a need for the techniques to be compatible with the situation in the case study area. The researcher attempted to select techniques that would allow data collection to proceed even in the face of limited financial and time resources. As a result, the study mainly relied on participant observation and interviews (formal and informal). A structured questionnaire for

interviews was administered to a small sample of households to acquire additional data to substantiate information derived from observation and interviews. (appendix 3 data collection methods). The number of householdsⁱⁱ, which were interviewed, was thirty.

In selecting households to be interviewed, a random sampling with replacement was used. The sampling was done on the bases of housing units and an attempt was made to interview all heads of households. However, it proved to be difficult to find all households heads, thus mainly the study was carried on weekends when most households heads were more likely to be at home.

4.2 GEOGRAPHICAL DESCRIPTION OF THE STUDY AREA

4.3 INTRODUCTION

The study was based in the Jeppe's Reef area (map 4.1). It is located in the Lowveld of the Mpumalanga Province, in the former KaNgwane homeland (map 4.2). The relief of the area is relatively flat with few isolated hills on the western side. The altitude of the area is about 500 – 1400 metres above sea level. The area is well drained, with warm to hot summers and cold winters. The mean annual temperature is about 26 degrees celsius. The rainfall, which is mainly conventional occurs in between November and March. The climate of the area is the Tropical type (map 4.3) that is one rainy season, one dry season; hotter during dry season, cooler during wet season. Winter rainfall is very uncommon in the area. The mean annual rainfall for the area is about 500 - 750 mm per year (map 4.4).

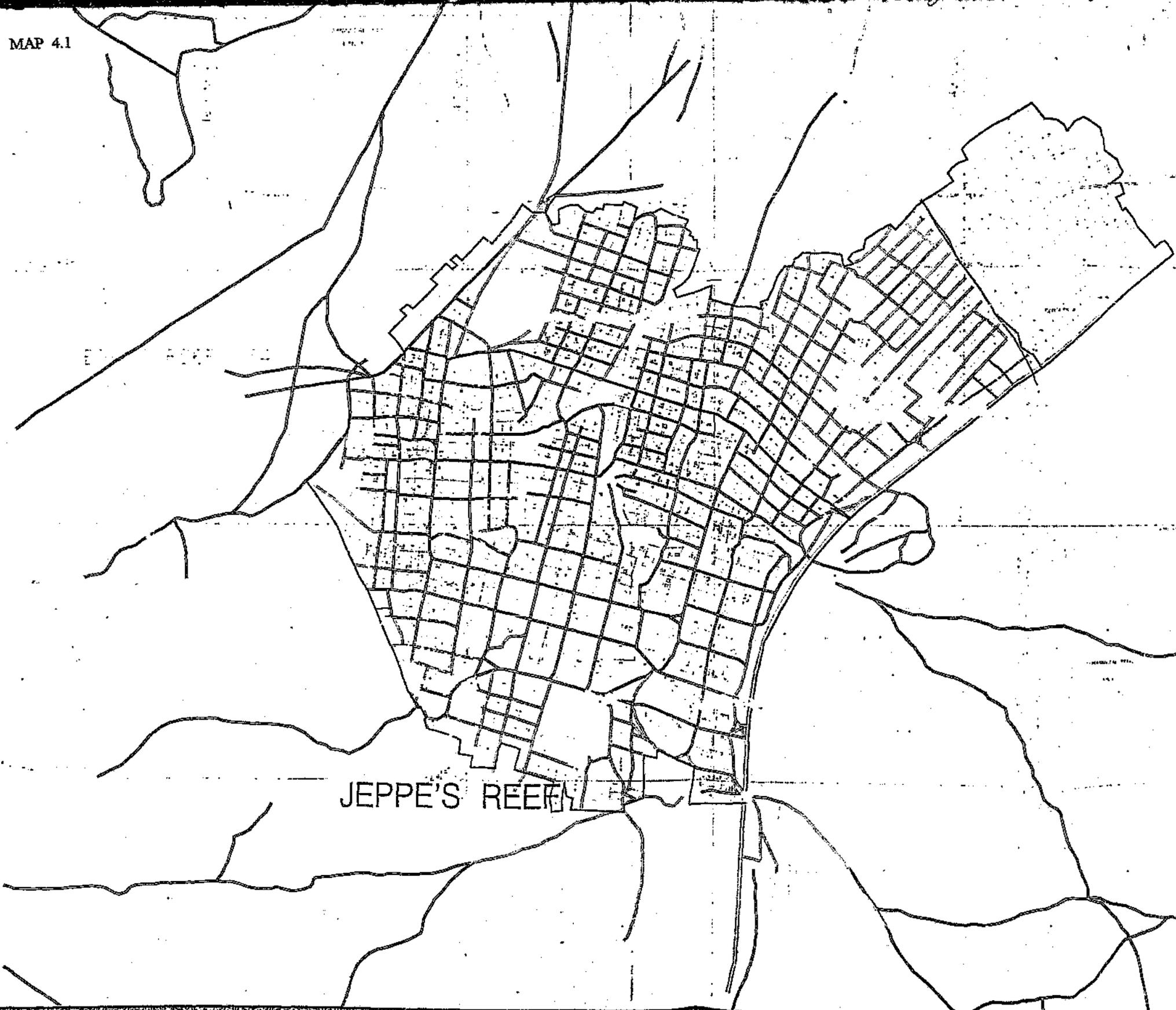
The vegetation of the area consists of Tropical dry savanna (map 4.5). There is no man-made forest. Overgrazing which is a common practice in the area, has contributed quite substantially to the deterioration of the natural vegetation. In other parts of the area the rate of donga development is clearly assuming alarming proportions. A foreseeable negative consequence of this lack of concern is a further reduction in the area presently put under livestock grazing land.

The main form of public transport is buses and taxis. Some of the noteworthy development includes a farming input depot, fenced communal grazing land, electricity, a

MAP 4.1

LEGEND:

- PROPOSED ROADS
- EXISTING ROADS
- STREETS
- ...



JEPPE'S REEF

SCALE
1:5000

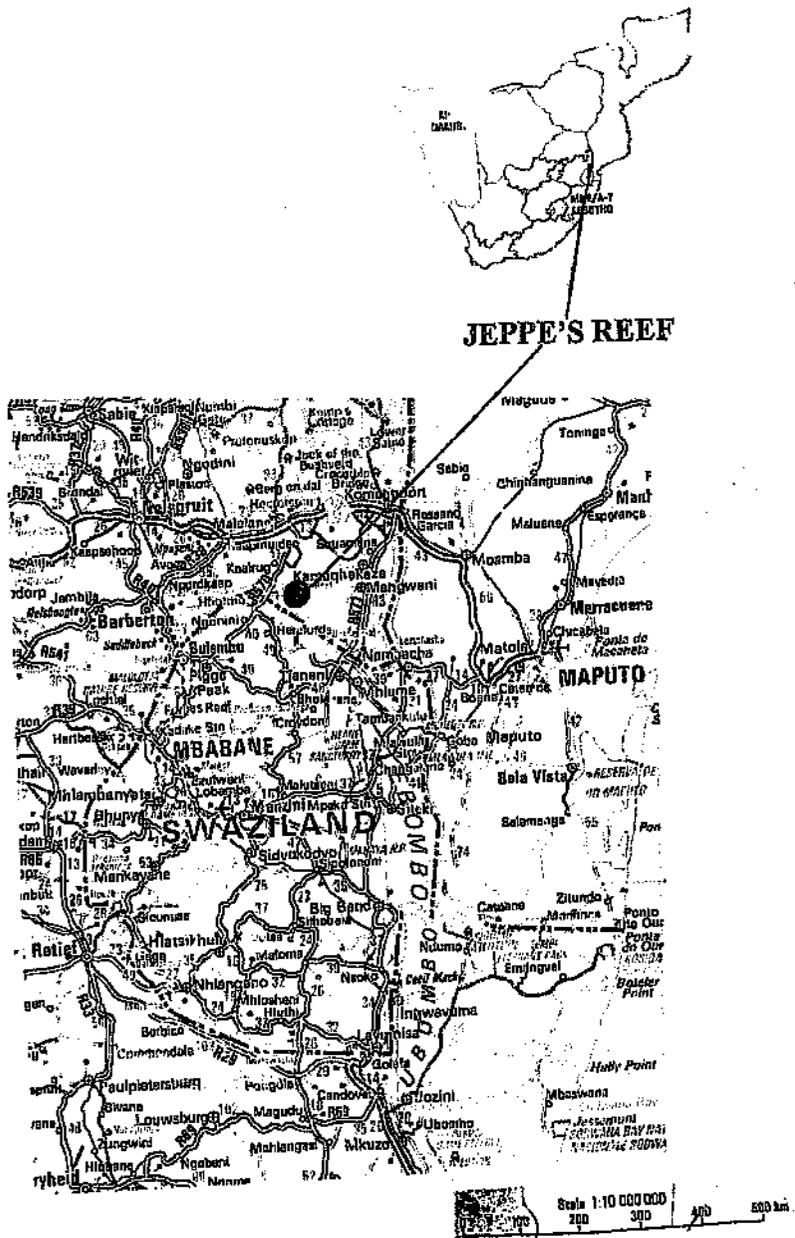


FEASIBILITY STUDY:
KOMAZI

JEPPE'S REEF

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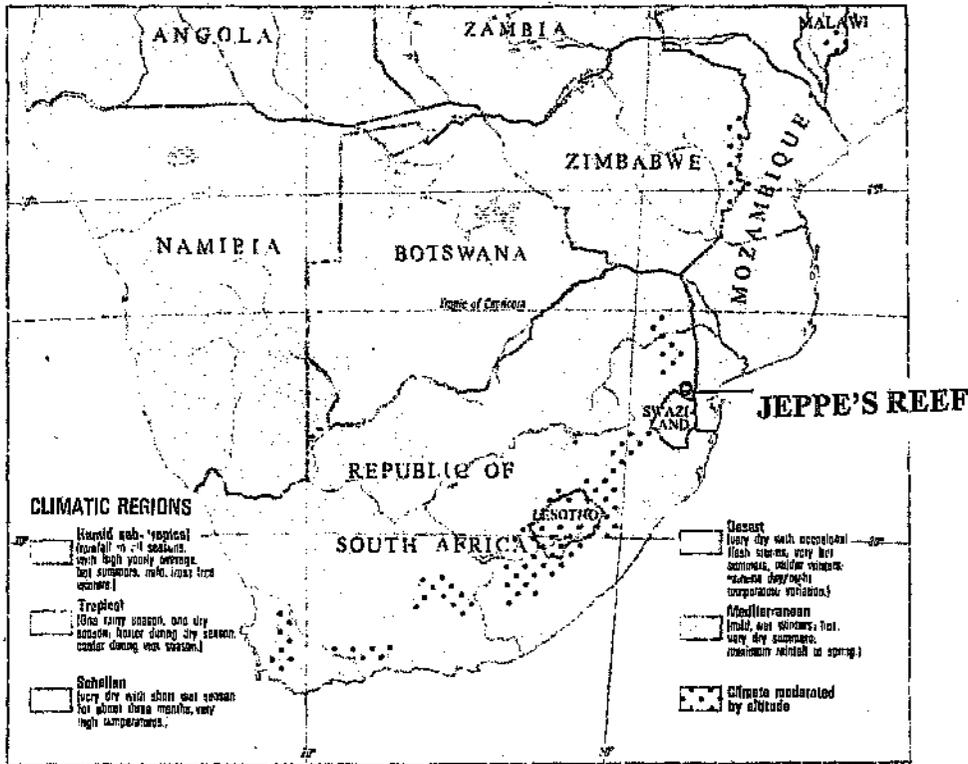
A MAP SHOWING THE LOCATION OF JEPPE'S REEF



