Water Services Barometer Study

Report to the
Water Research Commission

by

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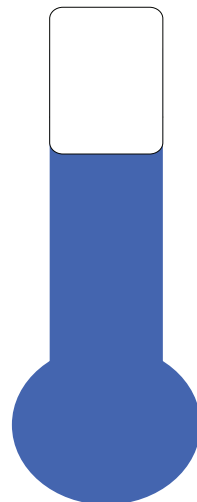
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List of acronyms

AMPS	All Media Product Survey
CBO	Community-based organisation
CSA	Community service agent
DFID	UK Department for International Development
DM	District municipality
DPLG	Department of provincial and local government
DWAF	Department of Water Affairs and Forestry
FBW	Free Basic Water
HSRC	Human Sciences Research Council
LM	Local Municipality
LSM	Living Standards Measure
NGO	Non-governmental organisation
SALGA	South African Local Government Association
SANCO	South African National Civic Organisation
WASH	Water and Sanitation Hygiene for all
WRC	Water Research Commission
WS	Water Services
WSA	Water Services Authority
WSP	Water Services Provider

Executive summary

Community consultation in the provision of water services is both a legislative obligation and a critical success factor. Legislation and policy require government to engage with communities in the provision of Water Services.

In order to inform/consult the public and obtain their participation and support, national departments such as DWAF and DPLG embarked on awareness campaigns and/or solicited public participation through meetings, leaflets and the mass media.

As far as could be established, no single comprehensive study has been done which provides a barometer of the general public's knowledge and understanding of the water services messages as communicated, and their involvement in, and preferences for, consultative processes. This study was undertaken to fill this gap. The study gives a 'reading' of the current state of knowledge and awareness amongst the South African public regarding five key water services knowledge areas. The analysis of the data furthermore identifies areas of strength and weakness with the view to developing recommendations for improvement.

For the purpose of this study, the term 'community consultation' was broadly defined to include all types of communication aimed at the general public, ranging from information dissemination to community participation.

The study limits itself to water services messages and it focuses on two major communication campaigns of the Department of Water Affairs and Forestry that have dealt specifically with Water Services, Free Basic Water and Water and Sanitation Hygiene (WASH).

The literature review places community consultation regarding water services in the paradigm of development communication.

Outcomes sought in public communication campaigns are, typically, awareness, attitude change, or behavioural change. Although large amounts of money are spent on public communication campaigns, the outcomes/results/success of public communication campaigns are often not assessed – "many mass media campaigns proceed in the absence of a research foundation" (Rice & Atkin, 2000:125). There is often no evidence of how many members of the target public read the publications or listened to the radio messages, understood them, believed them, or changed their attitude or behaviour as a result of them. This will only become known through evaluation research.

This study follows the Macnamara model to evaluate the outcomes of key Water Services campaigns. Macnamara's Macro Model (1993), or as later versions became known, the Pyramid Model, presents in a pyramidal form three layers of a communication campaign, i.e. inputs, outputs and results. Each layer is associated with a set of evaluation parameters and an applicable evaluation research methodology. Qualitative methods were used to assess inputs and outputs of the major communication campaigns of Water Services. For example, in-depth qualitative interviews were conducted in order to determine what the South African public is expected to be aware of/know/understand/believe/practise in terms of key water services messages. In addition, case studies of 6 WSA community consultation projects were sourced to give an overview of inputs and outputs of water services community consultation from the perspective of municipalities.

In order to assess the results/outcomes of these water services campaigns, an innovative tool, the barometer instrument, was constructed.

Five key water services knowledge areas were identified from the literature review and the analysis of the interviews with stakeholders and the case studies. They are listed below: The indicators in brackets refer to the expected level of awareness:

- Free Basic Water (the general public should be **aware** of FBW and **understand** what it means)

- Basic water as a constitutional right (awareness and understanding)

- Responsibilities (awareness and behaviour)

- Health and hygiene (knowledge and behaviour)

- Institutional roles (knowledge)
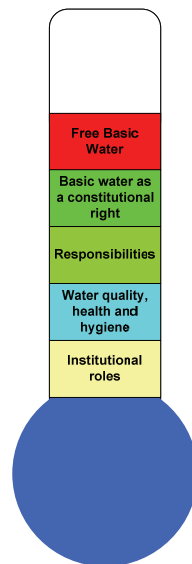
Each knowledge area was associated with core messages from the major water services communication campaigns. A score of 2 points was allocated for knowledge/ awareness/desired behaviour regarding the core messages of each of these five knowledge areas. A composite score out of a possible 10 therefore provides a barometer reading of the knowledge/awareness/desired behaviour of the sample universe regarding core messages of the major water services campaigns.

A quantitative survey was undertaken from 10/11/2006 until 8/12/2006 to test the knowledge and understanding of the general public of South Africa on a number of water services messages on which they were consulted during the past five years. (The survey questions were included in the AC Nielsen Omnibus Survey. The sample comprised an area-stratified, probability sample of 2456 urban and 795 rural respondents. The sample universe was adult (16+) South Africans.)

The following are key barometer results:

- The national average WS barometer score was 5.759 out of a possible 10.
- Figure 1 below shows how the national average WS barometer score is made up of a sum of the scores for each of the knowledge areas.

10

5.76

0

10

5.76

0.67

0.75

1.68

1.52

1.13

0

- Free Basic Water: 0.67 out of possible 2
- Rights: 0.75 out of possible 2
- Responsibilities: 1.68 out of possible 2
- Health & Hygiene: 1.52 out of possible 2
- Institutional roles: 1.13 out of possible 2
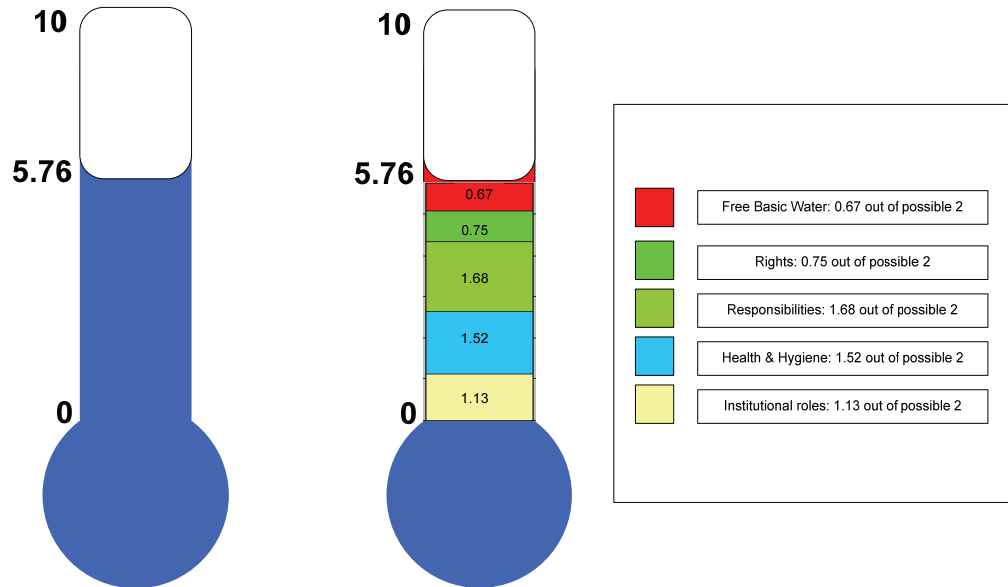
Figure 1

- Standing on its own, the result is a reliable indicator of the knowledge/awareness/behaviour that was tested. However, without a baseline, or a definite expected outcome (e.g. 1+ out of a possible 2 for FBW), the score cannot evaluate the effectiveness of water services community consultation as good, average or disappointing. Various role players will give their own interpretation of the results, based on the knowledge/awareness/behaviour that they expect from the adult South African population.

- Responsibilities scored higher than Rights: people have better knowledge of their responsibilities than their rights.

- The highest scores occurred in the areas of Responsibilities and Health and Hygiene. Although it is difficult to say whether people accurately reported behaviour, South Africans seem to be at least aware of their responsibility to pay for water in excess of 6000 litres/month and to report broken infrastructure that directly affects them. This is also the case with answers on Health and Hygiene received from respondents. Most respondents scored at least one point for being aware that you should wash your hands after you have been to the toilet. Only 2.1% said that 'it is not important to wash your hands.'

- South African adults scored the lowest in the areas Free Basic Water and Constitutional Rights, because 59% said that they have never heard of Free Basic Water and 45% said they have never heard of the Constitution.

For each of the knowledge areas, the main results are as follows:

- Free Basic Water

    40.8% of the adult population have heard of FBW; 59.2% have not.

    Awareness of Free Basic Water is the lowest amongst the rural population and lower LSMs[1]

    The age group 35-49 is the best informed

    25.7% of the adult population, who have heard of FBW, believe that it means that water is for free – as much as you want.

    Composite barometer scores cross-tabulated with the meanings of FBW, show that knowledge of the exact amount of FBW that households receive per month correlates with high barometer scores.

    LSM groups access information from a variety of sources. It is therefore correct to distribute Free Basic Services messages through a variety of communication challenges.

    38.1% of respondents who answered 'Water is for free – as much as I want' said the source for their information was school/college/evening classes, etc.

- Constitutional rights

    54.4% of the adult population have heard about the Constitution; 45.6% have not. 57% of rural adults have not heard of the Constitution.

    93% of people who have heard of the Constitution believe that, constitutionally, everyone has the right to a flush toilet, and 95% believe that everyone has the right to a tap inside their home.

    There is a correlation between respondents who have heard of the Constitution and of Free Basic Water and respondents who have not heard of either.

- Responsibilities

    25% of people, who have the responsibility to pay for water and sanitation, admit that they do not pay their account every month for some or other reason. Non-payment correlates with the lower LSM groups, indicating that people in the lower LSM groups should be educated and encouraged to bring their consumption down to an affordable amount.

    Urban people in the lower LSM groups are less likely to report broken infrastructure than people in the higher LSM groups.

    Responsible behaviour amongst the urban population correlates with higher composite barometer scores.

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[1] The Living Standards Measure (LSM) has been developed by the South African Advertising Research Foundation. It is built around a set of 29 household variables, e.g. sewing machine, flush toilet in/outside house, traditional hut, electric stove. There are 10 LSM groups. In terms of the Living Standard Measure Group 1 has the lowest living standard, whereas Group 10 has the highest.

In contrast to the urban population, most rural people took some action when the infrastructure that supplies them with water breaks, or get stolen.

- Health and hygiene

  64% of the total population are aware that it is important to wash your hands with soap and water after you have been to the toilet and they claim to do this always.

  34% admit that they do not always wash their hands after they have been to the toilet for various reasons.

  2% believe that it is not necessary to do so.

  Desired behaviour correlates positively with high composite barometer scores.

  Desired behaviour correlates with people having seen posters/radio messages, etc. that told them to wash their hands with soap and water after they had been to the toilet.

  77% of rural people know that you should boil water to make it safe for drinking.

  Respondents were unsure as to how much Jik/bleach should be added to a bucket of water; one cup of Jik/bleach was selected almost the same number of times as one teaspoon.

  Respondents were not well informed about the need to filter water.

  7.3% of rural adults indicated that they did not know how to make their drinking water safe, despite the fact that they were given options to select from.

- Institutional roles

  On average, 71% of the population know that municipalities are responsible for supplying their water and sanitation services.

  Only 35% of urban adults know who their ward councillor is. 8% don't know what a ward councillor is.

- Attendance at meetings and preference for communication channels

  Preference for a particular communication channel, although not exclusively, is also a matter of access, particularly for the lower LSM groups. LSM groups 1-6 choose interpersonal contact (meetings, community development worker, friends/neighbours, tribal messenger) and radio as the preferred communication channels.

  The communication preferences of rural people are similar to that of LSM 1-6. 20.7% of rural people prefer to receive information on water and sanitation services from the tribal messenger (iphoso lenkhosi).

  LSM groups 8-10 prefer to receive information on television, in the form of written material (posters, pamphlets, booklets) and on their accounts.

People require more information on aspects that critically affect their water services. For example, for rural people, information on tariffs, billing and meter reading is a lower priority than it is for urban people; it is a much higher priority for them to know when they will get basic water services.

Conclusions

- The barometer instrument is an innovative tool which can be applied to evaluate the results (the top triangle of the Macnamara pyramid) of any community consultation process.

- The composite barometer score is a powerful predictor of patterns of behaviour regarding payment, reporting broken infrastructure in an urban context, and health and hygiene.

- The literature review emphasises the importance of a participatory approach to development communication in international and local best practice. Although limited, DWAF used participatory methods when developing the WASH campaign. The study could not confirm that participatory methods were used in the development of the FBW media campaign. This might have impacted on the findings. There are still serious gaps in knowledge/awareness regarding Free Basic Water.

- Qualitative information has indicated that infrastructure without water, or with regular interruptions, is common in some non-metropolitan and rural areas. In such instances, people buy water from shops, neighbours or water vendors. This is a disturbing fact, because these people are not receiving a basic water supply, despite having a tap inside their yards or homes.

Recommendations

- It is recommended that the results of this study be used as a baseline. Follow-up studies can track improvement or changes in knowledge/awareness and behaviour.

- The innovative barometer instrument can be applied and extended to other knowledge areas, for example, a basic services barometer, an AIDS barometer or a safety barometer.

- Participatory methods should be employed in planning development communication. A lack of knowledge/awareness of basic concepts is easily overlooked, leading to misunderstandings and unrealistic expectations.

- More focused interpersonal interventions are necessary to bring rural consumers on par with urban consumers. These would include meetings, community development workers/municipal development officials, community networks, community media and tribal messengers. South Africans cannot exercise their constitutional right to sufficient water if they have never heard of the Constitution.

- A booklet/pamphlet that summarises municipalities' obligations in terms of community consultation and provides practical guidelines and best practices is recommended for the communication managers/officials of municipalities.

- Literature on best practice such as the WIN/DPLG lesson series, or projects such as the Citizen's Voice or eThekwini's Khanyisa project should be made available to all municipalities to learn from and to apply in their own context.

1. Objectives and scope

Objectives of the study

Community consultation in the provision of water services is both a legislative obligation and a critical success factor.

Consumers have a right to access to a basic water supply and sanitation service. According to the Strategic Framework for Water Services, "this right also embodies the obligation to exercise that right reasonably and in accordance with general limitations placed on that right. These rights and responsibilities *must be clearly communicated* (our italics) to consumers" (Strategic Framework for Water Services, 2003: 37-38**).**

Furthermore, legislation and policy require government to engage with communities in the development of the Water Services Development Plans and Tariff Formulation Policy. For example, with regard to credit control, "consumers must be *informed* with respect to water consumption, credit control, debt collection and disconnection policies, credit control procedures and consumer responsibilities. Communication must be clear and accessible and, wherever practical, in the home language of the consumer" (Strategic Framework for Water Services, 2003: 37**)**.

The draft regulation strategy recognises that consumers are in the best position to monitor the effectiveness of water services provision since they are the first to experience the effects of poor, inadequate or absent services. It is the responsibility of water services authorities to strengthen the voice of consumers, and to put into place mechanisms for facilitating, listening to and responding to consumer and citizen feedback on the quality of services provided.

The challenge to consistently increase the number of people who get basic water and sanitation, is driven largely by Government's commitment to the Free Basic Water strategy and the 2008 and 2010 targets. The success of both these aspirations is fundamentally dependent on the nature and extent of community consultation in the provision of water services. In order to inform/consult the public and obtain their participation and support, national departments such as DWAF and DPLG embarked on awareness campaigns and/or solicited public participation through meetings, leaflets and the mass media.

As far as could be determined, no single comprehensive study has been done which provides a barometer of the general public's knowledge and understanding of the messages that were communicated, their involvement in, and their preferences for, consultative processes. Therefore it was necessary, at this point in time, to assess where we are and what measures can be taken to enhance the situation. To this end, this study into the level and status of community consultation on a range of water services issues was being undertaken in order to give an indication of the current state of knowledge and awareness amongst the South African public regarding five key water services knowledge areas. Through this study, areas of strength and weakness with the view to developing recommendations for improvement were to be identified.

Scope of the study

For the purpose of the study, the term 'community consultation' was broadly defined to include all types of communication aimed at the general public's awareness, ranging from information dissemination to community participation.

The study limited itself to water services messages and covered the following aspects:
1. A local and international literature overview of relevant theories, policy and legislation, consultative campaigns and research on public awareness.
2. An overview of community consultation in the water services sector over the past five years.
3. An assessment of consumers' knowledge and understanding of a number of key aspects of water services. The rationale is that, if the consultation process had been effective, a minimum level of awareness of the key aspects would be expected. Cross-tabulation with demographic and other key variables would indicate levels of awareness and particular strengths and gaps.
4. An assessment of consumers' experiences of, and preferences for, consultative processes.
5. Identification of challenges and best practice
6. Recommendations as to how community consultation can be optimised whilst taking the main variables into consideration.

2. Methodology

The study was structured in terms of seven outputs or deliverables. Each of the outputs are set out and discussed below.

Output 1: Desktop research: Literature review

The literature review comprises the following headings:

- ➢ Concepts and theory
  - How does this study fit into current communication theory?
  - Definitions of information dissemination, community consultation and participation
  - Discussion of various models of community consultation, including the Macnamara model
  - Defining the working model for this research
- ➢ Overview of relevant legislation and policies that refer to public and/or community consultation in the provision of water services
- ➢ Overview of literature on local and international public awareness campaigns that specifically focused on the provision of water services, including:
  - Objective of campaign/consultation
  - Link with the Constitution, relevant policies and legislation
  - Target group(s)
  - Key messages
  - Channels and communication products used
  - Expected outcomes
- ➢ Overview of research methodologies and results of existing local and international studies on public awareness of water sector related issues, for example WS Regulation's Consumer survey and the DWAF/DFID Customer Care and Protection study.

