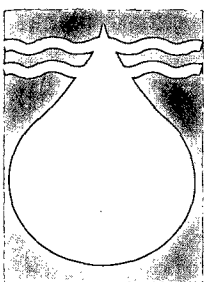


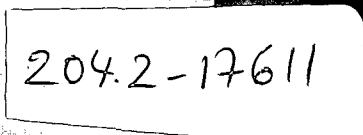
**RAPID CAPACITY BUILDING FOR  
WATER AND WASTE  
MANAGEMENT AT LOCAL  
AUTHORITY AND DISTRICT  
COUNCIL LEVEL**

**AMM Rossouw • PC Crous**

**WRC Report No 982/1/00**



Water  
Research  
Commission



204.2-17611

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**RAPID CAPACITY BUILDING FOR  
WATER AND WASTE MANAGEMENT  
AT LOCAL AUTHORITY AND  
DISTRICT COUNCIL LEVEL**

**Report to the Water Research Commission**

by

**AMM ROSSOUW  
&  
PC CROUS**

**Health and Development Research Institute  
University of Port Elizabeth**

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**LIBRARY IRC**  
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## EXECUTIVE SUMMARY

This report emanates from a project financed by the Water Research Commission (WRC).

The concept "Rapid Capacity Building" was probably born out of the crisis pertaining to ensuring access to healthy, clean water and sanitation for all communities. In response to an invitation of the Water Research Commission, this research project was designed to address the challenge of seeking for a model which made rapid capacity building possible for the management of water and waste services at community level.

A basic assumption was made that rapid capacity building would be possible once the core competencies for the task were known and these competencies could be instilled through ensuring optimum staff components and the necessary training of staff regarding these competencies. The objectives of the research project are the following:

1. To advise on the staffing levels and competencies required to perform the task efficiently
2. To determine the skills gap between skills level and competencies needed to effectively fulfil the task
3. To identify the priority areas to be address through training in order to make the largest impact in the shortest possible time
4. To develop a rapid capacity building (RCB) programme and test the programme

All of the objectives were met excepting to test the programme developed for rapid capacity building. To have stated such an objective was rather ambitious within the confines of the time and the funding available.

The research was conducted by means of semi-structured interviews with staff at a number of towns, a postal questionnaire which targeted staff responsible for water and waste management and maintenance, interviews with specialists in the field and a workshop with senior officials of district councils. The research showed that the question of capacity is a much wider issue than core competencies and optimum levels of staffing, although these also were of importance. What became clear is that optimum staffing levels and the training of staff to have the required competencies is a medium to long term aim and cannot be part of a rapid capacity building approach.

It became clear that the approach should rather be to consolidate and muster existing competencies and expertise and make these accessible to communities. The competencies required for management of water and waste services under normal circumstances are

rather basic and menial. A problem occurs when systems are faulty and need to be corrected and advanced expertise is required. These factors refer to technical capacity. In addition to technical capacity, communities require administrative capacity and financial capacity. These require competency and skills in managing water and waste systems and the staff needed in such a system as well as the ability to recover costs for financial sustainability. The capacities bring into play the ability of the community to pay for services, and where this is not possible, to seek for alternatives.

The model for rapid capacity building therefore focuses on the formation of a "hub" or a centre where all kinds of information are held such as contact information of experts and organisations in the area and guidelines for certain procedures. This centre needs to be established within the existing structures. The most appropriate location for such a centre would probably be a district council or a water board depending on which exists and which is best suited for the establishment of the centre. For the centre to function optimally, a communication system needs to be in place so that communities within the service area of the centre can have ready access to the centre. The ultimate vision of this system is to have all communities linked to the centre by computer.

The conclusions drawn based on this research are as follows:

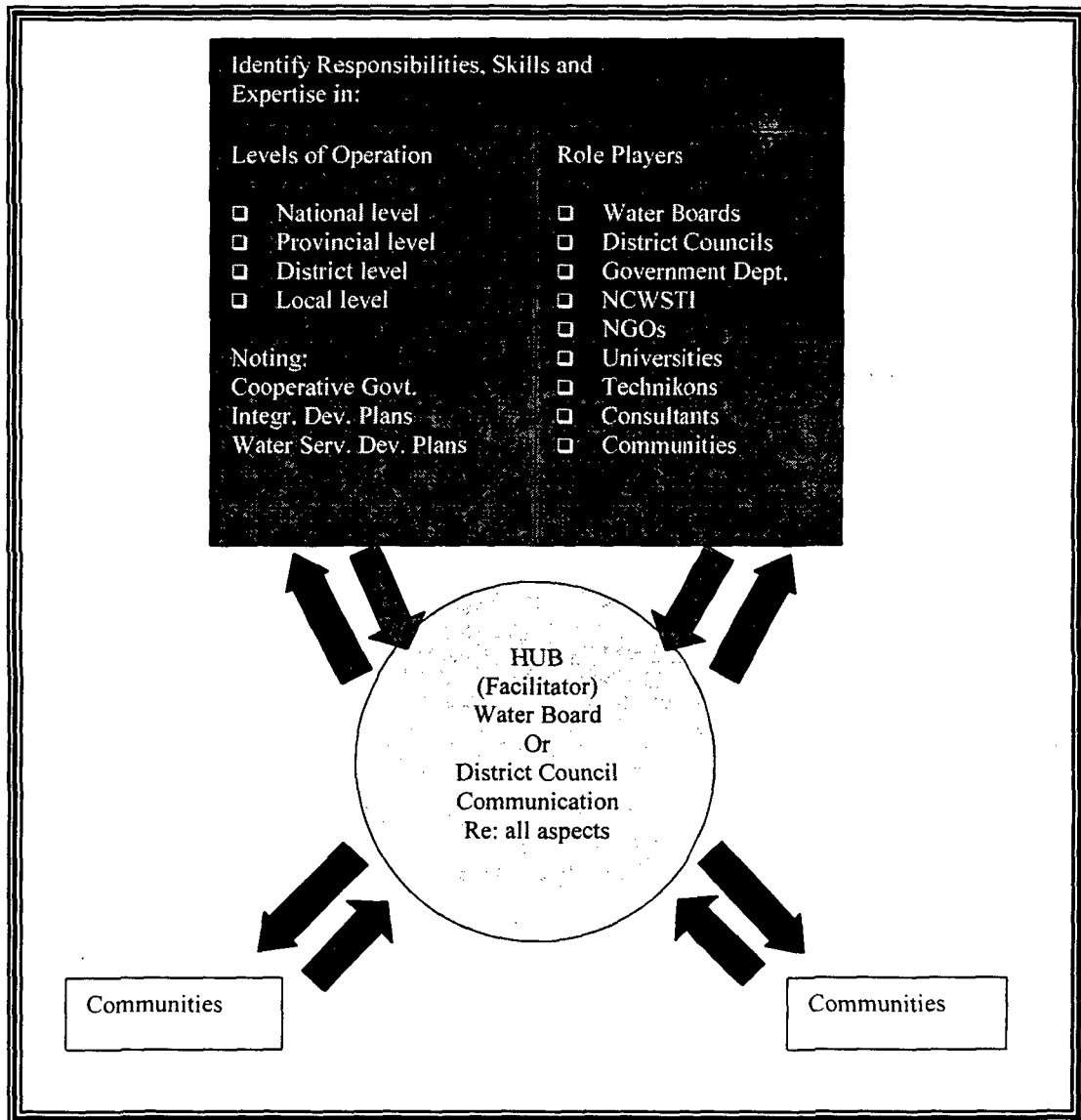
1. It is clear that **training and education is only one factor in building capacity**. Building capacity **also includes the ability to access funding, technology, administrative resources, equipment, information, support and collaborative partnerships**. Though training and education forms an important basis for capacity building, it is clear that this alone may only frustrate if it is not accompanied by the other factors named above.
2. Capacity building involves ensuring that the system exhibits the necessary **managerial/administrative, technical and financial abilities** for the task or function that has to be fulfilled.
3. In terms of rapid capacity building, it is concluded that education and training cannot be seen as providing short-term or rapid results. Rapid capacity building is possible in terms of two scenarios. One is to simply provide the required capacity, using existing external expertise, consultants and the like. This is a high cost, low risk option with a high probability for success. The other is to empower the communities to build their own capacity. This represents a low cost, high risk option, which will not deliver at the speed required under the present critical conditions pertaining to water and waste services.
4. A third scenario appears to be appropriate for the situation prevailing in the Eastern Cape. This entails a combination of the above two scenarios. In the short term, **existing expertise and consultants can be mustered to provide information** needed at community level to manage and maintain water and waste services. The information could also include the **establishing of databases and guidelines** to handle any given situation that may occur at community level. **Existing human resources can also be pooled** so that teams may be available to provide support with regard to all aspects of managing and maintaining of water and waste services at community level.

Simultaneously, but independantly of the short term action, the **medium- to long term activities** of education and training can be launched. This requires not only education and training with regard to the specific requirements for water and waste services management and maintenance, but also **follow-up action** and addressing broader issues concerning **community governance, community economics and civil society**.

This can be realised through an education and training programme aimed specifically at water and waste services management, in combination with a community development process which adresses issues of governance, building a local economy and strengthening civil society.

5. A two-pronged approach as referred to in #4 requires an **inter-sectoral approach**. This means that relevant government departments, other government authorities at different levels, commerce and industry (i.e. the private sector), consultants (in training and engineering) and tertiary educational institutions need to be brought together to address the issue not only of capacity building for the management of water and waste services, but of the basic structure and systems required for healthy, functioning communities.
6. **At district level** it is necessary to **establish a centre which channels all the existing expertise, other capacities and guidelines to the communities**. This also requires the establishing of an **effective communication system** between the centre, the existing resources and the communities the centre serves.
7. At community level the minimum staff complement needs to be established, with clusters of communities under the mentorship of an expert or a team of experts. As was shown by the case study, a small staff complement is required, but of people who are able and skilled to fulfill their function. It would appear that a town clerk, a computer typist/operator, an administration clerk and a technical assistant will suffice in most smaller communities, more specifically the rural villages. These are the people who would need to be in direct contact and communication with the centre and the mentorship.
8. Whilst this short term action is taken as a form of rapid capacity building, the medium- to long term action of education and training needs to be initiated. This needs to be carried out continuously by consultants who are skilled at transferring knowledge and can follow up to support learning and the development of skills by supervising the application of the new knowledge.
9. Some of what has been mentioned is already being done. What appears necessary is that the attempts need to be **less fragmented and better coordinated**. In addition it needs to be ensured that the **combination of a short term strategy with a medium- to long term strategy are well synchronised**. This, and much more, can be achieved by the **establishment of support centres in each district**, referred to in the document as a "hub" or "**WATER AND WASTE MANAGEMENT SUPPORT COORDINATION CENTRE**". This needs to be a lively, vibrant facility that constantly updates information on existing data, knowledge and documentation, develops guidelines, ensures the establishment of

an effective communication system and serves as a link between the communities and the resources.



### **Recommendations based on the conclusions are:**

1. This research project should be followed up by a **second phase of piloting the model as described in this document**. The Amatola district has been suggested as a possibility for the application of the model. The main reasons for this is that: (i) the district has settlements representing all types which are found in the Eastern Cape; (ii) the District Council is well established and would be able to participate meaningfully in such a venture; and, (iii) a water board has been established in the district which can be drawn into the process. This possibility needs to be followed-up as soon as possible. The necessary funding for the piloting process will have to be made available.
2. Part of the piloting of the model should include **clarifying which** of the water board, acting as a water services provider, or the district council, acting as water services authorities and/or water services providers (see Par. 3.14), **is most suitable for the establishment of the centre**. The major advantage of the water board is that it specialises in water services and have already adopted a support and mentoring strategy which can be compatible with the strategy proposed by the model. The advantage of the **district council is that it operates on a more inter-sectoral basis which is a basic principle underlying the rapid capacity building model**, but is not so in the case of the water board.
3. A centre needs to be established which needs to be supported by consultants to ensure that the model is implemented correctly and can learn first hand from the implementation process so that the model can be refined for dissemination.
4. The **centre needs to be staffed by a competent communicator** with a good computer literacy level and an ability to organise the data and information regarding the resources so that it is accessible in a user-friendly fashion. Basic knowledge of water and waste systems and services is preferable.
5. Once the centre is established, one of its first tasks would be to **record all relevant information of resources and to arrange for guidelines to be drafted**. Another task would be to look into the most effective and practical way in which to **establish a communication system** between the centre and the communities it serves.
6. The centre needs to **coordinate the short-, medium and long term strategies of capacity building** to ensure that the strategies are complementary and mutually supportive.
7. The **competency levels of the staff at community level needs to be assessed, as well as the staffing levels**. This is necessary so that a strategy can be devised by which the correct staffing levels can be achieved and the staff can be optimally trained. The implication is probably that a number of people may have to be re-deployed for which a training and education programme will also be required. A further implication is that, in some cases, new staff will have to be recruited and appointed. These people will probably also come from the communities where the new staff have to be stationed. The **communities need to be involved to the extent that they take ownership of the process**.



## ACKNOWLEDGEMENTS

1. The initiative of the Water Research Commission to request research on the concept of “Rapid Capacity Building” and their willingness to finance such a novel project has made this research possible and is highly appreciated. The supportive attitude of Dr Mjoli needs to be specifically mentioned.
2. The cooperation, advice and support of the project committee throughout the project assisted the researchers to remain creative in their thinking, to expand the insights on the concept and to stay on course in terms of the objectives of the research project and is highly appreciated/
3. The cooperation of many communities and officials who deal with the challenge of managing water and waste services could not have been done without. They were a major source of information. We hope that the results of this research will contribute to them being able to meet their challenges more effectively.
4. Members of the Steering Committee for their time and invaluable input to ensure the success of this project.

## STEERING COMMITTEE

Dr NP Mjoli	Water Research Commission
Dr GR Backeberg	Water Research Commission
Ms K Wentworth	Water Research Commission
Mr P Hirst	Presidential Project Team
Mr DA Raymer	Port Elizabeth Municipality
Prof D Baird	University of Port Elizabeth
Prof B Robertson	University of Port Elizabeth
Dr A Shaker	NCWSTI
Mr A vd Schyff	Water Systems Management
Mr JD Timm	Palmer Development Group
Mr C Burger	Dept of Local Government and Housing, Eastern Cape

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# CHAPTER 1

## 1. PROJECT DESIGN

### 1.1. Introduction

The project relates to Rapid Capacity Building regarding Institutional and Management Issues. The research question pertains to meeting the demands of water and waste service delivery and management at District Council and Local Authority Level by empowering staff through Rapid Capacity Building approaches, and appropriate organisational structure and staff levels.

A research project into the above aspects was proposed to the Water Research Council by Dr A M M Rossouw of the Institute for Development Planning and Research of the University of Port Elizabeth.

### 1.2. Purpose and value of the research

Water is of short supply in a number of districts in the Eastern Cape. The present demand in the Western Region of the Eastern Cape already exceeds the exploitable potential of the rivers so that water needs to be imported from the Orange River (Rossouw, 1993:2). Beumer (1993) states that in this region most of the suitable dam sites have been used and others could only be developed in less suitable sites at high cost. The fact that the cost of accessing more water is extremely high, and that it is impossible in some cases, indicates the dire need for people to be educated in the careful consumption of water in order to curb any wastage.

Waste is an increasing problem in a consumer economy. More and more products are consumed which produce waste and effluent which needs to be dealt with. One merely has to observe the condition of both urban and rural areas to notice the presence of unprocessed waste. In this instance it is necessary to assess the status of the service provided as well as the attitude and behaviour regarding waste of the general public. In our latest research on housing and health, conducted for the Medical Research Council (MRC), it is shown that waste is a problem which needs to be dealt with both at the service provider level and the end user level (Thomas, et al, 1999).

It is therefore imperative that the capacity of service providers and communities be maximised to ensure maximum impact on the problems pertaining to water and waste which face this province and this country. It is necessary that the aims and objectives of service providers and communities be assessed, and that the optimum, appropriate capacity to achieve these aims and objectives be developed to ensure sustainable service provision. Rapid Capacity Building is regarded as a process where core requirements of service delivery and management are identified and addressed through training and the adjustment of delivery and management systems to achieve minimum acceptable standards of services within the shortest possible time frame. The problem, especially regarding water in the Eastern Cape, is critical in many parts of the province, so that rapid results for the provision and management of water and waste services are required. According to the RSA Constitution people have the right to such basics as

water and a clean and healthy environment, which places an obligation on service providers (Wiechers et al, 1997: P2).

The comments of the President, combined with those of the White Paper on Water, and of the Discussion Document on Local Government, strongly indicate the need for the research proposed by this project.

The White Paper on Water states:

**"Over the last decade, the traditional fields of water research, agriculture and industry, have been extended to include research in the fields of social and financial issues, integrated catchment management, policy development, decision support systems, capacity building (including education and training) and ecosystem structure and function. There has been a trend towards interdisciplinary and participatory research which recognises the need for a link between technology and communities. These approaches need to be extended and accelerated."**

With regard to Waste, the Discussion Document towards a White Paper on Local Government states:

**"South Africa has relatively high levels of waste and pollution impacting on air, land and water. Waste disposal practices are unsatisfactory. Ineffective waste management and poor regulatory controls allow waste producers to externalise waste management costs on to the environment and society."**

Most importantly, it was the President himself who pointed out in his address at the opening of Parliament on 7 February 1997, that:

**"In so far as local government is concerned, there is nothing as urgent and as critical as the training of councillors. ....to play their role in the multibillion housing and infrastructure programmes [of which water and waste are major issues]....., and to work with communities in a partnership for development are skills that should be built more intensively this year."**

The WRC clearly needs to play a key role in enabling competent researchers with experience in the field of social research to address the issue of building the capacity of local government structures so they can fulfil their task of delivering basic services.

### **1.3. Project aims**

The aim of the research project is to provide a strategy for rapid capacity building in the area of water and waste services in the Eastern Cape.

The objectives of the research were originally as follows:

1. To advise on the staffing levels and competencies required to perform the task efficiently;
2. To determine the skills gap between present skills level and competencies needed to effectively fulfil the task;
3. To identify the priority areas to be addressed through training in order to make the largest impact in the shortest possible time;
4. To develop a rapid capacity building (RCB) programme and test the programme.

Research products and target groups according to the original proposal were as follows:

Research Product: Identification of needs re: capacity i.t.o. staff, structures and systems.

Target Group: District Councils and Local Authorities in the Eastern Cape

Research Product: Development and presenting/ application of RCB programme.

Target Group: District Councils and Local Authorities in the Eastern Cape.

Research Product: A procedure for assessing capacity needs re staffing, structure and systems, and the development and testing of the programme.

Target Group: District Councils and Local Authorities, nationally.

### **1.4. Methodology**

The existing structures and systems at District Council and Local Authority level relating to water and waste services, was assessed. This assessment took into account present conditions regarding the services, structural and systemic capacity, and staff capacity (e.g. numbers and skills). The aims, objectives and functions of the service providers were clarified. This analysis was used to develop a Rapid Capacity Building Strategy or Programme, targeted at the service providers at District Council and Local Authority level, and the communities.

The execution of the research is summarised as follows:

#### **Phase 1:**

Semi structured interviews were conducted with role players at District Council and Local Authority level regarding water and waste to analyse the existing structure and



the functioning of the system. This data was then analysed and a draft report presented to the key role players in a workshop to verify the content of the report, in terms of its relevance to the region in general.

#### **Phase 2:**

A skills audit of managers and supervisors of water and waste services was conducted. A computer assisted analysis of existing and required competencies was conducted in a group interview situation. This entailed an analysis of existing capacity and the need for training and capacity building.

#### **Phase 3:**

From Phase 1 & 2 a RCB strategy and/or programme was developed. In the original proposal the monitoring and evaluation to determine its effectiveness was included as part of the research project. During the exploratory phase the new insights in respect of what rapid capacity building entails, proved this to be an unrealistic expectation.

### **1.5. Target population and Sampling**

The target population consists of the district councils and local authorities in the Eastern Cape. The 6 district councils in the province are: (i) Amatola; (ii) Drakensberg; (iii) Western; (iv) Stormberg; (v) Kei; and, (vi) Wild Coast. The original proposal suggested that a District Council be selected from which a cluster of communities would be sampled. During the exploratory phase it was decided to conduct interviews with representatives of service providers which represented a variety of systems. These respondents were selected from the Western, Amatola and Stormberg District Councils. For the purposes of the audit of competencies a sample was drawn from all six district councils.

The following towns were visited to explore examples of existing water and waste systems:

- Addo
- Bersheba
- Kirkwood
- Enon
- Louterwater
- Krakeel
- Woodlands
- Somerset East
- Pearston
- Queenstown
- East London
- Kei Road
- Alexandria

The following sample was drawn for the purposes of the audit of competencies:

1. Cradock
2. Hofmeyr
3. Tarkastad
4. Molteno
5. Sterkstroom
6. Lady Frere
7. Hewu
8. Cofimvaba
9. Kei Road
10. Komga
11. Centani
12. Idutywa
13. Nqamakwe
14. Tsomo
15. Keiskammahoek
16. Middledrift
17. Cathcart
18. Whittlesea
19. Cala
20. Gatyana
21. Willowvale/Mpofu
22. Xalanga

Of the above, the following responded and participated:

1. Whittlesea
2. Cathcart
3. Cala

The empirical data are complemented by a literature study. The study included an assessment of relevant policy documents, and theory and literature on capacity building and community development.

## CHAPTER 2

### 2. CONCEPTUALISING RAPID CAPACITY BUILDING.

#### 2.1. Introduction

The present inadequacy of water services, increased demands on water, and the raised expectations of people to have access to safe water, requires speedy solutions for the water problem, especially in the rural areas where water delivery systems are either non-existent or in disrepair. The term water and waste services includes the provision of water for human consumption and water carried effluent.

The current water crisis has two dimensions:

- Water supply and sanitation services are often inadequate.
- The development and management of water provision services are not sustainable.

The quality and reliability of services are often unacceptably low. Water supply and sanitation policies need to be constantly updated, institutions are inadequate, well-trained people in short supply, technology inappropriate and financial mechanisms ineffective. It is these prevailing conditions that require rapid capacity building of water and waste services management.

#### 2.2. An understanding of rapid capacity building in the managing of water and waste

Capacity building is the process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide water safe for human consumption (Brown et al, 1997: P I-1). Capacity building is understood in a broad sense, involving all the partners, be they from the public and private sectors or non-governmental organisations, participating in the developmental process.

A rapid capacity building model is one that allows for the recognition of all the elements that impacts on sustainable water systems, to align and strengthen these elements in order to allow these water systems to acquire and maintain adequate technical, managerial, and financial capabilities, in the shortest possible time frame, to enable them to consistently provide water safe for human consumption.

Water resources are increasingly scarce due to over-exploitation, wastage, pollution and high cost of development. At the same time, population growth, socio-economic development and industrialisation are increasing the demand on water. The inadequacy of water services and the intensifying competition for clean water have together inspired a remarkable consensus among developing countries and external support agencies on the need for *integrated planning of development and management* of water resources and their use. Building capacity in this area is now widely regarded as a key element in ensuring sustainable water systems. Operational strategies for

sustainable water systems management must be tailored to the state of a country's water resources and demands. A multi-faceted assessment of the water sector at large by government and other specialists should provide the basis of such strategies. Carrying out a water system assessment is also the preferred way of initiating the capacity-building process.