SOURCE: MPOTOKWANE et al, 1990

MAP 4.3

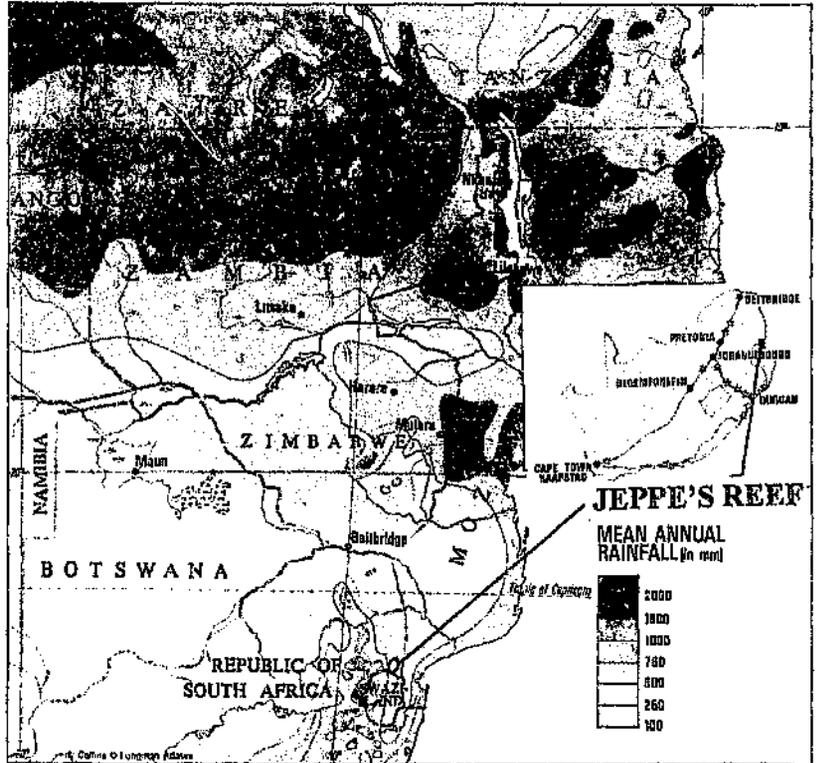
A MAP SHOWING THE CLIMATE OF JEPPE'S REEF



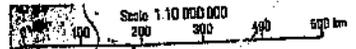
SOURCE: MPOTOKWANE et al 1990

MAP 4 4

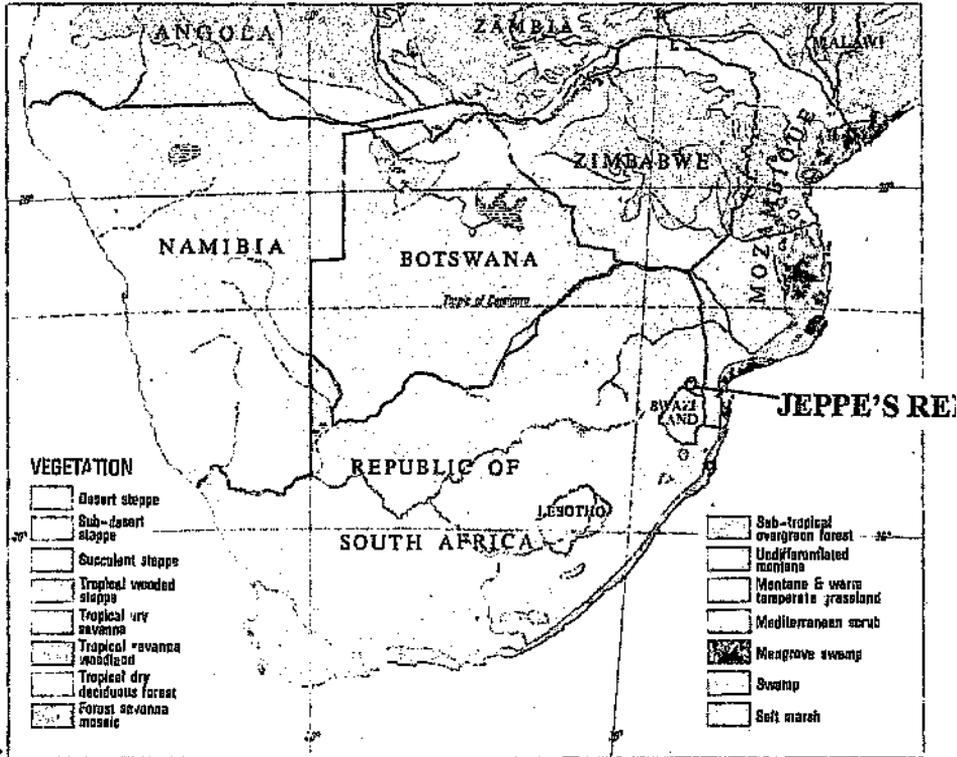
A MAP SHOWING THE MEAN ANNUAL RAINFALL OF JEPPE'S REEF



SOURCE: MPOTOKWANE et al. 1990



A MAP SHOWING THE VEGETATION OF JEPPE'S REEF



SOURCE: MPOTOKWANE et al 1990

clinic, a hospital (Shongwe Hospital), three Primary schools (Sisini Primary School, Buyani Primary School, Sabatha Primary School), and one High school, Tinlonúla High School, post office, and a business area where one finds different groceries, butcheries, a garage, petrol filling station and a fruit and vegetable market.

The population of the area is approximately 8 000 people. The majority of the population (more than 50 percent) is less than 21 years old. The ratio shows that the dependency ratio is very high. Furthermore, those over 65 years old also increase the dependency ratio. Human activities in the area revolve mainly around two activities: subsistence farming and wage employment. The area's proximity to major industrial centres such as the Nelspruit Industrial Site, makes it particularly attractive to rural migrants who seek employment in the industrial areas in order to supplement their incomes. Most of the people in the area work in Nelspruit, Malelane and on the neighbouring farms as farm workers. Employment opportunities in the area are very limited. There are also non-farm activities in the area which include handicraft, brewing, milling, dressmaking and brick-making, fence, maize tank making and welding to mention just a few.

Subsistence farming is the only type of farming which is practised in the area. There are different food crops and livestock found in the area. This includes cassava, sorghum, sweet potatoes, beans, (groundnuts being the major ones), and maize is the mostly grown crop. Maize is grown during the rainy season only. The major livestock found in the area are cattle and goats. There is no large-scale crop and livestock farming in the area.

The land available to the community is poor, in that the type of soil found in the area is mainly ferralistic soils. This is not good because crops do not grow well in this type of soil as they do in loamy soils. The western side of the area is suitable for crop production and is where the community grow its crops. About 70% of the area under cultivation is too steep making it difficult to cultivate the area using tractors. The best alternative is to use an ox-drawn plough for ploughing. Furthermore, before a person starts cultivating he \ she had to clear the piece of land because it is a natural forest area. Thus those people who do not own cattle have to till a large piece of land using a hoe. Most of the households use family labour in clearing the forest. The land distribution within the

village would appear unequal. Some households own several hectares of land while others have only less than a hectare.

There are a number of perennial streams and mountain springs which do not flow through the community but at about 2 kilometres away from the community. The springs in the area are not protected at all from being contaminated and polluted by both human activities and animals.

According to the community members interviewed, the community need clean drinking water as a first priority. The water needs of the community was in terms of quality and quantity. The water from the Driekoppies dam (which forms part of the Komati Basin Water Authority (KOBWA)) is now used to supply the whole community with clean drinking water. The water is supplied through the standpipes, which are about 200 metres away from each other. According to the Times of Swaziland (July, 20, 1998) the water from the dam will benefit over 475 000 people from South Africa, Mozambique and Swaziland. The construction of the dam helped the community as now they have enough water for drinking. The water is purified at the Shongwe Hospital (the only hospital in the area) which serves the Jeppe's Reef community and the neighbouring areas. The Shongwe hospital has the right technology and expertise to purify the water. The Local Government and the Department of Health are responsible for the payment of the expenses incurred in purifying the water. Presently the community is not paying for the water and the people are not allowed to use the water to irrigate their gardens. The water is restricted to drinking and washing of clothing only. Community members who want to have gardens at their homes are supposed to fetch water from the stream \ river. The whole community water standpipe project cost R867 000. The Local Government in the drive to provide the Jeppe's Reefs community with clean water had provided this money.

4.4 ESTABLISHING CONTACTS

To establish contacts in the community was difficult because I have no full knowledge of the whole area. Although I knew the area, such knowledge was based on second hand information mainly through the mass media. At first it was difficult to get leaders of the

community because they were always not around. I had to make several visits to the area in a bid to make contacts and permission to pursue my study in the area. The community members and leaders warmly welcomed me in one of their community meetings. The "Indvuna" of the area introduced me and surprisingly the community thought I was a donor to help them as they were asking me which company or organisation I was working for. The meeting was very important to me as I was given an opportunity to introduce myself and to explain fully the nature of my study. There were several questions which were directed to me and I had to answer them. It is worth noting that most of the questions were from men. The major information providers at this stage were the community leaders and the water project executive committee. Interviews with the community members were not carried out the same day as they were hurrying home after the meeting had ended. I also visited the Local Authority where senior and junior government officials were interviewed. Furthermore, I also went to the working site as to see how the work is done and the community members appreciated my present as they have previously met me in the meeting. I was also able to attend one of the meetings at the work site which was about the work progress (figure 4.1).

4.5 FIELD OBSERVATION

Field observation is one of the subtle methods of data collection which the researcher used. Sometimes fieldwork observation went simultaneously with interviews in the community. The combination of both interviews worked quite effectively and were comfortably compatible. Overall field observations, data collection method, is flexible and easily adaptable to the situations in the study area. The approach allows the researcher to witness community processes without much interference with the normal activities. It is a holistic approach that opens variety of data at one time. Experience from fieldwork indicates that in reality the length of time required for field observation can largely depend on the process under observation. In this study, the researcher I was working under severe time constraint to familiarise myself and keep track of community processes like attending community meetings frequently or experience decisions adopted in meetings being implemented. Given the time constraint it was difficult for the researcher to monitor effectively how decisions are reached and later implemented.

FIGURE 4.1

JEPPE'S REEF WATER PROJECT MEETING



SOURCE: JEPPE'S REEF WATER PROJECT SURVEY, 1998.

4.6 INTERVIEWS

The aim of interviews was mainly to complement and substantiate information collected from field observations. It must be noted that elaborate explanation of people's view and opinions on water problems cannot be acquired in any other ways than on interviews.

In Jeppe's Reef formally structured interviews and informal interviews proved to be a feasible strategy to get information from the community respondents, therefore questioning primarily in a structured and semi-structured manner and highly open-ended. The interviews with the community leaders were highly structured and in written form. Note taking and recording was allowed by the leaders, however unlike the community these interviews took place under extreme time limits set by the government officials. There were two formats adopted in interviewing the community. These are the focus group interviews and by informants interviews. This group consisted of community members who were involved in the actual project committees. The sample size was made small (ranging from six but not more than fifteen) deliberately for the researcher to be able to ensure control over discussion and debates.

Key informants both in the community and the government's office were selected in following manner:

1. A senior position in the community or in the relevant government department or water delivery agency.
2. The role the individual plays in the community for e.g. water project committee members, community liaison in the government.
3. Community personalities and according to their economic, educational, and other achievements in the society, or simply prominent community individuals.
4. When using the questionnaire, the selection of community members was through random sampling with replacement. A sample population of thirty households was selected. The households in the same street were given numbers and these numbers were written down on different pieces of paper. These pieces of papers were then put in a plastic bag and shaken thoroughly before and after picking the number. In a case

where a household was picked for the second time, it was taken back to the plastic bag and the selection process restarted. This worked very well, as there was no bias in the selection of the households to be interviewed.

4.7.0 INTERVIEWING PROCESS

4.7.1 GROUP INTERVIEWS

This was the most difficult part of organising groups for interview in community. Besides the reluctance of the members, it is illegal in the community to hold a meeting of more than 7 people without the authority of the community leaders each time. I was told it is a laid down procedure which the community is used to. Furthermore, this is to safeguard the people in the community against people who come with hidden agenda. Thus the Traditional Authority must first know the agenda of the meeting before it takes place: either to approve it or not. Therefore to have a meeting in Jeppe's Reef is a very lengthy process. Worse still there was a side which was not in favour of the present Shongwe leaders. Nonetheless, due to time constraints illegal meetings were organized. The interviews were conducted in Jeppe's Reef community hall.