Fieldwork

A combination of qualitative and quantitative research techniques was followed.

Output 2: Qualitative research

- ➢ In-depth qualitative interviews with key persons in DWAF and DPLG who were responsible for public awareness campaigns/consultation in order to establish:
  - Objective of campaign/consultation
  - Link with Constitution, relevant policies and legislation
  - Target group(s)
  - Key messages
  - Channels and communication products used
  - Expected outcomes
  - The value that this research will add and the specific questions that the community would like answers to
- ➢ All interviews followed a discussion guide, and were recorded and transcribed for analysis.

> ➤ Case studies of 5 WSA community consultation projects:
>> Cape Town Metro – Citizen's Voice project
>> eThekwini
>> Johannesburg Water – Gcin'amanzi
>> Steve Tshwete LM – tariff policy and sanitation
>> Zululand – priority areas for service level improvement

Output 3 Quantitative survey

The key features of the survey are the following:

➤ The concept of a Water Services barometer was developed in order to quantify, with a composite score out of a possible 10, the results/outcomes of the main water services awareness campaigns. <u>Five key water services knowledge areas</u> were identified from the literature review and the analysis of the interviews with stakeholders and the case studies. The features of the WS barometer are discussed in detail in Chapter 5.

➤ The survey assessed the knowledge and understanding of a number of key water services messages of the general public on which they were consulted during the past five years. These messages relate to the five key water services knowledge areas mentioned. In addition, a number of general questions on community consultation experiences, information needs and communication preferences were included.

➤ For reasons of cost effectiveness; the survey was put onto one of the existing syndicated studies that are conducted by the major market research houses. The OMNIBUS survey of the Nielsen Company was used because it fitted into the time frame best.

➤ The OMNIBUS survey covers black, coloured, Indian and white adults, aged 16 years and over. An area-stratified, probability sample of 3251 households, was drawn. The urban sample comprised 2456 households and the rural sample 795 households. The advantages of a probability sample, as contrasted with a quota sample, are:
>> Respondent selection bias has been eliminated.
>> Results can be evaluated within known limits of error.
>> Results can be weighted up to the total population being studied.
>> Findings from different surveys are statistically comparable.
>> Standard statistical procedures can be applied.

➤ The questionnaire was designed in collaboration with the identified key persons in DWAF and presented to the reference group for input and approval. A copy of the questionnaire appears in Appendix 1. The questionnaire was translated into Afrikaans, Zulu, Xhosa, Tswana, Southern Sotho and Northern Sotho.

➤ Personal at-home interviews were conducted in the home language, or preferred language of the respondent. The interviews were conducted using a structured questionnaire on a CAPI (Computer Assisted Personal Interview) machine as well as show cards.

➤ Fieldwork was started on 10 November 2006 and was completed by 8 December 2006. A 20% validation check was done personally or telephonically on the work of each interviewer.

➤ The results have been post weighted to estimated population proportions. The weighting cells used were:

Blacks	Province, community size, sex, age
Whites:	Province, community size, sex, age, home language
Coloured and Indians:	Metropolitan area, sex and age

➤ The analysis was done by specified demographic breakdowns:

Race:	Black, Coloured, Indian, White
Monthly household income:	R8000+, R4000-R7999, R800-R3999, R1-R799
Home language:	Nguni, Sotho/Other (including other African languages other than Sotho or Nguni, English (incl. other European languages, Afrikaans (incl. English and Afrikaans)

Gender
Provinces
Living Standards Measure (LSM)[2]
Community size: Metro, Other Urban, rural
Water Services Authorities: Cape Town, eThekwini, Ekurhuleni, Johannesburg, Tshwane, Buffalo City, Nelson Mandela, Msunduzi, Mangaung, Matshabeng, Amathole, Emfuleni, rest of Eastern Cape, Rest of Free State, Rest of Gauteng, Rest of KwaZulu-Natal, Rest of Limpopo, Rest of Mpumalanga, Rest of North-West, Rest of Northern Cape, Rest of Western Cape

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[2] The Living Standards Measure (LSM) has been developed by the South African Advertising Research Foundation. It is built around a set of 29 household variables, e.g. sewing machine, flush toilet in/outside house, traditional hut, electric stove. There are 10 LSM groups.

3. Literature review

Outline

The literature review is structured as follows:

The first section illustrates the principles for community consultation as reflected in the Constitution and relevant legislation and policy. Since this study focuses on Water Services, only illustrative material of relevance to Water Services is provided.

Section 2 makes the link between the legislative principles for communication between state and citizens; and the theory of development communication. Various development communication models are discussed. In conclusion the Government Communicator's Handbook is cited to illustrate how practical guidelines for public communication in the South African context have applied the participatory development communication model.

Section 3 gives a historical overview of the implementation of various development communication models in developing countries. It also cites an example from India to illustrate the current eclectic approach to the selection of channels and media in development communication.

Section 4 lists a number of key South African development communication campaigns over the past 12 years, and raises the issue of the evaluation of the outcomes/results of these campaigns.

Section 5 discusses evaluation models for public communication with special emphasis on the Macnamara Pyramid model, which will be used in this study. This section also discusses the relevancy of this model to the study.

Section 6 gives the findings of existing local research studies on citizen's knowledge, awareness, attitudes and behaviour regarding key aspects of Water Services.

Communication between state and citizens: an overview of relevant legislation and policies

The principles for communication between the state and citizens are set out in the South African Constitution and are integral to the human rights ideology that underpins the Constitution.

According to the Bill of Rights

> 32 (1) Everyone has the right of access to any information held by the state; and any information that is held by another person and that is required for the exercise or protection of any rights.

(2) National legislation must be enacted to give effect to this right, and may provide for reasonable measures to alleviate the administrative and financial burden on the state.

The developmental duty of the state is mentioned with reference to local government:

Developmental duties of municipalities

153. A municipality must 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 participate in national and provincial development programmes.

The basic values and principles governing public administration underscore democratisation, a developmental orientation and the consequent importance of consulting the public:

195. (1) Public administration must be governed by the democratic values and principles enshrined in the Constitution, including the following principles:

Public administration must be development-oriented.

People's needs must be responded to, and the public must be encouraged to participate in policy-making.

Transparency must be fostered by providing the public with timely, accessible and accurate information.

These values and principles of communication between state and citizens are followed through in legislation and policy. Local government and Water Services legislation and policy documents, for example, refer extensively to the obligation of organs of the state to inform/consult/involve the general public and/or communities.

The table on the following pages highlights references to this obligation in the Water Services Act, the Strategic Framework for Water Services (1993), The Municipal Structures Act (1998) and the Municipal Systems Act (2000).

Table 1

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
23. A water services provider must give such information concerning the provision of water services as may reasonably be called for by— (a) the water services authority having jurisdiction in the area in question; (b) the relevant Province; (c) the Minister; or (d) a consumer or potential consumer.	**3.8 The role of civil society** A vibrant and durable democracy needs a strong civil society. Government is committed to promoting the active involvement of civil society in the provision of sustainable and affordable water services, in research and in other related activities. This will be done through: ‣ engaging civil society organisations in policy development, research and advocacy, and assisting with planning, implementation and management of programmes and projects at community level; ‣ supporting the development of capacity in civil society organisations; ‣ encouraging civil society organisations to help monitor sector performance at all levels; ‣ engaging civil society organisations in creating a link between government and local communities; ‣ engaging capacitated community-based organisations to manage water services projects at the local level, where appropriate; and ‣ assisting in the mobilisation of funds for non-government and community-based organisations where appropriate. (*Strategic Framework for Water Services*, p24)	**Rights and duties of municipal councils** **4.** (2) The council of a municipality has the duty to-- (a) *Exercise the municipality's executive and legislative authority and use the resources of the municipality in the best interests of the local community;* (b) provide, without favour or prejudice, democratic and accountable government; c) encourage the involvement of the local community; e) consult the local community about— (i) the level, quality, range and impact of municipal services provided by the municipality, either directly or through another service provider: and (ii) the available options for service delivery: g)promote and undertake development in the municipality; ... j)contribute, together with other organs of state, to the progressive realisation of the fundamental rights contained in sections 24, 25, 26, 27 and 29 of the Constitution.	**19. Municipal objectives.**—(1) A municipal council must strive within its capacity to achieve the objectives set out in section 152 of the Constitution. (2) A municipal council must annually review— (*a*) the needs of the community; (*b*) its priorities to meet those needs; (*c*) its processes for involving the community; (*d*) its organisational and delivery mechanisms for meeting the needs of the community; and (*e*) its overall performance in achieving the objectives referred to in subsection (1). (3) A municipal council must develop mechanisms to consult the community and community organisations in performing its functions and exercising its powers.

8

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
		Rights and duties of members of local community	
		5. (1) Members of the local community	
		have the right to –	
		(i) contribute to the decision-making processes of the municipality: and	
		(ii) submit written or oral recommendations, representations and complaints to the municipal council or to another political structure or a political office bearer or the administration of the municipality;	
		b) to prompt responses to their written or oral communications, including complaints, to the municipal council or to another political structure or a political office bearer or the administration of the municipality;	
		c) to be informed of decisions of the municipal council, or another political structure or any political office bearer of the municipality, affecting their rights, property and reasonable expectations;	
		d) to regular disclosure of the state of affairs of the municipal council.	
	8.4 Monitoring and information management	**CHAPTER 4**	(3) The executive committee in performing its duties must—
	8.4.1 Monitoring and information needs and uses	**COMMUNITY PARTICIPATION**	(a) identify and develop criteria in terms of which progress in the implementation of the
	8.4.2 Principles	**Development of culture of community participation**	
	Bottom-up design. Monitoring and information	**16. (1)** A municipality must develop a culture of	
33(3) Before setting general conditions a water board must invite comment from water services institutions within its service area, its consumers and users.			

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
(4) General conditions set by a water board must be accessible to the public.	systems should be designed and managed in a bottom-up way. Any information collected locally should be useful locally, and public participation in monitoring should be encouraged. **Duty to provide information.** Water services authorities have a duty to provide information concerning the provision of water services as reasonably requested by the Minister, DWAF (the national water services regulator), the relevant province and consumers. (*Strategic Framework for Water Services*, p 59,60)	municipal governance that complements formal representative government with a system of participatory governance, and must for this purpose- (a) encourage, and create conditions for, the local community to participate in the affairs of the municipality, including in— (i) the preparation. implementation and review of its integrated development plan in terms of Chapter 5; ii) the establishment, implementation and review of its performance management system in terms of Chapter 6: iii)the monitoring and review of its performance, including the outcomes and impact of such performance: iv)the preparation of its budget; and v) strategic decisions relating to the provision of municipal services in terms of Chapter 8; (i) the local community to enable it to participate in the affairs of the municipality; and (ii) councillors and staff to foster community participation; and use its resources, and annually allocate funds in its budget, as may be appropriate for the purpose of implementing paragraphs (a) and (b). (2) Subsection (1) must not be interpreted as permitting interference with a municipal council's right to govern and to exercise the executive and legislative authority of the municipality.	strategies, programmes and services referred to in subsection (2) (*c*) can be evaluated, including key performance indicators which are specific to the municipality and common to local government in general; (*b*) evaluate progress against the key performance indicators; (*c*) review the performance of the municipality in order to improve— (i) the economy, efficiency and effectiveness of the municipality; (ii) the efficiency of credit control and revenue and debt collection services; and (iii) the implementation of the municipality's by-laws; (*d*) monitor the management of the municipality's administration in accordance with the policy directions of the municipal council; (*e*) oversee the provision of services to communities in the municipality in a sustainable manner; (*f*) perform such duties and exercise such powers as the council may delegate to it in terms of section 32; (*g*) annually report on the involvement of communities and community

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
34. (1) In performing its activities, exercising its powers and carrying out its duties a water board must achieve a balance between— (a) striving to provide efficient, reliable and sustainable water services; (b) optimally using available resources; (c) striving to be financially viable; (d) promoting the efficiency of water services authorities; (e) taking cognizance of the needs of water services institutions, consumers and users;	**4.5.8 Credit control** **Communication.** Consumers must be *informed* with respect to water consumption, credit control, debt collection and disconnection policies, credit control procedures and consumer responsibilities. Communication must be clear and accessible and, wherever practical, in the home language of the consumer. (*Strategic Framework for Water Services*, p 36,37)	**Mechanisms, processes and procedures for community participation** **17. (1)** Participation by the local community in the affairs of the municipality must take place through— (a) political structures for participation in terms of the Municipal Structures Act; (b) the mechanisms, processes and procedures for participation in municipal governance established in terms of this Act; (c) other appropriate mechanisms, processes and procedures established by the municipality; (d) councillors; and (e) generally approving the provisions for participation as provided for in this Act. (2) A municipality must establish appropriate mechanisms, processes and procedures to enable the local community to participate in the affairs of the municipality, and must for this purpose provide for— (a) the receipt, processing and consideration of petitions and complaints lodged by members of the local community; (b) notification and public comment procedures, when appropriate.	organisations in the affairs of the municipality; and (*h*) ensure that regard is given to public views and report on the effect of consultation on the decisions of the council. 44 (3) The executive committee in performing its duties must— (h) ensure that regard is given to public views and report on the effect of consultation on the decisions of the council.

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
		(c) public meetings and hearings by the municipal council and other political structures and political office bearers of the municipality, when appropriate;	
		(d) consultative sessions with locally recognised community organisations and, where appropriate, traditional minorities; and	
		(e) report-back to the local community.	
		(3) When establishing mechanisms, processes and procedures in terms of subsection	
		(i) The municipality must take into account the special needs of—	
		(a) people who cannot read or write;	
		(b) people with disabilities;	
		(c) women; and	
		(d) other disadvantaged groups.	
39. (1)		**Communication of information concerning community participation**	
(3) The policy statement must contain information concerning the water board and all other companies, institutions or bodies in which it has an interest, including—		18. (1) A municipality must communicate to its community information concerning—	
k) the procedures for consultation with water services institutions, consumers. users and advisory forums, if established;		(a) the available mechanisms, processes and procedures to encourage and facilitate community participation;	
	Consumer relations. Water services providers must communicate the contents of the consumer charter with all consumers to whom they provide services. All water services providers must make themselves accessible to consumers and provide the necessary facilities to receive consumer payments, queries, complaints and suggestions for improvements.	*(b)* the matters with regard to which community participation is encouraged;	
	(*Strategic Framework for Water Services*, p 13)	(c) the rights and duties of members of the local community; and	
		(d) municipal governance, management and development.	

Water Services Act

67. (1) The Minister must ensure that there is a national information system on water services.

(2) The information system may form part of a larger system relating to water generally.

(3) The public is entitled to reasonable access to the information contained in the national information system, subject to limitations necessitated by the rights enshrined in Chapter 2 of the Constitution.

(4) The Minister must take reasonable steps to ensure that information provided is in an accessible format.

Purpose of national information system

68. The purpose of the national information system is—

(a) to record and provide data for the development, implementation and monitoring of national policy on water services: and

(b) to provide information to water services institutions. consumers and the public—

(i) to enable them to monitor the performance of water services institutions;

Strategic Framework for Water Services

Balancing rights and responsibilities. The limitation and disconnection of water services is a sensitive issue that requires the balancing of rights and obligations. Consumers have a right to a basic water supply and sanitation service. However, this right also embodies the obligation to exercise that right reasonably and in accordance with general limitations placed on that right. At the same time, water services authorities must ensure sustainable provision of water services and safeguard the financial viability of the water services provider. These rights and responsibilities must be clearly communicated to consumers.

(*Strategic Framework for Water Services*, p 37,38)

Municipal Systems Act

(2) When communicating the information mentioned in subsection (1), a municipality must take into account—

(a) language preferences and usage in the municipality; and

(b) the special needs of people who cannot read or write.

Communications to local community

21. (1) When anything must be notified by a municipality through the media to the local community in terms of this Act or any other applicable legislation, it must be done—

(a) in the local newspaper or newspapers of its area;

(b) in the newspaper or newspapers circulating in its area and determined by the council as a newspaper of record; or

(c) by means of radio broadcasts covering the area of the municipality.

(2) Any such notification must be in the official languages determined by the council, having regard to language preferences and usage within its area.

(3) A copy of every notice that must be published in the *Provincial Gazette* or the media in terms of this Act or any other applicable legislation, must be displayed at the municipal offices.