In combination with human resource development, strengthening of institutional, legislative, and management structures are key elements of the program. A prerequisite for progress in enhancing access to water and sanitation services is the establishment of an institutional framework that ensures that the real needs and potential contributions of currently unserved populations are reflected in development planning. The multi sectoral approach which is a vital part of water systems management, requires institutional linkages at the national, provincial, district and local levels, and the program includes proposals for establishing inter sectoral planning groups.

The program should include the establishment of appropriate design standards, water-quality objectives, and discharge consents. It should also include support for strengthening the capability of water and waste services providers and for developing their autonomy and financial viability. Operation and maintenance of existing water and waste facilities have been recognised as entailing a serious shortcoming. Technical and financial support are needed to help correct present inadequacies and build up the capacity to operate and maintain rehabilitated and new systems.

A rapid capacity building program will only be successful if it is implemented, co-ordinated and monitored by an authority who is recognised on a national level and who has financial, legal and institutional support to influence stakeholders on a national, provincial, regional and local level. A rapid capacity building program needs to be addressed on national level, provincial level, regional level and community level simultaneously.

### **2.3. Technical capacity**

Technical capacity is the physical and operational ability of a water system to meet set requirements. Technical capacity refers to the physical infrastructure of the water system, including the adequacy of source water and the adequacy of treatment, storage, and distribution infrastructure. It also refers to the ability of personnel to adequately operate and maintain the system and to otherwise implement requisite technical knowledge (Brown et al, 1997: P I-5).

A water system's technical capacity can be determined by examining key issues and questions, including:

- Source water adequacy -- Does the system have adequate yield of drinking water? Is the source of generally good quality and adequately protected?
- Infrastructure adequacy -- Can the system provide water that meets set standards? What is the condition of its infrastructure, including well(s) or source water intakes, treatment, storage, and distribution? What is the infrastructure's life expectancy? Does the system have a capital improvement plan?
- Technical knowledge and implementation -- Is the system's operator certified? Does the operator have sufficient technical knowledge of applicable standards? Can

the operator effectively implement this technical knowledge/ does the operator understand the system's technical and operational characteristics? Does the system have an effective operation and maintenance program?

- (Brown et al, 1997: P I-5)

#### **2.4. Managerial capacity**

Managerial capacity is the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with set requirements. Managerial capacity refers to the system's institutional and administrative capabilities.

Managerial capacity can be assessed through key issues and questions, including:

- Ownership accountability -- Are the system owner(s) clearly identified? Can they be held accountable for the system? Ownership refers to both the service provider and the community.
- Staffing and organisation -- Are the system operator(s) and manager(s) clearly identified? Is the system properly organised and staffed? Do personnel understand the management aspects of regulatory requirements and system operations? Do they have adequate expertise to manage water system operations? Do personnel have the necessary licenses and certifications?
- Effective external linkages -- Does the system interact well with customers, regulators, and other entities? Is the system aware of available external resources, such as technical and financial assistance?
- (Brown et al, 1997: P I-5)

#### **2.5. Financial capacity**

Financial capacity is a water system's ability to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with set requirements.

Financial capacity can be assessed through key issues and questions, including:

- Revenue sufficiency -- Do revenues cover costs? Are water rates and charges adequate to cover the cost of water? Is the system affordable for the community? Are water services tariffs and charges adequate to cover the cost of water?
- Credit worthiness -- Is the system financially healthy? Does it have access to capital through public or private sources?
- Fiscal management and controls -- Are adequate books and records maintained? Are appropriate budgeting, accounting, and financial planning methods used? Does the system manage its revenues effectively?
- (Brown et al, 1997: P I-5)

## **2.6. Interrelationship of technical, managerial, and financial capacity**

Many aspects of water system operations involve more than one kind of capacity. Infrastructure replacement or improvement, for example, requires technical knowledge, management planning and supervision, and financial resources. A deficiency in any one area could disrupt the entire effort (Brown et al, 1997: P I-7).

## **2.7. Factors that encourage or impair capacity building**

Institutional, regulatory, financial, tax, or legal factors at National, Provincial, District or Local level may *encourage* or *impair* capacity building.

Factors that may impair capacity building are:

- A lack of legal (or regulatory) authority to develop and implement a capacity building strategy.
- Institutional barriers to developing a capacity building strategy.
- Legal and financial issues associated with water rights.
- Insufficient state or local funding to implement a capacity building strategy
- A lack of reciprocity for operator certification.
- Barriers that preclude systems from obtaining variances or exemptions reasonably (flexibility).
- State statutes or regulations that hinder consolidation, regionalisation, or interconnection.
- (Brown et al, 1997: P III-10)

Factors that may encourage capacity building are:

- National wide growth-management legislation - encourages capacity building by checking the unrestricted growth of poorly-planned water systems.
- Statutes dealing with privatisation or procurement - allows systems to contract for operations and maintenance or other services more easily.
- Statutes dealing with mergers and acquisitions - encourages consolidation by allowing adjustments to the rate base.
- Statutes that require renewable operating permits for water systems and periodic sanitary surveys - encourages capacity building by enabling the state to periodically assess capacity.
- (Brown et al, 1997: P III-10)

## **2.8. Actions to establish or enhance authorities to ensure the capacity of water systems**

Capacity building efforts by authorities may require expanded *engineering analysis* and *financial analysis capabilities*. Staff may need *additional tools* and *training* to

conduct business planning and other activities. New staff functions might be created or out-sourced. Sharing of personnel among agencies can be considered.

### **2.8.1. Co-ordinate agency capacity efforts**

It is important that the various stakeholders co-ordinate their efforts in building capacity. It is suggested that this be done by establishing a directory of stakeholders with their specific fields of expertise and different roles. This directory should be maintained at a central communication centre and made accessible to all stakeholders (See Par. 6.4.2 and Fig. 4). This information should be used to encourage stakeholders to focus on their specific areas of interest and expertise, at the same time, eliminating unnecessary duplication of functions and ensuring maximum efficiency.

### **2.8.2. Conduct regular meetings**

Co-ordinate capacity building efforts by conducting regular meetings that include representatives of the agencies that have authority over water systems. These meetings can facilitate informal and formal means of coordination. Regular meetings allow agency personnel to draft and implement more effective capacity policies.

### **2.8.3. Formulate interagency policies**

State agencies can formulate joint policies to direct their capacity building activities. These policies establish common goals and activities across agencies. This will typically include a joint policy statement or statement of objectives, a description of the specific areas where collaboration is envisioned, and the mechanics of the collaboration.

### **2.8.4. Share data and information resources**

The inaccessibility of relevant information is a significant barrier to effective review of capacity building. New information-sharing technology can enhance interagency communications and policy making.

### **2.8.5. Clarify state and local rules**

Successful capacity building requires clarification of state and local roles. While the state is responsible for ensuring the capacity of new water systems, many critical control points exist at the local level. Well-informed, active local governments will achieve more efficient development practices and reduce the need for state intervention.

Where allowed by law, the state can delegate some of the responsibility for ensuring capacity of new systems to local government, provided that the arrangement is guided by clear written agreements. Local control points are most effective when coordinated with local approval processes and known and understood by new system applicants.

#### **2.8.6. Promote awareness of capacity issues**

In order to build capacity it is necessary that awareness of capacity issues should be promoted.

#### **2.8.7. Form a stakeholder group**

State capacity building efforts can be enhanced by a formal process for stakeholder involvement (Brown et al, 1997: P II-13). While such organisations may not represent everyone, their communication networks reach a large percentage of the target audience. Convene advisory committees or task forces consisting of all relevant stakeholder groups and the relevant agencies. Some of these groups continue to meet regularly to monitor and manage the implementation process. Written communications plans may support program implementation. The plans identify objectives, specify the individual segments of the target audience. Outline the messages and information to be conveyed to each segment, and itemise the options for delivering the messages and information.

#### **2.8.8. Educate communities**

Communities may be unfamiliar with state regulations and unaware of capacity building policies. Clear, early communications when developing new water systems, or rehabilitating existing systems, is an important aspect of capacity building.

#### **2.8.9. Educate consumers and communities**

Educating consumers and communities can help bring market forces to bear on new system capacity. Communities who are educated and informed about the requirements and cost implications of a new system may be more committed to support such a system.

#### **2.8.10. Educate the technical community**

Engineering and other consultants should be made aware of capacity building issues and policies



#### **2.8.11. Encourage interconnection, consolidation, and regionalisation**

Water and waste services require an holistic approach which can be achieved by encouraging interconnection, consolidation and regionalisation.

#### **2.8.12. Require consideration of regional alternatives**

The state approval process could include consideration of regional alternatives. Regulators may require a new system applicant to demonstrate that the proposed service area cannot be absorbed by a larger system or served by a line extension from a nearby system. Regional options could be considered for all or part of utility operations (Brown et al, 1997: P II-16). For example, a system might run its distribution facilities, but purchase wholesale water from a regional supplier. Another system might maintain ownership but contract with a nearby utility for operations services.

#### **2.8.13. Promote regional planning**

Regional water system planning can promote capacity by providing efficient alternatives to creating new systems. Regional planning can link capacity building to other planning processes by providing opportunities for local governments to interact.

**(Brown et al, 1997: P II-17)**

#### **2.8.14. Establish an interconnection policy**

An interconnection policy requires co-ordination of existing policies across provinces and regions **(Brown et al, 1997: P II-17)**.

#### **2.8.15. A comprehensive business plan**

Requiring water systems to provide comprehensive business plans may be one of the most important means of ensuring technical, managerial, and financial capacity **(Brown et al, 1997: P II-17)**. Planning is a diagnostic as well as a capacity building tool. Planning can be used to generate reliable information about costs and other issues needed to make sound decisions about a water system's future.

### **2.8.16. A technical operations plan**

This approach relies on authorities to set expanded engineering standards for appropriate systems, well construction, requirements for approval of surface water sources for small systems, requirements for the frequent presence of a certified operator on the premises, specific operator certification requirements, requirements for system water rates, and management certification requirements (**Brown et al, 1997: P II-17**).

### **2.8.17. Develop benchmarks or minimum standards**

Under various authorities, agencies can develop benchmarks or minimum standards for screening systems. While standards usually are developed formally, benchmarks often emerge from practical experience. Benchmarks and standards also can be used to monitor system performance (Brown et al, 1997: P II-19).

### **2.8.18. Ensure take-over by another entity in case of failure**

Ensuring a take-over involves appointing a local government or another system as trustee or securing a commitment from the local government to annex, assimilate, or interconnect the system. One approach is to give some authority ( municipal or district) responsibility for all water service within its jurisdiction. Therefore, if a system fails, the authority is required to provide water to the customers served by the failed system.

## **2.9. Methods or criteria to prioritise systems**

An instrument will have to be developed to investigate the type of system most suitable for a specific community taking into account various criteria (Rate base, topography, water sources etc.). Systems needing to improve their technical, managerial, and financial capacity need to be identified and prioritised in terms of capacity building requirements.

The following issues may be considered in developing methods and criteria to identify and prioritise systems that need to improve:

- Do the methods or criteria for prioritising systems permit the consideration of all systems in the country/province/region.
- Do the methods or criteria for prioritising systems provide the authority with a ranking scheme?
- Are the methods or criteria for prioritising systems easy to implement?
- What are the data requirements of the prioritisation procedure?
- Does the authority have access to an existing database, can an existing database be modified, or can a new data system be developed, given available resources?
- (Brown et al, 1997: P III-8)

The elements that the authorities must consider, solicit public comment on, and include as appropriate in its capacity building strategy, are:

- ❑ The methods or criteria that the state will use to identify and prioritise the systems most in need of improving technical, managerial, and financial capacity.
- ❑ A description of the institutional, regulatory, financial, tax, or legal factors at the national, provincial, district or local level that encourage or impair capacity development.
- ❑ A description of how the authorities and agencies will assist water systems in complying with the requirements, encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems, and the training and certification of operators.
- ❑ A description of how the authorities will establish a baseline, and measure improvements in capacity.
- ❑ An identification of the persons that have an interest in and are involved in the development and implementation of the capacity building strategy. (Including all appropriate departments at national, provincial, district and local government level, and private and non-profit organisations.)

The key activities of a training programme should include:

- ❑ Identify all the service providers/potential service providers on training in the area of water and waste management.
- ❑ Review available training and resource materials in the area of water and waste management.
- ❑ Develop/adapt training modules in the area of water and waste management.
- ❑ Organise training interventions on water and waste management.

## **2.10. Information needs for capacity building**

The key to effective information management for capacity building purposes is to focus on essential information only. Solutions to capacity building issues can be extremely complex and it is not always easy to determine what information is essential. At minimum the information set should include available skills, expertise and competencies and how these can be accessed. The establishment of such an information set may require the services of dedicated consultants. In managing the information set, all expressed needs should be recorded which will reflect capacity building requirements.

Other functions of the information set should include the following:

- ❑ Development of a water system profile – Developing a system profile by taking inventory of existing resources and conditions helps systems assess the present circumstances and design strategies to meet emerging needs. Summarise the service and operating characteristics of the water system. Provide an overview of conditions and a description of climate, water availability, or other factors that might affect water supply.

- Prepare a demand forecast – Prepare a forecast of anticipated water demand for selected time periods. To the extent practical, the planner should take into account variations in demand based on type of water usage, as well as perform a "what if" (sensitivity) analysis.

## **2.11. Strategic planning**

It is important to use the information set for strategic planning for capacity building. Strategic planning should be addressed on all levels, from national to local. With the availability of the information set, strategic planning becomes a relatively simple task, matching the capacities to those required, and preparing a strategy to move forward. This process can be summarised in terms of three underlying questions as follows:

- Where are we now?
- Where do we want to be?
- How are we going to get there?

The answer to the above questions should lead to a strategy linked to a timetable for implementing and assessing capacity building. Build in some immediate "wins" and short-term successes. This is a good way to show community residents that something is really happening; it makes successes visible. Identify realistic goals, find out how to get things done, organise to do things efficiently, measure progress, evaluate, and make corrections along the way.

- When will the goal of rapid capacity building be achieved?
- What indicators will signal that you were successful?
- Are there intermediate benchmarks you can identify?
- How will you measure success? -- what are your realistic baselines.
- Who will carry out the measurement and integrate the findings into the planning process.

Is there widespread community interest, support, and involvement in the ongoing planning and programs? How can one increase and maintain this involvement? The importance of involving all the members of a community in decisions about water provision is emphasised, as is the need to incorporate hygiene education from the outset. Map the assets within the community to look for ways to build upon what's already happening with skills, resources, materials that the community already controls. The aforementioned relates closely to the concept of community development and confirms the importance of community development in relation to capacity building (See chapter 4).

## CHAPTER 3

### 3. POLICY DOCUMENTS AND LEGISLATION

#### 3.1. Introduction

A number of policy documents and some legislation with relevance to the issue of water and waste services and the management and maintenance of these services were identified. The documents referred to in this chapter are:

- (i) The White Paper on Local Government, March 1998;
- (ii) The National Water Act, Act 36 of 1998;
- (iii) The Water Services Act, Act 108 of 1997;
- (iv) Draft White Paper on Integrated Pollution Control and Waste Management for South Africa, August 1998; and,
- (v) White Paper on a National Water Policy for South Africa, April 1997.

Information relevant to this research project were also abstracted from the website of the Department of Water Affairs and Forestry: <http://www.dwaf.gov.za>.

In this chapter relevant aspects are discussed as they relate to the issue of rapid capacity building for water and waste services management, with a specific focus on rural communities.

The White Paper on Local Government confirms that government commits itself to work towards ensuring that all South Africans have access to adequate housing, health care, education, food, water and social security. This research focuses on the issue of access to water as one of the critical factors in satisfying minimum requirements of people to enjoy the very basic aspects which support human dignity and human rights.

#### 3.2. Structures of local governance

##### 3.2.1. District Councils

The District Councils who are responsible for the bulk services functions of the old Regional Services Councils, in some areas also provide municipal services directly to the public. According to The White Paper, in some cases the District Councils have not successfully adopted their role as development agents. They also experience problems in developing primary structures in rural areas and are not flexible enough to address priority issues that are not formally within their functional scope. During the research process some respondents indicated that District Councils do not have the capacity in terms of management and technical staff to meet all demands.

District Councils receive most of their revenue from urban areas because of the presence of large industry. Urban areas complain that not enough of this revenue

returns in the form of development and maintenance of services, while District Councils, however, have an increasing obligation to provide services to rural areas.

The White Paper on Local Government states that District Councils are significant centres of municipal capacity and consideration should be given to build on this capacity toward the design of a new local government system. In this regard, an appropriate capacity building strategy should be aligned with the new design of local government<sup>1</sup>. At the present moment there is very little clarity on this issue as much of the newly created policy still needs to be translated into practice.

According to The White Paper, District Councils could serve as a point of coordination for national and provincial capacity building programmes and the location of support and training infrastructure. Among other things, this implies that the District Councils may be the key recipients of the findings of this research.

### **3.2.2. Transitional Local Councils**

The White Paper states that the small towns experience problems as they do not have the financial, administrative and service delivery capacity to provide adequate services and governance without external assistance and support. This implies that capacity building initiatives should be focused on technical, management and financial issues within and in support to local government.

### **3.2.3. Rural Councils**

There are three forms of rural governance at present, namely:

- (i) Transitional Representative Councils (TRepC);
- (ii) Transitional Rural Councils (TRC); and,
- (iii) District Councils with Remaining Areas.

In both the TRepCs and TRCs capacity is limited in generating revenue and providing services. At present they are mostly dependant on what funding they can obtain from and through the District Councils. It is clear that the capacities of the Rural Councils and those of the District Councils are directly linked and lack in capacity in one, places a greater burden on the other. Capacity building cannot ignore either levels of governance, but need to clarify where to focus in order to obtain the most effective results in the shortest possible time.

District Councils and Rural Councils are not expected to function on their own, but are seen to be in an intergovernmental relationship with provincial and national government departments. The two higher levels of government are responsible for monitoring and control, as well as financial support and assistance with capacity building. No capacity building strategy can therefore be effected without recognising the role of these two levels of government. The roles of provincial and national government are clearly indicated in the White Paper in Section C which concerns itself with co-operative government.

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<sup>1</sup> Information from personal discussion with Mr Sewisa.

More specific reference is made to the institutional development and capacity building roles on p 42 of the White Paper. The provincial government and SALGA (South African Local Government Association) need to play a central role in training, by ensuring that training and other capacity building is provided and co-ordinated. The ways in which capacity building can be promoted are:

- (i) facilitating or funding training programmes;
- (ii) providing technical assistance;
- (iii) providing mentorship;
- (iv) arranging exchange programmes;
- (v) providing assistance with IDPs;
- (vi) facilitating shared learning between municipalities; and,
- (vii) the secondment of staff where it is appropriate.

The higher levels of government can play a fiscal, monitoring and intervention role in ensuring that the necessary capacity is developed in order for local government structures to fulfil their role in terms of provision of services, and promoting social and economic development.

Besides government departments, other service and consulting agencies such as the South African Local Government Association (SALGA), NGOs and other service and consulting agencies, together with tertiary educational institutions, can play a major role in the building of capacity in local government structures and communities. This would also be true in respect of water and waste services.

### **3.3. Local Government Finance**

This is one of the crucial aspects where capacity needs to be built. Viable tax bases need to be developed, and financial management needs to be strengthened, such as budgeting, accounting, credit control and financial support systems. There needs to be a symbiosis between planning, budgeting and community participatory processes.

### **3.4. Administration**

The White Paper comments that the changed mandate of local authorities requires an additional developmental function, for which new capacities are required. New relationships need to be established between municipal councils, the administration, the work force and the service users. Significant support and investment are required to build administrative capacity for the new local government system. The transitional process has caused municipalities to focus their capacities inward on administrative reorganisation, rather than toward their constituencies and service delivery. At the same time municipalities have faced increasing demands and expectations on delivery, often without an increase in the resources to deal with these demands.

### **3.5. Requirements of municipalities**

The first basic requirement set out by the White Paper is that municipalities should have clear objectives reflected in their strategic development plans and integrated development plans. These plans should include clearly developed action plans and budgets. In these plans human resource development strategies are of particular importance. These strategies should be focused on assisting municipalities to reorganise their administrations for improved service delivery to communities.

In terms of budgeting, the generation of capital is one of the basic building blocks. It is necessary for local government structures to devise a coherent infrastructure investment plan, mobilising public and private funding sources for this purpose.

Another concept of importance for capacity building is the monitoring of key performance areas. The key performance areas include development indicators, such as the household development index, others available from the Central Statistical Services, and value-for-money indicators directly relating to service provision. The community should be directly involved in the establishment of such indicators of key performance. Involving communities in setting key performance indicators and by reporting back to communities on performance, accountability is increased, and public trust in the local government system enhanced. A specific section of the White Paper, paragraph 3.34, pp 33-36, is dedicated to citizen involvement as a key factor in building the capacity of local government structures to deliver and become sustainable (also see Chapter 4 on the concept of community development as it relates to the issue of capacity building for water and waste services management).

### **3.6. Links between local government functions and other government departments**

All national and provincial departments have some link with local governments. Those deemed most relevant for water and waste services delivery, management and maintenance are:

- Department of Health water supply being a basic requirement for primary health and primary health care;
- Department of Land Affairs which imposes a set of planning requirements and deals with land tenure and land restitution issues, all of which impact on the issue of water and waste;
- Department of Public Works being involved in programmes which impact on local economic development, which include labour intensive programmes, procurement reform programme and programme supporting emerging contractors, once again with implications for water and waste services provision, management and maintenance;
- Department of Housing which also requires co-ordination of the planning and provision of bulk and basic services with the planning and implementation of new housing projects, all of which also need to deal with the provision of the basic services of water provision and waste removal;
- Department of Water Affairs and Forestry probably one of the most directly involved departments, together with the Department of Local Government and



Housing, in the provision of water to communities; The Department of Water Affairs and Forestry has committed itself to a systematic institution building programme at the local government level to ensure local government involvement in the programme of supplying water; and,

- Department of Environmental Affairs and Tourism as water consumption and generation of waste impact on the environment.

### **3.7. Integrated development plans**

The integrated development plans need to include programmes for water and waste services development, management and maintenance. This includes the issue of capacity building, without which these services cannot become sustainable. Much progress has been made in terms of the development of integrated development plans, especially with regard to the assessment of present capacities, especially in the case of more established municipalities. The Department of Housing and Local Government has done much in this regard. The same is true of District Councils who received the data collected by the Department of Housing and Local Government. These plans may not yet be as complete as would be desired, and many communities are still without. A major problem is the building of the necessary capacity, not only in developing or providing these services, but especially in managing and maintaining these, once they have been developed. It has to be borne in mind that draft plans had to be completed by December 1998.