The study provided them with the opportunity to make their feelings and problems to be known regarding the project and other community problems. It is worth noting that though the purpose of study was not to measure the peoples feeling on the water project currently going on, however the project helped in assessing community involvement and participation. Conclusions were made and resolutions were written down and developed into structured research notes immediately after the interviews.

The method used proved to be time consuming than anticipated, but it is an effective method of soliciting people's opinions without having to visit inhabitants individually. The problem I encountered was in getting all the people to be interviewed to agree to an appropriate time for interviews. It was later discovered that in the women group that some other respondents could not attend because they were looking after children.

4.8 KEY INFORMANTS

In this category I conducted interviews in the respondents' premises. Among the community key informants the interviews were in the form of informal conversation. Firstly I introduced the topic and then allowed the conversation to progress in the normal way of day-to-day talking. From time to time, I guided the conversation towards crucial issues and concerns requiring some elaboration and clarifications.

All the key informants, except for one who was indifferent, made it clear that they would not allow any recording but only note taking. I found it difficult to understand the reasons behind this. The only thing they highlighted was that they did not want to be recorded while being interviewed. So to pursue the secrecy of the community, not all of the key informants would be mentioned in the presentation, analysis and identification of clues.

The interviews generally went well, but key informants in community tended to shift the conversation away from the topics concerned. Nonetheless, though delaying sometime it was a blessing for the members of the community would raise important points crucial to the study which I had overlooked in the preparation of the interview. It was rather difficult to bring the respondents quickly back to issues in which I was interested in for many of the respondent were senior in age and some held position of influence within the community. Interviewing key informants in the government sector was very fast and to the point. Officials adhered to structured questionnaire and responded accordingly.

4.9 FOCUS OF INTERVIEWS

Interviews and conversations were structured in such a way that respondents could provide information on the following:

1. Water problems in the community and what they prefer;
2. decision – making process; and
3. community participation.

4.10 THE USE OF THE QUESTIONNAIRE - INTERVIEWS

The questionnaire (see appendix 4) was used to get additional information to substantiate findings based on information collected through observation and interviews. In addition there was a need to get information from individual households in community participation in the delivery of clean water to the community to acquire statistical information unavailable in group and key informants interviews. Information acquired from questionnaires could be used to lead discussion in the thesis which could be supported by information from either observations or interviews. The questionnaire was used to get information on household demography, income characteristics, location /physical address, individual households perceptions, priorities and water problems in the community.

For the effective use of the questionnaire, a sample population of thirty households were selected using a random sampling with replacement. The households in the same street were given numbers and this numbers were written down in different pieces of papers. These pieces of papers were then put in a plastic bag and the plastic bag was shaken thoroughly before and after picking the number. In a case where a household was picked for the second time, it was taken back to the plastic bag and pick another number again. This work very well as there was no bias in the selection of the households to be interviewed.

When no one was present in a household during data collection I was forced to pay a second visit. Sometimes I would even go for the third time to collect data from households whereby there was no one to interview during the first and second visits.

4.10.1 INTERVIEW PROCESS

It was a problem using self – administered questionnaires because the mailing system is not reliable. Also I felt that most of the respondents may not reply or may need clarification on certain questions. Furthermore the researcher felt that some people may not be able to fill the questionnaire because they could not read and write. Thus the

questionnaire was administered at each homestead by the researcher. The interviews were carried out using SiSwati (map 4.6) as the medium of communication.

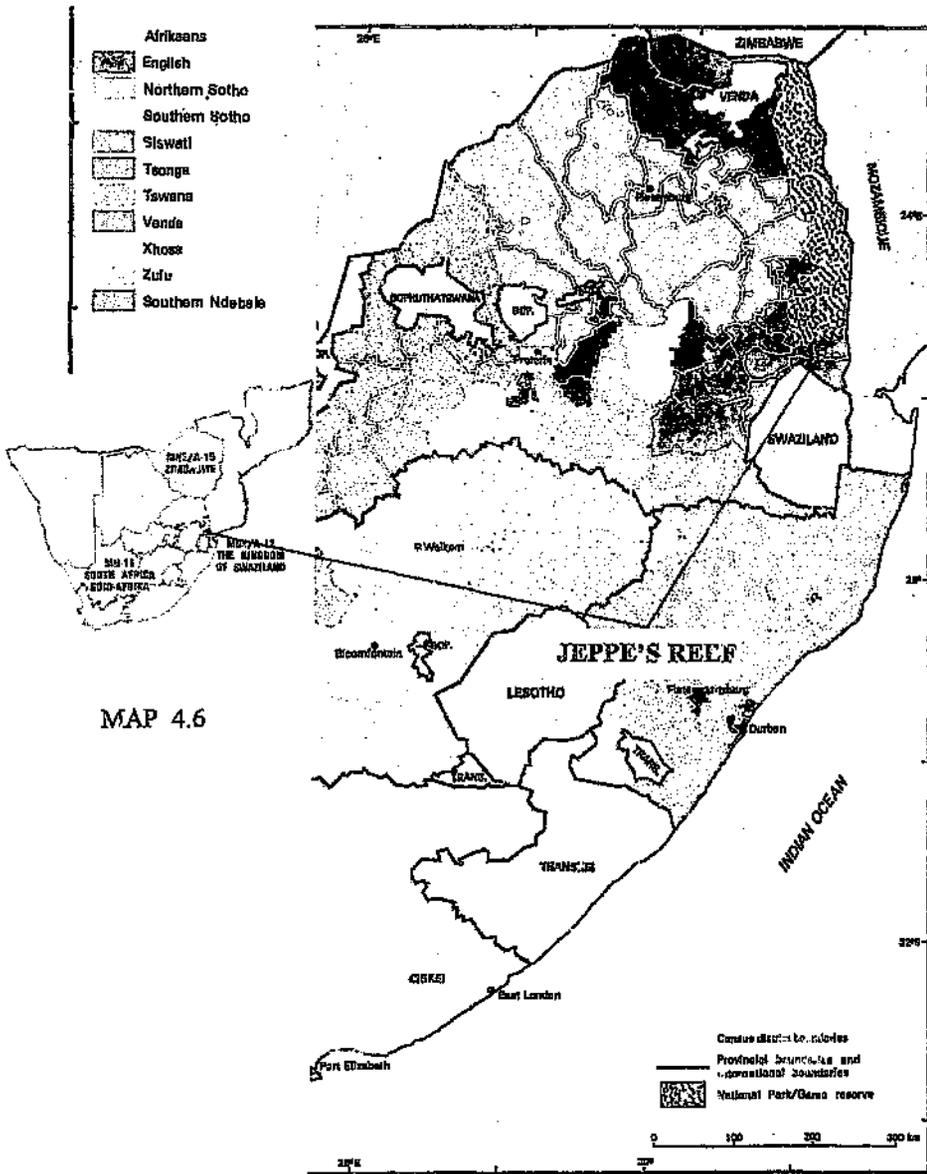
Since most of the household heads were at work during the weekdays, questionnaire interviews were conducted over the weekend. In some households where the head of the house was not present during the interview, the immediate head was used which in most instances was the spouse. The major problem the researcher faced was that it was difficult to bypass the head of the household and talk to the wife because Swazi custom does not allow or treat women as heads. In some cases when the man were not available the wife would be selected but if the husband arrived during the interview she would simply hand over the process to the man. In some cases female household heads (wives in temporary absence of husband) refused to answer some of the questions and the researcher had to ask some of the questions in different ways. The researcher was able to acquire variety of information during the interview process.

4.11 EVALUATION OF THE RESEARCH METHODOLOGY.

The research methods used for the study showed both advantages and disadvantages.

- Firstly, on the advantage side, the method was an economical approach to data collection. It was a comprehensive data collection method relevant to diversified community settings.
- Secondly, the holistic approach of the methodology opened to researcher a variety of informations and at the same time it allowed for spontaneity. On the other hand, there is a problem of receiving too much which at the end of the day may be difficult to organize, manage, understand interpret correctly. At the same time spontaneous information available to the researcher should be noted and collected.
- Thirdly, within the data collection in this research approach, there is a lot of flexibility and compatibility. This was more evident to the researcher in the field where more than one research activity took place at the same time. For instance, while conducting interviews it was also possible to do spontaneous observations.

A MAP OF SOUTH AFRICA SHOWING THE DOMINANT LANGUAGES



MAP 4.6

SOURCE: DEPARTMENT OF LANGUAGES RESEARCH, 1990.

- Fourth, the flexibility of the research method made it easily adaptable in the different areas of research. For instance formal interview (as data collection technique) was efficient in the interviews with the key community leaders, government officials, while informal interviews were invaluable with key informants and community members in the community. Focus group interviews was an economical technique of soliciting people's views and ideas in community participation in the delivery of clean water supply to the community without having to visit all individuals in their different households.
- Fifthly, there is important complementary relationship among the data collection techniques used. For instance, information missing in the field observation technique was acquired either through interviews and / or the questionnaire.
- On the disadvantage side, the method used does not give a true reflection of the degree of participation within the community. However, this may be attributed to the nature of participation. It must be noted that participation is a process, it cannot be achieved overnight. Research which seeks to understand participation can not be monitored over a weekend and bring out major issues upon which decisions can be treated as conclusive and reflective of the true situation. I noted that the community was very eloquent about their water problems but they were not as keen on issues of participation.
- I found out that a lesson worth noting is that it is important for a researcher to be very familiar with the place of study before the actual research because a lot of time was wasted while trying to establish communication channels. It is also equally important for the researcher to try and make the respondent appreciate the value of the research and identify with the research in order to get correct and in depth information about the community.
- In the administration of the questionnaire for interviews problems were experienced. One of the major problems was that of *gender*. In four households where the heads

were temporarily women, it was difficult to get most of the information but, the researcher had to ask the same question in a variety of ways. For instance, some women were reluctant to give out information but refer some questions to their absent husbands and sometimes I had to come back when the husband was around.

- Lastly, there were other minor problems, mainly having to do with misunderstanding of questions. I assisted in such cases by clarifying the question. Overall, the interviews were conducted according to plan and the information acquired particularly on community situation proved to be relevant. However, there is a need to devise better effective methods which will focus strictly on participation and empowerment.

CHAPTER 5 DATA ANALYSIS

5.1 INTRODUCTION

A qualitative approach to the research was presented in the last chapter. The data collection technique used in the research relied on focus groups, key informants, observations and administered questionnaires. The aim of the questionnaire was to build more representation of views. Thus it must not be mistaken as incorporating a quantitative analysis in the study. It must be noted that it is difficult to quantify human views and behavior. As a result the analysis of the questionnaire would be done with aim of arriving at a descriptive analysis to support information derived from the other data collection techniques. The rest of the data would be analyzed based on the qualitative analysis procedure method which involves the classification of respondents responses into categories mainly presented in table form. Other responses, primarily narrative data, have been summarized and presented as phrases and quotations.

In dealing with the study, the gist of discussion revolved around important factors in the delivery of clean water. These factors were deduced from a wide range of participation in the delivery of clean water to rural areas and were trimmed to the relevance of the study at hand.

5.2 DESCRIPTION OF RESPONDENTS AND INFORMATION OBTAINED

5.2.1 FOCUS GROUP DISCUSSIONS

- **COMMUNITY MEMBERS**

The community members were people who were found working at the project site. There were ten people who volunteered (that is six men and four women). Their ages ranged from mid-thirties to past sixty. One of the women was a widow, but the rest of the members were married with grandchildren. Five of the members were born in Jeppe's Reef or claimed to have been in the area as far back as the 1950s. I was unable to establish their educational level due to the fact that they felt it was too personal to ask

such question in a group interview. Due to the above reason I was unable to establish as to how old they are. I found out that six of the members were unemployed, and the rest live through a number of informal businesses including selling fruits and vegetables.