(4) When the municipality invites the local community to submit written comments or representations on any matter before the council, it must be stated in the invitation that any person

Municipal Structures Act

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
(ii) for research purposes; and (iii) for another lawful reason.		who cannot write may come during office hours to a place where a staff member of the municipality named in the invitation, will assist that person to transcribe that person's comments or representations. (5) (a) When a municipality requires a form to be completed by a member of the local community, a staff member of the municipality must give reasonable assistance to persons who cannot read or write, to enable such persons to understand and complete the form. (b) If the form relates to the payment of money to the municipality or to the provision of any service, the assistance must include an explanation of its terms and conditions. (*Municipal Systems Act*, p 31-34)	
The Minister may terminate the appointment of any of the members of a water services committee after consultation with the members of the community served by that committee. (*Water Services Act*, p 47)	**8.4.3** A regulatory monitoring framework should also recognise that *consumers* are in the best position to monitor the effectiveness of water services provision. They are the first to experience the effects of poor, inadequate or absent services.	**Adoption of process** 28. (1) Each municipal council, within a prescribed period after the start of its elected term, must adopt a process set out in writing to guide the planning, drafting, adoption and review of its integrated development plan.	
A water services committee must, on request, provide information on its affairs and financial position to any person, subject to the limitations necessitated by the rights enshrined in Chapter 2 of the Constitution. (*Water Services Act*, p 48)	Therefore, the most important and effective monitoring strategy for the sector is *strengthening the voice of consumers*. It is the responsibility of water services authorities to put into place mechanisms for facilitating, listening to and responding to consumer and citizen feedback on the quality of services provided. (*Strategic Framework for Water Services*, p 60)	(2) The municipality must through appropriate mechanisms, processes and procedures established in terms of Chapter 4, consult the local community before adopting the process. (3) A municipality must give notice to the local community of particulars of the process it intends to follow. (*Municipal Systems Act*, p 40)	

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
		Process to be followed **29. (1)** The process followed by a municipality to draft its integrated development plan, including its consideration and adoption of the draft plan, must — (a) be in accordance with a predetermined programme specifying timeframes for the different steps; (b) through appropriate mechanisms, processes and procedures established in terms of Chapter 4, allow for— (i) the local community to be consulted on its development needs and priorities; (ii) the local community to participate in the drafting of the integrated development plan; and (iii) organs of state, including traditional authorities and other role players to be identified and consulted on the drafting of the integrated development plan; (c) provide for the identification of all plans and planning requirements binding on the municipality in terms of national and provincial legislation; and (d) be consistent with any other matters that may be prescribed by regulation. (2.) A district municipality must— (a) plan integrated development for the area of the district municipality as a whole but in close consultation with the local municipalities in that area; (*Municipal Systems Act*, p 40)	

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
	WSDP ➢ The planning process must take into account the views of all important stakeholders, including communities, through a consultative and participatory process. Every effort must be made to ensure the adequate and meaningful participation of women in consultation forums. ➢ The draft plan must be made available for public and stakeholder comment and all comments made must be considered when preparing the final plan. ➢ The contents of the WSDP must be communicated to all important stakeholders, including DWAF. ➢ A water services authority must report annually and in a public way on progress in implementing the plan. (*Strategic Framework for Water Services*, p 41,42)	80 (2) Before a municipality enters into a service delivery agreement for a basic municipal service it must establish a mechanism and programme for community consultation and information dissemination regarding the service delivery agreement. The contents of a service delivery agreement must be communicated to the local community through the media.	85 (2) Before establishing an internal municipal service district, the municipality must— (a) consult the local community on the following matters: (i) The proposed boundaries of the service district; (i) the proposed nature of the municipal service that is to be provided: (iii) the proposed method of financing the

Water Services Act	Strategic Framework for Water Services	Municipal Systems Act	Municipal Structures Act
		municipal service; and	

Under **Municipal Systems Act**:

municipal service; and

(iv) the proposed mechanism for the provision of the municipal service: and

(b) obtain the consent of the majority of the members of the local community in the proposed service district that will be required to contribute to the provision of the municipal service.

(*Municipal Systems Act*, p 80)

Communication is referred to in various terms: 'the right to information', 'community consultation', 'participation of the local community'. For the purpose of this study the term 'community consultation' was used to refer to all types of communication between state and citizens.

The communication processes cited in the above legislation and policy documents all further the broad democratisation and developmental principles as set out in the Constitution. This places these communication processes in the theoretical space of development communication. The next section of this chapter gives an overview of the theories of development communication and their relevancy to South African public communication.

Overview of development communication models

There are many definitions of development communication to be found in the literature. According to Besette (Besette & Rajasunderam, 1996) the definitions have in common "the need for an exchange of information to contribute toward the resolution of a development problem and improve the quality of life of a specific target group".

Transmission models

Most of the early approaches to development communication were based on transmission models. Transmission models are essentially unidirectional and top-down in the sense that information is initiated and passed from senders to receivers. The diffusion and two-step flow models are discussed as examples of transmission models that have particular relevance to development communication.

The diffusion model

The diffusion model essentially describes how new ideas, products or methods spread among members of a social system over time (Agunda, 1999). It comprises four elements: 1) innovation, 2) communication through certain channels, 3) a time span and 4) diffusion of the idea or product use amongst the members of a social system.

The model has similar resembles characteristics to the hypodermic needle mass communication model, according to which the audience receives a generic message and if the 'injection' is powerful enough, it will influence the receiver in some way (Tubbs & Moss, 1994).

Servaes' (1995) and Moemeka's (2002) criticisms of the diffusion model are applicable to all transmission models:
- Communication is only identified as the transfer of information.
- The communication source can manipulate and control the receivers if it has vested interests.
- It is a *talking-to* model instead of a *talking-with* model.

The two-step flow model

A study by Lazarsfeld, Berelson and Gaudet in the 1940s concluded that exposure to election broadcasts turned out to be a relatively poor predictor of voting behaviour, in comparison with other factors such as their interpersonal communication with friends, union members, business colleagues and the political tradition voters had grown up in. This view of media effects was confirmed in a variety of other investigations and came to be known as the 'limited effects paradigm' of media influence (www.cultsock.ndirect.co.uk).

Consequently, Lazarsfeld and his colleagues developed the notion of a 'two-step' flow of media messages, a process in which opinions flow from the media to opinion leaders and from there to the remainder of the population (Tubbs and Moss, 1994).

Graphically the two-step flow model can be represented as in the figure below:
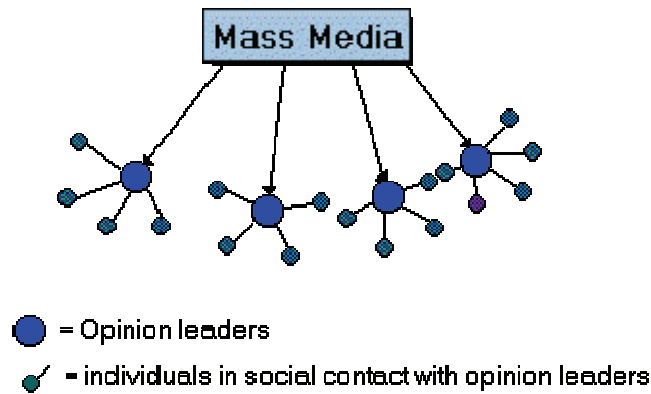

Figure 2: The two-step flow model

According to this model, mass media information is channelled to the 'masses' through opinion leadership. The more literate people, with the best understanding of media content, explain and diffuse the content to others.

Despite criticisms, the findings of Lazarsfeld and his colleagues' are still relevant today and are applicable to various types of communication including development communication (Weiman, 1991).

For example, Gauntlett refers to the current consensus that "the mass media may be effective for providing information and creating awareness, but that face-to-face channels are essential for behaviour change to be produced" (1995: 79). The implication is that development campaigns, aiming at influencing attitude and behaviour, should include face-to-face channels.

Viral marketing, via the Internet and 'word of mouse' (www.cultsock.ndirect.co.za), is a modern day example of extremely powerful two-step flow of communication.

Participatory models

During the last twenty years there has been a gradual shift in development communication to a two-way process that is interactive and participatory. The change in perception about the nature of the communication process, as well as the increase of democracy, facilitated the shift away from transmission models towards participatory communication and decision making on local level (Besette & Rajasunderam, 1996).

A participatory approach gives government officials and development agents the opportunity to listen to people and to learn from them (Moemeka, 2000).

The Transactional Model

According to Nair and White (1993) full participation of receivers with regard to inputs and decision making has in the past mostly been lip service. Subsequently, they have developed a participatory model that emphasises participation at the grass-roots level

in defining the local needs – thus leading to self reliance and egalitarian ideologies. It is called the transactional model.

The model can be defined as "the opening of dialogue, source and receiver interacting, continuously, thinking constructively about the situation, identifying developmental needs and problems, deciding what is needed to improve the situation, and acting upon it"(Nair & White, 1993). Figure 3 below depicts the model.
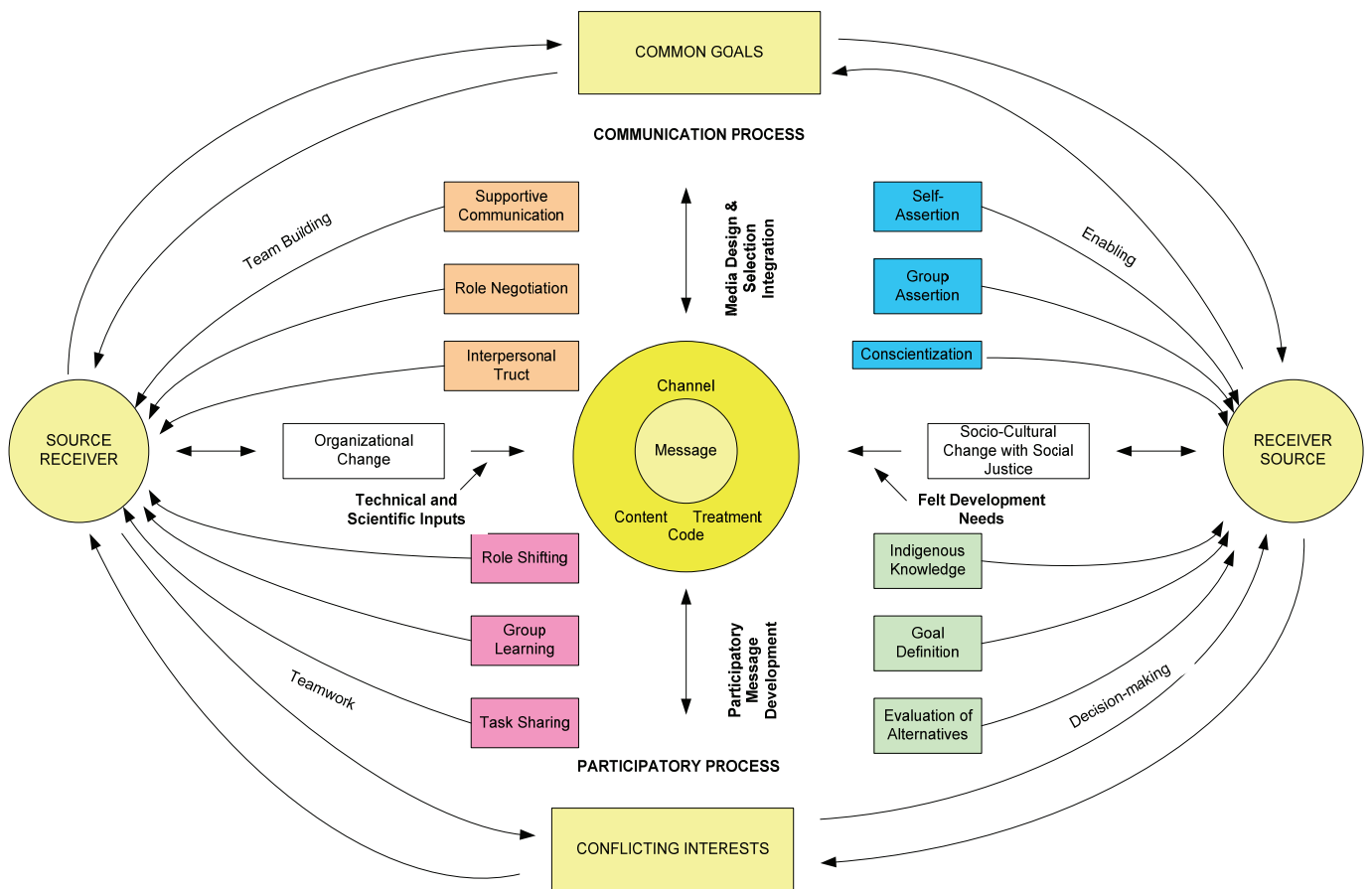
Figure 3: The transactional model

The receivers are not merely recipients of someone else's messages, but are actively involved in the process of message development, elaboration and delivery. The needs of the receivers are identified jointly by the receivers of the message and the developer or communication practitioner. The choice of message is based on a solution of a problem identified by the recipients and communication practitioners. The message is shaped by drawing on technical input from the source and indigenous knowledge from the receiver.

The model introduces an interaction of 'top down' and 'bottom up'; in fact, receiver and source roles are continuously shifting.

Feedback is modelled as a two-way process and reflects the inherent characteristics of dialogue such as contradictions and complements (the outer circle of arrows).

Teamwork, team building, decision making and enabling are all part of the two-way, dynamic interaction that takes place between 'grass roots' receivers and the 'information' source (Nair & White, 1993).

Relevancy to South African public communication

The Government Communication Handbook (Anon, 2000) makes it very clear that all government communication in South Africa should be, in essence, developmental. It defines development communication as "communication which takes into account the needs of society, the developmental goals of government and general empowerment of the citizens".

The guidelines given in the Handbook are in line with participatory models of communication, for example:
- The central message should always be to improve the quality of citizens' lives
- Communication should never be a one-way process, but should always involve feedback from the public
- The message must show how the information transmitted will make a difference in peoples' lives
- NGOs, CBOs and Traditional Leadership structures should be involved
- Common ground should be established with recipient communities
- Plan with communities
- Plain and relevant language should be used, and the community's language should be adhered to.

Government Communication Handbook (Anon, 2000)

Development communication in the international context: a historical perspective

Internationally, there have been several applications of the above models in development communication. In line with the evolution of development communication models, development practices gradually recognised "the need to move from communication practices based on the one-and-only model of information transmission removed from the community processes, to practices involving the grassroots in their development" (Besette & Rajasunderam, 1996).

The concept of development communication arose within the framework of the contribution that communication and the media made to development in the countries of the Third World. In the 1950s and 1960s, the United Nations Educational, Scientific and Cultural Organization (Unesco) and US AID (the American Aid Agency) sponsored numerous projects utilizing the media for communication, information, or educational purposes, with a view to facilitating development. Other major United Nations agencies, like the Food and Agriculture Organization (FAO), the United Nations Development Programme (UNDP), and the United Nations Children's Fund (UNICEF) also got into the act, and subsequently promoted communication within the framework of development project implementation. (Besette, 1996:2)

Various paradigms of development communication developed over time:

> The modernisation paradigm: The first two decades of development communication were characterised by the idea that the first world (the North) could disseminate its knowledge and the technologies to third world countries in order to modernise them. This paradigm relies on the communication model based on persuasion and information transmission, and on a development model based on increasing economic activity and changes in values and attitudes. However, gradually applications shifted to a greater recognition that societies are responsible for their own development and that development is not something that can come from the outside only. This

allowed the concept of development to broaden to include notions of social equality, liberty, revenue distribution, grassroots participation in development, etc. Grassroots participation became the key concept in the development process.

➢ The dependence paradigm is in essence a criticism of the modernisation paradigm and it is based on the fact that the third world did not modernise as expected, but appeared to be sliding further into poverty and bad living conditions. "According to this paradigm, obstacles; to development come first and foremost from external, not internal, obstacles: that is to say, the international economic system. Consequently, the mass media cannot act as agents of change, since they transmit the western message, and the capitalist and conservative ideology. This paradigm, which is still in existence today, was also criticised because it put too much emphasis on the contradictions at the international level and not enough on the contradictions at the local and the national level. The resulting discussions and recommendations regarding the 'new information order' related to this paradigm" (Besette, 1996: 5).

➢ The paradigm of another development: This paradigm emphasises not only material development but also the development of values and cultures. Where development communication interventions are concerned, it emphasises the small media operating in networks and the use of grassroots communication approaches. According to this paradigm, grassroots participation reinforces the chances that communities will adopt activities appropriate for them. The utilisation of community media extended in campaigns that were developed within the framework of this paradigm.

> Subsequently, in the 1970s, people turned to the role of communication in supporting development activities and specific projects (family planning, oral rehydration, basic health care, agriculture, etc.). Attention then turned to the potential of small media and community media: participatory videos (Global Village in Bangladesh, Belkins in Tanzania, DNAFLA in Mali, CEPAC in Peru, CEDIP in India), audio cassette forums, and traditional media (theatre, puppet shows, stories, etc.). People also placed more emphasis on the contribution of communication to the promotion of democratic and social rights, which led to the development of community radio and communication agencies in the South dedicated to these aspects. (Besette, 1996: 15)

The fight against AIDS and the promotion of condom use saw a return to the large-scale use of the mass media, for example, interactive school radio projects in Latin America and Africa, and the promotion of a television for development (project WETV and project SATURN GLOBAL) (Besette & Rajasunderam, 1996).

Recently, development communication started to implement new communication technologies (satellite, telephone, e-mail, etc.). There is also a new appreciation of the knowledge held by First World countries in the implementation of communication units within government structures for the purpose of analysing needs, training of personnel, and production of training materials (Besette & Rajasunderam, 1996).

The choice of the appropriate paradigm and model is not always an either/or choice. International examples of development communication often follow an eclectic approach to the selection of appropriate communication channels and products, combining both transmission and participatory approaches. The School Water Supply, Sanitation and Hygiene Education programme initiated by the Indian Ministry of Rural Development in 2003/4 is an example of a communication campaign that has used an eclectic approach to communication. It included activities such as a large-scale needs assessment, village communication campaigns, sensitising small target groups,

orientation of parent groups, establishing school health clubs, and daily school themes and visits.

Development communication in the South African government context

The South African government initiated several major public development communication campaigns over the past 12 years. Below is a list of some of these campaigns:
> Voter education (1994)
> Elections (1994
> Batho Pele (1997)
> Proudly South African (2001)
> 10 years of democracy
> Transport:
>> Be legal (2001)
>> Don't carry HIV/AIDS home (1999+)
> Tourism
>> Tourism month (2001) : theme: to travel is to see; message: discover your country; discover yourself
> DPLG
>> Local elections
>> Free basic services (2005/6)
> GCIS
>> A growing economy for all (2006)
>> Safety and Security for all (2006)
>> Speeding up access to Social Services (2006)
> Department of Water Affairs and Forestry
>> Water Services
>>> ▪ Free Basic Water (various campaigns), 2006: FBW roll out with new vigour
>>> ▪ WASH (2003)
>> Water Resources:
>>> ▪ How to manage, conserve and sustain water and forestry resources (2003/4)
>> Forestry: FireWire campaign – risk of starting unwanted wild fires (2006)
>> Other: 10 years of a better life for all (linked to national campaign)

This study focused on two major communication campaigns of the Department of Water Affairs and Forestry that have dealt specifically with Water Services, Free Basic Water and WASH.