### **3.8. New approaches to service delivery**

The White Paper underwrites the principle of basic services for all. This requires administrations to be geared for effective delivery. The principles for delivery are:

- Services have to be accessible;
- Services have to be affordable;
- Services have to be suitable for its purpose, timely, convenient, safe, continuous and responsive;
- Service providers have to ensure quality, affordable and accessible services to consumers to whom the service providers are accountable;
- Integrated approach to planning, development and provision of services needs to be adopted;
- Sustainability of services need to be ensured;
- Services have to be value-for-money in terms of cost of inputs and value of outputs;
- Ensure and promote competitiveness of local commerce and industry; and,
- Promote democracy

The above principles set a high standard, and almost seem insurmountable, when the realities at community level are considered. In the case of the provision, management and maintenance of water and waste services the above principles seem almost

impossible to achieve. The only manner in which the above situation may be approached is through a close and supportive partnership between all parties, especially local government and civil society, and through clear definition of what is deemed acceptable and realistic, in terms of accessibility, affordability, value-for-money, suitability, timeliness, convenience, etc. within the context of available resources, i.e. natural, financial, human and social.

Options suggested for delivery include:

- Building on existing capacity.
- Corporatisation.
- Public-public partnerships.
- Partnerships with community-based organisations and non-governmental organisations.
- Contracting out.
- Leases and concessions (public-private partnerships).
- Transfers of ownership (privatisation).

The building of capacity needs to be based on an evaluation of the skills, capacity and potential of the existing administration. The problem is that often either no administration exists, or skills and capacity is almost non-existent. A further complication is to devise a way in which to evaluate potential. The White Paper states that managerial reform and worker empowerment is needed for capacity building. Management reform involves building a culture of, and commitment to, results, value-for-money and service orientation where labour is a partner in services delivery. In some instances a partnership may involve civil society and volunteerism in collaboration with the local government structures, especially in the rural communities.

Some options for management reform include the introduction of performance based contracts for senior staff focusing on improving accountability and outputs and outcomes. Other possibilities are revising or developing codes of conduct and affirmative action (re: race and gender) strategies. Worker empowerment refers to human resource development and the decentralisation of operational responsibility. In this regard, it is important that participatory management is practised so that management and workers can develop strategies together. The White Paper suggests that training and capacity building is an essential part of both management reform and worker empowerment. Joint programmes for managers and workers can be particularly effective in building a common understanding of concepts, issues, problems and approaches to services transformation.

### **3.9. Capacities for local governance**

#### **3.9.1. Core administrative capacities to support development**

The White Paper refers to three essential or core administrative capacities to support development, namely (i) Strategic capacity; (ii) Integrating capacity; and, (iii) a Community orientation.

### **3.9.2. Strategic capacity**

Strategic capacity refers to the ability to assess, plan, and develop innovative programmes to meet local needs. Capacity is also needed to move quickly and effectively to meet demands at the highest level of competence. This implies that a basic knowledge of strategic planning is required.

### **3.10. Integrating capacity**

Local authorities need to be able to direct capacity and resources from both inside and outside the municipality to common, directed programmes of action.

### **3.11. A community orientation**

According to the White Paper, municipalities need to develop mechanisms to interact with community groups in order to identify service needs and priorities, as well as community resources, that can be unlocked and channelled for development ends. Mechanisms are also needed to ensure that delivery systems are inclusive and accommodate marginalised or disadvantaged groups. The front-line workers need the capacity to correctly assess, rapidly communicate and effectively respond to service needs. Other capacities needed are to strategise, integrate and interface with non-municipal groups and interests. The development of new capacities and approaches should go hand in hand with measures to enhance the accountability of the administration, and to build relationships of mutual respect and trust between councillors and the administration. It also seems feasible that this relationship should extend to the community, i.e., civic society.

### **3.12. The training system**

Two government structures are responsible for local government training. The two separate boards for training, i.e. the Local Government Education and Training Board, administrated by Department of Labour, and the Training Board for Local Government Bodies, administrated through the Local Government Training Act of 1985, now share common membership in an attempt to align their efforts. At present they still operate separate networks of training centres throughout the country. These boards are to be replaced by a Local Government Sector Education and Training Authority (SETA) in terms of the Skills Development Act, Act 9 of 1999, to co-ordinate training for local government. This body will regulate the training standards and quality, governed by the Skills Development Act. Training agents will be accredited through the SETA for Local Government.

The provision of training will be financed by provincial structures established in each province, together with the local authority structures. The training will be out-sourced to a variety of agents.

### 3.13. Basic standards set by the Water Services Act

The Water Services Act acknowledges that it is a basic human right to have access to basic water supply and basic sanitation. A clear definition of basic water supply and sanitation, or minimum standards does not seem to exist. Specific reference with direct bearing on the standards of water services are found in Section 9(3), which states that:

1. The need for everyone to have a reasonable quality of life must be considered;
2. The need for equitable access to water services must be considered;
3. Operational efficiency and economic viability of water services have to be ensured; and,
4. Impact which water services might have on the environment must be observed.

The Water Services Act combines water supply and sanitation and does not cover waste removal and dumping. Although solid waste impacts directly on the environment and therefore also on water resources, it is not dealt with within the concept of water and waste.

### 3.14. Structures for and functions of water services

To ensure the provision of water services, the Act refers to a number of structures, namely:

1. Water services authorities;
2. Water services providers;
3. Water services intermediaries;
4. Water boards; and,
5. Water services committees.

A **water services authority** refers to all forms of local government as referred to in the Local Government Transition Act, 1993, which is responsible for ensuring access to water services to the members of the communities for which they are responsible. Such an authority may be a water services provider, or may enter into an agreement or joint venture with a provider so that the authority could fulfil its obligation to ensure access to water services. A **water services provider** may therefore be any person, organisation or local authority which provides such services. Under the present legislation such services can only be rendered with the permission of the local authority. A **water services intermediary** appears to refer to any person or organisation with which an agreement has been entered into by a local authority, or water services authority so that that authority may be able to provide the water services it is obliged to.

A **water board** has the primary function of providing water services to other water services institutions within its service area. This appears to refer to having to provide

bulk supply to water service providers to enable them to provide their services to the end users. The water boards are also charged with other functions, viz.:

1. Providing management services, training and support to service providers;
2. Supplying untreated water for non- household purposes;
3. Providing catchment management services;
4. Performing water conservation functions; and,
5. Providing water services in joint ventures with authorities and supplying water directly for industrial use or to end users.

It would appear that a water board needs to function as a support structure to those end-users who need to be provided with basic services, and providers who need capacity to provide basic services to end-users, for both household and industrial purposes. These boards seem to have been awarded substantial powers to enable them to fulfil their function. This may potentially create conflict between a board and larger water services providers, especially those service providers who have ownership of their own bulk supply and water resources such as dams and reservoirs. The parameters as set out in the Act need to be strictly adhered to by a water board to ensure that it does not over step its powers or that its actions do not give rise to conflict situations.

Water services committees are to be established where there is either no authority which can attend to water services, or where the authority is unable to do so. Once established, the water services committee fulfils the same functions as a water services authority.

### **3.15. Water services development plan**

One of the basic tasks of any water services authority, or body responsible for the provision of basic water services, is to draft a development plan. This development plan needs to feed into the integrated development plans required in terms of the Local Government Transition Act, Act 209 of 1993. The development plan needs to contain details pertaining to the following:

1. Physical attributes of the area;
2. Size and distribution of the population;
3. Time frame, which includes the implementation programme;
4. Existing water services;
5. Existing industrial water use;
6. Existing industrial effluent;
7. Number and locations of persons not being served with basic water and sanitation;
8. Who the water service providers are or will be;
9. What contracts are or will be entered into with service providers;
10. Proposed infrastructure;
11. Water sources to be used;

12. Capital and operating costs, financial arrangements for funding and including the tariff structures.
13. Institutions that will assist the water services authority;
14. Operation, maintenance, and replacement of existing and future infrastructure;
15. Number and location of persons to whom water services cannot be provided, reasons and time frame within which it will be provided; and,
16. Water conservation, recycling and environmental protection measures.

The contents of the required development plan refer to various technical, managerial, financial and demographic factors. Although these factors are of crucial importance, it ignores the role and involvement of the communities which are to be served. The plans should be drafted in the spirit enshrined in the White Paper on Local Government and the Local Government Transition Act. These documents require that authorities should operate in terms of a developmental approach which requires maximal involvement in planning and decision making by the community. It also requires a partnership between the local authority, the civilians and the business sector in the endeavour to provide basic services and to create conditions for social and economic development. The Water Services Act alludes to the concept of participation in Section 14 by requiring that the development plan should be brought to the attention of consumers and potential consumers and should invite comments. What seems to be ignored is the need for, next to the organisational development in the provision of water services, the need for a community development process to support the establishment and maintenance of water services.

### **3.16. Tariffs and payment for water services**

Section 10 of the Water Services Act makes reference to the norms and standards for tariffs. It requires the need for tariffs to be determined on a differential and equitable basis in consideration of different users, different types of water services, different geographic and physical conditions and different socio-economic conditions. Also of importance is communities committed to the concept of payment for services, so that there is a realistic balance between the provision of basic services by the authority (within reason) and a commitment by the community to pay for these services, in order to ensure a measure of sustainability of these services.

The community also needs to have an understanding of the establishment of appropriate services, the maintenance and management of such services, and how it is linked to payment for services. The community may even take upon themselves to render part of the services. A need exists for both *organisational development*, which refers to the establishment of the technical, administrative and financial capacity to render the service, and a *community development* process which ensures sustainability through commitment.

### **3.17. Environmental management**

Almost every function of water services has implications for the environment, whether physically, socially, or economically. In terms of the Draft Environmental Management Bill published July 1, 1998, all affected parties need to be consulted as determined in Chapter 4 of the Bill. Other requirements set by the Bill include, *inter alia*, sustainable development, environmental co-ordination, and co-operative governance. This Bill impacts on the capacity required by authorities in the provision of water services as well as the necessity for interdepartmental co-operation and support to local authorities. In the majority of cases local authorities do not have the basic capacities required, and it should probably be accepted that they will never or only in the far future have the required capacities within themselves, to fulfil their role as set out in the various relevant bills, acts and white papers.

## CHAPTER 4

### 4. COMMUNITY DEVELOPMENT AS A CONCEPT FOR CAPACITY BUILDING

#### 4.1. Introduction

Grassroots support is critical to the success of community development efforts. Representations and active involvement by affected citizens are the cornerstones of community success. The process of developing goals should involve community representation. Modern resource planning emphasises an open process that gives all affected groups an opportunity to express their interests and concerns. Involving the community in goal development and implementation also serves an important public education function, and can greatly enhance the success of capacity building programs. Ongoing involvement helps maintain and build support for achieving capacity building goals and "getting the word out" about the effort. Participants can act as a focus group for exploring specific capacity building measures and also can provide valuable linkages to key groups, consumers, businesses, and institutions, involved in implementing certain capacity building measures. Participants also can offer input on the level of satisfaction with the system's programs. Finally, community groups can assist the water system in monitoring results and adjusting program implementation. For many water systems, involving the community in water system planning will be a new experience.

Community involvement does not have to consume excessive time or resources. Even a few "town hall" meetings or "brainstorming" sessions can be helpful. Most system managers will find that involving members of the community in developing goals, implementing programs, and evaluating results is a very worthwhile investment.

Community development is **a process which promotes people-centred development and the empowerment of communities**, such as disadvantaged communities, and marginalised groups such as women and the youth. Although the process focuses on human and social development, it is realistic in recognising that it has to contend with issues such as economic growth, politics and the role and place of government, the role and importance of civil society, and the role and value of NGOs and CBOs. **Governance, civil society, NGOs/CBOs and the economy** are identified as crucial elements of the process of development in a specific community, which includes all sectors of which water and waste services are part.

#### 4.2. Governance and community development

The term "governance" does not only refer to the formal institutional structure and location of authority, but also refers to "a looser and wider distribution of both internal



and external political and economic power" (Corbridge,1995:428; also see Lofchie,1989:121-125). Leftwich in Corbridge (1995:428) state further that:

**Governance thus denotes the structures of political and, crucially, economic relationships and rules by which the productive and distributive life of society is governed.**

It would appear that successful governance could be achieved if more political and economic power could be devolved to community level so that more decision making powers are vested at that level (also see Pearce,1993:91). The rules which govern society will consequently be influenced by local communities to a larger extent, rather than being determined by centralist national governments. These powers would include the ability to negotiate, co-operate and make decisions over the use, production and distribution of resources (see Leftwich,1983:387-388 & 427-438; see also Pearce,1993:62-63).

In the South African context, the political will to create the type of relationship between civil society (or communities) and the government structures is expressed in the Constitution of the Republic of South Africa (1996:Chapter 7) where the following statements regarding the objectives for local authorities are made:

- 1. To provide *democratic and accountable government* for local communities;**
- 2. To ensure the *provision of services to communities in a sustainable manner*;**
- 3. To promote *social and economic development*;**
- 4. To promote a *safe and healthy environment*; and**
- 5. To encourage the *involvement of communities and community organisations in the matters of local government*.**

(also compare with Meiring,1995:38)

The Constitution (1996) continues in the same chapter with regard to developmental duties of municipalities as follows:

- 1. Structure and manage its administration and budgeting and planning processes to give priority to the *basic needs of the community, and to promote the social and economic development of the community*; and**
- 2. Participate in national and provincial *development programmes*.**

The Constitution of the Republic of South Africa (1996:63) makes provision for a more participatory process of governance in terms of Chapter 7, art. 152 (1) (e) [also see p 83, art. 195 (1) (e), (f) and (g)]. These articles should be interpreted in the context of empowerment as referred to above and guided by the concept of community development. Although government is held responsible for formulating policy, care should be taken that policy regarding community development does not over-regulate the process. Policy should reflect guidelines which make it possible for a community to become involved in a community development process in collaboration with the local authority.

An important aspect of the policy for community development is that it should enable practitioners and communities to implement the process (see Perry,1989:248-249). The community development process is dynamic and multi-variable which demands a balance between extremes such as too little or too much planning or control, as well as **the demise of grandiose views of rapid progress, replaced by more realistic expectations** (Perry,1989:250).

Perry (1989:251-252) names five golden rules for projects, viz.:

1. **Keep projects relatively simple, and seek relevant models;**
2. **Plan ahead, but not beyond the available data, and involve key actors;**
3. **Error correction and flexibility are keys to implementation;**
4. **Get the right information, and get it quickly;**
5. **Never forget that serving target groups is your main objective.**

The above quote indicates the need for (i) access to information; (ii) involvement of key actors; (iii) consideration of the community; and, (iv) flexibility in planning and direction. Linked to these are: (i) to ensure staff competence of the various authorities in order that they may be able to provide the necessary technical support which communities may need; and, (ii) to control for more successful implementation and better results, which demands information about local government decision making processes and local community dynamics (Perry,1989:255). This means that there should be commitment and competence from the staff and leaders in the authority structures (Perry,1989:256). A further requirement pointed out by Perry (1989:256) is that there is a need for flexible bargaining and negotiations between the development agency staff (e.g. Community Development Centres or other CBOs) and the regional and local authorities, as well as a need for positive incentives to gain local commitment. In addition, it has been a long-standing function of local government to provide funding in the form of grants (see Nigro & Nigro,1989:138-140) as a means to support local initiative regarding projects and programmes. In the South African context with so many communities experiencing financial difficulty, a form of financial support would appear to be needed to further enable communities.

The responsibility for creating an enabling policy and environment has been most successfully fulfilled by a separate community development unit, centrally located under the chief executive of the applicable authority (Broady & Hedley,1989:149). In the South African context this would probably mean that the **chief executives** of the **local authority and district council**, i.e. the primary and secondary levels of government in the province, should bear the responsibility. Local authorities are of critical importance for the success of the Reconstruction and Development Program as it is this level of authority which is closest to the community (Van Der Walt & Helmbold,1995:187).

Kenny (1994:121-122) lists a number of objectives for community development workers as follows:

**...aim to ensure that all members of the community:**

- \* Have access to open and democratic community structures;**

- \* **Have optimum and meaningful participation;**
- \* **Can make a real choice in life styles;**
- \* **Have the physical health and energy to participate;**
- \* **Are accepted for what they are;**
- \* **Have a real voice of their own, with the right to speak in their own words and be listened to;**
- \* **Have access to reliable information;**
- \* **Have access to resources which positively affect their well-being;**
- \* **Have self-esteem and are treated with dignity and respect;**
- \* **Believe in the right to control their own destiny;**
- \* **Have reason to believe that participation in decision making processes is meaningful and productive;**
- \* **Work and live in a non-authoritarian environment with egalitarian structures;**
- \* **Collectively decide on and prioritise their own needs, issues and problems;**
- \* **Collectively decide how to resolve needs, issues and problems, and develop their own strategies;**
- \* **Collectively decide on future directions for their community's development; and,**
- \* **Have the right not to participate in community decisions and processes.**

The above provides a list of indicators of empowerment and deals with basic needs issues, politics, institutional transformation, and education and information.

One other vehicle of empowerment is **communication**, i.e. **the sharing and accessibility of information**. Altafrin (1991:312-314) states that communication is seen as a basic human right. The public should have access to and be involved in communications. The locus of control of this commodity lies with the community and not with an elitist group. Communication should encourage a participatory mode allowing for self-expression and serving as a social mirror of the reality of historically marginalised people. With such communication, communities' capabilities to analyse and express themselves are enhanced, which contributes to widening the discussion of common problems, finding solutions, and strengthening the role of the poor in development.

The notion of good governance needs to be reflected at the local level of governance and is therefore relevant in terms of capacity building at district and community level. This is based on the philosophy that communities have **the right and responsibility to self-determination** regarding their future. As a result, all development that takes place, is accepted and sanctioned by the community members. To enable communities to have self-determination, they **have to be empowered** to do so. This does not only refer to knowledge and skills, but also to the ability to exercise control over their environment, especially aspects regarding laws, land tenure, and participation in local government (Wilson & Ramphela,1989). DuBois & Miley (1996:27-28) quote Hartman saying:

**Empowerment links two main sources of power personal power and political power. Personal power involves an individual's ability to control his or her destiny and influence his or her surroundings. Political power is the ability to alter systems, redistribute resources, open up opportunity structures, and reorganise society.**

### **4.3. Economy and community development**

In this section aspects of the economy which are relevant for community development are discussed. The focus is on the economy at community level and on those factors which appear to be relevant to the community development process.

An improvement in standard of living and quality of life implies not only better physical and material living conditions, but also an improvement to the extent to which life is worth living (Korten,1990:168-171). Increased economic wealth goes a long way to satisfying many standard of living and some quality of life aspects, but also adds to the reduction of quality of life by adding stress and all that it brings. The negative social and environmental impact of the economic growth model which has steered development to date is unquestionably clear (Korten,1990:11-16 and 164-166; see Friedmann,1992:42; Hueting,1980; Pearce,1993:143-145). This point is also made by Craig (1996) in his address at the opening of the 28th Annual Community Development Society Conference held in Melbourne, Australia (also see Craig & Mayo,1995 and Latouche,1993).

According to Todaro (1992:100), development should be viewed as a multidimensional process which involves changes in structures, attitudes and institutions, and which also leads to the acceleration of economic growth, the reduction of inequality, and eradication of absolute poverty. In saying this, he confirms that economic and social development are of equal importance and should be sought simultaneously.

With regard to business and the relationship between the individual and the state, Robinson (1995:23) refers to Robinson & Ghostkeeper who state that what is needed is:

**...a community development hypothesis for small business development which embodies sustainability, self-reliance and meeting basic human needs. A global future is foreseen which de-emphasises the state and formal contractual relationships between the state and individuals, and promotes community self-reliance, inter-community networks, freely committed volunteerism and a people-centred vision of development.**

In terms of the "new paradigm for community development", Robinson (1995) seems to offer the alternative that economic development and growth need not be in opposition to human-centred development, but, on the contrary, that the two approaches to development could be complementary to each other. This can be achieved by ensuring the development of strong small business with the following philosophical principles quoted from Robinson (1995:25):

**We respect all environments, cultures and religions;**

**We utilise traditional skills and materials;**

**We create trade links that are not only successful but sustainable;**

**We trade in replenishable natural materials;**

**We encourage small-scale projects that can be easily duplicated, and,**

**We provide a long-term commitment to all projects;**

Rural communities should not only seek economic development through agricultural development programmes, but should also consider other opportunities by assessing the market demands for other products. This ensures that economic development projects are in tow with regional, national and global trends of the market and ensures diversification with regard to labour.

One of the major tasks is the eradication of poverty. Poverty is a force of disempowerment, which implies that the removal or diminishing of poverty empowers people. This gives clear direction to the process of community development in what it should set out to achieve in terms of building the economic capacity of a community.

Kinsley (1997:17-25) introduces four principles of economic renewal which form the basis of "a collaborative process for sustainable community development", viz.:

- **Plug the leaks**, which means that ways have to be found to put money back into the community instead of spending it outside the community;
- **Support existing businesses**, which stresses the importance of small business in the community, having been found to be the largest source of new job creation, and tend to be less mobile and more committed and loyal to the community;
- **Encourage new local enterprise**; and,
- **Recruit compatible new business**.

The author of the above suggests that these principles should be applied in the order in which they are given, as having applied the first usually overlaps with and leads to the next.

#### **4.4. Civil society and NGOs/CBOs and community development**

The importance of the role of the NGOs is recognised in South Africa. National surveys have been conducted resulting in legislation which supports the building and maintaining of strong NGOs/CBOs and NGO/CBO networks (See Korten,1990:56). NGOs and CBOs contribute to community participation, ownership of development initiatives, and the delivery of appropriate services. Through a strong NGO/CBO network and civic society it becomes easier for pressure groups to lobby for the support of community interests.

NGOs and CBOs play an important role in contributing to development and the empowerment of communities, especially through capacity building, and on forging links among international role players, national and local government structures, other NGOs and CBOs, and the business sector. There also appears to be a commitment to accountability and monitoring and evaluation in order to ensure effective, appropriate services and to create a learning environment through which performance is improved.

In our modern society it may indeed require a conscious and focused effort to revitalise a sense of social obligation and build a strong civil society. It may be easier in the African context where the African cultures have maintained a sense of social solidarity and a realisation of the value of combined effort. This was in fact enhanced in the communities which were involved in the struggle for freedom and democracy in South Africa and can serve as a basis to build upon. Such a society needs the support of a people's driven government and an economy that is sensitive to both the environment and people's basic needs. Thus, instead of grappling with ideological fixations and state-individual relations, the world needs to focus on global community development questions (Robinson,1995:23-26).

Civil society and networks of civic engagement can contribute to the creation of social capital by facilitating communication, improving the flow of communication, building mutual trust and co-operation, and fostering the development and strengthening relationships in communities (Putnam,1993:173-174).

Women have proven to make a major contribution to development and agricultural and market activities (Midgley,1995:122-123) (also see Boserup,1970 and Van den Hombergh,1993). The process of community development cannot be successful without the true empowerment of the women of a community.