5.2.2 KEY INFORMANTS

• JEPPE'S REEF

There were six key informants from Jeppe's Reef. Two of them (a female and a male born in the area) were senior residents and have participated in a number of community meetings and development. One of the other two is the Indvuna of the area and the other one was a Royal Family development representative. Of the last two, the chairperson of the water project, and the other has lived for a long time in the area and have served the community.

• GOVERNMENT

The key informants:

1. Community Liaison Officer in the Local Government
2. Department of Water in the Local Government.
3. Health Inspectors
4. Nurses in the local clinic.

◦ WATER PROJECT COMMITTEE

The Chairperson of the water project committee, Veli Shongwe, was very resourceful in helping in organising meetings and showing me the area. The Water Project Committee comprises the following people:

TABLE 1 JEPPE'S REEFS WATER PROJECT COMMITTEE MEMBERS

NAME	POSITION
MR VELI SHONGWE	CHAIRPERSON
MRS MASITI NKOSI	VICE-CHAIRPERSON
MRS MTHABISI THWALA	SECRETARY
MRS VILAKAZI	VICE-SECRETARY
MR VUSI NGUBANE	MEMBER
MR NDLELENI THABEDE	MEMBER

Source: Jeppe's Reef Research Survey

The people who were elected to the Water Project Committee have been in the forefront in the initiation of other community projects such as Farmers Development Committee, Rural Development Committee, to mention just a few. I gathered that the people who are in the committee always attend community meetings and thus they are well vested on the developmental issues which are taking place. I also gathered that the education level of the four-committee members is Matric (Standard 10) and the Chairperson has post matric Diploma in Business Administration.

TABLE 2**THE EMPLOYMENT PROFILE OF THE WATER PROJECT COMMITTEE**

NAME	EMPLOYMENT
MR VELI SHONGWE	OWN GROCERY
MRS MASITI NKOSI	SELLING FRUITS AND VEGETABLES
MRS MTHABISI THWALA	SELLING FRUITS AND VEGETABLES
MRS VILAKAZI	OWNS SPAZA SHOP
MR VUSI NGUBANE	VEGETABLE FARMING
MR NDLELENI DLAMINI	OWNS SPAZA SHOP

Source: Jeppe's Reef Research Survey

There are other committees which have been formed in the community which are

supposed to perform some developmental duties. These committees comprise of the following:

- a) Rural Development Committee
- b) Road Development Committee
- c) Farmers Development Committee
- d) Pastures Development Committee

5.3 PERSONAL INFORMATION

About 80% of the people interviewed were head of households and the remaining 20% were elderly people in the community. The ages of the people interviewed ranges from 24 and above. About 50 percent of the people interviewed were working, 30 percent were self-employed, sell fruits and vegetables, handicraft and seasonal workers in the farms. The remaining 20 percent are unemployed, but some are subsistence farmers growing maize for family consumption. The elderly people who are unemployed depend on State monthly pension. The income of the people interviewed ranges between R300.00 and over R10, 000 per month. About 70% of the people interviewed are earning between R300.00 and R4000.00 per month. This covers both formal, informal employment and casual work. Most of the people are engaged in the informal sector such as selling vegetables, owning Plaza shops, small-scale farming both livestock and growing crops. The rest of the people are in formal employment and some they live by doing casual work. Those people who earn between R4 001.00 and R10 000.00 are the people are employed in the formal sector especially the government officials and those people who owns shops and butcheries in the Jeppe's Reef area. Most people in the area supplement their incomes by growing maize, and keeping livestock like cattle and goats. The incomes of other families are supplemented by the State monthly pension fund. The amount, which the government is paying to the pensioners, is currently R480.00. According to the Indvuna of the area, Mathew Mhlanga, "*the State monthly pension is of great assistance to the community as some families depend on it, which without they cannot even take the children to school*". According to the Mathew Mhlanga the unemployment rate in the area is very high and is still increasing every year as the number of school leavers do not find employment.

5.4 COMMUNITY ORGANIZATION

Most of the people interviewed clearly stated that the community tap water supply project (see figure 4.2) is a project that has come to improve their lives. For example the children would now arrive on time at school because they are now fetching the water 200 metresⁱⁱⁱ away from the household.

One of the respondents said that *"I use to wake up at 5am, carrying my 25 litre drum, to the spring and if I get there late there is no water. But even if there is water it's often muddy and undrinkable. After school my daughters heave a wheelbarrow up a steep, rocky path carrying two full 25 litre drums. I used to spend six hours a day collecting low-quality water"*.

The Jeppe's Reef community was no different from thousands of other rural households where collecting and queuing for water, often undrinkable, dominates each day. According to the Sowetan (1998) rural women spend up to 15 hours daily on household chores- the lion's share on using and collecting water.

About 50 percent of the people interviewed indicated that they are affiliates of different Community Based Organisations, 15 percent are members of the Farmers Organisation, 45 percent are members of the Burial Society, and Poultry Society. In addition most of the people indicated that they are members of the African National Congress (ANC). The large number of people (about 50 percent in Jeppe's Reef) who do not belong to any organization implies that there is a need to educate the people on the benefit of joining Community Based Organisations. The people of the area must be able to pull their resources together for their benefit. For example co-operative society can be formed whereby the people can borrow money instead of going to the bank. Furthermore, co-operatives societies do not require high collateral as banks do. Some of the people do attend meetings if they have time and the people who attend meetings without fail are the unemployed and self-employed, the researcher gathered. Those people who are working are able to attend if the meetings are held on weekends. The people who belong to the Burial Society did not have any complaints pertaining to the running of the organisation at the present moment. The Burial Society was formed in 1990 and all the members come from the community.

FIGURE 4.2

WOMEN AND CHILDREN QUEUEING FOR WATER IN JEPPE'S REEF



SOURCE JEPPE'S REEF WATER PROJECT SURVEY, 1998.

Members of the Farmers Organisation and Poultry Society complained about members who do not attend meetings. These people, according to the members, are delaying progress of the organisations as important decisions cannot be taken if they do not form a quorum. In regard to the farmers organisation some of the members do not repay back the loans which the organisation has borrowed them. The majority of the people interviewed who are ANC members indicated that they still support the ANC party but they were not happy at all about the corruption which is taking place within the different government departments. In addition the members clearly indicated that the government is saying there is no money, whereas government officials are squandering millions of rands which should have been used to uplift the standards of the people in the rural areas. Moreover the people clearly indicated that they in the rural areas they are also paying taxes to the government and the government must also cater for their different needs. They also complained about the elected Member of Parliament who has done nothing for the community.

More than half of the people interviewed highlighted that the family members do not belong to one organisation and some of the family members do not see any need for being a member of any community organisation. The reason for not belonging to any organisation was not very clear as they only highlighted that they do not see any need. This can be due to the lack of education on the importance of the organisation and the lack of people to motivate the undecided to join highlighting the benefits to be accrued.

5.5 COMMUNITY DEVELOPMENT

Some community members indicated that they have been involved in projects, especially the water project. The people were involved in the protection of the springs^{iv} in winter. The people would fence the spring around so as to prevent animals from drinking the water. Management and protection of the whole system including the unseen underground part, is essential if the spring is to be used for water supply. The World Health Organisation (WHO) estimated that 80% of all illness in developing countries is related to water (World Development Report, 1993). Waterborne diseases are those which are mainly spread through contaminated drinking water. Water development

projects are intended to improve the quality of the human environment. The chief concerns of water quality control are the spread of diseases where water.

Part of the community members, due to the spread of cholera in the area in the 1980s initiated a standpipe water projects in order to solve the problem. The project failed due to the lack of co-ordination among the community members who were involved in the standpipe water project. This project did not involve the whole community. The water trenches were dug by the people. This was a good idea of using the local people for them to feel that they were part of the project. The problem which faced the whole project lack of experts in terms of going to advise the community in the project such as planners and engineers, just to mention a few. Each homestead \ family contributed R200.00 towards the purchasing of pipes and other required materials. This water project was a dismal failure in respect of the physical and economic effort that was done.

The Local Government had the idea that the water should be for drinking only so as to save cost. The Local Government had to ask those people who wanted to have water taps in their premises to submit their names and how much they would to pay for the service. The Local Government had tried to involve the people in this process and the community members are very happy to be part of the process. Most of the community members interviewed indicated that they are willing to pay for the service because they have been consulted in time as to make their own input in the process. The majority of the community members indicated that they are willing to pay between R10.00 and R20.00 for the service.

The second community need is the upgrading of the internal roads within the community. The internal roads within the community are in bad condition in such a way that taxis and buses do not want to use it. As a result, the taxis and buses drop people at the main roads and some people had to walk more than 4 kilometres to reach their homes. By the time they reach home they are tired and cannot do any work. The Indvuna of the area indicated that he have tried several times to ask the Local Government Authority to grade the internal roads within the community, up until now there has been no response.

5.6 COMMUNITY LEADERSHIP

There are two types of leadership in the community: that is, the traditional leadership (Umphakatsi) and the Water Project Committee. The Chief and the Chief's advisors appoint the traditional leadership (see figure 4.3 institutional structure of the community). On the other hand, the Water Project Committee was elected by the people to run the project during and after completion. The Water Committee's term of office does not expire and there is no constitution which states the role of the committee in the project.

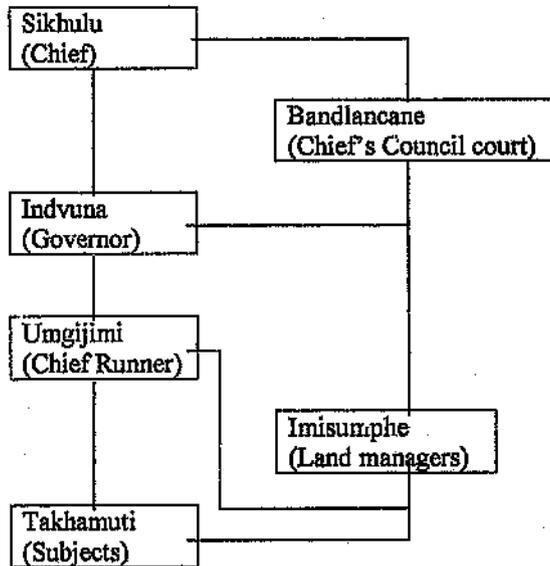
The community members interviewed highlighted that for the water project they are satisfied in terms of the role of Traditional leaders is playing towards the development of the community. The leadership (Umphakatsi) had played a prominent role in the water project through the Indvuna of the area, Mathew Mahlangu. The community members were satisfied with regards to the role the leadership had played. The members felt that the leadership had identified the one of their needs. The traditional leadership was the one which had mobilised resources for the water project from the Local Government. The different organisations in the community mobilise their own resources locally and outside the community. The majority of the community members agreed that the traditional leaders do not consult the community before making important decisions. Furthermore the community members agreed the traditional leaders come to the community to sell an idea so that they can buy it. This clearly indicates lack of participation from all the parties who are supposed to be involved in the project from problem identification up to the implementation stage.

5.7 INFORMATION

The community members mostly agreed that they are able to get information on developmental issues taking place in the community through the traditional leaders. If there will be a developmental project in the community all the people are called for a meeting at the Royal Kraal (Umphakatsi). I discovered something in Jeppe's Reef community, the manner in which the traditional leaders (Umphakatsi) communicate

FIGURE 4.3

INSTITUTIONAL STRUCTURE OF THE COMMUNITY



SOURCE: JEPPE'S REEF WATER PROJECT SURVEY, 1998.

with the community members is very interesting. The most effective way of letting the people know about meetings is through the use of messengers. When there is going to be a meeting at the Royal Kraal (Umphakatsi) at any time \ day the messengers are deployed to go to each and every household to convey the message to the adults of that homestead. As the messengers move around, they blow a whistle in order to make the people aware that they are coming.