In the analysis of two Water Services communication campaigns in the next chapter, the study will analyse the various communication mechanisms that were utilised in the planning of these campaigns, in terms of the theory and models of development communication. For each of the campaigns the following aspects will be discussed:
>> Objective of campaign/consultation
>> Link with the Constitution, relevant policies and legislation
>> Theoretical approach
>> Target group(s)
>> Key messages
>> Channels and communication products used
>> Expected outcomes

Outcomes sought in public communication campaigns are typically awareness, attitude change, or behavioural change. Although huge amounts of money are spent on public communication campaigns, the outcomes/results/success of public

communication campaigns are seldom assessed. There is no evidence of how many members of the target public read the publications or listened to the radio messages, understood them, believed them, or changed their attitude or behaviour as a result of them. This will only become known through evaluative research.

The next section discusses models for the evaluation of development communication.

Evaluating development communication

Various models have been developed to evaluate the outcomes/results (success) of communication campaigns, for example:

> PII model (Preparation, Implementation, Impact) (Cutlip et al., 1995). Preparation assesses the adequacy of background information, the appropriateness and quality of the message. Implementation looks at the number of messages sent to the media and who received them. The third leg of the model, Impact, evaluates changes in opinion, attitudes and behaviour.

> The Continuing Model of Evaluation (Tom Watson, 1997 [in Watson & Noble, 2005]).

> The Unified Evaluation Model (Paul Noble & Tom Watson, 1999 [in Watson & Noble, 2005]).

> Lindenmann's yardstick (1993) also has a three-level approach. The first level measures outputs, such as media placements. The intermediate level judges the number of messages received by the target audience, and the advanced level examines outcomes, such as attitude changes.

> Macnamara's Pyramid model (Jim Macnamara, 1992-1999).

The Macnamara model has been used more widely than the other models and, since it is also the most applicable to development communication theory, it will be used in this study.

The Macnamara model

Macnamara's Macro Model (1993), or as later versions became known, the Pyramid Model, presents a pyramidal form with three layers of a communication campaign: inputs, outputs and results. The model therefore recognises communication as a multi-step process. A very practical characteristic of the model is the research methodologies (on the right hand side of the pyramid) that it proposes. These can be applied to each of the step, in order to develop a comprehensive evaluation process.
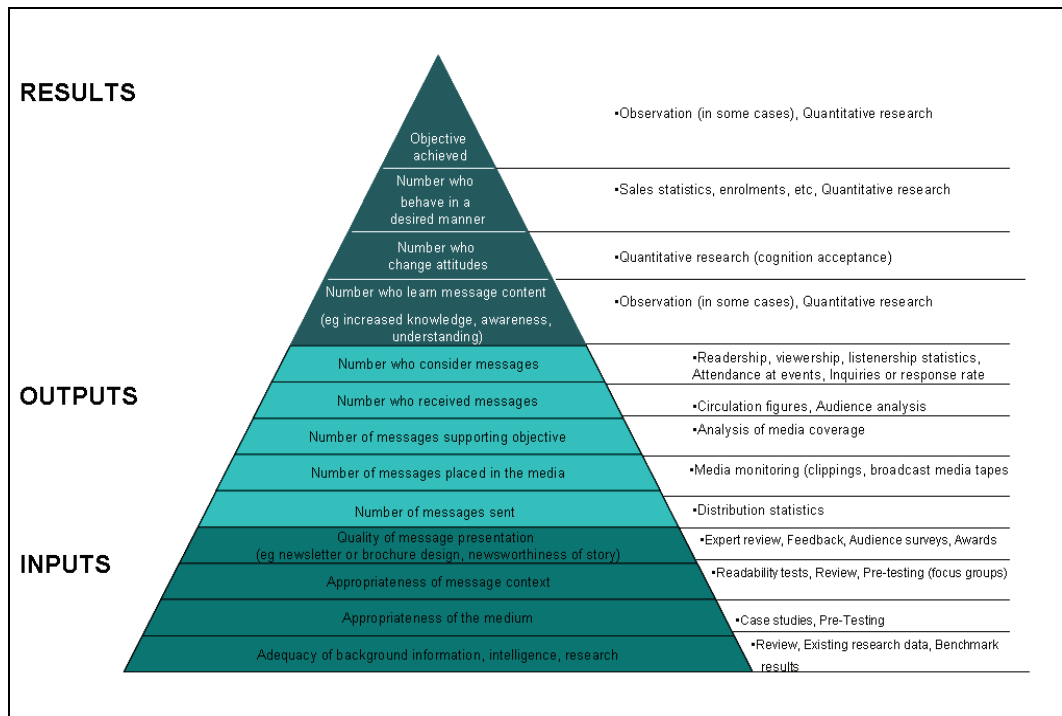
Figure 4: Macnamara's pyramid model

Inputs refer to the planning and pre-testing processes that go into a campaign. In the participatory model the target audience is involved in the planning and pre-testing process.

Outputs are the immediately visible communication products, for example a brochure, poster, radio message, television advertisement, workshop, etc. According to Macnamara (1993) outputs are "any number of quantifiable items that are generated as a result of the effort". The top level of this layer of the pyramid borders on a Result and can be included either in Outputs or in Results. Four methods are most frequently used to measure impact at the Output level: Media Content Analysis, Cyberspace Analysis, Event Measurement, and Public Opinion Polls (Lindenmann et al., 1997). Media content analysis determines whether the key messages, concepts and themes disseminated to various target audiences, via media, have been received. In South Africa communication campaign outputs can be assessed against the AMPS (All Media Products Study) figures in order determine whether a campaign used the appropriate media selection for a specific target audience. Cyberspace analysis refers to the analysis of website visits and the types of actions that visitors performed. Event Measurement assesses, typically, the number and type of attendees at, for example, public meetings, or street theatre shows, or the number and types of phone calls during a phone-in programme. Public opinion polls are often carried out in an effort to determine whether or not the key target group has been exposed to particular messages or themes.

The assessment of the Results or Outcomes of a communication campaign measures whether the target audience group has actually understood the messages, and retained them in some shape or form. Results/Outcomes also "measure whether the communications materials and messages which were disseminated have resulted in any opinion, attitude or behaviour changes on the part of these target audiences to whom the message were directed" (Lindenmann, 1997). Research techniques used to measure results/outcomes include quantitative surveys, focus groups, ethnographic studies, experimental research projects, and multivariate studies. Usually, it involves different techniques for different types of results/outcomes; for example, awareness

and comprehension measurements, recall and retention measurements, attitude and preference measurements, and behaviour measurements (Lindenmann et al., 1997).

A comprehensive evaluation of a communication campaign should take all three levels of the pyramid into consideration, utilising the research methods indicated.

This study will follow the Macnamara model to evaluate the outcomes of key Water Services campaigns. This study makes use of qualitative methods to assess inputs and outputs of the major communication campaigns of Water Services. A barometer has been constructed in order to quantify, with a composite score, the results/outcomes of these campaigns. The research will measure the target public's knowledge of Free Basic Water, the right to water and institutional roles, as well as their attitudes and behaviour regarding health, hygiene and responsibilities. The composite scores will provide a 'barometer' of the outcomes of these campaigns. It will also indicate areas of strength and weakness.

The barometer is discussed in depth in the introduction to the survey results (chapter 5).

Overview of findings of existing evaluations of public communication

Very few examples were found of evaluations of any of the three levels of the Macnamara model in public communication in the South African water services sector. In the instances found, it was not the purpose of the study to evaluate the results of community consultation.

Potter and Skinner (1999) evaluated community water supply and sanitation projects in terms of their sustainability for the Mvula Trust. A qualitative approach was followed. One of the most important findings was the positive impact of communication and information dissemination on the sustainability of projects. The study evaluated a number of communication inputs. It found, for example, that Village Water Committees, as a centralised community representative structure, do not disseminate the necessary information or obtain community input to decision making. Decentralised communication and decision making has been more effective. "Project agents, both social and technical, will have to work directly with community members to ensure proper input to decision making and information dissemination (Potter and Skinner, 1999:5).

In 1995 DWAF and DFID jointly formulated five Water and Forestry Support Programmes (WFSP) with the overall goal to improve livelihoods and reduce poverty. The Water Services component of the programme aimed to provide support to the Water and Sanitation Services sector with specific reference to Local and International Best Practice in customer care and protection.

One of the key outputs was an investigation into customer care and protection from the perspective of consumers. A quantitative study was undertaken which comprised an area-stratified probability sample of 2474 households. The sample covered all population groups; adults of 16 years and older, as well as metros, cities, towns and villages. It did not include the rural areas.

Some of the findings of the study reflect the level of awareness of consumers regarding a number of water services issues, and are already an indicator of what can be expected from the barometer.

Consumers' awareness of their rights with regard to water and sanitation services

An open question was asked: *What do you think are your rights as a consumer with regard to water and sanitation services?*

Respondents' answers were grouped and coded. Multiple answers were possible; percentages therefore do not add up to 100.

Feedback from field worker debriefing: Respondents generally displayed a low awareness of rights with regard to water and sanitation services, and the question had to be explained to them.

The figure below gives the percentages for the highest scores.
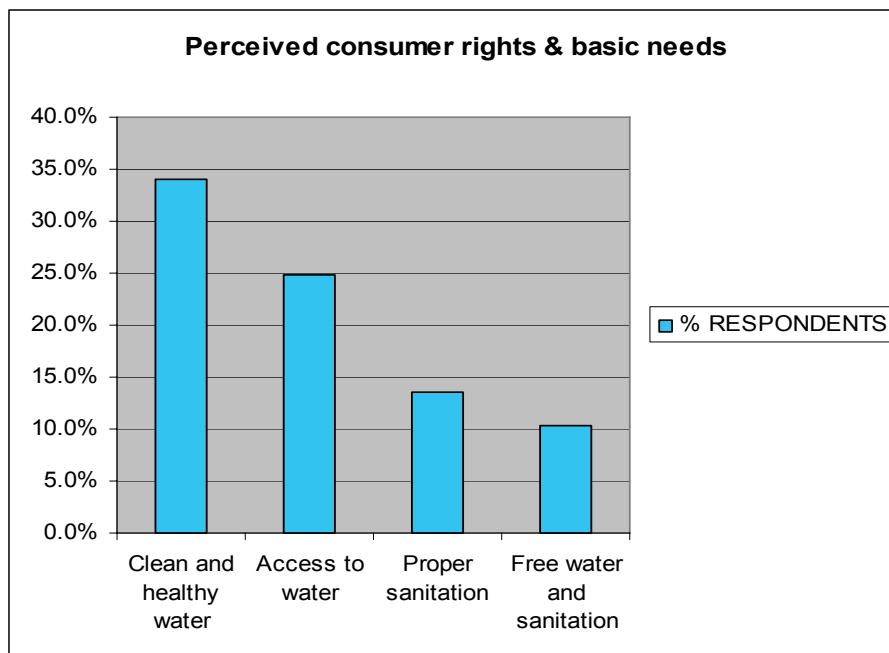
Figure 5

Access to information: Most commonly used communication channels

The question was: Which of the following do you do when you experience water or a sanitation problem? The chart below summarises the results.

Most commonly used communication channels - ALL
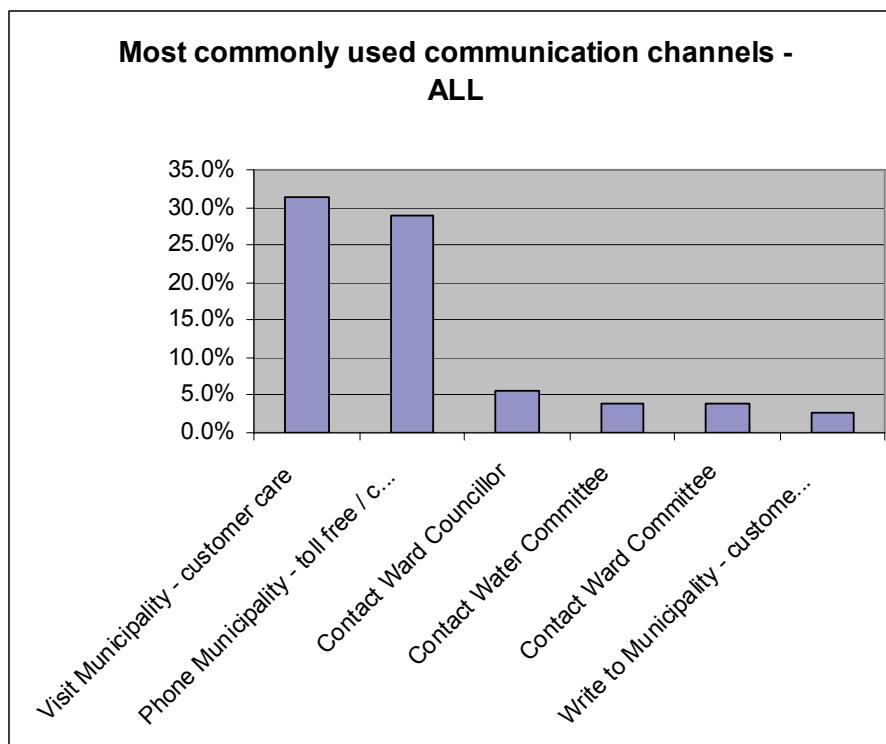
Figure 6

The selection of communication channel is both a function of income/LSM group and preference of cultural groups. It is difficult to make a distinction between the two:

− The use of the telephone correlates with higher income groups/higher LSMs and probably relates to the availability and cost of telephones.

− All demographic categories give a high preference for face-to-face interaction when they encounter a problem.

− Black people and Indians are more likely to contact civil structures such as water committees, Councillors or even tribal authorities when they encounter a water or sanitation problem, than Whites and Coloureds are.

− Disturbingly high percentages of customers don't know what to do or do nothing when they experience a problem. This percentage correlates with socio-economic position.

Knowledge of contact details

Question: *Do you know what number to phone or where to go at the municipality when you experience water or sanitation problems?*

DO YOU KNOW WHERE TO GO OR WHAT NUMBER TO PHONE IF YOU HAVE A PROBLEM?

YES
43%

NO
57%
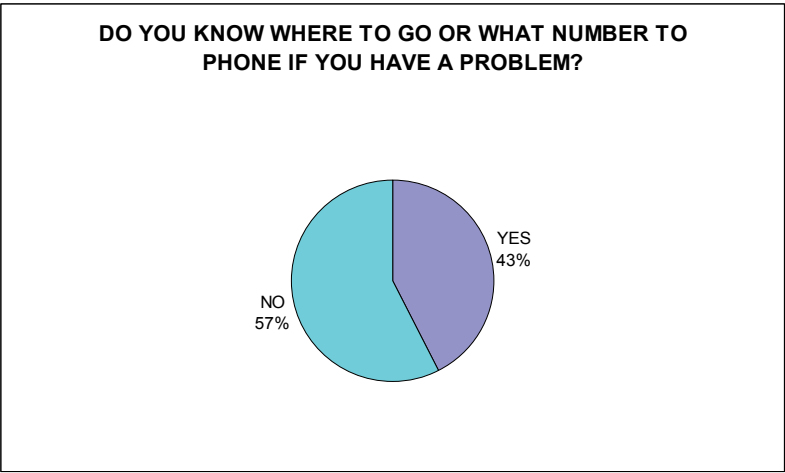
Figure 7

Awareness of Free Basic Water

Question: *Does the municipality supply your household with 6 kℓ free water per month?*

Does your household receive 6 kℓ free water per month?

Yes
33%

Don't know
37%

No
30%

- Yes
- No
- Don't know
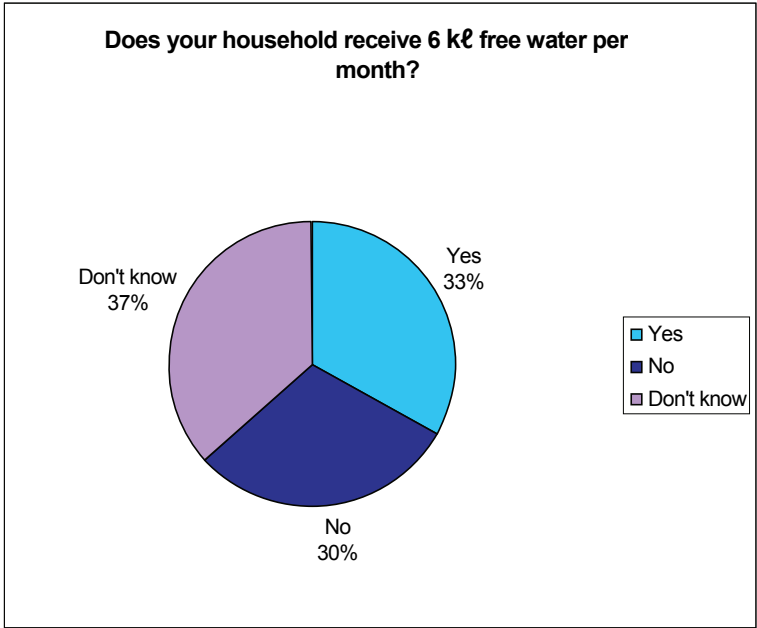
Figure 8

The respondents in this study were urban consumers. The qualitative research has indicated that most WSAs/WSPs prefer to give 6 kℓ of water free to all their customers because of the practical difficulties with indigent registers. One can therefore assume that the majority of respondents who have given these answers indeed receive 6 kℓ of water per month free of charge. Johannesburg, for example, provides all households with 6 kℓ water per month free of charge; yet 33.3% of customers from Johannesburg said 'no' they don't receive free basic water, and 48.6% said that they 'don't know'.