A further principle in community development is that it should be **a holistic process**. Community development as a process cannot concentrate on one aspect of the community only, but needs to consider all the systems of a community. A development process which only concentrates on economic and material development, and not on the other sectors in a community, can lead to the breakdown of the community's traditional anchors and recognised behavioural patterns. The result is that the community starts to disintegrate. Batten (1975:6) comments in this regard as follows:

**...and the community may begin to segment or disintegrate. The effects of this may show themselves in various ways: in an increase of crime, such as theft; in a weakening of family relationships; in resistance to traditional authority; in a growth of litigation; in a drift to the towns; in unwillingness to co-operate for the common good; and even in general bewilderment and apathy. ...to encourage material development is to tackle only a part of the community problem.**

Swanepoel & De Beer (1996:24-29) have summarised some of the most important principles very clearly which are listed as follows:

- (i) Principle of abstract human needs of which the most important is dignity and cannot be separated from concrete needs;
- (ii) Principle of learning;
- (iii) Principle of participation;
- (iv) Principle of empowerment;
- (v) Principle of ownership;
- (vi) Principle of adaptiveness; and,
- (vii) Principle of simplicity.

## **4.5 Community development and water and waste services management**

In this chapter the importance of a holistic approach to development is considered. Sectoral development projects need to be launched within a broader context of a development process. A community development process needs to ensure that it focusses on at least ensuring that a community is able to manage itself, that it has an economic base and that its civil society is vibrant and well networked.

In order for water and waste services to be provided and managed in a sustainable manner, it has to be ensured that a community consists of the required governance-, economy- and civil society dynamic to sustain such services. The alternative will be that services would have to be provided, managed and maintained through external resources. The establishment or building of these three pillars (i.e. governance, economy and civil society) is crucial for any development projects to be sustained by the community.

It would therefore be futile for any authority to simply proceed to construct the required physical infra structure without also attending to the reconstruction and development of the governance, economy and civil society of the communities it serves. The provision of water and waste services therefore is a process of provision of the not only the physical infra structure, but also the building of the economic, governing and social infra-structure.

Clearly, the process described above, is beyond the scope of merely ensuring that water is brought to the homes of people and would require a multi-sectoral approach. No one authority has the capacity to address this issue alone. It requires that all expertise and organisations which have a contribution to make, to collaborate and pool their abilities, skills and capacity to achieve sustainable success. It would appear that a body dedicated to co-ordinate information and communication concerning water and waste services management, could and should also contribute to the co-ordination and facilitation of this multi-sectoral process of community development. This is not only important to ensure sustainability of water and waste services, but of all other services and projects initiated at community level.

## **CHAPTER 5**

### **5. EXPLORATION OF PREVAILING SITUATION AT COMMUNITY LEVEL.**

#### **5.1. Introduction**

The basic assumption of this project was that there is a set of generic knowledge and skills which will enable a person to effectively manage and maintain water and waste services in a community. By focusing training on this specific set of knowledge and skills, the trainee will be available for service sooner. Due to the urgent need for the management and maintenance of water and waste services in communities in the Eastern Cape, this appeared to be an important assumption well worth investigating. The first step was to explore water and waste services at community level. The objectives were:

1. To identify various role players;
2. To identify different delivery systems;
3. To identify competencies associated with the different delivery systems; and
4. To gain an understanding of the regional water and waste services model/network.

#### **5.2. Initial contacts**

A number of local authorities were selected with whom exploratory interviews were conducted to determine the situation regarding water and waste services management at community level (see Par. 1.5). These specific towns were selected because they represent the typical settlements and variety of water systems used in the area where the research was conducted. The guidance of representatives of water and waste affairs at District Councils were obtained in the selection of Local Authorities.

From initial discussions with representatives at provincial government and district council level the following became apparent:

- (i) A vast number of communities in the Eastern Cape lack in water and waste services.
- (ii) There are various levels of water and waste services, ranging from highly sophisticated to minimalistic, and even to vast numbers of communities where nothing exists.
- (iii) The representatives of the Drakensberg, Kei and Wild Coast District Councils warned that hardly anything exists in the rural areas regarding water and waste services.



On these grounds it was decided that an exploration exercise was needed to become familiar with the realities at community level. A range of communities were visited where water and waste services at various levels of sophistication exist. The basic knowledge and skills required of a person responsible for the management and maintenance of water and waste services in a community were identified.

The knowledge and skills base of managers of water and waste services were explored in field visits to the following:

- ❑ Mr Mike Pretorius in connection with Kirkwood, Bersheba, Enon and Addo and Mr Andreas Senger in connection with Louterwater, Krakeel and Woodlands. These are all small to very small communities with varying levels of water and waste services.
- ❑ Mrs Human, Town Clerk of Pearston and the foreman for water and waste services.
- ❑ Mr de Beer and Mr Greyling, responsible for the water and waste services in Somerset East.
- ❑ Mr Johnny Douglas, and Mr Mike Harrison (Engineering Section), Stormberg District Council, Queenstown.
- ❑ Mr Doug James, Director: Engineering Services of East London and responsible for water and waste services of the city.
- ❑ Mr Brand, responsible for the water and waste services at Kei Road, a very small rural town in the former Ciskei area.
- ❑ Mr van Rooyen, in charge of water and waste services for the town of Alexandria.

The preliminary findings and impressions stemming from these meetings are presented in the following paragraphs.

### **5.3. Various role players in water and waste services management in the Eastern Cape**

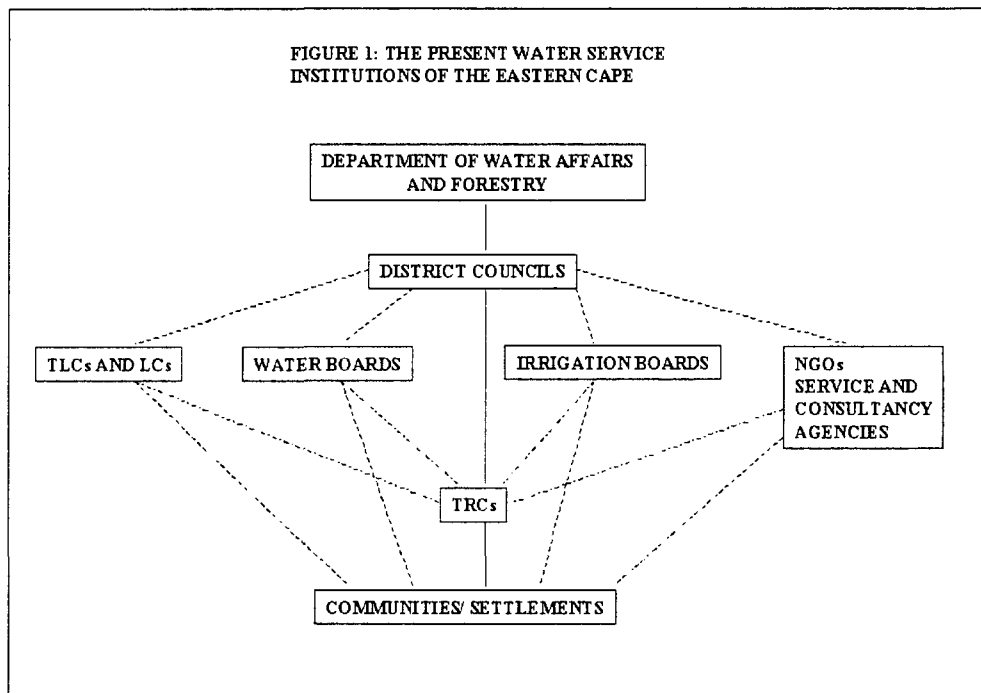
At national level the Department of Water Affairs and Forestry bears the ultimate responsibility with regard to water and waste services and management. The Department of Environmental Affairs and Tourism is another national role player.

On a regional level a number of institutions are involved, such as:

- ❑ Water Boards;
- ❑ District Councils;
- ❑ Department of Agriculture;
- ❑ Department of Health;
- ❑ Private consultants (engineering firms);
- ❑ Regional and Town planners;
- ❑ Larger metropolitan local authorities;
- ❑ NGOs (operating at a district and provincial level).
- ❑ At local level the following role players have been identified:

- TRCs;
- TLCs;
- Local authorities;
- NGOs;
- CBOs;
- Civic organisations;
- Health forums;
- Private consultants;
- Department of Agriculture;
- Department of Health

This list is not exhaustive and could probably be added to. A structure as it exists in the District Councils in the Eastern Cape is depicted in Figure 1:



It is clear that due to the variety of delivery systems, it becomes impossible to identify a generic set of knowledge and skills for the management and maintenance of water and waste services. At best one can identify some generic competencies which will be applicable to all the systems, with a number of competencies being specific to individual systems or groupings of systems similar in nature. This is due to the variety of physical and geographic conditions which require a variety of technological systems.

In all communities the concept "water and waste services" include water provision, sanitation, waste disposal and refuse removal. This is contrary to the conceptualisation of water and waste as interpreted by the Water Services Act, which only refers to water

provision, effluent and sanitation. The variety of services included in water and waste further complicates the identification of generic competencies. For water provision certain qualifications are required in terms of regulations and with regard to waste disposal and refuse removal there are certain grades attached to disposal sites which require certain levels of qualification from an individual. These regulations and grades need to be considered when identifying competencies.

#### **5.4. Role of communities in respect of capacity building**

It has become apparent that communities lack knowledge and understanding in the use of water and toilet facilities. This leads to systems becoming dysfunctional and unhygienic and leading to wastage. The correct use of systems has a direct bearing on community health. It would appear that while the Engineering/ Works departments are capable of providing the systems and basic instructions, it is imperative that the provision be followed up with thorough and ongoing training in the correct use, and management and maintenance of the systems. This needs to be a "hands-on" process as communities appear to be prone to fall back to old ways or incorrect ways of doing, despite basic instructions and some training.

Dept. Housing & Local Government experiences problems in some cases where communities claim that the Department puts in systems that do not work. This, for example, was repudiated in the case of a community near Gonubie where, when the blockage was opened, household items such as a table cloth, knives and forks, a bicycle handle, etc., had to be removed. This clearly indicates that communities need education regarding the correct use, management and maintenance of such systems. It has also been found that water systems are not properly managed with regard to, for example, the utilisation of high and low pressure reservoirs. This ultimately leads to users at higher points not getting water most of the time. The operator, although properly trained, is still not able to carry out the task. In certain cases there is an attempt to sabotage the existing systems as they are being perceived as inferior and are consequently rendered ineffective purposely to pressurise for the provision of "better" systems. This also demonstrates the problem of unrealistic expectations as opposed to what is realistically possible.

The inefficient rendering of accounts due to the lack in capacity results in the non-payment for services.

#### **5.5. Some issues identified**

Some of the issues that were identified are listed as follows:

- Pumps break down and communities are unable to repair them.
- Communities do not have enough diesel to run the pumps for long enough to provide a constant supply of water.
- Small holdings and brick-making enterprises using substantial volumes of water, are not metered and billed, resulting in the uncontrolled use of water.
- Capacity building amongst town officials in the management and maintenance of the water and waste systems and services is crucial. According to PPT (Presidential

Project Team) they commenced with financial management training. They experienced problems for example with Umtata Municipality, in that their financial administration was corrected, but collapsed shortly after PPT withdrew. Councillors and town officials also lack commitment to enforce regulations.

- A technician, trained up to a certain standard, was recruited by Port Elizabeth Municipality. He was valued for his newly acquired skills of which there is a shortage in the province. The skills required at rural level may not be deemed as valuable and therefore may not pose the same risk. Some interviewees mentioned that people trained to a certain level of competence, should be adequately remunerated to retain their services. If this is not done, it is feared that the trained people would be lost for the community, as they seek better employment opportunities in the larger towns and cities.
- Due to the lack of services in the rural areas, the 4500 villages in these areas may be the focus of capacity building in the Eastern Cape.

## **5.6. Identification of competencies associated with the various delivery systems**

Certain generic competencies were identified and are listed as follows:

### **Personal traits:**

- Sense of responsibility
- Sense of duty
- Sense of urgency (when dealing with problems)
- Trustworthy
- Caring
- Giving advice
- Building trust in the community
- Build credibility
- Assertive
- Multilingual ability
- Social skills
- Positive attitude
- Approachable
- Project a positive image
- Be presentable
- Command respect
- Dedicated to long term solutions no quick fixes
- Basic skills:
  - Communication skills
  - Supervisory skills

- ❑ Able to liaise (with specialists, consultants and community)
- ❑ Technically and mechanically inclined
- ❑ Management skills
- ❑ Financial management
- ❑ Budgeting skills
- ❑ Strategic planning
- ❑ Planning routes for collection of waste and refuse
- ❑ Negotiation
- ❑ Power of persuasion
- ❑ Able to sell ideas
- ❑ Customer care
- ❑ Lead group discussions
- ❑ Deal with complaints and conflict
- ❑ Motivate people re: waste and pollution
- ❑ Basic knowledge:
- ❑ Knowledge of physical layout of the system
- ❑ Knowledge of basic legislation and regulations
- ❑ Basic understanding:
- ❑ Community dynamics and history
- ❑ Involved in community

**Basic technical skills**

- ❑ Pump maintenance
- ❑ Maintenance of pipes
- ❑ Chlorination
- ❑ Measurement of chlorine levels
- ❑ Reservoir control (water levels and basic maintenance)
- ❑ Dump site maintenance (solid waste)
- ❑ Terrain management (dam sites; sewage)

The status of core competencies as identified in Chapter 5, par. 5.7 were tested with regard to managers and supervisors of water and waste services at community level. The TLCs and TRCs were sent questionnaires to be completed and had to fax the answering sheets back for processing and analysis. The questionnaires included a list of the core competencies to which respondents had to respond by using the provided scale. They had to indicate the level of importance and of competence from their point of view. The results were used to analyse where the priorities for capacity building with regard to competencies are. The findings of the audit are shown below.

### 5.6.1. The importance of competencies

The rating and average scores (i.e. mean scores) as indicated in Appendix A and B are used to express the level of importance and level of competency of the people who are responsible for water and waste services management in communities in the Eastern Cape. The rating ranged from 1, indicating a low rating, to 5, indicating a high rating. All actors were stated so that 1 always indicated less importance and a low level of competency and 5 high importance and a high level of competency. The average scores merely indicate the average rating for each factor or item.

The importance of the competencies identified as listed in Appendix A were rated by respondents who have to have these competencies. From Appendix A it is apparent that, throughout, the importance of the competencies are rated high with the existing level of competencies consistently lower than the importance. The indication appears to be that, with regard to all these competencies, respondents felt that their competencies and those of their colleagues need to be raised. This confirms the need for training and support as was hypothesised in this research.

The number of respondents were too limited to draw valid conclusions with regard to the target population from the results, but the exercise served as a reconfirmation of the validity of the competencies identified during the exploratory phase of the research process. In measuring the importance of competencies and the level of competencies one need to differentiate amongst the different water delivery systems, and ensure a representative sample from each. Competencies from the category basic technical skills rated slightly more important than competencies in the other categories.

The **competencies** that were rated **most important** per category were in terms of **basic technical skills**, the ability to add the correct dosages of chlorine to the water supply. In terms of **management skills**, the ability to act in such a manner as to instill trust and to convince others that one can be trusted to do what the situation demands, at all times, even in the absence of authority. In terms of **care**, the ability to act in the best interest of the community. In respect of **communication**, the ability to communicate in a clear, concise manner – getting one's message across and listening to others and getting their message. In respect of **social skills** the ability to demonstrate a positive attitude was deemed most important. On **responsibility**, the ability to at all times put duty before one's own convenience, preferences and activities to ensure continuous water and waste delivery, and the ability to act in a responsible way were rated equally important. In **influencing the community**, the ability to motivate community members to pay for water and waste services was rated most important.

### 5.6.2. The level of competencies

The level of the competencies identified as listed in Appendix B were rated by respondents who have to have these competencies. The level of their own competencies and those of their colleagues, as rated by the respondents, are depicted in the table included in this document as Appendix B. The level of competencies were

rated, in general between 3 and 4. This indicates that the level of competencies of respondents and their colleagues were rated as being fairly average, further borne out by the fact that the deviance and minimum/maximum ratings indicated a tendency toward the average. This rating appears to apply for all categories under which factors were rated. It could therefore be speculated that the present level of competencies, as recorded in this research, suggests that there is room for improvement, should the aim be set at achieving maximum rating. The positive indication of these results is that at least none of the factors were rated very low, which would have indicated a serious problem concerning the competency level of such factors.

In terms of the rating of specific **skills level**, the ability to maintain windmills and the ability to maintain rainwater catchment systems, were the two competencies rated lowest. The ability to maintain windmills was most probably rated low because the respondents were not involved with systems that make use of windmills.

Another factor demonstrated through the auditing exercise is that the identified competencies and prevailing levels can and need to be assessed in the case of all communities. This is a means whereby the competencies can be prioritised and the status thereof assessed for each community, so that appropriate action can be taken to build their ability pertaining to, not only the management of water and waste services specifically, but also other basic services which may require some of the more generic knowledge and skills.

## **5.7. Regional water and waste services model/network**

Within the water and waste services system, sophisticated technical and chemical skills are required at the one end and very basic supervision of services at community level. The higher order skills are usually needed for:

- Construction of systems
- Supervision of sophisticated systems
- Crisis or emergency situations
- Periodic advanced laboratory tests

The basic skills needed for day to day running and supervision of less sophisticated systems are usually required in smaller towns/communities. In these systems the treatment of water requires knowledge of flocculation, including elementary testing for chlorine levels. Due to high health risks associated with un-safe water, a system may need to call on support from the total range of technologies, from the basic to the most advanced. Although it is impractical and costly to have such a trained person present in each community at all times, it is necessary to provide the community access to such a network of support.

Most of the advanced technical skills are located within the larger municipalities and to some extent in the District Councils. They therefore play a key role in the formation of a network of support. All service authorities and communities should have access to such a network. This network will form an important part of the rapid capacity building model. Such a support network would, among other things, include:

- A telephone directory of contact or skilled persons
- A manual for quick reference

- Training regarding basic generic skills or competencies as already identified in the above list
- Call-out service in the case where telephonic instructions do not enable the solving of a problem

The opinion was expressed by a number of interviewees that a specialist team should advise communities as soon as possible regarding systems for water and waste services, best suited for their unique conditions. Appropriate technology should be applied, using the more basic alternatives, for example:

- (1) Gravity systems where possible;
- (2) Mechanical systems where gravity systems are not practical; and,
- (3) Electronic systems as a last resort.

The role of the water boards need to be clarified. Already, bodies responsible for delivery of water and waste services, lack technical and engineering staff. Any effort to replicate services or institutions, will have to draw on this pool of scarce resources. This scarce pool of resources within the District Councils is further depleted by policy, for example, in terms of intended regulations, all towns graded 5 or under may, in future, be included as rural communities which will then increase the jurisdiction of the District Councils (a grade 5 town within 50 Km of an urban area can be included as part of that urban area).

## **5.8. A case study of a success story**

Case studies of successful water and waste services management in a small town or village were sought so that benchmarks could be developed pertaining to the required capacities. Case studies were undertaken to investigate the structure and functioning of water and waste services management as it appears in reality, considering the staff complement, their level of competencies and the equipment and operational space they require. The case study of a success story, suggested to the researchers by Mr Hirst (PPT) and Mr Burger (Dept. Housing and Local Government), was Middledrift in the former Ciskei region.

### **5.8.1. A brief background**

Middledrift is a small town which is situated almost midway on the road between Alice and King William's Town. It is therefore on the main route of people travelling from the eastern and north-eastern parts of the Eastern Cape to Fort Hare University or further on to Graham's Town and Port Elizabeth. It has a small population, but serves as a business node for the surrounding rural villages in the district.

Middledrift found itself without a town clerk approximately two years ago, having resigned as he could not cope with the demands of the situation in the town. A new town clerk was appointed who previously was a district councillor for the Middledrift district. The new town clerk was therefore well informed regarding the problems of the town as well as of the surrounding rural area and understood its people. The town clerk and town councillors soon realised that the town had the potential to serve as a service



node for the area. This provided the opportunity for Middledrift to become a growth point. Besides this potential, the town had a financial problem and had to pay serious attention to making the accounts balance.

### **5.8.2. Some of the challenges faced by the community**

One of the first challenges faced by the new town clerk and his council was to reduce the number of employees of the local authority. A first phase saw the number reduced from approximately 44 to 22. A further reduction of the majority was required. Finally the complement of officials employed by the local authority was four, which included the town clerk, two administrative staff and a technical assistant.

The technical assistant is responsible for managing and maintaining all services. Although he is an artisan, i.e., a bricklayer of trade, he is labeled as multi-skilled and very capable. This is very useful as knowledge about plumbing, such as water pipes, valves, taps and pump maintenance, as well as quality control of water, is required in this kind of position.

Another challenge which had to be dealt with immediately was the lack of recovery of costs for services. Although this problem has not been completely solved, the situation has improved, using the Masakhane concept, to a present 30% recovery rate. To curb non-payment, a credit control system has been devised. Clients who wish to have access to water services sign an agreement promising payment and that, should payments not be made, the service is discontinued. A further strategy of the local authority is to combine the water and the electricity accounts as electricity is viewed as a higher priority by the community. By combining the two accounts the users are encouraged to pay so that they do not have their services, especially electricity, discontinued.

The amount charged for water has been unchanged, but the local authority has decided to start with an increase of 10%, which will be adjusted until it ensures recovery of costs per client. There is a basic service charge of R5.00 per month and a connection fee is charged depending on the requirements of the individual case.

Another function which received priority attention was to ensure that the administration of the local authority was able to issue accounts. The two administrative staff, one computer operator and one revenue officer, ensure that payments are received and the necessary receipts are issued. The meter reading has been privatised. As the services grow, tasks and functions will be contracted out/ out-sourced.

In order to obtain co-operation of the community, the local authority also had to provide evidence that it is willing and capable of providing proper services. One of the first tasks was to upgrade the sewerage plant and water provision. The projects were approached as community owned projects, which also served to draw different groups in the town together. The up-grading also provided the opportunity to re-negotiate the question of payment for services.

It was found that the challenges pertaining to recovery of costs and non-payment were best met through councillors and the town clerk communicating and informing the community in this regard.

## CHAPTER 6

### 6 A MODEL FOR RAPID CAPACITY BUILDING

#### 6.1 Introduction

In understanding the full meaning of capacity in terms of managerial, financial and technical capacity, and by identifying the competencies needed to deliver water and waste services, one realises the shortages that exist in terms of water and waste management. One also realises the importance of putting a system in place that will enable communities to have sustained access to safe drinking water.

The issues pertaining to rapid capacity building have been discussed in the previous chapters. From the issues it is clear that capacity building is not a simple problem that can be solved by a training effort alone. To provide for rapid capacity building one needs to move away from a dysfunctional approach to an assets based approach. One needs a model for rapid capacity building that will muster all the existing skills and knowledge available in a region and make it accessible to all communities. This enables the design and development of a model for rapid capacity building in the Eastern Cape. Capacity building is an effort by the “authority” to help water and waste systems improve their finances, management, infrastructure, and operations so they can provide safe drinking water and waste services consistently, reliably, and cost effectively.

Capacity building such as training, organisational development, improvement of information systems and extensions is considered the most crucial element of development support. Capacity building is understood in a broad sense involving all the partners, be they from the public and private sectors or non-governmental organisations, participating in the development process.

The sort of help that will be provided will depend on the water and waste system needed. Each community is unique, and its water and waste systems face a variety of problems and challenges. The significance of these challenges, even their root causes, may depend on where a particular system is located.