I found out that this is the most effective ways of making sure that the message is conveyed to everyone. The other way was by putting posters throughout the community strategic areas and these posters are written in the vernacular language so that everyone can read it. The third way is to put the announcement in the mass media specifically the radio. Through using the above various communication strategies the message is conveyed to the community, thus many people attend the meetings.

5.8 COMMUNITY PARTICIPATION

The community was informed about the water project after the Traditional Leaders and the Local Authority had agreed that the project should be implemented. The elders came with the idea of the water project. Most of the community members interviewed were very keen in taking part in community projects initiative. Most of the community members wanted to be part of the decision-making. The people wanted to be part of the whole process from problem identification to implementation because they know their day to day problems than any other outside person. The community members were against the idea of employing a contractor to lay down the pipes.

According to the community members, Local Government and the Umphakatsi were supposed to make sure that local people were trained on such skills as laying pipes,

supervision, management, and standpipe connection. These are skills that can be learnt easily especially if they are going to be used in a small community project which does not need highly skilled specialisation. The people interviewed further highlighted that they are eager to organize the community as to get their views on issues that affect their lives. One respondent highlighted that "it is very difficult to really decide on what people want... they should be the ones who voice out their problems". Most of the unemployed indicated that they have time to work on community projects (see figure 4.4 and 4.5) shows people working on the project). On the other hand, the people who are employed and self-employed indicated that due to the lack of free time it is difficult for them to work on community projects. The community members have no idea about planners since they have never seen a planner in their community. The only person some of the people knew was the Development Officer who is based in Nelspruit. The community want the Development Officer to come and work in the area on a full time basis as to advise the community on developmental projects. The community sees him as a person who is so resourceful but is not helping the Jeppe's Reef community on a full time basis. The Development Officer lives in the same community and he advises the Traditional Leaders (Umphakatsi) on development issues.

5.9 COMMUNITY INVOLVEMENT IN DECISION MAKING

With regard to community participation in decision – making, it was very interesting to observe that all the community members interviewed agreed that community participation in the water project was very limited. The people in power came with the idea of water project to sell it to the community. The community accepted the idea with an overwhelming majority as the community was desperately in need of clean drinking water. The Traditional Leaders through the Indvuna of the area and other elders (Inner Council), concluded the water deal with the local government without the involvement of the community. The leaders only call meetings to announce to the community about the progress in the discussion of the water project. Thus the community was not fully involved in the initial stages of the project from problem identification. It was gathered that most of the people do not question such an act because they still pay allegiance to the traditional authority and they do not challenge the ideas even if imposed on them. A

FIGURE 4.4

A COMMUNITY MEMBER WORKING ON THE WATER PROJECT



SOURCE: JEPPE'S REEF WATER PROJECT SURVEY, 1998.

FIGURE 4.5

COMMUNITY MEMBERS WORKING ON THE WATER PROJECT



SOURCE: JEPPE'S REEF WATER PROJECT SURVEY, 1998.

committee was elected to oversee the water project, and the water project operates without a constitution. According to the Chairperson of the water project the constitution is going to be drafted after the completion of the project.

It was also gathered from the community that there is a power struggle between the Traditional Authority and the elected member of Parliament and the Local councillors. As to who is responsible to oversee the development of the area is still debatable. The Local Authority want to speed up developmental projects in the delivering of services as the 1999 elections are nearer. On the other hand, the Traditional Authority still want every project(s) to be approved via the elders (Inner Council) for the approval. Thus the power struggle between the Traditional Authority and the elected Government Officials delays developmental projects in the area.

5.10 THE RELEVANCE OF COMMUNITY PARTICIPATION TO DEVELOPMENT PLANNING

Community participation is relevant to development planning in that, it is concerned about the involvement of people in decision making about issues \ problems that affect their lives. According to Jerome (1987), since the 1950's this has been an issue in comprehensive planning. Due to its scientific nature, comprehensive planning has been heavily criticized. McLoughlin argued that comprehensive planning is an uncritical collection of facts and figures (Muller, 1992). Banfield argued that comprehensive planning is an impossible undertaking which requires more intelligence and information than is ever available (Jerome, 1987). On the other hand, Walker called for a more direct link with decision making and decision-makers (Jerome, 1987).

The authors and others, as a result of these began to articulate models of more decision relevant to planning that were also limited in scope and more sensitive to the decision environment which planners operate. These included efforts by Davidoff and Reiner in choice theory which allowed an element of choice into planning, with the belief that individuals have preferences and behave in accordance with them and that preferences express comparison between wants (Faludi, 1973). Furthermore, Lindblom's disjointed

incrementalism seeks to adapt decision making strategies to the limited cognitive capacities of decision-makers and to reduce the scope and cost of information collection and computation (Etzioni, 1979). Etzioni's mixed scanning approach accommodates a base of rationality to give legitimacy to planning as a decision making process, a look out function and provision for implementation (Muller, 1992). Therefore it is evident that changes that occur in planning seek to address the same problems in society, but with changing societal values and priorities planning methods also change.

In South Africa currently the vision for wider participation and development perspective that was lacking in planning in apartheid era, makes planning an interesting prospect. This will enable communities to be included in decision making to promote a bottom up approach as oppose to the top down approach. This aspect of participation is not new in planning it has been an issue as advocates and progressives planners in particular stressed the need to bring people into the planning process who by design or practice have not participated (Jerome, 1987). However social planners were criticized of being overly pluralistic and that the government usually determines the issues and influenced the type of local organization. The democratic government which is ruling the country is pro - active and promoting a people driven development process issues would be influenced by the people and for themselves.

Proponents of strategic planning who assert that strategic planning is orientated more toward action, results and implementation share this view. It promotes broader and more diverse participation in planning where it is believed that participation will lead to more insightful and responsive planning (ibid, 1987). Therefore strategic planning emphasises competitive strategy where communities are encouraged to identify their competitive abilities and use these abilities to develop themselves. In a nutshell strategic planning is based on capacity building. It encourages honest assessment of a community's capacity to act, seeking to maximise strength and minimise weaknesses in the context of opportunities and threats. Strategic planning is adopted from the private sector but it is applicable to public organisation or communities (World Bank, 1992). The initial stage involves an agreement among decision-makers on the purpose of the effort

- Who should be involved

- What topics should be addressed
- The arrangement for minutes taking and reports
- The identification of mandates, issues or stakeholders e.g. community, government departments etc. clarification of the organization's mission, values and needs \ wants.

This process draws similarities and differences among those who have a stake in the outcome of the process and in what the government mission ought to be in relation to those stakeholders. Stakeholders may include any individual that can put forward a claim on the organization's attention, resources or affected by the output. This can be done by doing the following:

- Identification of internal strength and weaknesses and external opportunities and threats;
- Identification of strategic issues;
- Strategy development for the identification of practical alternative for resolving the strategic issue;
- Look at the organization's potential future;
- Decision on how to implement the strategies;
- Evaluation of the results.

This process of strategic planning is interactive, and it is important that there is discussion and feedback on issues such as goals, objectives and alternatives which may require professional advice and assistance. It is important that every stage is monitored to ensure that the whole process adheres to the stipulated goals or to change the goals via feedback. The process is based on the interaction of all stakeholders to ensure that the goal is realised.

5.11 SUMMARY

After looking at the research approach and how the data were collected and analysed, the chapter has highlighted how the interviews (both group interviews and individual) were conducted. The outcome of the fieldwork has been presented. Various tables have been used to summarise some of the research findings. Lastly, the chapter has dealt with the relevance of community participation to development planning.

CHAPTER SIX

PLANNING RECOMMENDATIONS AND SUMMARY

6.0 INTRODUCTION

The focus of this section would be the planning recommendations which I am going to propose, based on the findings of the discourse through the literature review of the international experience and South African experience in community participation in rural water supply projects and based on the case study at Jeppe's Reef, Mpumalanga Province.

Much of the success during the decade in improving water supply coverage was achieved by using appropriate technologies and community-based approaches to projects (Ka:øermatten et al.1992). The conventional approach to infrastructural development adopted from urbanised, western, developed countries was found to be unsuitable because it was overly centralised and did not reflect local traditions and the needs for community participation. The lessons which we have learnt from the international experience is that any success of a developmental project must have covered the following:

- Targeting the poor;
- targeting women;
- institutional training;
- appropriate technology;
- community participation;
- community management; and
- cost recovery.

6.1 DEVELOPING A SHARED VISION AND PURPOSE

From the responses of the community members interviewed, it became clear to the researcher that developing a shared vision and purpose was an important underpinning factor in the creation of a positive culture of community participation. All the community members interviewed, concurred that developing a shared vision and purpose begins by

involving the community \ stakeholders in decision – making on almost all community issues. The stakeholders can achieve this by setting common goals and objectives for that particular project which they would try to achieve.

It is crucial that the vision of the community is one which everyone connected with the projects can share. In realising a vision or even attempting to realise, one will not work in a project if the community leaders, community, stakeholders are expected to work towards someone else's ideal. In order to achieve a shared vision and purpose, all stakeholders, should draft a statement of intent which is a commitment by all the stakeholders and beneficiaries.

6.2 ENCOURAGING TEAMWORK AMONG COMMUNITY LEADERS AND THE COMMUNITY.

Response from the interviews conducted indicates that teamwork was a value that was fading away in the community and the community is becoming more individualistic. The community members maintained that teamwork is essential for the community's success because it engenders a sense of commitment on the part of community, leaders, stakeholders and this is ultimately transmitted to any developmental project in the area. One of the respondents noted that "in case one party fails to perform according to the expected standards of the project/s, that party feels that it is letting the team down". The team members should form a tradition of assisting each other wherever possible and this should be done because of the concern about the final product at the end. Since the different parties \ stakeholders had a shared vision and purpose, they should usually plan together and share ideas as to how best they could enhance their effectiveness in promoting community participation.

6.3 CIVIC ORGANISATIONS AND LEADERS

According to literature, observations and according to development experts virtually every settlement has community organisations. This is very important to enhance effective participation as these organization, would assist in mobilizing community members, facilitating the development process and in monitoring and co-ordination.

On the other hand, one of the findings is that it is important that planners are aware of the fact that not all these organisations represent the interests of the community, or that communities are homogeneous. Therefore it would be important to ensure that other members of the community are included in participation by using the media, conducting surveys, establishing task teams and using other methods mentioned above.

6.4 PLANNERS

The development planner's role in South Africa is crucial in facilitating a process of implementing broad development frameworks. Previously planners worked under a different banner they exercised different roles to what they need to exercise today. With this new roles comes new skills and new responsibilities. Planners need to assume non-directive roles in the promotion of community participation. Roles taken on by planners today need to epitomise professionalism which involves accountability and service in the public interest. Special skills will need to be acquired to assume the roles of reconstruction and conciliation, namely: communication, conflict resolution through mediation and negotiation, and problem solving skills.

Community participation is not simply a method to be applied by the planner. However planners have a crucial role to play is basically and primarily a process in which ordinary people will play a leading role with governments and other agencies playing a facilitating role from problem identification up to the implementation of the project. Therefore it is important that the planner informs the community about development issues, advises and assists them in articulating their needs. This is very important as it will allow communities to make informed choices. In community participation there is interdependence, the planner through assisting, advising, facilitating and co-ordinating is also learning from some of the inputs made by other stakeholder, the community, private sector or NGO's. All stakeholders gain from contributions made. In addition, negotiating or organizing and mediating skills of the planner would be enhanced. At the end of the project, empowerment is gained from the fact that this project would add to the growth of development which creates fulfillment to those concerned about development.

6.5 LOCAL GOVERNMENT

The local government has an important role to play in ensuring that communities are informed about its functions. For instance, it was noted that one of the major problems for communities and developers is the fact that communities are not aware that there are different departments rendering different services. It is important that communities are informed because their expectations would be inflated only to discover that there is no delivery. The government should be responsible for providing funds for communities to employ professionals to advise and assist them.