The high percentages indicating that they 'don't know', are probably also indicative of customers' difficulty to access information from bills.

Respondents do not understand the contractual implications implicit in the policy of Free Basic Water very well. They confuse Free Basic Water with free water.

Level of vulnerability – the disempowerment factor

A large section of consumers are disempowered and uninformed and, as a result, highly vulnerable, as the bulleted list of figures below illustrates:

- "I don't know what my rights are" (7.2%)

- "I do nothing when I experience a water or a sanitation problem" (17.3%)

- "I don't know what to do when I experience a problem" (8.9%)

- "I don't know the number of the municipality or where to go when I experience a problem" (57.4%)

- "I don't know if I receive Free Basic Water" (38.8%)

The disempowerment factor is exacerbated for the lower income/LSM groups as the figure below illustrate:

Disempowerment factor - PER INCOME GROUP

Legend:
- Don't know contact number or where to go
- Don't know if receiving FBW
- Do nothing when experiencing problems
- Don't know what to do in case of problems
- Don't know rights

X-axis categories: R8000+, R4000-R7999, R800-R3999, R1-R799
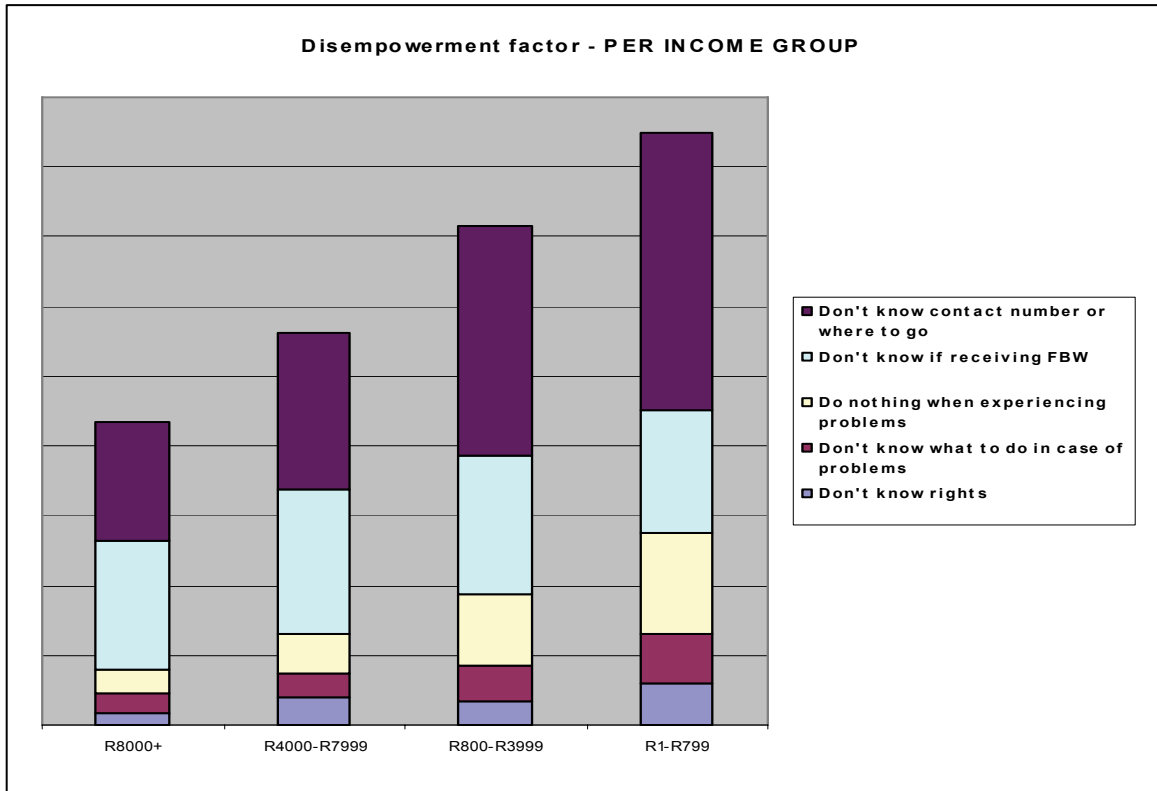
Figure 9

As a follow-up on the DWAF/DFID Customer Care and Protection study, Water Services Regulation commissioned in 1995 a national consumer survey. The study was conducted by the HSRC. The study included questions that tested consumers' awareness of Free Basic Water, for example. Unfortunately the results of this survey were not released and can therefore not be quoted.

The above findings are indicative of the need for a study that will measure the South African public's knowledge, attitudes and behaviour regarding key water services issues in such a way that it provides a barometer of the outcomes of the major communication campaigns of the sector.

4. Findings of qualitative research

This chapter gives an overview of the state of community consultation in the water services sector from two perspectives:

a. The perspective of key persons in DWAF and DPLG who are, or have been, responsible for community consultation campaigns

b. The perspective of six municipalities that have undertaken major community consultation projects

Creating public awareness: the perspective of key sector stakeholders

Introduction

Ten in-depth qualitative interviews were conducted with key persons in DWAF and DPLG. The following persons were interviewed:
Ms Cindy Damons (DPLG – Free Basic Services)
Ms Rachelle Greeff (Acting Director, Communication Services (DWAF))
Ms Kavitha Kassie (WS Regulation, DWAF)
Ms Bongiwe Msane (WS Regulation, DWAF)
Mr Abrie Vermeulen (Policy and Legislation, DWAF)
Ms Shantal Harigobin (Policy and Legislation, DWAF)
Mr Hugh Sussens (Local Government Support, DWAF)
Ms Senzi Shongwe (Local Government Support, DWAF)
Ms Rosetta Simelane (Local Government Support, DWAF)
Mr Masia Mgwambani (Sanitation, DWAF)

DWAF Water Services Regulation's consultation programme covers a whole range of their stakeholders, other government departments and civil society. For the interviewees it was critical that the general public understand both their rights and responsibilities regarding water services. The Citizen's Voice project aimed to educate consumers about rights and their responsibilities. It also aimed at assisting communities to create a forum where they can access help from the municipality when they have a problem with water services. (This project will be discussed in greater detail under the case studies). The other major project is the annual Water Services Consumer Survey where 5000 households across the country were interviewed to determine the status of service delivery (interviews with DWAF officials).

Policy and Regulation develop communication material mostly for practitioners in the sector, but they also consult with the public and have various ways of consulting with the sector stakeholders. Usually, when new legislation or a policy document is published, DWAF consults internally with the regions and with the sector leaders. And

then they do a public consultation process, which could be an advertisement in the paper, or they would ask the regions to identify people and then they do a workshop.

For instance, a guideline for local government would automatically be sent to SALGA. SALGA would take it further to municipalities, who would consult their consumers.

> For the Strategic Framework for Water Services we developed pamphlets. And for the old Water Services Act we did a colourful brochure. It goes to the regions and they decide how it should be distributed. We don't deal so much with the general public.
>
> Yes, we assume that people know that (water is a constitutional right). Certainly a lot of them do, but it would be interesting to see what people's perceptions are.
>
> There has been no research as to what the public knows.

According to DWAF, sanitation communication is project specific and aimed at specific target groups. Communication is usually aimed at municipalities and channelled through SALGA. For example, for the bucket eradication project, specific critical areas were identified, written information (e.g. various guideline documents, such as operation and maintenance guidelines and technological options) were developed in collaboration with Communication Services. Communication Services assisted with editing and layout.

The WS Councillors project provides sanitation-specific information for councillors. They are expected to share this information with consumers in their constituencies.

Two major public campaigns were undertaken by the water services sector during the past 5 years, Free Basic Water (as part of Free Basic Services) and WASH, the health and hygiene campaign. The two campaigns are discussed below in terms of the following:

- Objective of campaign/consultation
- Link with Constitution, relevant policies and legislation
- Target group(s)
- Key messages
- Involving the target audience
- Outputs: Channels and communication products used
- Expected outcomes/results
- The value that this research will add, and the specific questions that they would like answers to.

Free Basic Water

The Free Basic Services (FBS) programme policy was adopted in 2000 after President Thabo Mbeki announced government's intent to provide free access to basic services to the poorest of the poor to enhance the fight against poverty. The focus areas are free basic water, energy, sanitation and refuse removal. The responsibility for the development of policies for different services, as well as the communication thereof, lies with the respective sector departments. The Department of Provincial and Local Government (DPLG) plays a crucial role in coordinating and overseeing the implementation of the FBS. The DPLG, coordinating department of Free Basic Services, together with the sector departments, compiled a draft

communication strategy in 2003/4; however this strategy was reviewed in 2006 and the result is the revised new Free Basic Services communication strategy.

The Department of Water Affairs and Forestry (DWAF) was the first sector department to roll-out Free Basic Water services to those without access to safe water. DWAF commenced an awareness campaign in 2001, communicating the free basic water policy.

The stakeholders of the Free Basic Services programme range from the DPLG (playing a coordinating role) right through to communities who are beneficiaries of free basic services projects. The target audience for the Free Basic Services communication strategy is thus very broad and diverse.

A comprehensive communication strategy was developed in 2002. The DWAF Free Basic Water campaign comprised the following:
- Between March and May 2001 a total of plus-minus 20 FBW LG workshops were held to discuss key issues for local government;
- A Local Authorities kit;
- A public campaign, including a media campaign and street theatre events during which caps and t-shirts were distributed;
- Posters were printed and sent to municipalities;
- By the end of 2002 the last information pack was developed. In the meantime there were several media releases;
- Municipalities were provided with promotional material that they could hand out to consumers; and
- A total of R8 million was spent on the FBW campaign.

Key messages

- What is the objective of the policy of Free Basic Services and of Free Basic Water specifically?

- What does Free Basic Water mean – the focus was on the amount of water that would be provided free of charge?

- Who qualifies for free basic water?

- Whose responsibility is it to provide Free Basic Water?

Target audience

The campaign was aimed at the general public with emphasis on LSMs 1-6.

Involving the target audience

The target audience was not directly involved in the development of the media campaign. However, feedback received from the workshops held with local government provided important input the development of the media campaign.

Expected outcomes

"One would expect that 50% of the population knows what Free Basic Water is" (DWAF).

Issues to be included in barometer study

As there was no formal evaluation of the campaign, the interviewee felt that it would be useful to test awareness of FBW as well as people's understanding of the concept of FBW in the barometer study.

"We also want them to know what free basic services are, as well as the process that they need to follow to receive those services," said Ms Damons. For DPLG, it was therefore also important to know what the awareness and understanding of FBW were amongst the general public, as well as the levels of awareness of institutional roles. Do people, for example, know that the municipality is responsible for their water services?

Measuring results

Both DPLG and DWAF mostly rely mainly on the All Media Product Survey (AMPS) audience figures to extrapolate how many people were exposed to their messages.

> …there is a standard monitoring and evaluation process, for example, every time someone listens to the message over the radio, that message is communicated to at least six other people".

Feedback from the general public in the form of letters and phone calls is a further indicator of results, but as this is not monitored systematically no figures could be given.

WASH

Key messages

WASH messages
- Water Week: the three Rs:
    - Reduce the amount of water you use every day. Save water. Think of innovative ways to use less water
    - Re-use water whenever you can
    - Repair leaks. Check that all taps and pipes are leak-free
- Make your water safe to drink
    - Collect fresh water every day
    - Filter the water through a clean cloth
    - Boil – let it bubble for one minute
    - Add 1 teaspoon bleach to 25-30 litres of water. Leave for 1 hour before using
    - Store in clean closed container
- Wash your hands with soap:
    - Before you prepare food
    - Before you feed children or eat
    - After you have been to the toilet
    - After you have changed a nappy
- Prepare safe food

> ➢ How to deal with diarrhoea
>
> ➢ How do I care for my toilet?

In addition: Water week 2005 also communicated the following messages:

➢ According to the Constitution everyone has the right to have access to sufficient water to live. (Part of our right to life is the right to have water).

➢ Individuals or groups cannot own water. Water belongs to all.

➢ Keep our water resources clean – do not pollute our rivers and streams paint and chemicals down the drain.

➢ Farmers must ensure that they keep toxic insecticides away from water sources and streams.

➢ Factories should take care of how they discharge mercury and other heavy metals into waste water.

➢ Rural people should not use the river or river bank as a toilet.

➢ South Africa is a water scarce country. Our average rainfall is about half the world annual average. Therefore we need to save and conserve water.

➢ Diarrhoeal diseases claim the lives of many children every year. Handwashing saves lives.

What informed your specific messages

The Constitution

The Water Services Act

The Free Basic Water Policy

The Strategic Framework for Water Services

> We work closely with other departments, e.g. the Department of Health, and the line functions in DWAF. All content is developed in close cooperation with the line functions in DWAF.

Involving the target audience

The development of the message and the exact manner in which it is phrased was a consultative process. There was criticism from Mvula Trust about the pictures in the campaign material. DWAF Communication Services conducted 20 focus groups with the target population prior to the WASH campaign. In that sense the target population participated in the development of the campaign. The focus groups discussed the messages in depth and DWAF received valuable feedback from the target group with regard to various cultural traditions. The discussions confirmed that the use of pictures was correct. It was extremely important that the words and the pictures matched. DWAF tested this and made several adjustments.

The target audience

The focus of the WASH campaign was on LSMs 1-6. Most of the resources were focused on these groups. DWAF Communication Services also focused specifically on

rural people and school children. These groups were found them to have a similar need for interaction; therefore opportunities were created for them to engage with the material.

No research of the target group was done prior to the communication. The campaign strategy relied on the AMPS information.

Expected outcomes and measuring results

It is extremely difficult to test the success of a campaign where the expected outcome is a change in behaviour or an improvement in behaviour, as it is virtually impossible to observe behaviour, especially with something as sensitive as washing your hands after going the toilet. The Communication Directorate based their measure of success on the feedback received from the target audience. They have a contact number on most of their communications. Currently the toll free number of the DWAF goes on all communications.

Issues to be included in barometer study

A key message of the WASH campaign was 'how to ensure that your drinking water is safe'. "We would like to know what are people levels of knowledge and awareness of this." (DWAF). Another key message was healthy and hygienic toilet habits; for example, the importance of washing your hands with soap and water after you have been to the toilet. The questionnaire assessed respondents' knowledge and behaviour regarding both these messages.

Case study 1: Cape Town Metro – Citizen's Voice project

Raising citizens' voice in service delivery is not a choice, but rather a necessity for the sustainability of water services in South African municipalities. This project is premised on a belief that greater public involvement in service delivery can contribute to a better understanding by citizens of how service delivery works. It can also lead to a better understanding by service providers of where there are weaknesses within their water systems and what citizens consider necessary to improve the performance of water service delivery. This knowledge can then translate into increased consumer responsibility with regard to the conservation of scarce resources, and also to increase compliance with regard to payment.

The project pilots a model framework for enhancing citizen's voices in the local regulation of water services in the Western Cape. If successful, it is envisaged that this model will be tested in two other provinces, and eventually be mainstreamed and adapted more widely across the country.

Objectives
The main objectives of the project are:

Raising consumer awareness and capacity:
➢ develop citizens' understanding about how services work in the City of Cape Town, i.e.: increased consumer understanding of what goes into the cost of the service people are billed for, and whether these costs are seen as fair;
➢ develop citizens' sense of responsibility in the household management of water services;
➢ raise awareness of rights with regard to reliability and quality of the service.

Provider awareness and capacity
➢ develop increased awareness within the service authority of the affordability threshold in the city and ensure that this awareness is translated into tariff

discussions/negotiations within the municipality and between residents and the municipality;

➢ develop increased awareness within the service authority about the site-specific levels of dis/satisfaction with water services, including identification of areas of non-compliance by the service provider.

➢ deepen the engagement between the service authority and citizens to identify options for seeking solutions to community-identified service delivery issues.

➢ increase awareness of where service delivery problems lie within the selected areas.

Institutional Innovation

➢ Create institutional mechanisms to ensure effective communication/feedback loops between the provider/authority and service user.

Deliverables

➢ Methodology report on how to involve civil society in water services regulation;

➢ Workshop presentations of results of project, and suggestions for replication of the methodology;

➢ Mid-term report presenting achievements and constraints with 1) township communities selected for the project; and 2) Water department, City of Cape Town;

➢ Final report on the project, incorporating feedback from the workshop;

➢ Publication of the training modules that can be used in subsequent pilots.

Institutional relationships to be established:

➢ Local Government: City of Cape Town
Water Department
Contract/Shareholder Management Unit (City Secretariat)
IDP office

➢ Provincial Government: Western Cape DWAF Regional Office

➢ Civil Society:
NGO coalitions will be built through the Western Cape South African Water Caucus, hosted by the Environmental Justice Network Group (EJNF);
Relationships with CBOs will be built through identification of relevant community structures in the selected areas for this project;

➢ Academia: Partnerships will be sought through involvement of graduate students from Environmental Science and Geography department of the University of Cape Town and the Socio-Economic Rights project at the Community Law Centre, University of the Western Cape.

Activities:

1. Preparation

➢ Establish intergovernmental support for this project through a reference committee consisting of National, Regional and Cape Town officials and or politicians;

➢ Ensuring buy-in and cooperation from the City of Cape Town Water Department;

Four areas within the City will be the sites for this pilot in developing the citizen's voice. These areas will be selected in conjunction with the water department. Possibilities that have been explored are:

1) Langa-African Township (Strong community structures in place)
2) Khayelitsha-African Township (Strong community structures in place)
3) Denune-Informal settlement on fringe of an African Township in Milnerton, Blaauwberg (very poor quality of services and largely reliant on formal township services)
4) Lentegeur (Mitchell's Plain)-Coloured Township with good community structures

The project works with existing community structures in each of the selected sites with the aim of integrating a consumer overseeing role.