Involvement with capacity building will include the following actions:

- Identify and rank water systems that need capacity improvements.
- Help water and waste systems to comply with national drinking water standards, encourage systems to work together, and support the training and certification of system operators.
- Measure progress in improving the capacity of water and waste systems, i.e. monitoring and evaluation.
- Revenue sufficiency. Do revenues cover costs? Are water rates and charges adequate to cover the cost of water?
- Credit worthiness. Is the system financially healthy? Does it have access to capital through public or private sources?

## **6.2 Capacity development**

Capacity development is the process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide safe drinking water. Local leadership is considered a key element of a sustainable development process. As true leadership is based on skill and proficiency in substance matters, capacity building (such as, training, organisational development, improvement of information systems, extension, etc) is considered the most crucial element of development support. Capacity building is understood in a broad sense involving all the partners, be they from the public and private sectors, non-governmental organisations, or civil society participating in the development process. The consultants' role is predominantly that of a facilitator in the process, while implementation responsibility is borne by local staff.

### **6.2.1 Technical capacity**

Technical capacity is the physical and operational ability of a water system to meet set requirements. Technical capacity refers to the physical infrastructure of the water system, including the adequacy of source water and the adequacy of treatment, storage, and distribution infrastructure. It also refers to the ability of system personnel to adequately operate and maintain the system and to otherwise implement requisite technical knowledge.

A water system's technical capacity can be determined by examining key issues and questions, including:

- Source water adequacy. Does the system have a reliable source of drinking water? Is the source of generally good quality and adequately protected?
- Infrastructure adequacy. Can the system provide water that meets set standards? What is the condition of its infrastructure, including well(s) or source water intakes, treatment, storage, and distribution? What is the infrastructure's life expectancy? Does the system have a capital improvement plan?
- Technical knowledge and implementation. Is the system's operator certified? Does the operator have sufficient technical knowledge of applicable standards? Can the operator effectively implement this technical knowledge/ does the operator understand the system's technical and operational characteristics? Does the system have an effective operation and maintenance program?

### **6.2.2 Managerial capacity**

Managerial capacity is the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with set requirements. Managerial capacity refers to the system's institutional and administrative capabilities.

Managerial capacity can be assessed through key issues and questions, including:

- Ownership accountability. Are the system owner(s) clearly identified? Can they be held accountable for the system?
- Staffing and organisation. Are the system operator(s) and manager(s) clearly identified? Is the system properly organised and staffed? Do personnel understand the management aspects of regulatory requirements and system operations? Do they have adequate

expertise to manage water system operations? Do personnel have the necessary licenses and certifications? Effective external linkages. Does the system interact well with customers, regulators, and other entities? Is the system aware of available external resources, such as technical and financial assistance?

Operational strategies for sustainable water resources management must be tailored to the state of a country's water resources, as well as to the specific characteristics and requirements of the way in which these resources are managed. A multi-faceted assessment of the water sector at large by government and other national specialists, complemented as required by external expertise, should provided the basis of such strategies.

Carrying out a water sector assessment is also the preferred way of initiating the capacity-building process.

In combination with human resource development, strengthening of institutional, legislative, and management structures are key elements of the program. A prerequisite for progress in enhancing access to water and sanitation services is the establishment of an institutional framework that ensures that the real needs and potential contributions of currently unserved populations are reflected in urban and rural development planning. The multi-sectoral approach which is a vital part of urban water resources management, requires institutional linkages at the national and city levels, and the program includes proposals for establishing intersectoral planning groups, with a focus on a district level. Proposals for greater pollution control and prevention depend on the right combination of economic and regulatory mechanisms for their success, backed by adequate monitoring and surveillance, and supported by enhanced capacity to address environmental issues on the part of local governments.

Establishment of appropriate design standards, water-quality objectives, and discharge consents are among the proposed activities, the program also includes support for strengthening the capability of water and sewerage agencies and for developing their autonomy and financial viability. Operation and maintenance of existing water and sanitation facilities have been recognised as a serious shortcoming. Technical and financial support are needed to help correct present inadequacies and build up the capacity to operate and maintain rehabilitated and new systems.

A rapid capacity building program will only be successful if it is implemented, coordinated and monitored by an authority who is recognised on a national level and who has financial, legal and institutional support to influence stakeholders on a national, provincial, regional and local level. A rapid capacity building program will only be successful if addressed on National Level, Provincial Level, Regional Level and Community level simultaneously.

### **6.2.3 Financial capacity**

Financial capacity is a water system's ability to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with set requirements.

Financial capacity can be assessed through key issues and questions, including:

- Fiscal management and controls. Issues which need to be attended to are whether or not adequate books and records are maintained, whether or not appropriate budgeting, accounting, and financial planning methods used, and whether or not the system manage

its revenues effectively.

#### **6.2.4 Interrelationship of technical, managerial, and financial capacity**

Many aspects of water system operations involve more than one kind of capacity. Infrastructure replacement or improvement, for example, requires technical knowledge, management planning and oversight, and financial resources. A deficiency in any one area could disrupt the entire effort.

### **6.3 Stages of capacity building**

For a capacity building program to be effective it needs to include the following stages:

- ❑ Assessment of capacity building needs;
- ❑ Assessment of existing resources and capacity;
- ❑ Detailed definition of development needs;
- ❑ Immediate support to capacity building;
- ❑ Planning and implementation of the capacity building program; and
- ❑ Monitoring and evaluation.

#### **6.3.1 Assessment of capacity building needs**

The capacity building needs are represented by the gap between the capacity needed to sustain the capability to function as a water and waste system in accordance with accepted performance criteria, and the present level of functioning.

The capacity building needs in respect of the areas technical, managerial and financial capacity are to be identified within the different institutions at National , Provincial, District, and Community level, depending on the focus of the capacity building programme. In the case of this research project the focus is on local authority and district council level.

#### **6.3.2 Assessment of existing resources and capacity**

Existing resources need to be assessed in the areas of technical, management and financial capacity to form an understanding of the present capacity of systems to sustain the delivery of safe drinking water to communities.

Assessment will have to address existing systems, upgrading of existing systems and the development of new systems. Procedures and measuring instruments need to be developed to ensure a systematic approach and uniform/standardised systems. In terms of upgrading or new systems, criteria such as affordability, technical complexity and available expertise should be considered. The type of system will impact on the capacity needed to run and sustain such a system.

#### **6.3.3 Detailed definition of development needs**

Once identified, detailed definitions of development needs have to be compiled. These definitions should be so detailed as to serve as guidelines for implementation.

### 6.3.4 Immediate support to capacity building

All the agencies and support to capacity building need to be identified. Once identified these agencies and support to capacity building should be included in a Directory for Support to Water and Waste Capacity Building.

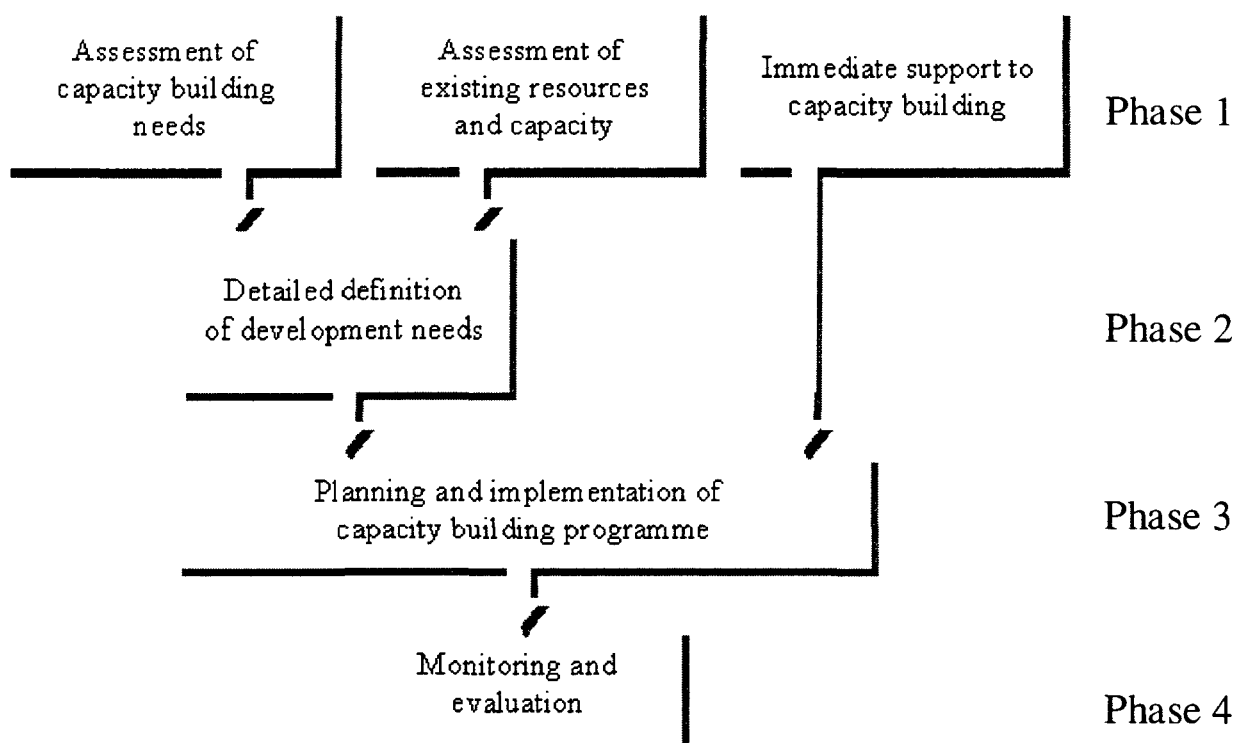
### 6.3.5 Planning and implementation of capacity building program

The detailed development needs and identified required capacity building support should be integrated into a capacity building program for implementation. The department/agency coordinating the capacity building program should be identified and the program implemented according to the priorities identified.

### 6.3.6 Monitoring and evaluation

A monitoring and evaluation agent should be put in place and the capacity building programme be monitored on a regular basis. The various stages of capacity building are depicted in figure 2 below:

**FIGURE 2: Stages of Capacity Building**



The different stages and phases of capacity building should be applied to the micro level (community level) and the macro level (network system). Capacity building needs should be assessed at both these levels, defined in detail in order to form the basis of a capacity building program which provide for training and development and organisational development issues. The capacity building program should be continuously monitored and evaluated in order to make corrective adjustments to the program when and where needed.

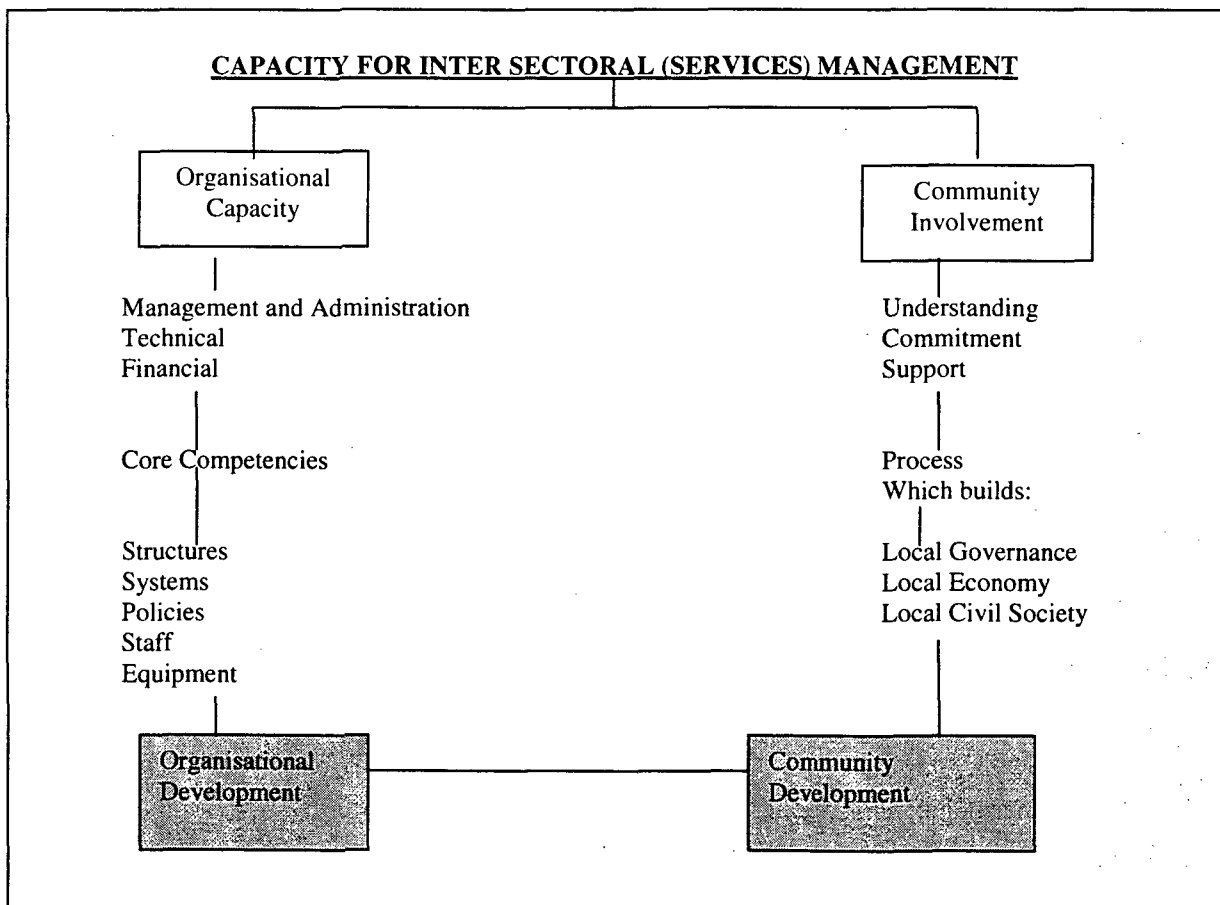
### 6.4 A model for rapid capacity building

A capacity building concept was developed as a result of this research which focuses at both a community level, i.e., at the level that local authority operates and a macro level (network system). It could therefore be referred to as a dual-level system for capacity building.

#### 6.4.1 A micro system for capacity building

The following is a diagrammatic presentation of what is required at a micro level, i.e. community level.

**FIGURE 3: Micro Level Capacity Building**



The above figure illustrates that at community level, i.e. micro level, a coordinated strategy for community involvement and for the building of organisational capacity for the management of services need to be initiated. This requires the simultaneous initiation of a community development process which aims to gain the community's understanding of, and commitment and support for the establishment of capacity required for services management. It should be understood that, especially in the case of small and rural communities, establishing the capacity for services management alone, without building the capacity of communities and gaining their support, is not adequate. This implies that organisational development for services management as well as the initiation of a community development process are required to establish capacity for long-term sustainable service provision, management and maintenance.

A strategy needs to be developed to ensure that all communities in the Eastern Cape reach at least the minimum level of water and waste service delivery (see RDP standards) in the shortest possible time. Only a coordinated effort which involve systems at National, Provincial, Regional, and Local level will be able to achieve this end. Priorities will have to be set to ensure that those regions and communities with the most lacking capacity are targeted first. In the Eastern Cape province a large number of towns already have functioning water and waste management systems.

A large number of communities, especially in the rural areas do not have the capacity to manage water and waste systems. In the development of a rapid capacity building program this situation should receive special consideration while care is taken that the functioning systems do not deteriorate. The lack of water services in especially the rural areas of the Eastern Cape calls for urgency and a strategy for rapid capacity building.

The only way in which rapid capacity building can be achieved is by concentrated effort, aligning all legislative, management, communication, training and expert support systems, and by focusing on the most critical/basic competencies needed to run water systems. The following are prerequisites of such a system:

- An understanding of the needs on a macro level
  - level of existing competencies
  - water system requirements
- A network of all the capacity building support systems available
- Detailed knowledge on the impact of legislation
- An instrument to coordinate and monitor the process

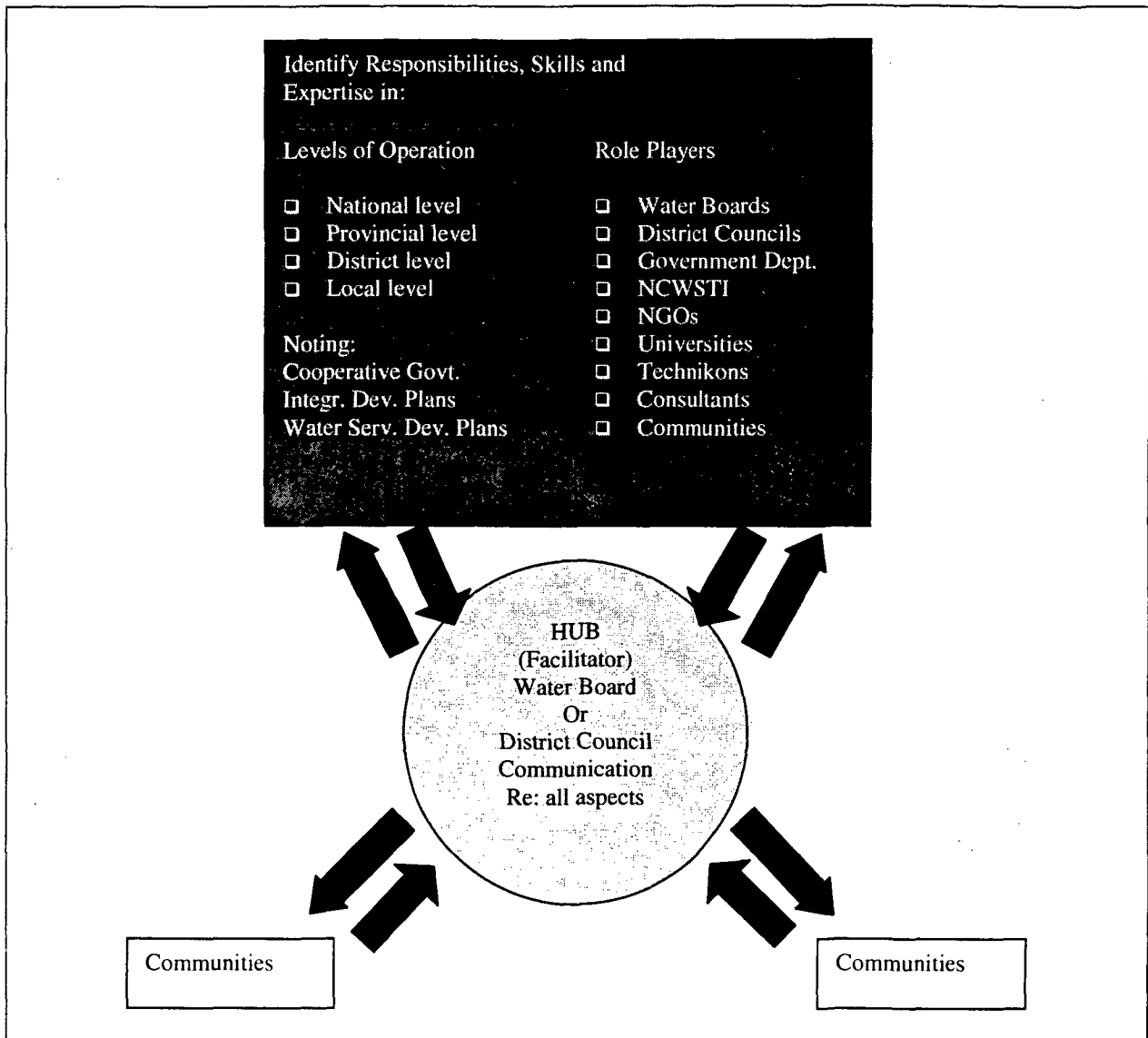
A communication center which can serve as a central hub or reference center through which all requests for support and responses to those requests can be channeled.

#### **6.4.2 A Macro system for rapid capacity building (A Network system)**

A well-developed information data base should form the basis of a rapid capacity building strategy. In order to make the best use of capacity building and capacity sustaining resources one needs to survey the capabilities of partners and potential partners in capacity building, address any weaknesses, inefficiencies and overlaps and implement a network system. This system which operates at a macro level is depicted in Figure 4.



**FIGURE 4: A Network Macro System for Capacity Building**



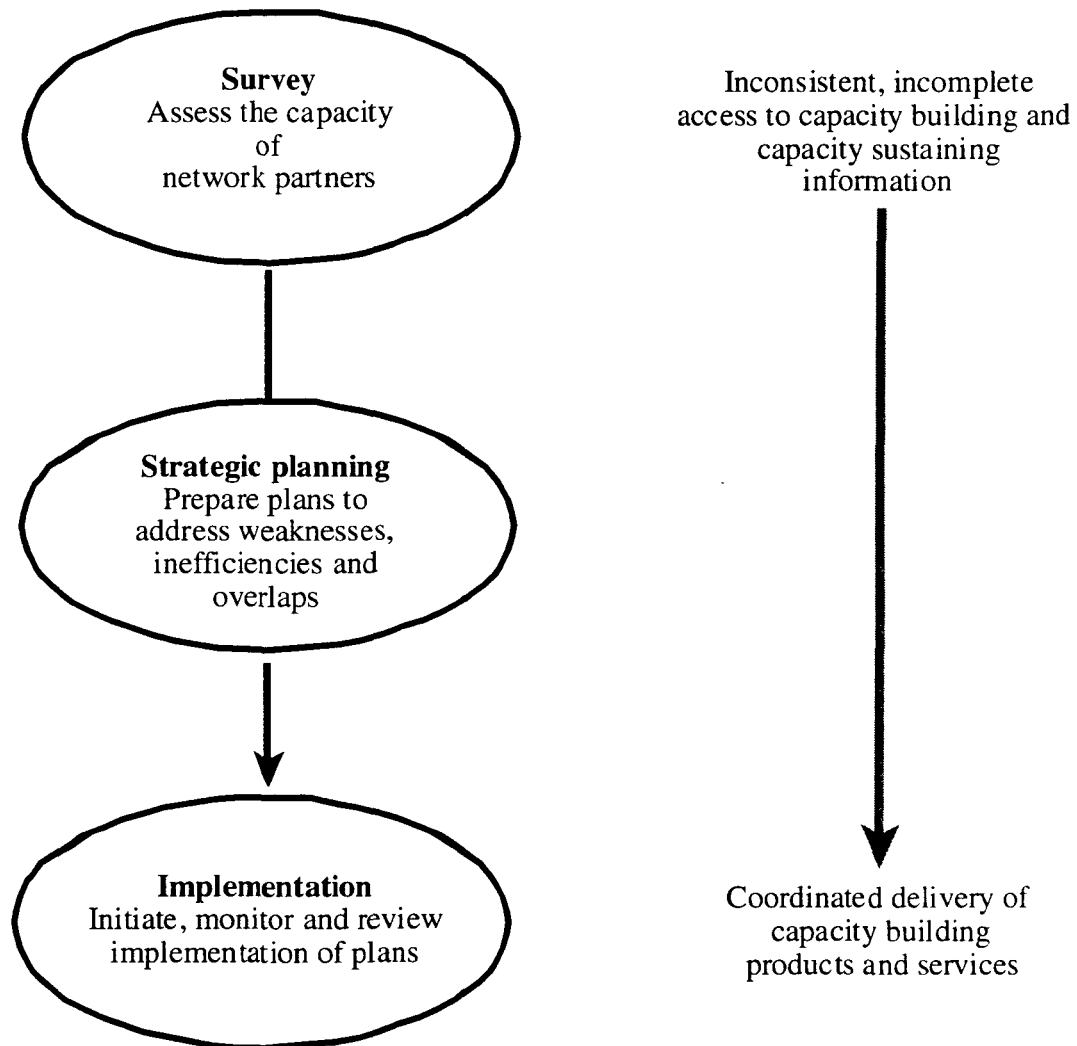
(Derived from Reynolds et al, 1997: P31)

The water and waste management support coordination centre (hub) forms the central focus point of the model. The hub forms the communication link between the communities with their specific needs in terms of water and waste management, and the sources of expert knowledge and services available in a specific region. A community with a specific problem or need that they can't deal with by themselves will contact the support coordination centre. The hub will as first line of support give advice from a set of manuals. If the problem is such that the hub is unable to give advice or assistance, it will, with the help of a directory and the guidance of a set of standard operating procedures, bring the operator in contact with expert information/services. There will be a flow of requests from the communities to the hub and from the hub to the support agencies. In return there will be a flow of advice and support from the support agencies to the hub, to the communities. The hub will ensure that all the available resources in a region is at the disposal of those who are in need of the resources. It will at the same time prevent the duplication of scarce resources.