The local government's responsibility in community participation is to inform, facilitate and co-ordinate projects. This leads to empowerment in the sense that the relationship between the community and the government would be improved. Communities get to understand what is involved in development and how the government works. The government, through transparency, would gain acceptability and recognition from the communities.

6.6 OTHER STAKEHOLDERS

Community participation as a development initiative involves the intervention by and co-operation with the state and other development agencies. These include NGO's, the private sector etc. Therefore it is important that there is co-operation among all these stakeholders to ensure effective participation. NGOs, for instance, are experienced in working with communities. Therefore they will be able to offer assistance in the mobilisation of funds and community members, in facilitating the process by holding workshops and conferences. NGOs and private sectors play a major role in community participation. The private sector assists in giving advice on the distribution or management of the funds. The NGOs assist in mobilising members of the community and advise on how to mobilise funds. Therefore they create a sense of responsibility among community members. Through development business could be enhanced in terms of loan agreements and other matters pertaining to the housing sector. It is apparent from this summary that empowerment in community participation is all encompassing. Therefore it is important that community participation be viewed as a learning process for both the

beneficiaries and those involved in the promotion of the process.

6.7 COMMUNITY PARTICIPATION

The government of South Africa, through its RDP programme, recognises the importance of community participation in redressing the inequalities and deprivation caused by the apartheid government (ANC, 1994). The Jeppe's Reef community want participation which will enhance some form of partnership where the government, communities and various government and non-government organisations (NGOs) will be involved in decision-making from planning to implementation of projects. The community is envisaging the creation of community development committee which will be made of elected members from the community, Royal Kraal and different government and non-government stakeholders. The kind of participation anticipated by the community is consistent with that perceived by White (1982) and Cheema (1987). Cheema (1987) defines community participation as the active involvement of the local population in decision-making concerning the planning and implementation of projects, through the establishment of community development committees to make demands on behalf of the community through various channels.

The rational comprehensive planning model comprises sequential steps which must be followed; from problem identification up to monitoring and review. Figure 6.1 shows the stages to be followed in the rational comprehensive planning model in a diagram form. There is little room for the involvement of the community in this planning model.

As opposed to the rational comprehensive planning model which was used in the Water project in Jeppe's Reef I recommend that the community use Community Decision planning model which is show in figure 6.2.

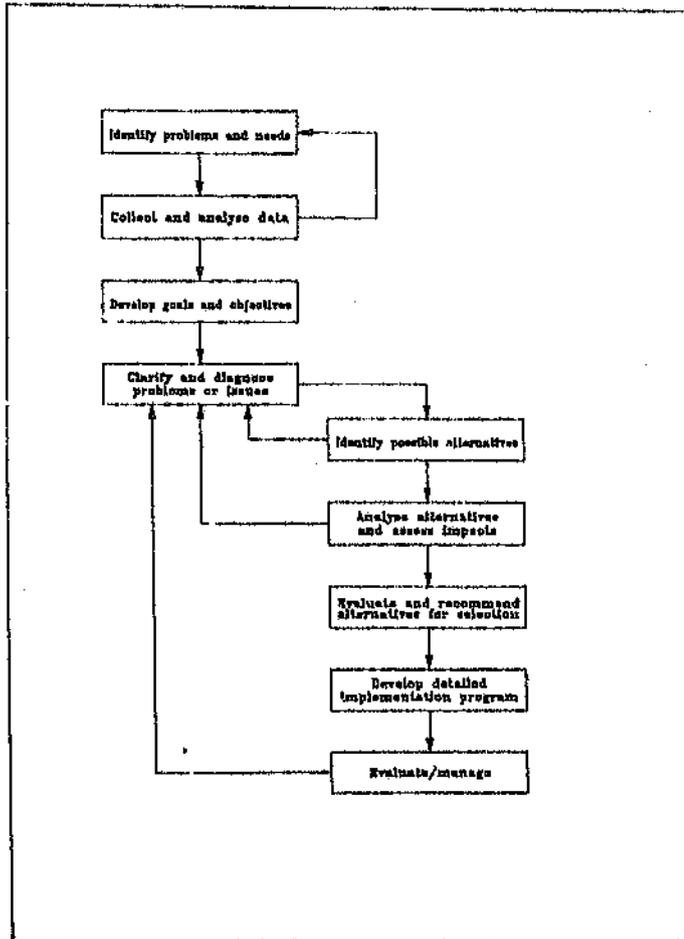
In the Community Decision Planning model the community is involved from problem identification up to project monitoring and review. Muller's (1994) community orientated decision-making model shows the elements of phenomenology consciousness experienced by the community:

- 1) perception
- 2) edification
- 3) conception
- 4) interpretation
- 5) resolution and realization.

These form the intuitive experimental bases of the community and decision-making

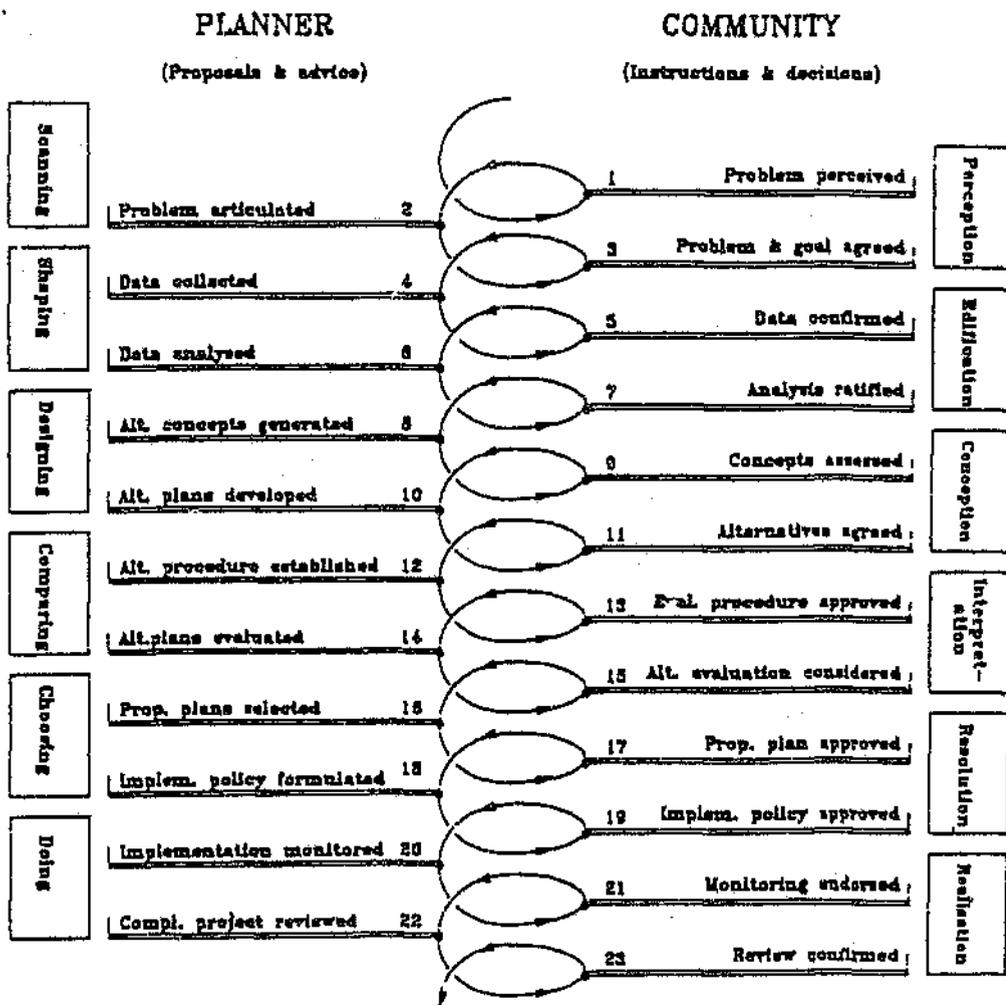
FIGURE 6.1

RATIONAL COMPREHENSIVE PLANNING MODEL



SOURCE: URBAN PLANNING GUIDE. AMERICAN SOCIETY FOR CIVIL ENGINEERING. (1989), p.9.

COMMUNITY DECISION MODEL



SOURCE: MULLER 1994

activity. This planning model is cyclical one where the planner consults the community at each and every steps he \ she takes.

The kind of participation expected by the Jeppe's Reef community is where by the community would be the one which identify the problem. Furthermore the community want to be fully involved in the planning and implementation of any developmental project. Presently what is happening the community is being consulted at the implementation stage and it is also not fully involved. Thus the community want to be fully involved in any decision-making that affect or is trying to improve their lives. It must be further noted that the community views, needs and aspirations, differ substantially from those of the government in terms of attaining the goal. For example the government believes that a contractor should be hired to install the water pipes and the community want the government to train local people to install the pipes. The community is concerned with the high rate of unemployment thus they want everything to be done by the local people. The local government employees are going to maintain the water project after its completion but the community wants its local people to be trained to do that. The local government wants to utilise the present staff or hire qualify people as to serve money which must be used to train the local people. Under such a conflict of perception it becomes clear that the problem of community participation in the delivering of services to rural communities is going to be still one of the major problem the government has to address in the future.

6.8 FACTORS BEHIND DIFFERENT PERCEPTIONS IN COMMUNITY PARTICIPATION

Information leading to the identification of the factors was derived mainly through observation in the Local Government and also from the informal interviews with the Royal Kraal Leadership and Jeppe's Reef community informants.

The factors that have been identified as responsible for these differences, include

- Lack of planners in the area to advise, act as mediators between the government and community.
- Poor community participation in planning and implementation of the water project.

- The undefined role of the Royal Kraal in developmental projects vs the elected councillors.

6.9 LACK OF PLANNERS

During the interviews with the community key informants, it was noticed that most of the community members have no ideas about planners. With respect to interviews with the local government officials, it was also noticed that most of the officials in the community development department do not have relevant training in development planning. Most of the Officials in the Local government are simple college and university graduates with diplomas and first degrees in Social Sciences and Natural Sciences with little or no background in planning.

Due to the above observation the local government relies on outside development planners, experts, or consultants who have little experience with development planning. In project design, the local government relies on consultants. The problem in using consultants, which I have observed in the whole Jeppe's Reef Water Project design, contractor firm came out with the whole project design without involving the community. The Jeppe's Reef community needs a planner who is going to be an agent \ spokesperson for the community in developmental projects. With the absence of qualified planners to work with communities, try to understand the people in the community, their needs, and empower them through learning (by involving them in problem identification to project implementation).

6.10 COMMUNITY PARTICIPATION AND EMPOWERMENT

In community participation it is observed that empowerment does not only mean empowerment of the community but it means enhancement and empowerment of all those involved in the process. Wilson and Ramphela (1989) assert that "genuine development work is that which empowers people; which enables them to build organizations that, like a hydro - electric dam, pool their resources and generate power where previously there was none." This argument is taken further by McClelendon (1993) who argues that people with problems must be empowered to solve their own

problems and that effective planners do not represent or act as agents on behalf of their clients because this tends to promote dependency. Strategies which he cites as empowering strategies are: planners helping people to become their own planners by teaching them about networking, conflict resolution, consensus building, and the political decision – making process. Davidoff (1965) in Faludi (1973) believed that the planner should do more than explicate the values underlying his prescriptions for courses of action; he should affirm them, he should be advocate for what he deems proper. The advocate planner would fulfil the following roles; he would be:

- a provider of information;
- an analyst of current trends;
- a simulator of future conditions;
- a detailer of means;
- a proponent of specific substantive solutions;
- an educator; and
- a communicator.

The educative and communicative aspects of the advocate planners role would involve, for instance, informing other groups, including public agencies, of the conditions, problems, and outlook of the group he represented; and informing his clients of their rights under planning laws, about the general operations of city government, and particular programs likely to affect them (Davidoff, 1965: 283).