2. Roll-out of project

The roll-out of the project involves the following activities:

2.1 Developing training modules for citizen involvement in regulation. This includes a focus on rate-setting, access, operation and maintenance:

● explanations of how water services work;
    1. Pricing of water and wastewater services, connection and delivery
    2. Customer service in response to problem reports; billing methods
    3. Quantity: setting standards of service (including leak control, illegal connections, service termination, intermittent service, efficient wastewater removal, conservation initiatives)
    4. Regulatory follow-through: ensuring quantity standards are met

● what basic rights citizens are entitled to with regard to water and sanitation services;

● what service delivery anomalies to look out for and report on;

● how to frame issues so that they are utilised by relevant authorities;

● how to access the relevant authorities for pertinent information;

● explorations of how to institutionalise this type of monitoring/reporting activity;

● international visits from locations that have demonstrated best practice in citizen involvement in regulation, i.e.: Brazil (Recife, Porto Alegre), Cochabamba (Bolivia), Tamil Nadu (India), Caracas (Venezuela).

This training module was tested in various community structures within each of the four areas mentioned below. International participation in selected training modules was opened up to a broader number of stakeholders such as municipal officials, workers, politicians and NGOs.

2.2 Developing the institutional architecture within the Cape Town City Council to ensure that the issues raised through this initiative are integrated into appropriate overseeing mechanisms of service provision with the intended effect of improving the overall quality of services. This involves providing support to the City of Cape Town to nurture an autonomous Water Service Authority function so that the monitoring and evaluation function can be more clearly delineated from operational activities. Activities related to this are:

● Reviewing and commenting on the department's customer satisfaction survey to ensure that questions relevant to this project are integrated;

● Assisting with developing the authority's organizational scorecard's that will monitor performance;

- Assisting with designing the functions of the authority and ensuring that part of this is dedicated to receiving and channelling the consumer voice into appropriate interventions with the provider;
- Working with the department's Water Inspector's and Community Liaison Officers (not hired as yet) to play an active role in this project.

2.3 Developing a communication system to facilitate information exchange between the City of Cape Town's water department and/or relevant service authority unit and citizens. This area of activity is critical to sustaining citizen interest in regulating service delivery. Citizens need to know that their participation bears fruit in terms of transforming how services are delivered[3]. While creating the appropriate accountability mechanisms for following up on the relevant issues raised by citizens is important, it is equally important to relay back how these issues are addressed.

3. Sustainability

3.1 Mentoring the relevant personnel within the City of Cape Town and the Western Cape DWAF regional office will institutionalise the above set of activities. This will ensure the sustainability of these activities beyond the life of the project, with the hopes of citizen's voice in the regulation of service delivery becoming a norm in the day-to-day activities of service delivery in the City of Cape Town.

3.2 Research via a second round of household surveys is also planned in order to determine the impact of the project in fostering citizen interest and capacity in water services regulation.

4. Replication of the model

In order to ensure that this model can be replicated elsewhere, the coordinator of the project is responsible for drafting a framework for how the model has worked in Cape Town. This will form the basis of an understanding for developing a conceptual model for application in two other provincial localities. Research will be necessary to ensure that the models developed are context-specific, and are rolled out successfully.

Case study 2: Khanyisa – eThekwini's community project

Objectives

eThekwini launched this project to:

- Communicate with customers in order to explain to them options for addressing their debt situation

- Educate customers on how to reduce their consumption and resultant high bills

- Offer technical solutions which empower customers to keep within their free basic water limits

- Reduce debt levels within the water department and ensure that targeted customers pay their bills

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[3] Early impact will probably be only at the level of service quality, not broader regulatory or policy issues. Nevertheless, citizen involvement in regulatory and policy issues is critical and is something to nurture for a longer-term outcome of this project.

- Reduce water loss through leak identification and repair and thereby reduce water costs.

Twenty wards were prioritised for the project.

Activities

Extensive consultation and capacity building with councillors took place to ensure that the project was guided by their understanding of the "on the ground" issues, and that it received their support during implementation.

20 Community Service Agents (CSAs) were selected and trained to work in the 20 prioritised wards.

The eThekwini Accounts Database was utilised to target customers with arrears greater than R500,00.

On a weekly basis CSAs are given approximately 50 customers to visit in their homes. CSAs use or distribute the following documents:

- 2 visual education leaflets explaining issues such as leaks, high bills and water tariffs

- the customers latest account and a 6-month account statement (billing history)

- a form to bring in when visiting an eThekwini Customer Office

- a report form to record particular problems which need attention by eThekwini such as urgent leaks, incorrect names on accounts and meter malfunctions.

The CSA identifies what may have led to non-payment of bills, such as leaks, high consumption or a combination of factors. The CSA then explains the options available to the customer to prevent disconnection and encourages the customer to visit an eThekwini Customer Office as soon as possible to get help. A key option for customers experiencing poverty (or who cannot pay their debts) is to apply for a flow limiter device. The device ensures that the customer only gets 200 litres per day, which is the free basic water supply. The customer's debt is then frozen and can be paid off, interest free, over a period.

A second technical option being offered to customers who are struggling with poverty, is a rainwater harvesting system. The additional water collected using this system helps to ensure that the Customer does not use more than his/her 200 litres of free water per day. It also assists with food security as customers can use the additional water for garden projects. Use of grey water for gardens is also encouraged.

The project team monitors progress on a weekly basis through

- assessing completion of work rates by CSAs

- assessing numbers of customer forms brought into offices (i.e. response of customers)

- recording all field problems identified.

Field problems (faults) are then sent to the relevant section in order to be addressed.

Every two to three months an analysis of the accounts database is undertaken to assess debt levels, number of flow limiters applied for and cash payments made.

A feedback loop has also been established which allows for a second home visit to ensure that any identified fault has been attended to or to give a final warning letter if the customer has made no effort to address the problems of arrears.

Involvement of the targeted communities or beneficiaries

During 2003, a pilot Customer Service Programme entitled the Community Participation Project was run. This project was run in two eThekwini wards. Through an extensive participative process, which involved a number of community workshops and tools such as the PHAST[4] methodology, the key water issues affecting the community were identified. Systems and communication techniques were piloted and feedback from residents was received.

Based on the findings and input of residents, the present project was formulated and implemented.

Measuring the effectiveness of the project

A number of tools and methodologies have been used to measure effectiveness. These include:

- Interpretation of the eThekwini customer database to assess

    Income received from customers following the visit

    Number of visits made to eThekwini customer offices

    Consumption levels (to assess water savings)

- Feedback visits to customers to assess eThekwini response to faults and customer response to arrears situation
- The Human Sciences Research Council has been contracted by eThekwini Water Services to evaluate the project process in the light of these objectives. Civic organisations and professionals in the field were interviewed in relation to the role of councillors. It appears there is some conflict between the roles of civic groups and councillors and mutual suspicion. SANCO argues that councillors should consult them specifically in relation to key community issues such as consolidated billing and water service policy. They complain that there has been some implementation of an indigence policy, but that it is arbitrary and at the councillor's discretion. (Khanyisa report, p35,36)

Case study 3: Masakhane

The Masakhane Combined Services Communications Project (Hermanus Project) is a pilot project being undertaken in Mount Pleasant, a suburb of Hermanus in the Western Cape.

The Project represents the first major collaboration of key stakeholders in service delivery, viz. Department of Water and Forestry (DWAF), the Water Research Commission, Eskom, Telkom, the banking sector, Internet service providers, local government, meter manufacturers and the local community.

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[4] Participatory Hygiene and Sanitation Transformation – a new approach to working with communities.

The Project in partnership with the Mount Pleasant community and local authority, jointly researches the use of innovative technologies as a means of establishing equitable and efficient service delivery arrangements.

Project Rationale

Throughout South Africa effective and efficient provision of water and electricity remains a huge challenge to service providers that are struggling to address the inefficiencies of the past. It is clear that technological solutions need to be harnessed in addressing this challenge, the groundwork of which has already been laid in the implementation of prepaid utility meters. The benefits of prepayment are still however skewed in favour of service providers, which explain some of the problems that have plagued it, such as vandalism and theft. Expanding the range of services offered by prepayment technology is expected to go a long way towards getting consumers to support their implementation.

The Masakhane Combined Services Communications Project was launched to research the impact of introducing combined prepayment metering with added communication features. Mount Pleasant, a small previously disadvantaged community of Hermanus, was chosen as the pilot site.

Background

The project represented the third phase of the successful "User Pays Project", at the Kruger National Park and Tendele in the Drakensberg. The main aim of the "User Pays Project" was to determine whether nature reserves could be used as catalysts to effect changes in visitors' water and energy consumption through the exposure to appropriate technologies and information. The Masakhane Combined Services Communications Project takes this concept from a nature reserve into a real life community and aims to determine whether communities can control their use of resources (water and electricity) with the assistance of appropriate technologies and information.

Project Overview

Eskom (Research), Department of Water Affairs and Forestry (DWAF), Water Research Commission (WRC) and the Hermanus Municipality are the key funders of this research project. The project represents the first major collaboration in pre-payment metering by key stakeholders – water (DWAF and WRC), electricity (Eskom) and telephone (Telkom) utilities, the banking sector (Reserve Bank), Internet service providers (UUNET Africa), local government (Hermanus Municipality), meter manufacturers and the local community.

The Masakhane Campaign is one of the strategic partners on the project, ensuring that the project meets its overarching objectives of researching technology benefits to poorer communities. The involvement of the local community and partnerships with local institutions is an underlying principle behind the project to ensure that communities take the responsibility for their own development. Technology, natural resources, various service providers and people must therefore be harmonized in such a way that sustainable development is possible, in order to improve quality of life.

The technology introduced through the project also ensured that service provider and consumer jointly explore the advantages of using combined communications technology as a means establishing equitable and efficient service delivery arrangements. The implementation of this took place in two phases. Phase 1 of this process will be to implement combined prepayment water and electricity technology. Phase 2 of this process added the remote communications and value added services

to the Phase 1 infrastructure. Phase 2 opens up a communications channel between the municipality, the customer and a variety of service providers.

During phase one 45 meters was installed in households and a further 5 meters were installed at other sites like the community hall, library, school, crèche and clinic. The implementation of Phase 2 will depend largely on the outcome of the Phase 2 feasibility study.

A pilot site of this nature is therefore seen as a very valuable opportunity to drive and test concepts around:

- Remote Metering,
- Time of Use (TOU),
- Demand Side Management,
- Value Added Services,
- Efficient service delivery,
- The relationship between the access to information and social development,
- Community and utility participation,
- Community dynamics and quality of Life.

(www.masakhanemeter.co.za)

Case Study 4: Madibeng Local Municipality – involving the community in the implementation of FBW

Madibeng Local Municipality in the North-West province comprises the towns Brits, Hartbeespoort and Skeerpoort: 9000 farms and 43 rural villages. Madibeng LM's jurisdiction is about 3 814 square kilometre and has 30 wards.

The urban areas in Madibeng LM's jurisdiction are Brits, Oukasie, Lethlabile, Damonsville, Mothotlung, Hartbeespoort, Kosmos, Schoemansville, Melodie, Ifafi, Meerhof, and a number of private properties (Eagles Landing, Pecanwood, Westlake and Ville de Afrique).

The municipality serves 0.92 million households, and a population of 3.41 million. The water services backlog (access below RDP) is 20 069 households.

Without water pipes, taps and meters a municipality cannot provide basic water, let alone free basic water to consumers. Infrastructure requires large capital expenditure. The South African government received donor infrastructure (pipes and water meters) from the Chinese government. These materials have been made available to municipalities in order to save on their spending on infrastructure.

The local municipality of Madibeng successfully applied for, and installed, the Chinese donor material to relieve a critical shortage in infrastructure in a number of areas.

All people of indigent status are entitled to Free Basic Water. However, most municipalities find it very difficult to manage an indigent register efficiently and chose therefore to provide Free Basic Water to all consumers. Consumers whose water consumption exceeds the limit of 6000 litres per household, must pay for water according to a step tariff model/system. The majority of municipalities struggle with cost recovery because large numbers of consumers are in arrears with payment either because they cannot pay or because paying for municipal services is not a priority.

Madibeng LM has come up with very interesting cost recovery model which, instead of placing the responsibility on the indigent household to prove their indigent status,

places the onus on the non-indigent households to prove their status to receive more than the free basic 6000 litres of potable water per household per month.

Improved cost recovery and indigent identification

People who had not received water services in the past were not used to paying for water services. The municipality was faced with a challenge: they could now meter the water that was distributed to household, but they still had to recover their costs. Sandspruit (previously Odi Retail) were appointed by the municipality to manage the cost recovery component of the project.

Consumers with yard connections who use more than the free basic amount of 6000 litres per month have to be billed for the excess used. To ensure that consumers did not accumulate debt that they could not afford to repay Madibeng LM implemented an innovative cost recovery model. The model simplifies the administrative process that accompanies the identification of indigents who receive Free Basic Water. Bigen Africa developed the model. "After the municipality gave their inputs on the model and representatives of the community were consulted water restrictors were installed with every water meter," said PG Ngozo from Bigen Africa. The restrictors limit the water supply to a household to the free basic amount of 6000 litres per household per month.

A household would have to pay a connection fee of approximately R400 – R600 to have the restriction removed and to increase the flow rate. "The fact that community members are paying R400 to R600 for water connections to increase the flow rate, instead of the normal R1600 connection fee is a success to the municipality. "This was made possible though the savings made by using the donor materials," said Jan Mosalakgotla, the Water Services Superintendent.

This is quite different from the conventional method where indigents have to prove that they are unable to pay for water services. Madibeng LM switched this around and now those who can afford must prove their non-indigent status by paying a connection fee to receive more than 6000 litres per household per month.

This model is particularly suitable for new infrastructure projects where a restricted flow from a yard connection is a great improvement from a previous situation, for example where water had to be carried from a borehole. In established areas with unrestricted flow residents would probably be less willing to adapt to a restricted flow.

Public participation in the project

According to the Integrated Development Plan it is important to engage with the community and involve them in projects concerning them. The public should participate in the planning of a project and before any aspects of the project are implemented.

In Oxkraal/Madidi the local councillors held meetings to address the objectives and outcomes of the project and respond to the concerns raised by the community members who attended these meetings.

In Mmakau tribal councils together with councillors and contractors played a major role in engaging the community in order to address their concerns and incorporate their expectation of the project where possible.

The community was invited to participate in the project. The Project Steering Committees consisted of Bigen Africa, the municipality, councillors and community representative as nominated by the councillors. This committee was tasked with resolving any problems and assessing the progress of the project.

Community Liaison Officers were appointed by the community through the Labour Desk Office. A Community Liaison Officer's duty was to assess the project progress and address queries from the community.

Water Forums were also formed to give the communities who receive the infrastructure a platform to voice their concerns and express the challenges that they experienced. The forum also made sure that these concerns were addressed. Any labour related problems that may arise as a result of the project will be handled by the Community Liaison Officer and a Local Development Officer CDW.

(WIN/DPLG best practices series 2007)

Case study 5: Zululand DM – priority areas for service level improvement

Zululand District Municipality (ZDM) is situated in the north-western corner of KwaZulu-Natal and comprises the five local municipalities of eDumbe, uPhongolo, Abaqulusi, Nongoma and Ulundi, 18 towns and 772 rural settlements.

The area is primarily rural with 90.8% of the population residing in communities of less than 1500 people per square km. 53.7% of settlements have populations of 500 or less (75 households). This settlement pattern, coupled with the rugged terrain and little or no access roads, makes the provision of basic water services to the rural community extremely difficult and very expensive.

Water is scarce and droughts are a common occurrence. The current water assets comprise:
•   336 water schemes including 156 small borehole schemes;
•   1395 boreholes; and
•   91 electricity connections.
Very little or no historic information is available on any of these assets.

Other key issues in the municipality are:
•   Social issues
    –   HIV/AIDS
    –   Disaster management
    –   Gender, youth, disabled and aged equity
•   Sustainability and environment
•   Local Economic Development: Economic potential is limited owing to the distance from cities, ports and markets
•   Capacity to lead and manage development in Zululand

According to the mayor, Ms Zanele Magwaza, "people have the perception that everybody is being taken care of – everybody gets a slice of the pie."

Dividing up a "small pie" amongst a large number of people in such a way that everyone feels that their needs have been taken care of requires careful planning and skilful management. This is Zululand District Municipality's forte.

The backlog for water in Zululand DM is 60% and for sanitation it is 50%. At least 80% of the capital budget is allocated to the eradication of backlogs in water and sanitation. Unfortunately this is not enough.

About 97% of settlements (690,000 people) do not have access to an adequate level of water supply. It is estimated that, at the rate of current funding allocations, it will take approximately 20 years to provide basic water services to all households! It is therefore not possible for the municipality to meet the 2008 target for basic water.

Priority Models

System development and process management have been a key focus area for the Zululand District Municipality. Since its establishment the Zululand District Municipality, through the Technical Services Department, and more recently the Planning and Community Development Department, has established a number of systems and methodologies to ensure that service delivery is carried out efficiently and according to plan.

One of the challenges facing municipalities in a development context is the prioritisation of projects. Communities not given the highest priority, often feel neglected, and would even go so far as to vandalise the infrastructure in a higher priority area.

The Zululand District Municipality prioritisation model provides an objective mechanism to facilitate the decision-making process in water services delivery. Priority is given to those communities which have the greatest need.
This model provides a point of departure to refine and test the development of a good practice methodology for prioritisation of water services delivery at the local government level. Criteria and weightings can be adjusted to suit local conditions.