### 6.4.3 The strategic planning process to utilise the model

The strategic planning process is suggested in order to ensure that the model for rapid capacity building is implemented and rendered operational. This strategic planning process is depicted in Figure 5:

**FIGURE 5: A Strategic Planning Process to Apply the Model**



(Reynolds et al, 1997: P15)

The strategic planning process for implementing the macro model indicates the movement from inconsistent, incomplete access to capacity building and capacity sustaining information to coordinated delivery of capacity building products and services. In order to achieve this one need to survey the capacity of network partners, through a strategic planning process address weaknesses and inefficiencies, and implement and monitor the plan. Only through the use of a well planned, well executed strategic plan will one be able to move towards meaningful results.

## 6.5 Issues to be considered in the capacity building model

The variables involved in a rapid capacity building model for water and waste management are immense. The interrelationships and interactions of these variables give rise to a vast number of issues. Some of these issues are:

Develop and implement strategies to assist public water and waste management systems in acquiring and maintaining technical, managerial, and financial capacity.

Adequate authority is required to ensure water and waste system capacity. It needs to be ensured that adequate authority exists to enforce public water and waste management systems in complying with national primary drinking water regulations and waste disposal regulations. Authority needs to be exercised with regard to certification, technical standards and planning. For the this following activities should be considered:

- Plan and specification review and/or construction permit.
- Construction requirements for springs and wells
- Operating permit.
- Operator certification
- Approval of source water protection plan
- System planning requirements (Brown et al, 1997: P II-3)
- Withdrawal and source development permits
- Approval of water rights.
- System planning requirements
- Approval of environmental impact assessment (Brown et al, 1997: P II-4)
- Formation of a new local governmental entity to provide water service.
- Authorization of funding
- River basin withdrawal permits
- Basin planning and resource management requirements (Brown et al, 1997: P II-3, 4 & 5).

The promotion of awareness of capacity issues should be done through the following actions:

- Form a Stakeholder Group
- Educate New System Applicants
- Educate Consumers and Communities
- Educate the Technical Community
- Educate the Financial Community

Benchmarks or minimum standards need to be developed. Benchmarks and standards can be used to monitor system performance over time.

Takeover by another entity in case of failure needs to be ensured. Ensuring the takeover of a failed water system should help to guarantee that newly created systems have adequate capacity, while also providing a solution if they do not meet performance expectations. Ensuring a takeover involves appointing a local government or another system as trustee or securing a commitment from the local government to annex, assimilate, or interconnect the system.

## **6.6 Factors which impair or encourage capacity development**

Institutional, regulatory, financial, tax, or legal factors at National, Provincial, regional or local level may encourage or impair capacity development.

### **6.6.1 Factors that may impair capacity development**

- A lack of legal (or regulatory) authority to develop and implement a capacity development strategy.
- Institutional barriers to developing a capacity development strategy.
- Legal and financial issues associated with water rights.
- Insufficient state or local funding to implement a capacity development strategy
- A lack of reciprocity for operator certification.
- Barriers that preclude systems from obtaining variances or exemptions reasonably.
- State statutes or regulations that hinder consolidation, regionalisation, or interconnection.

### **6.6.2 Factors that may encourage capacity development**

- National wide growth-management legislation - encourages capacity development by checking the unrestricted growth of poorly-planned water systems.
- Statutes dealing with privatisation or procurement - allows systems to contract for operations and maintenance or other services more easily.
- Statutes dealing with mergers and acquisitions - encourages consolidation by allowing adjustments to the rate base.
- Statutes that require renewable operating permits for water systems, CCNs, or periodic sanitary surveys - encourages capacity development by enabling the state to periodically assess capacity.

## **6.7 Actions to establish or enhance authority to ensure the capacity of water systems**

### **6.7.1 Coordinate agency capacity efforts**

State capacity development efforts may require expanded engineering analysis and financial analysis capabilities within State agencies. Staff may need additional tools and training to conduct business planning and other activities. New staff functions might be created or outsourced. Sharing of personnel among agencies can be considered. Encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of systems, and assist public water and waste management systems in the training, certification, and continuing education of operators.

(Brown et al, 1997: P II-13)

### **6.7.2 Prioritise systems**

Target systems without certified operators or with under-qualified operators for capacity development efforts.

- Disseminate information to help with capacity issues through operator certification advisory boards.
- Evaluate the estimates of infrastructure needs
- Evaluate the system's strategy for financing infrastructural improvement

- Evaluate the managerial capacity of the system

Use consumer complaint records to:

- Identify technical problems in the water system (taste, odor. Or low pressure
- Identify problems in the system's billing and collection procedures
- Evaluate a system's efforts at customer outreach and service.
- Dealing with emergencies
- One element of capacity development is the development of an Emergency Response Plan that will define how systems will respond to emergency situations. These plans cover "routine" emergencies as well as "disaster" emergencies.

### **6.7.3 Classification of water and waste systems**

Different types of water and waste systems dictated by environmental, economic or population variables may require different capacities/different operator competencies.

### **6.7.4 Conduct regular meetings**

Coordinate capacity development efforts by conducting regular meetings that include representatives of the agencies that have authority over water systems. These meetings can facilitate informal and formal means of coordination. Regular meetings allow agency personnel to craft and implement more effective capacity policies (Brown et al, 1997: P II-13).

### **6.7.5 Formulate interagency policies**

State agencies can formulate joint policies to direct their capacity development activities (Brown et al, 1997: P II-13). These policies establish common goals and activities across agencies. This will typically include a joint policy statement or statement of objectives, a description of the specific areas where collaboration is envisioned, and the mechanics of the collaboration.

### **6.7.6 Share data and information resources**

The inaccessibility of relevant information is a significant barrier to effective review of capacity building. New information-sharing technology can enhance interagency communications and policymaking. (Brown et al, 1997: P II-13)

### **6.7.7 Clarify state and local roles**

Successful capacity development requires clarification of state and local roles (Brown et al, 1997: P II-13). While the state is responsible for ensuring the capacity of new water systems, many critical control points exist at the local level. Well-informed, active local governments will achieve more efficient development practices and reduce the need for state intervention.

Where allowed by law, the state can delegate some of the responsibility for ensuring capacity of new systems to local government, provided that the arrangement is guided by clear written agreements. Local control points are most effective when coordinated with local approval processes and known and understood by new system applicants.

### **6.7.8 Promote awareness of capacity issues**

A stakeholder group needs to be formed at community level. State capacity development efforts can be enhanced by a formal process of stakeholder involvement. While such organisations may not represent everyone, their communication networks reach a large percentage of the target audience. Convene advisory committees or task forces consisting of all relevant stakeholder groups and the relevant agencies. Some of these groups continue to meet regularly to monitor and manage the implementation process. Written communications plans may support program implementation. The plans identify objectives, specify the individual segments of the target audience. Outline the messages and information to be conveyed to each segment, and itemise the options for delivering the messages and information.

Communities and consumers need to be educated through education and information systems. Communities may be unfamiliar with state regulations and unaware of capacity development policies. Clear, early communications with new water system applicants is an important aspect of capacity development. Educating consumers and communities can help bring market forces to bear on new system capacity. If home buyers know what to look for and how to recognise a well-conceived water system, market forces may provide substantial pressure to ensure capacity.

### **6.7.9 Educate the technical community**

Engineering and other consultants should be made aware of capacity development issues and policies. (Brown et al, 1997: P II-16)

### **6.7.10 Educate the financial community**

Water systems usually require support from the private sector, including the lending and insurance industries. Bankers and insurers can avoid potential liabilities by fully understanding water system capacity. Better-informed providers can exert their market power on the water industry to enhance capacity development efforts. (Brown et al, 1997: P II-16)

### **6.7.11 Encourage interconnection, consolidation, or regionalisation**

Consideration of regional alternatives is required. The state approval process could include consideration of regional alternatives. Regulators may require a new system applicant to demonstrate that the proposed service area cannot be absorbed by a larger system or served by a line extension from a nearby system. Regional options could be considered for all or part of utility operations. For example, a system might run its distribution facilities, but purchase wholesale water from a regional supplier. Another system might maintain ownership but contract with a nearby utility for operations services.

Similarly, regional planning also needs to be promoted. Regional water system planning can promote capacity by providing efficient alternatives to creating new systems. Regional planning can link capacity development to other planning processes by providing opportunities for local governments to interact. It may be necessary to establish an interconnection policy to achieve this. A state-level interconnection policy requires coordination of existing policies that may or may not be consistent with regionalisation goals.

Another possible consideration is to minimise bypass opportunities. A policy that requires customers in an enfranchised service territory to connect to the water system and stay connected, rather than draw from individual wells, can enhance capacity by reducing uncertainty and enlarging the customer base, making it possible to achieve economies of scale. Minimising bypass also can improve regional environmental management by making it easier to monitor and control withdrawals, supply management, and source protection practices. (Brown et al, 1997: P II-16)

#### **6.7.12 Strengthen new system capacity**

##### **Require a comprehensive business plan**

Requiring water systems to provide comprehensive business plans may be one of the most important means of ensuring technical, managerial, and financial capacity. Planning is a diagnostic as well as a capacity development tool. Planning can be used to generate reliable information about costs and other issues needed to make sound decisions about a water system's future.

##### **Require a technical operations plan**

This approach relies on inherent public health authority to set expanded engineering standards for such topic as well construction, requirements for approval of surface water sources for small systems, requirements for the frequent presence of a certified operator on the premises, specific operator certification requirements, requirements for system water rates, and management certification requirements.

##### **Develop benchmarks or minimum standards**

Under various authorities, agencies can develop benchmarks or minimum standards for screening systems. For example, systems may be required to make a minimum per-customer investment or achieve a specified coverage ratio. While standards usually are developed formally, benchmarks often emerge from practical experience. Benchmarks and standards also can be used to monitor system performance.

##### **Ensure takeover by another entity in case of failure**

Ensuring a takeover involves appointing a local government or another system as trustee or securing a commitment from the local government to annex, assimilate, or interconnect the system. One approach is to give some unit of sub-state ( municipal or region) government responsibility for all water service within its purview. Therefore, if a system fails, the substate unit is required to provide water to the customers served by the failed system.

##### **Methods or criteria to prioritise systems**

An instrument will have to be developed to investigate the type of system most suitable for a specific community taking into account various criteria (Rate base, topography, water sources etc). Systems needing to improve their technical, managerial, and financial capacity need to be identified and prioritised.

Consider the following in developing methods and criteria to identify and prioritise systems that need to improve:

- Does the methods or criteria for prioritising systems permit the consideration of all systems in the country/province/region.
- Do the methods or criteria for prioritising systems provide the state with a ranking scheme?
- Are the methods or criteria for prioritising systems easy to implement?

What are the data requirements of the prioritisation procedure? Does the state have an existing database, can an existing database be modified, or can a new data system be developed, given available resources?

### **At Government level**

What are the elements that the state must consider, solicit public comment on, and include as appropriate in its capacity development strategy?

- The methods or criteria that the state will use to identify and prioritise the systems most in need of improving technical, managerial, and financial capacity.
- A description of the institutional, regulatory, financial, tax, or legal factors at the state, provincial, regional or local level that encourage or impair capacity development.
- A description of how the state will use the authorities and resources of this title or other means to assist public water systems in complying with the requirements, encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems, and assist public water systems in the training and certification of operators.
- A description of how the state will establish a baseline and measure improvements in capacity.
- An identification of the persons that have an interest and are involved in the development and implementation of the capacity development strategy. (Including all appropriate agencies of state, provincial, regional and local governments, private and nonprofit organisations).
- Proper by-laws and regulations to be developed by local authorities.

### **At agency level**

Key programme activities:

- Identify all the service providers/potential service providers on training in the area of water and waste management.
- Review available training and resource materials in the area of water and waste management.
- Develop/adapt training modules in the area of water and waste management.
- Organise training interventions on water and waste management.

### **Information needs**

The key to effective information management is to focus on essential information only. In situations where financial resources are scarce this is, inevitably, the information required to set and achieve urgent policy and management goals. Solutions to capacity building issues can be extremely complex and it is not always easy to determine what information is



essential. One approach is to ask decision-makers to articulate their needs directly, but this may not succeed where they have only a hazy idea of their requirements.

### **Factors to access**

The survey should empower managers to review, perhaps restructure, their capacity building and capacity maintaining activities in such a way that their corporate goals are consistent with those of the networks in which they operate. It should address all of those general capacities plus additional capacities where these are relevant or specific to local conditions.

Aspects which should be considered for inclusion in the survey are summarised below:

- Institutional detail - Basic institutional details should be recorded, for example the full name (with acronym if applicable), address and further contact details. The overall mission of the organisation, plus details of specific programmes and projects, should be described as they relate to the network's goals. In particular, brief suggestions on how the network is expected to contribute to the organisation, and vice versa, should be obtained, for example their role within the organisation, and their contact details for follow-up.
- Direct assets
  1. Datasets

Summaries of the datasets for which the organisation acts as custodian, for example their theme, scale, completeness, currency, reliability.
  2. Expertise

Descriptions of the expertise available to the organisation which is of most relevance to rapid capacity building, for example the number and education/training-level of researchers, data managers etc. Particularly strong or relevant expertise should be highlighted, as should urgent needs.
  3. Facilities

Descriptions of the main facilities accessible by the organisation to enhance information production, for example measuring equipment, and physical facilities (e.g. dedicated premises, transport). Particularly useful or relevant facilities should be highlighted, as should urgent needs. (Reynolds et al 1997: P16)
- Partnerships - Memoranda of Understanding provide indirect evidence of external partnerships, although these do not guarantee cooperation in themselves. Other indicators include the extent to which data and other commodities are shared with other organisations and the degree to which common standards and policies for capacity building are employed. Organisations should be encouraged to prepare diagrams illustrating the nature of their linkages with other organisations. Productive partnerships should be highlighted, and weak ones also noted (Reynolds et al 1997: P16).

One of the earliest tasks for those undertaking the survey is to define its scope, in terms of both the number and type of organisation to include. Where no existing network is established, a policy of inclusion is normally the best strategy. Once the task of selecting organisations has been completed, the next challenge is to identify specific people within them to take charge of the survey. These people are sometimes referred to as focal people or focal points.

Some form of active engagement of the organisations is usually necessary. Various suggestions are presented below.

- ❑ Before distributing the questionnaires, invite participants to a workshop to discuss the purpose, time-scale and method of completion of the questionnaire. This provides an opportunity to engage them in the process and assist by reviewing the questionnaire.
- ❑ Telephone or visit each of the selected organisations after the questionnaires have been distributed, or invite them to a 'surgery' where their reservations or difficulties can be addressed.
- ❑ After most of the questionnaires have been returned, invite participants to a further workshop to review the survey's findings, and consider how these can be transformed into strategic capacity-building plans (Reynolds et al 1997: P17)

Once the network's products and services have been defined, it is possible to analyse what capacities are required to deliver them, for instance in terms of essential data, expertise and facilities. This process is very important since it sets targets for capacity building across the network which, once reached, enable it to achieve its goals effectively. Strategic planning then becomes a relatively simple task: **match the capacities outlined in the survey to those required, and prepare a strategy to move forward.** This process can be summarised in terms of three underlying questions as follows:

- ❑ Where are we now?
  - ❑ Where do we want to be?
  - ❑ How are we going to get there?
- (Reynolds et al 1997: P23)

Areas in which to build capacity:

- ❑ Data
- ❑ Datasets should underpin the products and services it wishes to generate. The mobilisation of data on essential themes should therefore be one of the network's top priorities.
- ❑ Expertise
- ❑ Skills development can be addressed through a variety of learning processes, including formal education and training courses, lectures, seminars, informal workshops and discussion groups, and 'on the job' coaching sessions. Secondments, study visits and self-study breaks are also popular and useful.
- ❑ Facilities - Requirement for facilities should be specified in functional terms (i.e. the tasks which need to be done), rather than focusing on particular equipment brands or models. The latter change very rapidly and should be selected on the basis of proven experience or following independent advice. Communities/organisations may wish to share the burden of acquiring and maintaining facilities by doing so as a group, particularly where they are expensive or used only intermittently (Reynolds et al 1997: P25).

When acquiring new facilities, due consideration should be given to training needs, running costs, maintenance and technical support.

- ❑ Partnerships between organisations are a relatively unexploited form of capacity, with many organisations still preferring to duplicate each other's activities. Making partnerships an obvious, attractive way of doing business is one of the greatest challenges for a network. Partnerships generally occur at two levels:

- At the management level, where formal agreements may be signed to develop or confirm long-term alliances; and at the operational level, where data and expertise can be given, bartered or sold to address urgent and immediate challenges.
- At the operational level cooperation can be facilitated through participatory activities, including the establishment of joint project teams, shared training course, seminars and workshops, formal secondment and encouraging informal communications between staff.

### **6.7.13 Develop a water system profile**

Developing a system profile by taking inventory of existing resources and conditions helps systems assess the present circumstances and design strategies to meet emerging needs. Summarise the service and operating characteristics of the water system. Provide an overview of conditions and a description of climate, water availability, or other factors that might affect water supply.

### **6.7.14. Prepare a demand forecast**

Prepare a forecast of anticipated water demand for selected time periods. To the extent practical, the planner should take into account variations in demand based on type of water usage, as well as perform a “what if” (sensitivity) analysis.

### **6.7.15 Identify and evaluate capacity building measures**

Identify the capacity building measures that have been implemented, are planned, or are not planned. Provide an explanation for why recommended measures are not planned for the water system. For each measure chosen, estimate total implementation costs (Rand) and anticipated capacity gain and assess the cost effectiveness of the measure.

### **6.7.16 Budget**

Developing a budget for each capacity building measure is an invaluable part of the planning process.

### **6.7.17 Present implementation strategy**

Present a strategy and timetable for implementing and assessing capacity building measures and other elements of the capacity building plan.

Create benchmarks that make the plan a reality:

- Build in some immediate “wins” and short-term successes. This is a good way to show community residents that something is really happening; it makes successes visible.
- Identify realistic baselines and collectible data sources.

Go through a careful process to sort out the goals, find out how to get things done, organise to do things efficiently, measure progress, evaluate, and make corrections as you go through the process.

- Decide what kind of organisation works best in your area.
- Decide who will be the main implementor of your community’s vision.
- Build an organisation that responds to the people and the plan.

Map the assets within the community to look for ways to build upon what's already happening with skills, resources, materials that the community already controls.

The planning committee should have a clear picture of the strengths and weaknesses of the initial plan. Revisit the new opportunities and threats that might have impact on the new plans. To sustain a coordinated approach to community change you must have a diverse team that represents the range of community leaders, institutions, organisations, and these partners should be committed to working in a alliance to refine the plan, develop realistic new strategies, locate resources to implement programs, and to coordinate community involvement in carrying out the plan over a period. The following are relevant questions to guide the process:

- Are the key partners involved?
- When will the goal of rapid capacity building be achieved?
- What indicators will signal that you were successful?
- Are there intermediate benchmarks you can identify?
- How will you measure: what are your realistic baselines and what are the reasonable data that you want to track?
- Who will carry out the measurement and integrate the findings into the planning process.
- Is there widespread community interest, support, and involvement in the ongoing planning and programs?
- How can one increase and maintain this involvement?

The importance of involving all the members of a community in decisions about water provision is emphasised, as is the need to incorporate hygiene education from the outset.

## **6.8 Community involvement**

Grassroots support is critical to the success of rural development efforts. Representations and active involvement by affected citizens are the cornerstones of community success. The process of developing goals should involve community representation. Modern resource planning emphasises an open process that gives all affected groups an opportunity to express their interests and concerns.

Involving the community in goal development and implementation also serves an important public education function, and can greatly enhance the success of capacity building programs. Ongoing involvement helps maintain and build support for achieving capacity building goals and "getting the word out" about the effort. Participants can act as a focus group for exploring specific capacity building measures and also can provide valuable linkages to key groups - consumers, businesses, and institutions - involved in implementing certain capacity building measures. Participants also can offer input on the level of satisfaction with the system's programs.

Finally, community groups can assist the water system in monitoring results and adjusting program implementation. For many water systems, involving the community in water system planning will be a new experience. Community involvement does not have to consume excessive time or resources. Even a few "town hall" meetings or "brainstorming" sessions can be helpful. Most system managers will find that involving members of the community in developing goals, implementing programs, and evaluating results is a very worthwhile investment.

## 6.9 Establishment of the HUB

To establish the hub or “Water and Waste Management Support Coordination Centre”, the following budget and steps have been generated. It indicates the budget required for the first year and second year of operation as this is the time which would require the consultants to be most closely involved so that the centre is securely established and record is kept of lessons learnt. Subsequent to these two years, it should be possible for the centre to function autonomously. It is assumed that after the two year period, enough will be recorded regarding the establishment of such a centre, that it could be replicated elsewhere with support from the consultants who developed the concept and design of the centre.