Friedmann (1992) describes empowerment as: "Social and political empowerment whose long term objectives is to rebalance the structure of power in society making state action more accountable, strengthening the powers of civil society in the management of it's own affairs, and making corporate business more socially responsible" (1992:31)

He identified empowerment on the basis of access to three levels of power to which households have different amounts of access:

- The first he identified as social power, which is concerned with access to the bases of household production, such as information, knowledge and skills, participation in social organizations and financial resources. Increased social power may be understood by increased access to a households base of production.

- The second he called political power, which relates to the amount of access which individual household members have to the decision – making process. this involves the power to participate in social movements, collective action and political associations.
- Finally, psychological power which refers to the individual's sense of potency and their confidence to deal with different aspects of their lives.

In order to empower households, Friedmann states that households and individuals must develop greater access to power in the three above-mentioned spheres. This will occur through involvement in social and politically relevant actions. Those with partial access he regarded as disempowered.

Therefore community participation should be aimed at empowering people by ensuring that skills are developed and that employment opportunities are created. To overcome these problems a labour intensive programme is considered to be appropriate as it solves a number of problems simultaneously. Firstly it addresses the illiteracy problem by offering training on skills development. It promotes local employment and thirdly it ensures that services are provided at low cost and the living environment is improved

On the other hand, one of the findings is that not all these organizations represent the interest of the community and that communities are homogeneous. Therefore it would be important to ensure that other members of community are included in the participation by using the media, conducting surveys, establishing task teams and using other methods mentioned above. Empowerment is a cyclic process where personal and collective achievements feed back to increase feelings of power and control over one's life and in collective activities. Participation in collective action therefore promotes personal empowerment and as people are empowered the effectiveness in collective action will increase, leading to changes in the structural system which disempowers people.

6.11 COMMUNITY AND CIVIC ORGANISATIONS.

The fact that a community is recognized as a needy community, opens up opportunities for the distribution of resources to that community for development. This will further

expose it to other organizations which may be willing to be the benefactors. Communities get a chance to articulate their needs and steer development in the direction they consider appropriate. Therefore communities are empowered in the sense that they can make decisions based on local knowledge.

Community participation involves training and employment creation especially for poor communities. They acquire skills that can be used in the future for other projects or to secure permanent employment. This in turn improves the quality of life, they gain self-esteem and become self-sufficient.

Community participation does not only enhance the level of education or employment but the living conditions are improved as well. Through their active involvement in mobilization, negotiation and facilitation civic organisation also get empowered in the sense that they sharpen their managerial, administrative and leadership skills.

6.12 SUMMARY AND CONCLUSIONS

One of the objectives set out in this research was to highlight the problems faced by rural communities which hinders participation in the delivery of clean water so that the knowledge gained can be used to formulate effective strategies for progressive development. This was achieved through the literature review of community participation in the delivery of clean water supply to rural communities, local, international experiences and the study undertaken in Jeppe's Reef. The major issues which were observed include the fact that it is important to conduct a survey of a particular community to establish which organisations existing and to know the leadership capacity as some of the organisations are not representative of the whole community. The survey would highlight the specific problems that need to be addressed.

6.12.1 SELF – HELP PROJECT

Another objective of the research was to make the community aware that through self – help projects they have a competitive advantage, which if exploited would promote

effective development, and improve the standard of living. In the study undertaken it was realised that one of the major issues is that the community is divided and it is difficult for it to work as a group for a common goal. Also it was found that the communal identity which used to exist is no longer there. In addition each member of the community want to develop himself \ herself alone. This may be due to the lack of “*Ubuntu*” and this had resulted to the fading away of the “*Lilima*” concept which was making the work of the community members more easier. The study gathered what some people in the community are willing to be involved in the project.

6.12.2 “UBUNTU”

Koka's (1998) definition of “Ubuntu” was based on the Christian idea of “Love your neighbour as yourself”. This led to the slogan that “we are what we are because of others”. “Ubuntu” is a concept that is used to symbolise unity and I will argue that it is the core of the African Renaissance. This concept of Ubuntu as it is fading away in many South African communities especially in Jeppe's Reef where this discourse is based had led to the community members becoming more individualistic.

6.12.3 “LILIMA”

Lilima refers to a local community participation institution whereby people are informed about a project such as relocation of a homestead, weeding a field, building a hut, clearing an area for cultivation and people work in return for some food (usually traditional beer and \ or meat). Lilima operates on the basis of an open invitation. People who live in the area and far come to work and even a passerby can join the gathering at any stage. This institution is very social. Besides working on the project, it serves the purpose of bonding the community, enforcing social and communal links and creating new social links with other people. The system of community development in the whole nation based on observance of tradition and custom, goes a long way in instilling a strong sense of security in Swazi culture. In the process, it develops a strong faith in the expediency of the chief. The hierarchy, social classes, tributary mode of production, communal life and the institutions of the whole structure enjoys support as the survival pillar of the Swazi nation. This is to an extent that “to be a Swazi is to belong” (Kasenene

1993) and it remained the case until the coming of the white settlers in the late 1800s when the social fibre started getting affected. The reason for the breakdown of "lilima" can be attributed to many reasons such as lack of belongingness to one community, less people who teach the young generation about oral tradition, lack of adequate time due to employment, just to mention a few.

The two traditional concepts "Ubuntu" and "Lilima" are very important in community participation. They bind communities together in order to work for a common goal, either socially, economically or politically. I found that in Jeppe's Reefs the spirit of community participation in various projects within the community is no longer important to many people in the area.

6.12.4 COMMUNITY PARTICIPATION AND DECISION MAKING

Another objective of this research was to explore community participation in the delivery of clean water to rural communities and to encourage communities to get involved in decision-making processes. Through the study undertaken, it was realised that one of the major issues in rural communities is the fact that people in leadership make decisions on behalf of the communities. The communities are not involved in community decision making and the leadership approach the community by the time they want to sell the idea to them. The other problem which the study gathered was that there are many people in the community who are uneducated and unemployed. Therefore community participation should be aimed at empowering people by ensuring that skills are developed and that employment opportunities are created. To overcome these problems labour intensive programme is considered to be appropriate as it solves a number of problems simultaneously. Firstly it addresses the problem of illiteracy problem by offering training on skills development. It promotes local employment, and thirdly it ensures that services are provided at low cost and the living environment is improved.

6.13 CONCLUSION

Abrams (1992) contends that in community-based projects the community controls a project and makes important decisions, although professionals such as engineers may provide expertise, and finance may be provided by external financial sources. For a community to control projects it must acquire administrative and management skills. Phillips et al (1995) contend that South Africa at present is faced with similar difficulties to community participation since local institutional management capacity is not sustainable without an enabling local authority legal framework. A particular difficulty facing community-based projects in short-term programmes is the long-term nature and complex training needs of institutions capacity-building since there may be insufficient time and resources to accomplish this.

Although the planners' task is a crucial one, it is somewhat difficult. With the upliftment of communities, comes various difficulties including the divisions, conflicts and incoherencies that may exist within communities. It has become evident that under the new dispensation, planners have to acquire new skills to deal with such contingencies namely: negotiation, communication, and the ability to bring to the fore the differing needs of all actors.

There exists a multitude of planning tools that may or may not assist the planner in working with communities. Although utilizing the appropriate method in the appropriate context is essential, more crucial is the angle from which community development is approached. Apparently a top-down, blueprint approach to planning has left us the dismal state we find ourselves as planners today: social infrastructural backlogs, unserved townships, poverty, landlessness, environmental degradation and unemployment. Consequently community participation must be the new approach to planning if we wished to be relieved from the mess we have inherited from apartheid. However to gain certainty that such an approach will lead to the successful implementation of community plans, planners need to assert themselves in national policy formulation in order to gain some influence over which direction development plans will assume.

The planning process embarked on during apartheid was linear and product-orientated. It was not people-orientated; the people to be affected by the product were not considered. It is the criticisms of blueprint planning that planners need to pay close attention to, take note of, learn from, in order to be able to avoid the mistakes of the past by not involving the communities in decision-making that affect their lives. Community participation is the approach which planners should adopt and it will take us to the next millenium.

ⁱ There are a number of definitions used to describe the term "rural":

- The National Electrification Forum (NELF) database define rural as any area without a formally established urban council.
- Pearson, in his Water and Sanitation 2000 report, gives the following definition: the term "rural" refers to any settlement that is remote from urban centres (20 km minimum) and where there are no significant industrial and commercial activities taking place and the number of residents is less than 20000 people (Pearson 1991).

In terms of the NELF definition (Economic Analysis Systems, 1994) the rural population of South Africa is estimated to be 21, 2 million people. If the Pearson definition is used the rural population in this instance is estimated at 16 million people.

Pearson definition is considered the most representative of what is meant by rural communities in this report. Furthermore, the Pearson figure has been recently justified by the release of preliminary data from data Census 1996 which estimates the "non-urban" population of South Africa to be 16.9 million people, (Preliminary Estimate Report, Census 1996). The NELF definition has been superseded by the new local government arrangements in South Africa because municipal structures have now been introduced into all areas of the country.

ⁱⁱ Friedmann, J. 1992. Define household as a residential group of persons who live under the same roof and eat out of the same pot. Persons residing in a household may be blood-related or not. P.32.

ⁱⁱⁱ Regular and reliable access to 25 litres per person per day, at walking distance of not more than 200 metres away (Department of Water Affairs and Forestry's White Paper on Water Supply and Sanitation Policy). I discovered that before the water project the people of Jeppe's Reef each person was having access to between 12 and 15 litres of water per day. This represent far less than the 25 litres per person per day. The water project had enable the people to have access to 25 litres per person per day of regular and reliable access.

^{iv} A spring is a visible outlet from a natural underground water system. Management and protection of the whole system including the unseen underground part, is essential if the spring is to be used for water supply. (Toward Guidelines for Services and Amenities in Developing Communities; prepared by the CSIR for Department of Development AID, May 1988).

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PRIMARY SOURCES

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2. Jeppe's Reef Water Project Committee
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APPENDIX 1 DISEASES ASSOCIATED WITH WATER

Water – development projects are intended to improve the quality of the human environment. However, unless well planned, designed, and implemented, a water project may bring about a decrease in one type of disease but cause an increase in a more severe type. This may be especially true of projects designed to improve local agriculture. Hence one of the chief concerns of water quality control is the spread of diseases. The World Health Organization (WHO) estimated that 80 % of all illness in developing countries is related to water.

Water related diseases may be grouped as follows:

(a) Waterborne diseases

Waterborne diseases are those which are mainly spread through contaminated drinking water. The main infecting organisms are bacteria (vibrio cholerae, salmonella typhi, shigella), viruses (hepatitis A, orbiviruses, rotaviruses, and enteroviruses) and protozoa (giardia lamblia, histolytica). Contamination of the water occurs through faecal matter entering the water – that is, through poor hygiene and sanitation.

(b) Water – washed diseases

These diseases are mainly infections which can be significantly reduced by an improvement in domestic and personal hygiene. They depend on the quantity of water that is available, rather than on the quality. All diseases with faecal-oral transmission fall into this category – such as typhoid and cholera. Others are skin and eye diseases, such as skin sepsis and trachoma, and infections carried by parasites on the skin surface, such as lice. Most of the intestinal worms also belong in this group, including roundworm, threadworm, whipworm and pinworm.

(c) Water-based diseases

In the case of water-based diseases the pathogen has to spend part of its life cycle in the water. The best known of these is Schistosomiasis (Bilharzia). It is a water-contact disease that has infected many millions of people in the tropics. It is spread through

schistosome eggs in human excreta, which hatch on reaching water. The resultant larvae invade suitable snail hosts and multiply. The free-swimming schistosome larvae are released from the snail and ultimately penetrate the wet skin of humans. The incidence of schistosomiasis invariably increases significantly when irrigation projects are implemented in developing countries.

(a) Water-related insect vectors

Water provides the environment necessary for the development of many insects that transmit diseases. Malaria is a water-habitat vector-borne disease, certain mosquitos being the host. Other such diseases are filariasis and elephantiasis (also transmitted by mosquito), and onchocerciasis (transmitted by the black fly).