Two levels of project prioritisation are undertaken. Initially, all areas of need under consideration within the Integrated Development Planning (IDP) process are evaluated and prioritised for implementation, based on the available funding. The principles of the IDP model also apply to the Water Services Development Plan. A second level of prioritisation is undertaken to select priority of water projects.

These models were extensively discussed at a workshop with the Councillors, in order to establish the priority areas to be addressed within the Zululand District Municipality. The municipality's implementation plans follows the priorities that were established through this process.

The Water Project Prioritisation Model

Two key principles are applied in the prioritisation of water projects in Zululand District Municipality. The first principle is that water services should be provided progressively to communities and the second principle is that project prioritisation is determined through the implementation of a water prioritisation model. The prioritisation model was adopted during the development of the Water Services Development Plan in order to identify the most urgent water needs.

Prior to implementation of this model, appropriate verified baseline data of the status quo of water services was gathered and incorporated into a GIS tool. A long-term plan for water scheme development and service delivery was then compiled. This information forms the basis for the prioritisation process.

Eight criteria were determined by the Zululand District Municipality to prioritise a project to which weightings have been allocated (Table below). The criteria and weightings were developed by the Water Services Development Plan (WSDP) Steering Committee and submitted to the Zululand District Municipality Council for approval.

Prioritisation model for selecting water projects:

Table 2

Factor	Criteria	Value	Weighting
Water source	Project/network	0	30
	Borehole	0.35	
	River/Dam/Spring/Other	1	
Project cost/capita	R2,500	0.2	15
	R2,000 – R2,500	0.4	
	R1,500 – R2,000	0.6	
	R1,000 – R1,500	0.8	
	<R1,000	1	
Walking distance to water	<1 km	0	20
	1 – 3 km	0.7	
	>3 km	1	
Within 4 km of a development corridor/rural service centre	Primary	1	5
	Service centre	0.75	
	Tertiary	0.5	
	None	0	
Existing sanitation	Yes	0	5
	No	1	
Existing use/level of service	Nothing	1	15
	Survival (>800 m from good quality water source)	0.75	
	Rudimentary (5 ℓ per capita at 800 m)	0.25	
	> RDP	0	
Linkages to other projects within 4 km that can be supplied with water	Yes	1	5
	No	0	
History of water borne diseases	Yes	1	5
	No	0	
		Total	100

The above 8 criteria are applied to each community footprint and a total weighting out of 100 is determined. Thus, for each community footprint that has been allocated a unique identity number, a prioritisation rating is given.

A total weighting is calculated for each group of communities which will be served by a central reservoir. This is based on the priority rating calculated for each community footprint and the population, as shown in the following formula:

(footprint priority rating x population + footprint priority rating x population + ……..)

sum of population

The GIS bases the calculation on the information contained in the database.

The decision on the order in which water services will be delivered is determined by the priority rating for the community groups. This is particularly important at junctions in bulk infrastructure, where a decision must be made as to which routing to select first. Similarly the phased implementation of services within the community group is determined by the rating for each community footprint.

Priority ratings are calculated annually and implementation re-assessed to ensure that all backlogs have been eliminated after implementation of all project schemes.

Stakeholder Consultation

The key to the successful implementation of the prioritisation models was the approval for its use by the Zululand District Municipality Council. Although the models have been developed by the Zululand District Municipality planning department, workshops have been held with councillors to ensure consensus was reached on the criteria and the weightings to be applied in the decision-making process. "There are weekly meetings with business leaders, the amakhozi and the public, ensuring that no one is left out", said the mayor.

This transparent approach to water services planning and the development of a master plan for the district has helped the councillors significantly when they report to their ward constituencies.

(WIN/DPLG best practices series 2007; DFID (2005))

Case Study 6: Johannesburg Water

Johannesburg Water has to provide an affordable, cost effective and sustainable service to low income areas and informal settlements. They are furthermore facing the challenge to decrease high unaccounted for water (70%) in low income areas, resulting from poor infrastructure and deemed consumption bills. Operation Gcin'amanzi was started to address these challenges.

Background

Soweto consumes 30% of the total volume of water purchased in Johannesburg and 90% of the total volume for deemed consumption areas. Current purchases indicate that an average Soweto household uses 61 kℓ per month. Survey results show that defective plumbing, leaking secondary mains and wastage by residents contribute to this high consumption figure. In 2005, residents received monthly bills for 20 kℓ levied as deemed consumption. The actual average consumption is estimated between 4 and 14 kℓ/month. The gap between deemed and actual consumption indicates that a project that addresses the unaccounted for water will benefit customers and service providers alike.

Objectives

The key objectives of the project were to:

- Address the water supply problem in Soweto

- Address the issues surrounding affordability, wastage and loss and therefore create an environment conducive to payment for the services of water and sewerage

- Include, as a component of this project, a prepayment metering programme.

Broad strategy and approach

It was decided that Soweto should be the area of highest priority. Operation Gcin'amanzi would be a once-off intervention involving a variety of intervention

measures, integrating past experience of prepayment metering. The implementation was planned to take place over 4 years. It was intended to be a phased project with an initial smaller phase mainly to test methodology. A prototype area where the greatest impact could be achieved was selected for the pilot.

Intervention programme

All technical interventions were aimed at reducing unaccounted-for-water in Soweto. They entailed the following actions:

- Rehabilitation of the water network in Soweto

- Allowing customers full access to FBW and billing based on actual consumption

- Providing a better level of service in the form of larger diameter pipes laid in road reserves as opposed to mid-block within the erven

- Leak detection and once-off repair of plumbing fixtures

- Improving the level of integrity of technical information systems and customer records.

Social interventions

A number of social interventions were planned to ensure community participation: The community was educated about water as a scarce and precious resource, the water cycle, tariffs and Free Basic Water, rights and obligations. Various interventions were launched to obtain buy-in from residents.

Community liaison measures included the following actions:

1. Undergoing a consultation process with the community leaders and community

2. Conducting a Marketing and Communications Campaign

3. Undergoing an Educational Programme and Awareness Campaign

4. Instituting the signing of consumer water and sewer agreements

5. Consolidating all customer records

Technical interventions for phase 1 of the project included a house-to-house survey of existing plumbing fixtures including an affordability survey amongst residents. Semi-skilled previously disadvantages individuals, plumbers and contractors were trained for this task. All existing mains that were not going not be upgraded were tested for leaks. Secondary water mains were replaced, including zone meters. House connections were replaced. Private plumbing fixtures including flow control valves on hot-water systems, cisterns and gullies were rehabilitated or repaired.

Johannesburg Water provided metering infrastructure and metering devices.

It also monitored and evaluated the attainment of the project objectives in terms of KPIs, and implemented sustainable initiatives, which included the reallocation of Operations and Maintenance staff.

Public participation programme

The public participation programme provided an opportunity to those affected by policy decisions to become better informed about the nature and potential consequences of those decisions, and to participate in their implementation.

This was the most challenging component of the project as it deals with the human aspect, for which no specific time frame could be set.

The full co-operation from ward councillors, ward committees and other recognised community-based structures was critical for success.

Regular public meetings to enhance community buy-in as public participation is an ongoing process.

Public participation entailed three sub-programmes:

- Community Facilitator and Community Ambassador Programme

- Water Steering Committee and User Forum

- Public Communication Awareness Programme

All three programmes focused on defusing negative perceptions through engaging of stakeholders, shaping public debate, managing news agendas and responding to crises, engaging in activities that steadily replace negative perceptions with feelings of goodwill, trust and credibility, and enhancing the reputation of Johannesburg Water.

In this process Johannesburg Water liaised with: Ward Councillors, Ward Committee members, community-based structures, civic movements like SANCO, the community, concerned residents and other political parties. Information sessions were also held with specifically targeted stakeholder groups such as women's forums, youth groups, schools, teachers and parents, pensioners and veterans' groups.

Methodology included public meetings, consumer education, workshops and study tours, a door-to-door campaign, consumer information packs, Open Days, briefing sessions and workshops, publicity material, road shows and a media campaign.

The relationship with the community is sustained through:

- Regular meetings with councillors

- Ongoing public meetings to update the community

- Monthly meetings with the Water Steering Committee members

- Regular updates through electronic and print media

- Quarterly reports to councillors, and

- After care support.

(Xaba, Institutional & Social Development Manager, Johannesburg Water, 2005)

5. A Water Services Barometer

Developing the barometer instrument

It is very difficult, if not impossible, to relate knowledge/awareness/understanding/desired behaviour to a single output or communication campaign. Target groups are generally exposed to various sources of information, e.g. media campaigns, municipal newsletters, friends, educational material from various departments, posters, etc. On the other hand, it can be argued that the general public's knowledge/awareness/understanding/behaviour regarding key water services messages would be an indicator of the "state of community consultation" as defined in this study. Hence a water services barometer was constructed in order to give a 'reading' of the current state of knowledge and awareness amongst the South African public regarding <u>five key water services knowledge areas</u>[5].

<u>The five key water services knowledge areas</u> were identified from the literature review, the analysis of the interviews with stakeholders as well as the case studies. They are:

- Free Basic Water

- Constitutional rights

- Responsibilities

- Health and hygiene

- Institutional roles

For each of these the following were tested:

Table 3

Knowledge area	Awareness, knowledge, behaviour tested
Free Basic Water	Basic awareness of the term 'Free Basic Water'
	Understanding of the term: is it in line with government policy?
Constitutional rights	Basic awareness of the Constitution
	Awareness of water as a constitutional right
	If yes, what are respondents' perceptions of their right to basic water and sanitation?
Responsibilities	Awareness that water used in excess of the free basic amount should be paid for
	Desired behaviour (i.e. regularly paying an account for water use in excess of the free basic amount)
	Desired behaviour (in the case of broken infrastructure that affects the respondent directly)

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[5] Some members of the Reference Groups felt that term suggests discrete knowledge areas, whereas, for example, the Constitutional right to sufficient water and the responsibility to pay for water used in excess of the free basic amount, can all fall under Free Basic Water. Although we admit its limitations, for lack of a better alternative, we retained the term.

Health and hygiene	The questions focus on key health and hygiene messages communicated in the WASH campaign as well as desired behaviour:
	- Awareness that you should wash your hands after going to the toilet
	- Hygienic behaviour after using the toilet
	- Knowledge of how to make water safe for drinking (Because residents are assured that municipal water is safe for drinking, this question was asked to rural respondents only)
Institutional roles	Awareness/knowledge that municipalities are responsible for water services
	Knowledge of who respondents' ward councillor is (only urban respondents)

The questions that were asked and the scores appear in the table that follows. For each of the knowledge areas, two questions were formulated. One question is a simple yes/no or identification question, whereas the second question is pitched at a cognitively higher level. In order to simplify calculations, the five knowledge areas were allocated equal weight.

For FBW and Constitutional rights, it was decided that awareness was a prerequisite for understanding, therefore a filter was applied. For example, if you have never heard of Free Basic Water, you would not know what it means.

Stakeholders were specifically interested in the target public's behaviour as a result of communication campaigns. Concern was voiced that people know what the responsible behaviour should be, but that they don't necessarily apply it to themselves. (The researchers decided, on the recommendation of the Reference Group, not to judge behaviour as irresponsible, but rather to refer to it as 'desired' or 'undesired'.) A questionnaire always tests reported behaviour, which can be very unreliable, especially with sensitive issues. The questions on behaviour were very carefully phrased in order to allow respondents to report, in a positive manner, on undesired behaviour. For example, respondents could answer: Yes, I know I should wash my hands with soap and water after I have been to the toilet, but I don't always do it, because I am sometimes in a hurry. Or: We don't regularly pay our water account, because we don't have enough money.

Water Services Barometer: outline of questions and framework for scores

Table 4

Free Basic Water	Constitutional rights	Responsibilities	Health & hygiene messages	Institutional roles
Have you heard about it? 1 for correct 0 for incorrect	Have you heard about the Constitution? ½ yes 0 for no	Payment : desired (responsible) behaviour 1 for pay if you have to, or don't have to pay 0 for some excuse for non-payment	Washing your hands with soap and water after being to the toilet. 1 for knowledge 0 for ignorance 1 for correct behaviour 0 for incorrect behaviour	Who is responsible for Water and sanitation services? 1 for correct answer 0 for other options
If yes, what does it mean to you? 1 for correct 0 for incorrect	If Yes, is water a basic right according to the C? ½ for yes 0 for no or don't know	Urban: reaction when you observe a burst pipe or broken tap in your street EXPERIENCE ASSUMED 1 for report to authority 0 for the other options	Rural only: do you know how to make you drinking water safe? 1 for correct treatment actions 0 for the rest	Urban only: Awareness of ward councillor 1 yes and know the name 0 for all other options
	If yes, what does this right mean? 1 for correct 0 for incorrect	Rural: reaction when community pump broke or was stolen FILTER FOR EXPERIENCE 1 for report to authority or solve problem 0 for other options		
Total: 2	2	2	2 (rural gets an extra point)	1 (Urban gets an extra point)

Barometer maximum score: 10 points

The draft questionnaire was submitted for comments to the reference group and the stakeholders who were interviewed. Comments received were incorporated in the final version. Unfortunately the length of the questionnaire was limited due to time and budget constraints, with the result that some of the questions that explored media usage in greater depth had to be taken out. The final questionnaire appears in the Appendix.

Calculating the barometer scores

For each of the questions above, a score was calculated:

For example,

Table 5

Q 3: Have you heard the term Free Basic Water?	
a) Yes:	1 point
b) No:	0 points

In the case of multiple answers, the score was divided as follows:

Table 6

Q4: What does the term Free Basic Water mean?	
a) Water is for free as much as I want	0 points
b) It is a government policy to give poor people basic clean water	1/3 point
c) All households, whether rich or poor, get 6000 litres of clean water free per month	1/3 point
d) All households, whether rich or poor, get 10 000 litres of clean water free per month	0 points
e) All households, whether rich or poor, get an amount (I don't know how much) of clean water free per month	1/3 point
f) I don't know what it means	0 points

Questions on service levels, communication preferences and consultation experience were not scored as they were not included in the calculation of the barometer score.

Barometer scores were calculated for each of the five knowledge areas. The results of the survey have been post weighted to estimated population proportions. The weighted population figures were used for the barometer score calculations. For example:

Institutional roles:

Q16: Who is responsible for your water services?

Total adult population: 28 288 000

Correct answers (1 point) 19 981 000

Average score: 0.706 out of 1 (correct answers/total adult population)

Q17: Who is your ward councillor? (urban respondents only):

Total urban population: 17 066 000

Correct answers (1 point): 5 979 000

Average score: 0.350 out of 1 (correct answers/total urban population)

Rural respondents were not asked question 17 and therefore they could only score one point in comparison to urban respondents who could score a possible two. For Institutional Roles, the rural scores were weighted to get a score out of two.

For more details on the calculations, the reader can contact the service provider.

Finally, the scores for each of the knowledge areas (point out of a possible 2) were added to give a composite WS barometer score. The figure below shows how the national average WS Barometer score was calculated.
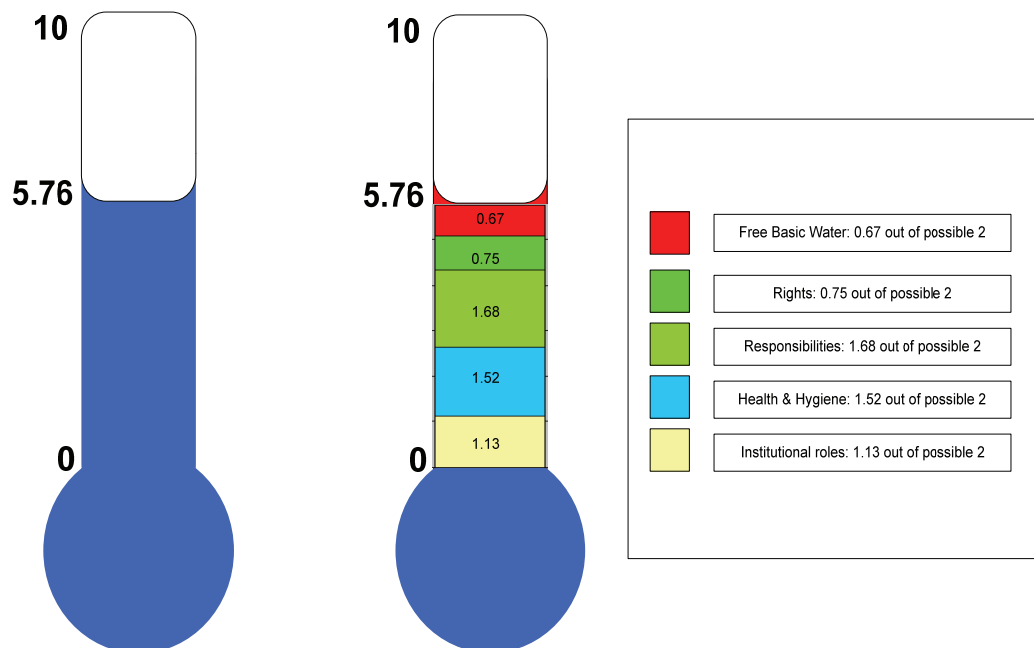
Figure 10: Average WS Barometer score for adult South Africans

The results in the next chapter discuss in detail the scores for each knowledge area, as well as the composite barometer scores for a variety of demographic variables.

Interpretation of results

How do you interpret the results of a barometer score? There are various interpretation possibilities:

a) The average score of knowledge areas can be compared with each other. This will indicate which knowledge areas can be associated with the best knowledge/awareness and desired behaviour.

b) The barometer scores for various demographic variables can be compared, for example, urban vs. rural, gender, age, language, province, living standard measure, house income, etc.

c) The distribution of the composite scores across the population, as well as across all relevant demographic variables can be traced, as the table below illustrates.