### WATER AND WASTE MANAGEMENT SUPPORT COORDINATION CENTRE

#### ESTABLISHMENT OF CENTRE – 1<sup>ST</sup> YEAR

		<b><u>COSTS</u></b>
<b>1. OFFICE SPACE</b>		(in Rand)
1.1.	1 X 6mx5m office space	
	@ R30/m / month x 12 months	10 800.00
1.2.	Furnishing	
	- desk space	1 500.00
	- desk chair	800.00
	- conference. table	1 500.00
	- chairs	2 000.00
	- reception / secr / admin. assistant	
	- desk	1 500.00
	- chair	800.00
<b>2. STAFFING</b>		
2.1.	1X Centre Manager (See Minimum requirements)	80 000.00
2.2.	Assistant (see Minimum requirements)	46 000.00
<b>3. EQUIPMENT</b>		
3.1.	Comp	15 000.00
3.2.	Fax / Telephone	3 000.00
3.3.	2-way radio system (?)	
	or cell phones (?)	
<b>4. OPERATIONAL COSTS</b>		
4.1.	Telephone	12 000.00
4.2.	Electricity	2 400.00
4.3.	Internet / e-mail	6 000.00
4.4.	Stationary	6 000.00
4.5.	Copying / publishing (printing and binding)	24 000.00
4.6.	Contracting (eg. Development of manuals)	60 000.00
<b>TOTAL</b>		<b>273 000.00</b>
4.7.1. Facilitation of Establishment Centres		180 000.00
2x consultants 1 consultant @ R1500.00 / day x 5 days / per month x 12 months		
4.7.2.	Transport and subsistence of consultants	26 400.00

- Flights (2200.00) x 12	
- Road transport (at actual cost) and Accommodation	21 000.00
- Accomodation	
Sub Total	227 400.00
+14 % VAT	31 836.00
<b>Total</b>	<b>259 236.00</b>
<b>Grand Total 1<sup>st</sup> Year</b>	<b>532 236.00</b>
2 <sup>nd</sup> year - operations	173 200.00
- consultants	65 000.00
<b>Total 2<sup>nd</sup> Year</b>	<b>238 200.00</b>

## PROCESS STEPS TO ESTABLISH CENTRE

The steps to establish the centre and operationalise it, are set out as follows:

1. Identify the area (for pilot).
2. Identify a venue for centre.
3. Appoint staff.
4. Purchase office equipment.
5. Purchase computer equipment.
6. Audit of communities served and water and waste systems in place.
7. Draft register of operators at community level (indicate competencies/ level of qualifications).
8. Develop directory of all service providers and expertise (externally and internally).
9. Identify manual content (matching #6, #7 and #8).
10. Identify contributors for the development of manuals and arrange contracting.
11. Draft, print and publish manuals.
12. Disseminate manuals to communities.
13. Establish communication linkages.
14. Communications internally re. Centre (brochure, meetings, guidelines, agreements of collaboration).
15. Define standard operating procedures for Centre (establish the centre as an integrated part of the larger system) – refer paragraph 6.7 and 6.8 of this document.
16. Establish and operate the system to measure progress re. Water and waste services management.
  - Technical see paragraph 6.5
  - Admin / Man.
  - Financial
  - Communication

The above steps should be guided by the processes described in this report. The report should therefore be used by the centre manager as a guideline in establishing and managing the centre.

## CHAPTER 7

### 7 CONCLUSIONS AND RECOMMENDATIONS

In this chapter conclusions are drawn pertaining to the general findings of this research and its relevance for the model for rapid capacity building as presented in Chapter 6. Based on these conclusions, recommendations are made which focus on the way in which this model could be implemented. The researchers take a serious view of the necessity to apply the results of this research. This ensures that the funds and time spent in obtaining the results are justified and that, in applying the model, maximum learning is achieved from the exercise. The conclusions and recommendations are presented in point form.

#### 7.1 Conclusions

1. It is clear that training and education is only one factor in building capacity. Building capacity also includes the ability to access funding, technology, administrative resources, equipment, information, support and collaborative partnerships. Though training and education forms an important basis for capacity building, it is clear that this alone may only frustrate if it is not accompanied by the other factors named above.
2. Capacity building involves ensuring that the system exhibits the necessary managerial/administrative, technical and financial abilities for the task or function that has to be fulfilled.
3. In terms of rapid capacity building, it is concluded that education and training cannot be seen as providing short-term or rapid results. Rapid capacity building is possible in terms of two scenarios. One is to simply provide the required capacity, using existing external expertise, consultants and the like. This is a high cost, low risk option with a high probability for success. The other is to empower the communities to build their own capacity. This represents a low cost, high risk option, which will not deliver at the speed required under the present critical conditions pertaining to water and waste services.
4. A third scenario appears to be appropriate for the situation prevailing in the Eastern Cape. This entails a combination of the above two scenarios. In the short term, existing expertise and consultants can be mustered to provide information needed at community level to manage and maintain water and waste services. The information could also include the establishing of databases and guidelines to handle any given situation which may occur at community level. Existing human resources can also be pooled so that teams may be available to provide support with regard to all aspects of managing and maintaining of water and waste services at community level.

Simultaneously, but independently of the short term action, the medium- to long term activities of education and training can be launched. This requires not only education and training with regard to the specific requirements for water and waste services management and maintenance, but also broader issues concerning community governance, community economics and civil society.

This can be realised through an education and training programme aimed specifically at water and waste services management, in combination with a community development process which addresses issues of governance, building a local economy and strengthening civil society.

5. A two-pronged approach as referred to in #4 requires an inter-sectoral approach. This means that relevant government departments, other government authorities at different levels, commerce and industry (i.e. the private sector), consultants (in training and engineering) and tertiary educational institutions need to be brought together to address the issue not only of capacity building for the management of water and waste services, but of the basic structure and systems required for healthy, functioning communities.
6. At district level it is necessary to establish a centre which channels all the existing expertise, other capacities and guidelines to the communities. This also requires the establishing of an effective communication system between the centre, the existing resources and the communities the centre serves.
7. At community level the minimum staff complement needs to be established, with clusters of communities under the mentorship of an expert or a team of experts. As was shown by the case study, a small staff complement is required, but of people who are able and skilled to fulfill their function. It would appear that a town clerk, a computer typist/operator, an administration clerk and a technical assistant will suffice in most smaller communities, more specifically the rural villages. These are the people who would need to be in direct contact and communication with the centre and the mentorship.
8. Whilst this short term action is taken as a form of rapid capacity building, the medium- to long term action of education and training needs to be initiated. This needs to be carried out continuously by consultants who are skilled at transferring knowledge and can follow up to support learning and the development of skills by supervising the application of the new knowledge.
9. Some of what has been mentioned is already being done. What appears necessary is that the attempts need to be less fragmented and better coordinated. In addition it needs to be ensured that the combination of a short term strategy with a medium- to long term strategy needs to be well synchronised. This, and much more, can be achieved by the establishment of support centres in each district, referred to in the document as a "hub". This indicates a lively, vibrant facility that constantly updates information on existing data, knowledge and documentation, develops guidelines and serves as a link between the communities and the resources.

## **7.2 Recommendations**

1. This research project should be followed up by a second phase of piloting the model as described in this document. The Amatola district has been suggested as a possibility for the application of the model. The main reasons for this is that: (i) the district has settlements representing all types which are found in the Eastern Cape; (ii) the District Council is well established and would be able to participate meaningfully in such a venture; and, (iii) a water board has been established in the district which can be drawn into the process. This possibility needs to be followed-up as soon as possible. The necessary funding for the piloting process will have to be made available.



2. Part of the piloting of the model should include clarifying which of the water board, acting as a water services provider, or the district council, acting as water services authorities and/or water services providers (see Par. 3.14), is most suitable for the establishment of the centre. The major advantage of the water board is that it specialises in water services and have already adopted a support and mentoring strategy which can be compatible with the strategy proposed by the model. The advantage of the district council is that it operates on a more inter-sectoral basis which is a basic principle underlying the rapid capacity building model, but is not so in the case of the water board.
3. A centre needs to be established which needs to be supported by consultants to ensure that the model is implemented correctly and can learn first hand from the implementation process so that the model can be refined for dissemination.
4. The centre needs to be staffed by a competent communicator with a good computer literacy level and an ability to organise the data and information regarding the resources so that it is accessible in a user-friendly fashion. Basic knowledge of water and waste systems and services is preferable.
5. Once the centre is established, one of its first tasks would be to record all relevant information of resources and to arrange for guidelines to be drafted. Another task would be to look into the most effective and practical way in which to establish a communication system between the centre and the communities it serves.
6. The centre needs to coordinate the short-, medium and long term strategies of capacity building to ensure that the strategies are complementary and mutually supportive.
7. The competency levels of the staff at community level needs to be assessed, as well as the staffing levels. This is necessary so that a strategy can be devised by which the correct staffing levels can be achieved and the staff can be optimally trained. The implication is probably that a member of the community may have to be re-deployed for which a training and education programme will also be required. A further implication is that, in some cases, new staff will have to be recruited and appointed. These people will probably also come from the communities where the new staff have to be stationed. The communities need to be involved to the extent that they take ownership of the process.
8. The above recommendations are also closely linked to the problem of recovery of cost in providing the water and waste services. An important aspect in the regard is that the community members need to be committed to the establishment of such services and that the process will have their full support. This may be the only way in which to obtain their acceptance of having to pay for services or that voluntarism is the only alternative whereby cost can be reduced. There needs to be a link between the centre and departments and organisations which are working on the issue of poverty and poverty alleviation/ eradication programmes.

## BIBLIOGRAPHY

Altafrin, Lara. 1991. Participatory communication in social development evaluation. **Community Development Journal**, Vol. 26, No. 4, 312-314.

Batten, T.R. 1975. **Communities and their Development**. London: Oxford University Press.

Boserup, Ester. 1970. **Women's Role in Economic Development**. London: Allen & Unwin.

Broadly, Maurice & Hedley, Rodney. 1989. **Working Partnerships, Community Development in Local Authorities**. London: Bedford Square Press.

Brown, K et al 1997 EPA **Information for States on Implementing the Capacity Development Provisions of the Safe Drinking Water Act**. Public Review Draft EPA 816-D-97-002) (<http://www.epa.gov/ogwdw/>)

Community Building Resources. 1994 **Steps to Capacity Success**. ([www.cha.ab.ca/commdev](http://www.cha.ab.ca/commdev))

Corbridge, Stuart. (Ed.). 1995. **Development Studies: A Reader**. London: Edward Arnold.

Craig, Gary. 1996. **Community Development in a Global Context**. Unpublished paper presented at the 28th Annual Community Development Society Conference, Melbourne, Australia.

Craig, G. & Mayo, M. 1995. **Community Empowerment**. London: Zed Books.

DuBois, Brenda & Miley, Karla Krogsrud. 1992. **Social Work: An empowering profession**. Boston: USA: Allyn and Bacon.

EPA United States Environmental Protection Agency. Office of Water. Office of Ground Water and Drinking Water. **Safe Drinking Water Act**. Amendments of 1996 (<http://www.epa.gov/ogwdw/>)

EPA United States Environmental Protection Agency. **Information for the Public on Participating with States in Preparing Capacity Development Strategies**. (<http://www.epa.gov/ogwdw/>)

Friedmann, John. 1992. **Empowerment: The Politics of Alternative Development**. Massachusetts, USA: Blackwell Publishers.

- Hirst, Paul. 1994. **Associative democracy: New forms of economic and social governance.** Cambridge: Polity Press.
- Hueting, Roefie. 1980. **New scarcity and economic growth: more welfare through less production?** Amsterdam: North Holland publishing Company.
- Joubert, E. 1998. **Monitoring and Evaluation of Rural Water Projects. Examples from the Eastern Cape.** WISA Conference Papers.
- Kenny, Susan. 1994. **Developing Communities for the Future: Community Development in Australia.** Australia: Thomas Nelson Publishers.
- Kinsley, Michael J. 1997. **Economic Renewal Guide: A collaborative process for sustainable community development.** Colorado, USA: Rocky Mountain Institute.
- Korten, David C. 1990. **Getting to the 21 st Century: Voluntary action and the global agenda.** USA: Kumarian Press, Inc.
- Latouche, S. 1993. **In the Wake of the Affluent Society.** London: Zed Books.
- Leftwich, A. 1983. **Redefining Politics, People, Resources and Power.** London: Methuen.
- Lofchie, M.J. 1989. Reflections on structural adjustment, in **Beyond Autocracy in Africa,** Atlanta, Georgia: Inaugural Seminar of the African Governance Programme, The Carter Centre, Emory University.
- Meiring, M.H. 1995. **Kollig op die munisipale beleidfunksie.** Port Elizabeth: School for Public Administration and Management, University of Port Elizabeth.
- Midgley, James. 1995. **Social Development: The Developmental Perspective in Social Welfare.** London: SAGE Publications.
- Nel, Etienne L. & Lindie, Nimrod M. (Eds.). 1996. **Local Economic Development in South Africa: Recent developments and strategies.** Johannesburg: Friedrich Ebert Stiftung and South African National Civics Organisation.
- Nigro, Felix A. & Nigro, Lloyd G. 1989. **Modern public administration.** New York: Harper & Row Publishers.

Pearce, John. 1993. **At the heart of the community economy: community enterprise in a changing world.** Portland Place, London: Calouste Gulbekian Foundation.

Perry, James L. 1989. **Handbook of public administration.** London: Jossey-Bass Publishers.

Putnam, Robert D. 1993. **Making Democracy Work.** New Jersey, Princeton: Princeton University Press.

Reynolds,J., Busby,J., 1996. **Guide to Information Management.** In the Context of the Convention on Biological Diversity. World Conservation Monitoring Centre. (<http://www.wcmc.org.uk/capacity building/>)

Reynolds,J et al 1997. **Guide to National Institutional Survey.** In the Context of the Convention on Biological Diversity. World Conservation Monitoring Centre (<http://www.wcmc.org.uk/>)

Robinson, Mike. 1995. Towards a New Paradigm of Community Development, **Community Development Journal**, Vol. 30. No. 1, 21-29.

Swanepoel, Hennie & De Beer, Frik. 1996. **Community Capacity Building: A guide for fieldworkers and community leaders.** Johannesburg: International Thomson Publishing (Southern Africa) (Pty) Ltd.

Thomas, EP, Seagar, JR, Viljoen, E, Potgieter, FE, Rossouw, AMM, Tokota, MB, McGranahan, G & Kjelen, M. 1999. **Household environment and health in Port Elizabeth, South Africa,** Stockholm Environment Institute, Stockholm, Sweden.

Van den Hombergh, Heleen. 1993. **Gender, Environment and Development: A Guide to the Literature.** Utrecht: International Books.

Van der Walt, G. & Helmbold, R. 1995. **Die grondwet en 'n nuwe publieke administrasie.** Kenwyn: Juta & Co. Ltd.

Wilson, F. & Ramphele, M. 1989. **Uprooting Poverty: The S.A. Challenge.** Cape Town, South Africa: Creda Press.

### **Government Policy Documents:**

Constitution of the Republic of South Africa. 1996. Act 108 of 1996.

Draft White Paper on Integrated Pollution Control and Waste Management for South Africa, August 1998

Draft Environmental Management Bill, July 1998

The Local Government Transition Act, Act 209 of 1993

The White Paper on Local Government, March 1998

The National Water Act, Act 36 of 1998

The Water Services Act, Act 108 of 1997

The Municipal Demarcation Act, Act 27 of 1998

The Municipal Structures Act, Act 117 of 1998

The Municipal Systems Bill (1999)

White Paper on a National Water Policy for South Africa, April 1997

Discussion Document towards a White Paper on integrated Pollution Control and Waste Management, 1997..

**APPENDIX A**  
**IMPORTANCE OF COMPETENCIES**

FACTORS WHICH WERE RATED	Rating					Average rating of importance	Average rating of competency level
	1	2	3	4	5		
<b>BASIC TECHNICAL SKILLS</b>							
1 The ability to understand the basic technical and mechanical functions of machinery.	1	0	0	5	11	4.47	3.76
2 The ability to do first level diagnosis and maintenance on water pumps.	1	0	1	3	12	4.47	3.65
3 The ability to diagnose serious defects in pumps and machinery associated with water and waste.	1	0	2	5	9	4.24	3.76
4 The ability to access technical support to effect repairs.	1	0	2	5	9	4.24	3.41
5 The ability to know and understand the physical lay-out of water pipes.	1	0	0	6	10	4.41	3.65
5 The ability to know and understand the physical lay-out of sewerage pipes.	1	0	0	6	10	4.41	3.41
7 The ability to maintain and repair the local pipe network.	1	0	0	6	10	4.41	3.94
8 The ability to control the desired water level in the reservoir.	1	1	1	2	12	4.35	3.94
9 The ability to effect basic maintenance in the reservoir area.	1	0	1	7	8	4.24	3.76
10 The ability to use prescribed tests to measure chlorine levels.	1	0	1	1	14	4.59	3.47
11 The ability to add the correct dosages of chlorine to the water supply.	1	0	0	1	15	4.71	3.59
12 The ability to ensure that water for household use is acceptable in appearance and taste.	1	0	0	4	12	4.53	3.76
13 The ability to control the use of water	1	0	3	6	7	4.06	3.35
14 The ability to control access to the solid waste dump.	2	0	2	4	7	3.93	3.07
15 The ability to control the material dumped on the solid waste dump.	1	0	3	4	7	4.07	3.27
16 The ability to use the correct/prescribed waste disposal methods.	1	0	2	3	9	4.27	3.53
17 The ability to restrict waste to the waste dump.	1	1	4	4	5	3.73	3.27
18 The ability to use the correct landfill methods.	1	0	2	4	8	4.20	3.20
19 The ability to use the correct procedures in managing waste	1	0	2	2	10	4.33	3.53
20 The ability to correctly use the substances (e.g. lime) needed in waste control	1	0	1	3	10	4.40	3.47
21 The ability to sanitise waste sites/community waste areas	1	0	1	8	5	4.07	3.27
22 The ability to control the waste in the community (prevention of waste)	1	0	3	5	6	4.00	3.20
23 The ability to manage the different terrains (Water capture areas, dam sites, sewerage sites, dump sites) keeping it clean from weeds and foreign material and to control access.	1	0	1	3	12	4.47	3.56
24 The ability to maintain boreholes	1	0	1	8	6	4.13	3.31
25 The ability to maintain windmills	1	0	2	7	6	4.06	3.00
26 The ability to maintain rainwater catchment systems	1	2	1	6	7	3.94	3.12
27 The ability to extract water from rivers/streams	1	1	2	7	6	3.94	3.18
28 The ability to manage community taps	1	0	3	6	7	4.06	3.29
<b>MANAGEMENT SKILLS</b>							
29 The ability to supervise others and to get work done through others.	1	0	0	9	7	4.24	3.41
30 The ability to manage all financial matters related to water and waste management	1	0	2	5	9	4.24	3.59
31 The ability to budget (develop a budget and control expenditure according to a budget)	1	1	1	3	11	4.29	3.76
32 The ability to act in such a manner as to install trust and to convince others that one can be trusted to do what the situation demands, at all times, even in the absence of authority	1	0	0	6	10	4.41	3.59
33 The ability to meaningful liaise with specialists, consultants and members from the community on matters pertaining to water and waste management	1	0	1	5	10	4.35	3.76
34 The ability and willingness to give advice on all aspects regarding water and waste	1	0	1	6	9	4.29	3.88

management within the community							
35 The ability to demonstrate a preference for and dedication to long term solutions instead of going for convenient quick fixes	1	0	1	6	9	4.29	3.41
36 The ability to plan strategically	1	0	1	7	8	4.24	3.69
37 The ability to plan routes to inspect the infrastructure, systems and sites and in tending to service requirements and complaints	1	0	1	9	6	4.12	3.41
38 The ability to negotiate with all stakeholders regarding water and waste management	1	0	2	6	8	4.18	3.76
39 The ability to manage monies received in respect of water and waste services	1	0	1	5	10	4.35	3.47
<b>CARE</b>							
40 The ability to show to others that one cares about their problems regarding service delivery on water and waste	1	0	1	5	10	4.35	3.82
41 The ability to build a trust relationship with the community regarding water and waste management	1	0	1	5	10	4.35	3.47
42 The ability to understand the community in terms of the dynamics and historical context with regard to service delivery	1	0	1	6	9	4.29	3.65
43 The ability to act in such a manner as to be seen to be approachable by others	1	1	2	4	9	4.12	3.76
44 The ability to act in the best interest of customers	1	0	0	3	13	4.59	3.93
45 The ability to demonstrate involvement in the community	1	0	1	6	9	4.29	3.59
<b>COMMUNICATION</b>							
46 The ability to act in such a consistent way that one is seen as a credible source of information	1	0	2	7	7	4.12	3.65
47 The ability to communicate in a clear, concise manner - getting one's message across and listening to others and getting their message	1	0	1	4	11	4.41	4.06
48 The ability to communicate with members of the community in the most prevalent languages	1	0	2	6	8	4.18	3.82
<b>SOCIAL SKILLS</b>							
49 The ability to demonstrate skills in social interaction with people on an individual and group level	1	1	3	8	4	3.76	3.35
50 The ability to deal effectively with complaints and conflict that may arise from water and waste service delivery	1	0	0	8	8	4.29	3.82
51 The ability to demonstrate a positive attitude	1	0	0	6	10	4.41	3.71
52 The ability to motivate people to deal with water and waste issues in a sensible manner	1	0	0	7	9	4.35	3.59
<b>RESPONSIBILITY</b>							
53 The ability to demonstrate a sense of urgency in dealing with matters arising from water and waste management	1	0	1	5	10	4.35	3.59
54 The ability to at all times put duty before one's own convenience, preferences and activities to ensure continuous water and waste delivery	1	0	0	4	12	4.53	3.71
55 The ability to act in a responsible way	1	0	0	4	12	4.53	4.00
56 The ability to command respect from others in the exercising of one's duties	1	0	1	6	9	4.29	3.88
57 A willingness to sacrifice one's time to attend to breakdowns in water and waste service delivery	1	0	1	5	10	4.35	3.71
<b>INFLUENCING THE COMMUNITY</b>							
58 The ability to project a positive and optimistic image	1	0	1	7	7	4.19	3.53
59 The ability to behave in an assertive manner - to stand on one's rights and to exercise official duties in a confident and consistent manner	1	0	0	6	9	4.38	3.88
50 The ability to persuade others to act in the best interests of water and waste management	1	0	1	3	11	4.44	3.71
51 The ability to sell one's ideas re water and waste management to the community and interesting parties	1	0	2	5	8	4.19	3.53
52 The ability to motivate community members to pay for water and waste services	1	0	1	1	13	4.56	3.35