The estimated number of people worldwide suffering from these diseases are given in the table below:

Table 1 Prevalence of certain diseases related to water resources.

DISEASES	PREVALENCE
Schistosomiasis	200 000 000
Filariasis	200 000 000
Onchocerciasis	40 000 000
Malaria	25 000 000
Enteric disease	unknown

The above information and figures indicate the importance of taking into account the different aspects which may affect disease transmission in a water-supply improvement project. Both the quality and quantity of water are important, and the correct disposal or utilisation of excess and waste water is of the utmost importance.

The transmission of disease is a complex process and hence no direct relationship between water supply and sanitation improvement and the occurrence of disease can be found. However, the following *steps* in combination *with education* may cause a marked reduction in the occurrence of water-based diseases:

- disinfection of domestic water supplies;
- provision of well-designed and constructed latrines;

- increased quantity of water for domestic use;
- provision of laundry facilities, thus reducing contact with open water bodies;
- provision of adequate drainage and disposal of waste waters.

SOURCE:

Guidelines for the Provision of Engineering Services Amenities in Township Development. Prepared by the CSIR for Department of Development AID, May: 1988.

APPENDIX 2

MEMORANDUM ON THE OBJECTS OF THE NATIONAL WATER BILL

1. INTRODUCTION

Water is a scarce and unevenly distributed national resource which occurs in many different forms which are all part of a unitary, interdependent cycle. It is a natural resource that belongs to all people, although as a result of discriminatory laws and practices of the past, there has not been equal access to water and the use of water resources. The National Government has overall responsibility for and authority over the nation's water resources and their use. Section 27 of the Constitution requires the State to take reasonable legislative and other measures to achieve access for everyone to sufficient water.

2. MAIN OBJECT

The main object of the Bill is to provide for the management of the nation's water resources so as to enable the achievement of sustainable use of water for the benefit of all water users. To that end it is necessary to provide for the protection of the quality of water resources and for the integrated management of water resources with delegation of powers to institutions at regional or catchment level so as to enable everyone to participate in the processes. The Bill accordingly seeks to provide for the protection, use, development, conservation, management and control of the nation's water resources, taking into account the need to –

- (a) meet the basic human needs of present and future generations;
- (b) promote equitable access to water;
- (c) redress the results of past racial and gender discrimination;
- (d) promote the efficient, sustainable and beneficial use of water in the public interest;
- (e) facilitate social and economic development;
- (f) provide for growing demands for water use;
- (g) protect aquatic and associated ecosystems and their biological diversity;
- (h) reduce and prevent pollution and degradation of water resources;
- (i) meet international obligations;
- (j) promote dam safety; and
- (k) manage floods and droughts.

3. ANCILLARY OBJECTS

The Bill seeks to provide for the development of strategies to facilitate the proper management of water resources, the classification of water of water resources, the provision for the reserve for basic human needs and for the ecological sustainability of the various water resources. It also seeks to provide measures for the protection of the water resources against pollution and for dealing with the effects of pollution of water resources.

The Bill seeks to lay the basis for regulatory water use, including the taking and storing of water, activities which reduce stream flow, waste discharges and disposals, other activities which impact detrimentally on water resources, altering a watercourse, removing water found underground and recreation. Since the new regulatory system which the bill seeks to introduce might impact on existing rights, provision is made for the payment of compensation in certain circumstances. The Bill also deals with measures to finance the provision of services as well as financial and economic measures to support the implementation of policies aimed at water resource protection, conservation of water and the beneficial use of water. The Bill seeks to provide for the progressive establishment of catchment management agencies so as to devolve water resource management to a local level and to involve local communities, within the framework of the national water resource strategy. It also deals with the establishment of water user associations which are co-operative associations of individual water users who wish to undertake water-related activities for their mutual benefit. It is envisaged that existing irrigation boards, subterranean water control boards and water boards established for watering stock will continue in operation until they are restructured as water user associations, which process must commence within a prescribed time period. The Bill also seeks to empower the Minister to appoint advisory committees and to provide for the continued existence of certain advisory committees established before the passage of the Bill. The Minister is also empowered to establish bodies to implement international agreements in respect of the management and development of water resources shared with neighbouring countries and to promote regional co-operation in respect of water resources.

The Bill seeks to empower the Minister to establish and operate government waterworks and to deal with existing government waterworks. The Bill also contains provisions aimed at improving the safety of dams and provisions seeking to secure

access onto and over property of others for purposes relating to water resource management and water use. There are also provisions to facilitate monitoring, recording, assessing and disseminating information on water resources.

The Bill seeks to establish a Water Tribunal to hear appeals against the decisions of a responsible authority and applications for compensation as result of the deprivation of water use rights. It also seeks to provide for mediation

The Bill contains general provisions as well as schedules dealing with permissible use of water, servitudes, powers and duties of catchment management agencies, the management and planning of water institutions, a model constitution for water user associations, the Water Tribunal and the repeal of certain laws.

4. PERSONS AND BODIES CONSULTED

The following persons and bodies were consulted in the drafting of the Bill:

GOVERNMENT DEPARTMENTS

Agriculture

Constitutional Development

Environmental Affairs and Tourism

Finance

Health Housing

Justice

Land Affairs (also Chief Registrar of Deeds)

Minerals and Energy

Trade and Industry

PROVINCIAL AND LOCAL GOVERNMENTS

Local government

MINMEC

General public and provincial and local representatives at workshops held in each province.

INTEREST GROUPS

African Development Consultants

Business SA

Chamber of Mines
Columbus Stainless Steel
COSATU
Council of SA Bankers
Eskom
Forest Industries Association
Free State Agricultural Union
Institute for Water Research (CSIR)
Iscor
Jan S. De Villiers & Son
Jephson Strategic Marketing
Kogelberg Biosphere Association
Marede Boerdery
Moaketsi Farmers Association
National Water Advisory Council
Nieu-Bethesda Transitional Local Council
Northern Cape Agricultural Union
Piketberg Study Group
Reanies Wetlands Project
Riversdale Municipality
Potato Producers' Organization
Sasol Limited
South African Agricultural Union
South African Sugar Association
Steffen, Robertson and Kirsten Consulting Engineers
Ter Morshuizen & Stratford Architects cc
Toens & Partners cc
University of Pretoria
Umgeni Water
Rand Water
Mhlathuze Water
Van der Spuy & Partners
VSA GeoConsultants (Pty) Ltd
National African Farmers Union

Nedlac

Transvaal Agricultural Union

COSAB

*** IRRIGATION BOARDS**

- Bo-Bergriver Major Irrigation Board
- Gamtoos Irrigation Board
- Kalkfontein Irrigation Board
- La Motte Irrigation Board
- South Agter Paarl Irrigation Board
- Umlaas Irrigation Board

5. PARLIAMENTARY PROCEDURE

The Department of Water Affairs and Forestry and the State Law Advisers are of the opinion that the procedure establish by section 75 of the Constitution should be followed in respect of this Bill since it is not a Bill to which the procedure set out in section 74 or 76 of the constitution applies.

SOURCE:

Department of Water Affairs and Forestry (DWAF). 1998. "Water Bill". Pretoria: DWAF.

APPENDIX : 3 METHODS OF GATHERING DATA

When a project covers a large community where the sheer number of people precludes including each individual in the study, good sampling techniques should be applied. Stratified random sampling should be used if communities vary by ethnic group, social class, etc., to ensure that minority components are adequately represented.

Four basic methods of gathering information exist, namely:

- (a) observation
- (b) key – informant interviewing
- (c) open – ended interviewing, and
- (d) surveys

Observation is perhaps the most basic and widely used method of information gathering. The researcher actively observes and records the relevant daily activities of the community. The researcher should visit the project sites in order to get a general feel of the conditions. This method of gathering information could also be expanded to include questioning of community members – thus becoming a participant – observation method. This method could be especially useful in gathering the necessary information needed to design the survey questionnaires.

Key – informant interviewing is method where people in the community who are knowledgeable about certain aspects in the project area are interviewed. This method should be used with great awareness of its limitations otherwise a distorted view of the society being studied may result. It is, however, particularly suitable for gathering information about the physical geography of the area, community practices and events, and organizations. The validity of both observation and key-informant interviewing is often open to question because the results may not be truly representative.

Open-ended interviewing schedules can be properly planned, although it may be difficult if reliable knowledge about what is relevant is not available. Questionnaires should be designed to minimise interviewer bias. It is important that the

questionnaires are evaluated and tested for problems of interpretation, writing space, etc., before being used.

Surveys are the most suitable method for collecting demographic data, for quantifying the occurrence of observable objects or characteristics (such as the existence of latrines, broken facilities, etc.) and for estimating the prevalence of particular attitudes, beliefs and practices. The main disadvantage of a survey is that it can limit exploration (for example into cultural beliefs and values) because of its pre-structured nature.

SOURCE:

Guidelines for the Provision of Engineering Services Amenities in Township Development. Prepared by the CSIR for Department of Development AID. May: 1988. P.9.

APPENDIX 4

COMMUNITY PARTICIPATION QUESTIONNAIRE

DEMOGRAPHIC INFORMATION

NAME:..... SURNAME.....

PHYSICAL ADDRESS.....

.....

GENDER		AGE GROUP		EDUCATION	
FEMALE	<input type="checkbox"/>	18 -24	<input type="checkbox"/>	No formal education	<input type="checkbox"/>
MALE	<input type="checkbox"/>	25 -34	<input type="checkbox"/>	Up to Standard 9	<input type="checkbox"/>
		35 - 49	<input type="checkbox"/>	Matric	<input type="checkbox"/>
		above 50	<input type="checkbox"/>	Post Matric	<input type="checkbox"/>

TOTAL MONTHLY INCOME

Below R300	R300-R999	R1000-1999
R2000-2999	R3000-R3999	Above R4000

COMMUNITY ORGANIZATION

1. Are you a member of any Community Based Organization? Yes No
2. If Yes, do you attend meetings?
3. If no, why?
4. Give some of the activities of your organization?
5. Do you have any complain pertaining your organization?
6. If you are not satisfied, please give reasons.
7. Do all the family members belong to one organization? Yes No.

COMMUNITY DEVELOPMENT

8. Have been involved in any community project especially water project?
If no, why?
9. What do your community need most?

10. What do you think is the major obstacle towards achieving this?
11. Where is the community getting help from in terms of funding? Government
NGO Community.

COMMUNITY LEADERSHIP

12. Are you happy with the community leaders and the role they play in development?
13. Do you feel that the community needs have been identified? Yes No
14. Who mobilises resources for improving the community standard of living?
15. Are your community leaders helpful? Yes No
16. Do your community leaders consult with the community before making important decisions?

INFORMATION

17. Are you able to get information on development issues taking place in the community? Yes No
18. Do you have an idea how and where to get information on community issues? Yes No.
19. Who inform you about the latest development issues?

COMMUNITY PARTICIPATION

20. Were you informed about the water project? Yes No
21. Who came with the idea of the water project?
22. Would you like to take part in community projects initiative? Yes No
23. If yes, how can you help?
24. Do you think you can have time to work on community projects?
If no, give reasons.
25. Do Planners often come to your community? Yes No
If yes, did you get any assistance from them?
26. In your opinion, was the community involved in taking the decision of having clean water supply?

27. If yes what is the role of the community in the project and at what stages of the project?
28. What are the problems that the community had experience due to lack of clean water supply?
29. Who will maintain the water project after completion?
30. Do you think community involvement is the best way of reaching agreements to prevent future conflicts? Yes No
31. In your opinion, is the Jeppe's Reef community participating as an active and equal partner in developments that affects their lives?
If no, why?
32. How do you think we can achieve full community participation in Joppes Reefs?

THANK YOU FOR PARTICIPATION AND YOUR TIME

Author:Thwala, Wellington Didibhuku.

Name of thesis:The role of community participation in planning the delivery of clean water to rural communities: a case study of Jeppe's Reef / Wellington

PUBLISHER:

University of the Witwatersrand, Johannesburg

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