**APPENDIX B**  
**LEVEL OF COMPETENCIES**

FACTORS WHICH WERE RATED	Rating					Average rating of competency level
	1	2	3	4	5	
<b>BASIC TECHNICAL SKILLS</b>						
1 The ability to understand the basic technical and mechanical functions of machinery.	1	2	3	5	6	3.76
2 The ability to do first level diagnosis and maintenance on water pumps.	2	1	2	8	4	3.65
3 The ability to diagnose serious defects in pumps and machinery associated with water and waste.	0	1	5	8	3	3.76
4 The ability to access technical support to effect repairs.	1	4	3	5	4	3.41
5 The ability to know and understand the physical lay-out of water pipes.	1	2	4	5	5	3.65
6 The ability to know and understand the physical lay-out of sewerage pipes.	1	3	5	4	4	3.41
7 The ability to maintain and repair the local pipe network.	1	0	5	4	7	3.94
8 The ability to control the desired water level in the reservoir.	1	1	3	5	7	3.94
9 The ability to effect basic maintenance in the reservoir area.	2	0	3	7	5	3.76
10 The ability to use prescribed tests to measure chlorine levels.	2	2	5	2	6	3.47
11 The ability to add the correct dosages of chlorine to the water supply.	1	3	4	3	6	3.59
12 The ability to ensure that water for household use is acceptable in appearance and taste.	1	1	6	2	7	3.76
13 The ability to control the use of water	1	3	6	3	4	3.35
14 The ability to control access to the solid waste dump.	1	7	1	2	4	3.07
15 The ability to control the material dumped on the solid waste dump.	2	3	3	3	4	3.27
16 The ability to use the correct/prescribed waste disposal methods.	2	1	3	5	4	3.53
17 The ability to restrict waste to the waste dump.	1	2	6	4	2	3.27
18 The ability to use the correct landfill methods.	2	4	1	5	3	3.20
19 The ability to use the correct procedures in managing waste	1	4	1	4	5	3.53
20 The ability to use the chemicals/substances needed in waste control correctly	1	4	2	3	5	3.47
21 The ability to sanitise waste sites/community waste areas	3	1	4	3	4	3.27
22 The ability to control the waste in the community (prevention of waste)	2	1	6	4	2	3.20
23 The ability to manage the different terrains (Water capture areas, dam sites, sewerage sites, dump sites) keeping it clean from weeds and foreign material and to control access.	1	2	4	5	4	3.56
24 The ability to maintain boreholes	3	2	2	5	4	3.31
25 The ability to maintain windmills	4	3	1	5	3	3.00
26 The ability to maintain rainwater catchment systems	3	4	2	4	4	3.12
27 The ability to extract water from rivers/streams	2	1	8	4	2	3.18
28 The ability to manage community taps	2	1	8	2	4	3.29
<b>MANAGEMENT SKILLS</b>						
29 The ability to supervise others and to get work done through others.	1	2	4	9	1	3.41
30 The ability to manage all financial matters related to water and waste management	2	2	2	6	5	3.59
31 The ability to budget (develop a budget and control expenditure according to a budget)	2	2	1	5	7	3.76
32 The ability to act in such a manner as to install trust and to convince others that one can be trusted to do what the situation demands, at all times, even in the absence of authority	1	2	4	6	4	3.59
33 The ability to meaningful liaise with specialists, consultants and members from the community on matters pertaining to water and waste management	1	2	2	7	5	3.76
34 The ability and willingness to give advice on all aspects regarding water and waste management within the community	1	2	2	5	7	3.88
35 The ability to demonstrate a preference for and dedication to long term solutions instead of going for convenient quick fixes	1	3	4	6	3	3.41
36 The ability to plan strategically	1	0	7	3	5	3.69
37 The ability to plan routes to inspect the infrastructure, systems and sites and in tending to service requirements and complaints	1	2	5	7	2	3.41
38 The ability to negotiate with all stakeholders regarding water and waste management	1	2	4	3	7	3.76
39 The ability to manage monies received in respect of water and waste services	2	4	0	6	5	3.47
<b>CARE</b>						
40 The ability to show to others that one cares about their problems regarding service delivery on water and waste	1	1	4	5	6	3.82



41 The ability to build a trust relationship with the community regarding water and waste management	2	2	2	8	3	3.47
42 The ability to understand the community in terms of the dynamics and historical context with regard to service delivery	1	1	4	8	3	3.65
43 The ability to act in such a manner as to be seen to be approachable by others	1	1	5	4	6	3.76
44 The ability to act in the best interest of customers	1	1	1	7	5	3.93
45 The ability to demonstrate involvement in the community	1	2	6	2	6	3.59
<b>COMMUNICATION</b>						
46 The ability to act in such a consistent way that one is seen as a credible source of information	1	0	6	7	3	3.65
47 The ability to communicate in a clear, concise manner - getting one's message across and listening to others and getting their message	1	0	3	6	7	4.06
48 The ability to communicate with members of the community in the most prevalent languages	1	1	4	5	6	3.82
<b>SOCIAL SKILLS</b>						
49 The ability to demonstrate skills in social interaction with people on an individual and group level	1	2	6	6	2	3.35
50 The ability to deal effectively with complaints and conflict that may arise from water and waste service delivery	1	1	3	7	5	3.82
51 The ability to demonstrate a positive attitude	1	1	5	5	5	3.71
52 The ability to motivate people to deal with water and waste issues in a sensible manner	1	3	2	7	4	3.59
<b>RESPONSIBILITY</b>						
53 The ability to demonstrate a sense of urgency in dealing with matters arising from water and waste management	2	1	5	3	6	3.59
54 The ability to at all times put duty before one's own convenience, preferences and activities to ensure continuous water and waste delivery	2	0	5	4	6	3.71
55 The ability to act in a responsible way	1	0	3	7	6	4.00
56 The ability to command respect from others in the exercising of one's duties	1	1	1	10	4	3.88
57 A willingness to sacrifice one's time to attend to breakdowns in water and waste service delivery	1	3	3	3	7	3.71
<b>INFLUENCING THE COMMUNITY</b>						
58 The ability to project a positive and optimistic image	1	2	5	5	4	3.53
59 The ability to behave in an assertive manner - to stand on one's rights and to exercise official duties in a confident and consistent manner	1	1	3	6	6	3.88
60 The ability to persuade others to act in the best interests of water and waste management	1	1	4	7	4	3.71
61 The ability to sell one's ideas re water and waste management to the community and interesting parties	1	3	2	8	3	3.53
62 The ability to motivate community members to pay for water and waste services	2	2	4	6	3	3.35

## APPENDIX C

### QUESTIONNAIRE FOR SKILLS AUDIT

This questionnaire needs to be completed by all staff who deal with water and waste services in the capacity of manager or supervisor – Indicate whether you are a manager or supervisor on the answering sheet as well as whether you work in water and / or waste (you may indicate both if that is the situation)

Water = water provision, effluent and treatment / Waste = sanitation

Using the same set of statements, please indicate, to your knowledge:

- A. How **important** the following skills for a manager / supervisor are to ensure water and waste services at local community level. (Rural community or very small town);

Scale values for importance: From your own experience, please indicate the level of importance of the items 1-57 in this questionnaire, using the scale provided below:

1 = Not important at all / 2 = less important / 3 = uncertain / indifferent /  
4 = important / 5 = extremely important

and

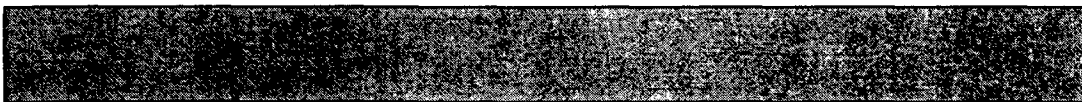
- B. What the present **level** of skills of water and waste managers and supervisors are at community level:

Scale values of competence : based on your experience please indicate the level of competence, using again items 1-62, of people doing your kind of work according to the scale provided below:

1 = Not competent / 2/ 3/ 4/ 5/ = very competent

Judge the competence by placing it somewhere on the scale from 1 to 5

Please indicate the above by drawing a circle around the number which indicates the level of importance (A) or competence (B) of your choice on the answering sheet which folds out next to the statements. Once completed, please detach the answering sheet and fax to (021) 887 5849.



## **BASIC TECHNICAL SKILLS**

1. The ability to understand the basic technical and mechanical functions of machinery
2. The ability to do first level diagnosis and maintenance on water pumps
3. The ability to diagnose serious defects in pumps and machinery associated with water and waste.
4. The ability to access technical support to effect repairs
5. The ability to know and understand the physical layout of water pipes
6. The ability to know and understand the physical layout of sewerage pipes
7. The ability to maintain and repair the local pipe network
8. The ability to control the desired water level in the reservoir
9. The ability to effect basic maintenance in the reservoir area
10. The ability to use prescribed tests to measure chlorine levels
11. The ability to add the correct dosages of chlorine to the water supply
12. The ability to ensure that water for household use is acceptable in appearance and taste
13. The ability to control the use of water
14. The ability to control access to the solid waste dump
15. The ability to control the material dumped on the solid waste dump
16. The ability to use the correct / prescribed waste disposal methods
17. The ability to restrict waste to the waste dump
18. The ability to use the correct landfill methods
19. The ability to use the correct procedures in managing waste
20. The ability to use the chemicals / substances needed in waste control correctly
21. The ability to sanitise waste sites / community waste areas
22. The ability to control the waste in the community (prevention of waste)
23. The ability to manage different terrains (water capture areas, dam sites, sewerage sites, dump sites, keeping it clean from weeds and foreign material and to control access)
24. The ability to maintain boreholes
25. The ability to maintain windmills
26. The ability to maintain rainwater catchment systems
27. The ability to extract water from rivers / streams
28. The ability to manage community taps

## **MANAGEMENT SKILLS**

29. The ability to supervise others and to get work done through others
30. The ability to manage all financial matters related to water and waste management
31. The ability to budget (develop a budget and control expenditure according to a budget)
32. The ability to act in such a manner as to instill and convince others that one can be trusted to do what the situation demands, at all times, even in the absence of authority
33. The ability to meaningfully liaise with specialists, consultants and members from the community on matters pertaining to water and waste management
34. The ability and willingness to give advice on all aspects regarding water and waste management within the community
35. The ability to demonstrate a preference for an dedication to long term solutions instead of going for convenient quick fixes
36. The ability to plan strategically
37. The ability to plan routes to inspect the infrastructure, systems and sites and in tending to service requirements and complaints
38. The ability to negotiate with all stakeholders regarding water and waste management
39. The ability to manage monies received in respect of water and waste services

## **CARE**

40. The ability to show to others that one cares about their problems regarding service delivery on water and waste
41. The ability to build a trust relationship with the community regarding water and waste management
42. The ability to understand the community in terms of the dynamics and historical context with regard to service delivery
43. The ability to act in such a manner as to be seen to be approachable by others
44. The ability to act in the best interest of customers
45. The ability to demonstrate involvement in the community

## **COMMUNICATION**

- 46. The ability to act in such a consistent way that one is seen as a credible source of information
- 47. The ability to communicate in a clear, concise manner – getting one's message across and listening to others and getting their message
- 48. The ability to communicate with members of the community in the most prevalent languages

## **SOCIAL SKILLS**

- 49. The ability to demonstrate skills in social interaction with people on an individual and group level
- 50. The ability to deal effectively with complaints and conflict that may arise from water and waste service delivery
- 51. The ability to demonstrate a positive attitude
- 52. The ability to motivate people to deal with water and waste issues in a sensible manner

## **RESPONSIBILITY**

- 53. *The ability to demonstrate a sense of urgency in dealing with matters arising from water and waste management*
- 54. The ability to at all times put duty before one's own convenience, preferences and activities to ensure continuous water and waste delivery
- 55. The ability to act in a responsible way
- 56. The ability to command respect from others in the exercising of one's duties
- 57. A willingness to sacrifice one's time to attend to breakdowns in water and waste service delivery

## **INFLUENCING THE COMMUNITY**

- 58. The ability to project a positive and optimistic image
- 59. The ability to behave in an assertive manner – to stand on one's rights and to exercise official duties in a confident and consistent manner
- 60. The ability to persuade others to act in the best interest of water and waste management
- 61. The ability to sell one's ideas re water and waste management to the community and interested parties
- 62. The ability to motivate community members to pay for water and waste services.

For office use only	Answer sheet No.			Statement No					Statement No					Competence							
				1	2	3	4	5	1	2	3	4	5	1	2	3	4	5			
	Do not concern yourself with the above number			1	1	2	3	4	5	1	1	2	3	4	5	1	1	2	3	4	5
				2	1	2	3	4	5	2	1	2	3	4	5	2	1	2	3	4	5
				3	1	2	3	4	5	3	1	2	3	4	5	3	1	2	3	4	5
				4	1	2	3	4	5	4	1	2	3	4	5	4	1	2	3	4	5
				5	1	2	3	4	5	5	1	2	3	4	5	5	1	2	3	4	5
Manager	1			6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5
Supervisor	2			7	1	2	3	4	5	7	1	2	3	4	5	7	1	2	3	4	5
Service				8	1	2	3	4	5	8	1	2	3	4	5	8	1	2	3	4	5
Water	1			9	1	2	3	4	5	9	2	3	4	5	9	2	3	4	5		
Waste	2			10	1	2	3	4	5	10	2	3	4	5	10	2	3	4	5		
				11	1	2	3	4	5	11	1	2	3	4	5	11	1	2	3	4	5
				12	1	2	3	4	5	12	1	2	3	4	5	12	1	2	3	4	5
				13	1	2	3	4	5	13	1	2	3	4	5	13	1	2	3	4	5
				14	1	2	3	4	5	14	1	2	3	4	5	14	1	2	3	4	5
				15	1	2	3	4	5	15	1	2	3	4	5	15	1	2	3	4	5
				16	1	2	3	4	5	16	1	2	3	4	5	16	1	2	3	4	5
				17	1	2	3	4	5	17	1	2	3	4	5	17	1	2	3	4	5
				18	1	2	3	4	5	18	1	2	3	4	5	18	1	2	3	4	5
				19	1	2	3	4	5	19	1	2	3	4	5	19	1	2	3	4	5
				20	1	2	3	4	5	20	1	2	3	4	5	20	1	2	3	4	5
				21	1	2	3	4	5	21	1	2	3	4	5	21	1	2	3	4	5
				22	1	2	3	4	5	22	1	2	3	4	5	22	1	2	3	4	5
				23	1	2	3	4	5	23	1	2	3	4	5	23	1	2	3	4	5
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## GLOSSARY

### TERMS USED

**Community** : People living in a specific geographic location which can be identified as a town or village.

**Corporatisation** : Corporatisation refers to the separation of service delivery units from the Council (in the same way that an external service provider is separate from the municipality). Service units which are corporatised may be "ringfenced" or have their budgets separated from the rest of the municipal budget. They will be managed as operationally autonomous units.

**Local Government** : Other term used alternatively is Local Authority. Refers to the B and C categories based on the Municipal Demarcation Act, Act 27 of 1998, the Municipal Structures Act, Act 117 of 1998 and the Municipal Systems Bill (1999).

**Public-public partnerships** : Public-public partnerships or public joint ventures allow for horizontal cooperation between municipalities to exploit economies of scale. They also allow for vertical cooperation to improve coordination at the point of delivery.

**Public Private Partnerships** : Leases and concessions are forms of public-private partnerships that are most common for services where large-scale capital investment is required. A variety of mechanisms exists through which the contractor can take responsibility for the development of new infrastructure, or the rehabilitation of existing infrastructure.

**Small towns** : In this document the target population are referred to as small towns and refers to settlements which have intermediate density levels and the characteristic apartheid urban form - a former white area with intermediate to high service levels, and former black areas with more limited access to services. Small towns vary greatly, but most are economically and socially linked to surrounding rural hinterlands. It also includes the following:

- Dense rural settlements. There are two predominant kinds of dense rural settlement, namely:
  - \*Betterment settlements, which are common in the former homeland areas. These are dense, planned settlements, with populations of over 5 000 people.

- \*Informal settlements, which are unplanned and largely unserved, with populations of over 5000 people. Some are close to urban areas, and others are located in rural areas with a minimal local economic base. Some intensive commercial farming settlements also fall within this category.

- Villages, or smaller rural settlements with populations of more than 500, but less than 5 000 people. These are often unplanned traditional settlements or resettlement areas.
- Agri-villages, which are planned, dense settlements in rural areas, which service the surrounding farms.
- - Dispersed or scattered settlements, which are mostly unplanned homestead settlements with a population of less than 500 people. Extensive settlements in commercial farming areas, some located on communal land and others on privately owned land, also fall within this category.

**Transfer of ownership** : The transfer of ownership refers to the sale of municipal assets as well as responsibility for managing the complete delivery of the service to a private company. This is often called "privatisation" to distinguish it from other forms of private sector involvement in service delivery.

**Water system** : The system which includes the physical infra structure as well as the administrative, financial and technical management and maintenance which provide in the water needs of a specific community.

#### **ABBREVIATIONS USED**

**Water services** : Includes both water and waste services.

**Waste** : Refers to water borne effluent.

**CBO** : Community Based Organisation

**IDP** : Integrated Development Plan

**LC** : Local Council

**NGO** : Non-Governmental Organisation

**MRC** : Medical Research Council

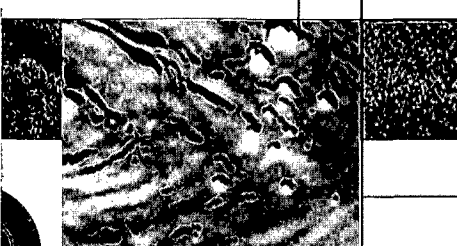
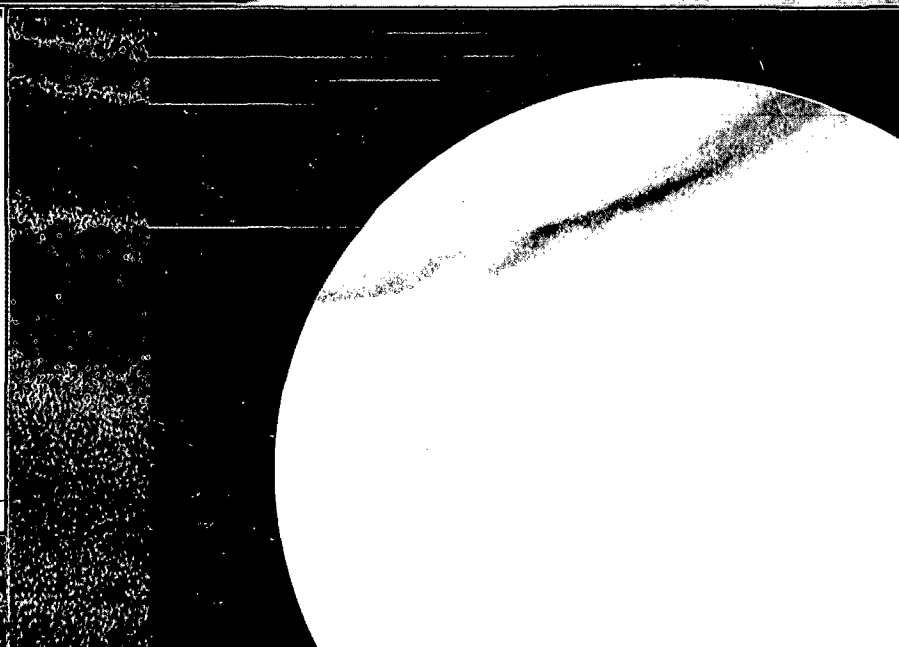
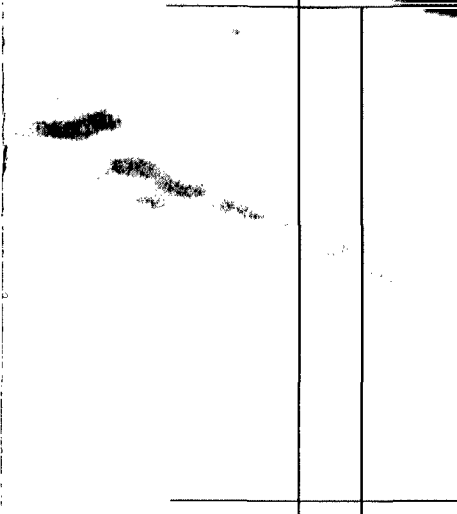
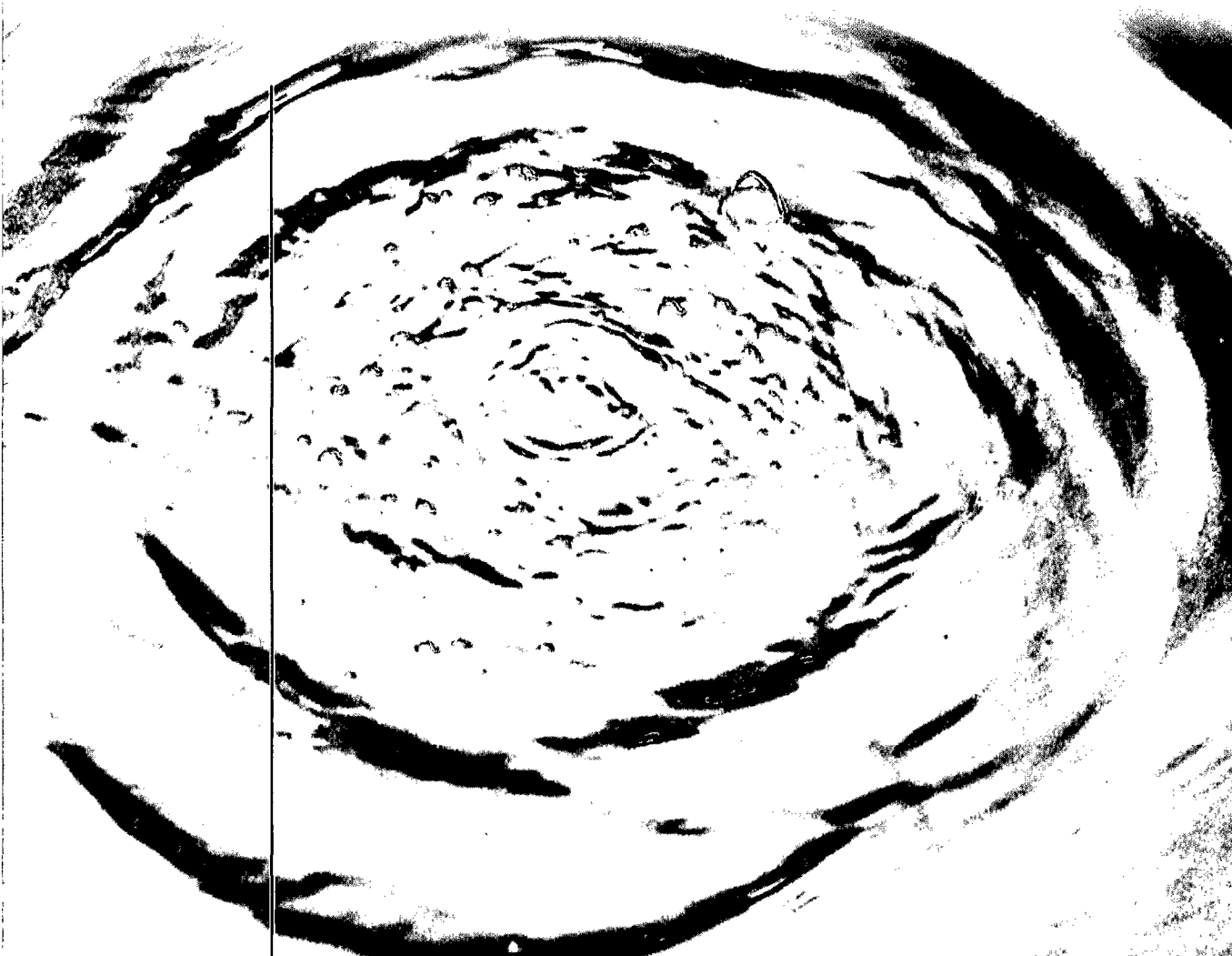
**PPT** : Presidential Project Team

**SALGA** : South African Local Government Association

**TLC** : Transitional Local Council

<b>RCB</b>	:	Rapid Capacity Building
<b>RSA</b>	:	Republic of South Africa
<b>TRC</b>	:	Transitional Rural Council
<b>TrepC</b>	:	Transitional Representative Council
<b>UPE</b>	:	University of Port Elizabeth
<b>WRC</b>	:	Water Research Commission





Water Research Commission

PO Box 824, Pretoria, 0001, South Africa

Tel: +27 12 330 0340, Fax: +27 12 331 2565

Web: <http://www.wrc.org.za>