Table 7

Distribution of Composite Barometer Scores								
Score out of a possible 10	Zero	1-3	3.001-4	4.001-5	5-5.999	6-6.999	7-8.999	9.001+
Number of informants	5	270	398	231	693	681	870	103
Population(000's)	77	3142	3986	2467	5561	5564	6621	871

d) Correlations between the distribution of the national average composite scores and the answers to each question can be indicated.

Is a national average barometer score good, average or bad? What do the results mean? The results of a barometer study will always give an indicator of the knowledge/awareness/behaviour that was tested. Without a baseline, or a definite expected outcome (e.g. 0.5+ for FBW), however, the score cannot be used to determine the success of any community consultation process. It is therefore important to repeat barometer studies in order to measure change/improvement.

Application of barometer instrument in other fields

The barometer instrument can be applied to measure the results (the top triangle of the Macnamara pyramid) of any community consultation process.

It could also be very useful for communicators to develop a campaign in conjunction with a barometer as a measure of expected behaviour. In this way the inputs, outputs and eventual results of a campaign can be linked right from the start. Advertising campaigns are often evaluated by the increase in sales, readership, etc. Development

communication campaigns should be evaluated in terms of an improvement in knowledge/awareness/behaviour, in the target group, especially where public money is involved. The barometer can be a useful tool to determine whether the target audience was reached and the money well spent.

6. Results of the Survey

This chapter describes the main results of the survey conducted in December 2006. The detailed questionnaire with the barometer points for each question appears in the Appendix.

The structure of the chapter is as follows:

- The first section of the chapter gives an overview of the feedback from the fieldworkers.

- The second section gives the results of first two questions of the questionnaire, regarding service levels. The questions were included for cross tabulation purposes.

- The next two sections discuss the composite barometer scores for various demographic variables.

- Following on the barometer scores, are the sections that discuss in detail the results for each of the knowledge areas that make up the barometer.

- Finally, the results of the questions that relate to community consultation, information needs and preferences for communication channels are discussed.

Qualitative information from debriefing of fieldworkers at AC Nielsen

The field workers were debriefed on 14 December 2006. During the debriefing session fieldworkers were requested to relate their field experiences question by question. Below is a summary of their comments:

Question 1: Water service levels

90% of rural areas visited by the fieldworkers have community standpipes within 200 meters from their houses. These taps do however "run dry" and then the residents buy water from a kiosk, water vendor or farmer.

Illegal connections: households make their own connections to the pipe that runs to the communal standpipe.

Pipes can "go dry" for three months at a time. In this event the consumers return to the rivers, dams and streams to get water.

Question 2: Sanitation levels

Most respondents know the difference between a flush toilet connected to a septic tank and a toilet connected to the municipal sewer system. They appear to be well informed about sanitation options.

In one rural area the chief told the residents to dig a pit and that the government will then put up "decent" toilets for them.

When a VIP is full, the residents usually dig a new pit. One respondent said: "There are a lot of holes in this yard."

According to fieldworkers, the general feeling is that the government does not provide sanitation services, the people do it themselves.

Questions 3 and 4: Free Basic Water

Most respondents think water and electricity go together. Consumers complained more about the problems they are experiencing with electricity. Possibly people want to complain about electricity more, because water is cheaper than electricity. The biggest expense, with regards to municipal services, in a household is electricity.

Respondents who have not heard of the term 'Free Basic Water' are curious to know what their rights are regarding 'Free Basic Water'.

Rural consumers think the fieldworkers are there to explain their rights to them.

Whites do not know about Free Basic Water. They notice that there is a free basic amount on their account, but they do not know how to read their water meters and are not sure if they get Free Basic Water.

Respondents who use the prepaid system know that they receive a free basic amount of water. They can see it on their prepaid meter.

There is confusion about Free Basic Water. Questions asked by respondents were:
- Do only urban or only rural people receive Free Basic Water?
- Does everyone receive Free Basic Water?

Consumers are very confused about who is entitled to it.

Question 6: Constitutional rights

Respondents were generally curious about "what the Constitution is". Respondents wanted to know more about what the Constitution is. Fieldworkers got reactions such as: "No, what is that?"

Question 9: Responsibility to pay

Respondents are reluctant to confess that they do not pay for water services.

Fieldworker: "You can see that the person (urban) wants to say no, but then decides to say that they do pay for water services".

Reasons for not paying:
- Some consumers do not pay because their water supply is interrupted
- Respondents have changed to prepaid meters and still receive a bill. One respondent said: "I'm not going to pay twice".

Question 10: Responsibility to report broken infrastructure (urban)

Some respondents say that if there is a problem inside their yard they will fix it themselves, but they have never experienced a burst pipe in their street or outside their yard. If that were to happen they would report it to the municipality, because the municipality is responsible for leaks etc. outside of the yard.

In Eldorado Park consumers told fieldworkers that they reported a burst pipe to their municipality, but the municipality took a long time to repair it.

In instances where two or more consumers share a tap, the responsibility to fix a tap is placed on the other user.

Respondents who live on farms experience difficulties in reporting a problem with their water services. One respondent explained to the fieldworker that he/she had reported the problem to the farmer; he does not fix it, but continues to deduct an amount off the wages for water services. Respondents would like to report such problems to their municipality, but do not know who their municipality is/how to contact their municipality.

A fieldworker saw a board at the entrance of a rural village which said: "Remember to pay your R10 levy for water and sanitation to the chief".

Question 12: Responsibility to report broken infrastructure (rural)

Pumps are broken due to vandalism and taps are stolen. This is reported to DWAF, but it takes too long for them to repair the pump. The community then repairs it themselves. The Water Committee collects the money for the repair.

Question 13: Health and hygiene

Many rural respondents answered c) Yes, but we don't have water or soap in or near our toilet.

Some respondents gave the letter, but others felt comfortable enough to read out the appropriate statement.

Question 15: How to make your drinking water safe (rural only)

A consumer said he does not know how to clean his water. He receives clean water and therefore does not know how to clean his water.

Question 16: Who is responsible for water services?

Some other answers: The Council, Rent Office, GG's.

Don't know answers were coded under g) Other.

Question 17: Who is your Ward Councillor?

Some respondents did not know the term/concept Ward Councillor.

People who answered a) Yes, could describe the person that they know as their Ward Councillor, they cannot, however, remember the person's name.

Some respondents (Houghton and Fourways areas) asked the fieldworkers who their Ward Councillor was.

Question 18: Attendance of meetings

Rural respondents said that they would go to meetings held by the traditional leader.

Non-attendance figures are high, both for women and men. Fieldworkers pointed out that women in rural areas are usually excluded from meetings. The reasons for this are:
- Women are always busy/working
- Women are not allowed at meetings
- The head of the household (men) go to meetings
- Women should fetch water and cook, not attend meetings.

A lot of promises are made at tribal meetings, according to respondents.

At the meeting they just say: "we must pay our water and sanitation account".

Usually there is a car with a speaker that announces the meetings.

Question 19: How do you prefer to receive information?

Tribal messenger is a favourite amongst respondents in rural areas. Most information that rural residents receive comes via the tribal messenger.

General feedback:

Rural respondents thought the fieldworkers were there to help them/solve their problems/fix their taps and pipes/provide them with services.

In rural areas the community members are usually separated into two groups, those who support the chief and those who don't.

Respondents want to know when someone will come to help them.

Access to Services

The figures below show the percentages for the main source of household water and sanitation. The sample universe of this study was adult (16+) South Africans, in comparison to the Census data, which provides these figures for the total population. The blue shades reflect basic and beyond basic levels of water and sanitation services, whereas the orange and pink shades reflect service levels below basic.

Access to water services - adult population
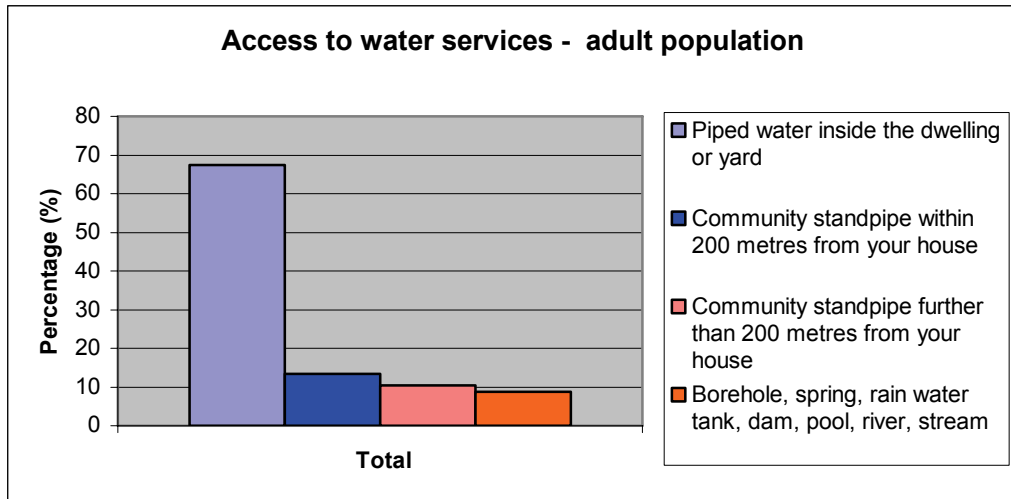
Figure 11: Access to water services

Access to sanitation services - adult population
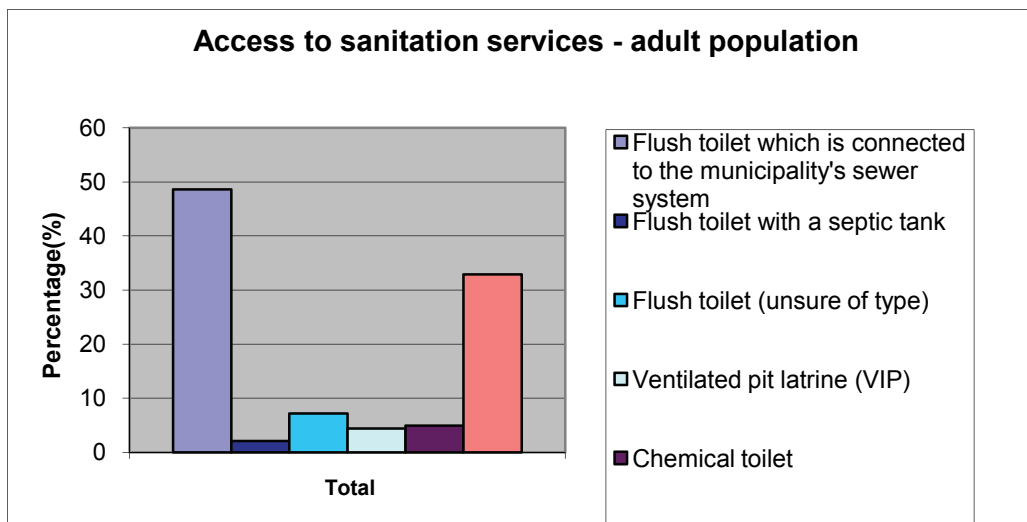
Figure 12: Access to sanitation services

The qualitative data indicates that there is a disturbing trend i.e. infrastructure without water, as the respondents' quotes reflect:

- There are taps installed in their yard but no water comes out.
- We have water in our pipes three times a week or sometimes no water for the whole week.
- Sometimes the pipes run out of water for a week and then the community gets water from the dam which is not clean.
- The community in this area pay for water and sanitation. The Limpopo government supplied a generator for the community to pump water and it was the community's responsibility to buy petrol; at the moment it's stolen and they buy water from the people.
- Truck from local municipality delivers water once a week, sometimes once in three weeks. We often run out of water for days. We even phone the offices and ask for water.
- We have a tap in the yard but it's now a month without water. We don't get water regularly. Water is supplied irregularly.

Barometer scores were calculated for each of the five knowledge areas and added together to give a composite barometer score for various demographic groups. These appear in the figures below:
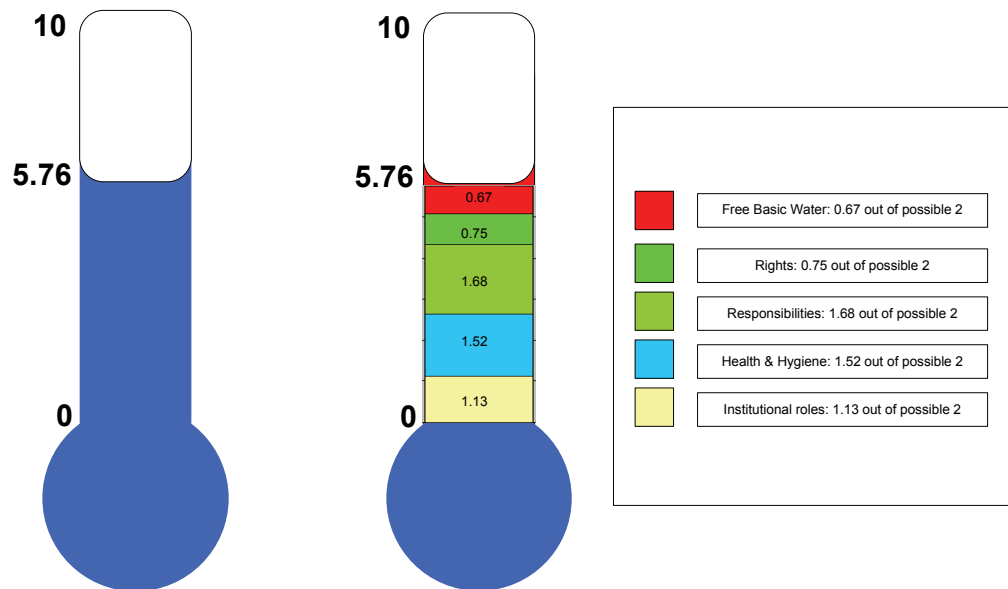
Figure 13: Average Barometer score for adult South Africans

Contribution of knowledge areas to national composite barometer score

FBW	0.669153
Rights	0.756605
Responsibilities	1.679889
Health & Hygiene	1.52045
Inst Roles	1.133873

National average barometer score
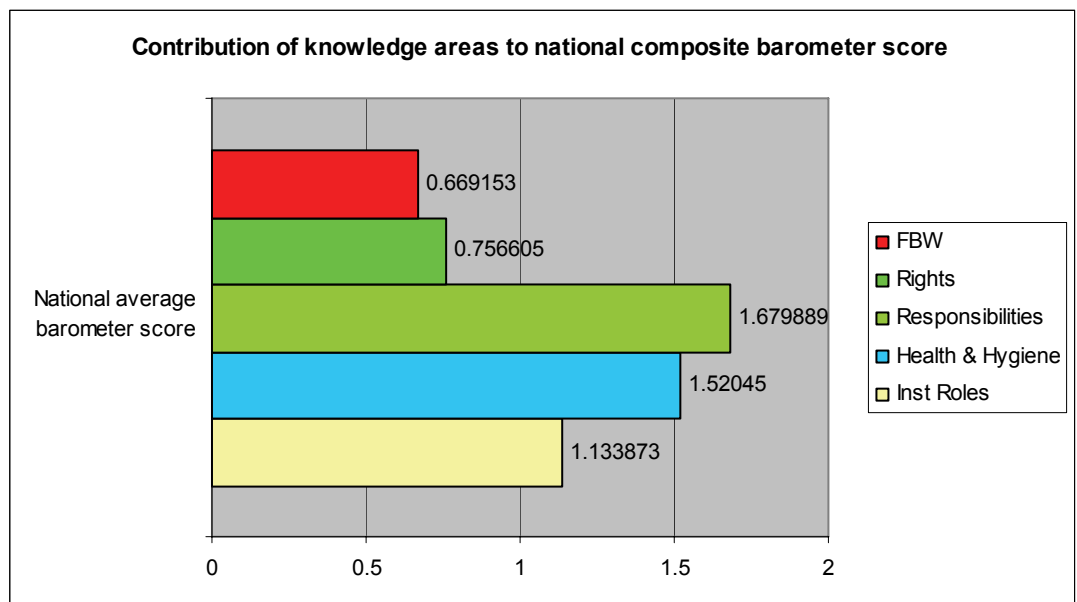
Figure 14: Contribution of knowledge areas to national composite barometer score

- The average WS barometer score for adults in South African was 5.759 out of a possible 10. Is this national average barometer score good, average or bad? Standing on its own, the result is a reliable indicator of the knowledge/

awareness/behaviour that was tested. However, without a baseline, or a definite expected outcome (e.g. 1+ out of a possible 2 for FBW), the score cannot evaluate the effectiveness of water services community consultation as good, average or disappointing. Various role players will give their own interpretation of the results, based on the knowledge/awareness/behaviour that they expect from the adult South African population. It is therefore important to repeat barometer studies in order to measure change/improvement.

- Responsibilities scored higher than Rights: people have better knowledge of their responsibilities than their rights.

- The highest scores occurred in the areas of Responsibilities and Health and Hygiene. Although it is difficult to say whether people accurately reported behaviour, South Africans seem to be at least aware of their responsibility to pay for water in excess of 6000 litres/month and to report broken infrastructure that directly affects them. This is also the case with answers on Health and Hygiene received from respondents. Most respondents scored at least one point for being aware that you should wash your hands after you have been to the toilet'. Only 2.1% said that 'it is not important to wash your hands.'

- South African adults scored the lowest in the areas Free Basic Water and Constitutional Rights, because 59% said that they have never heard of Free Basic Water and 45% said they have never heard of the Constitution. These respondents scored 0 in both these categories, because awareness was assumed to be a prerequisite for understanding. Free Basic Water cannot mean anything to a respondent if he/she has never heard of it.

Composite barometer scores for demographic categories

Urban vs. rural

The table and figure below show the national average, urban and rural barometer scores out of a possible 2, for FBW, Constitutional Rights, Responsibilities, Health and Hygiene and Institutional Roles.

Table 8

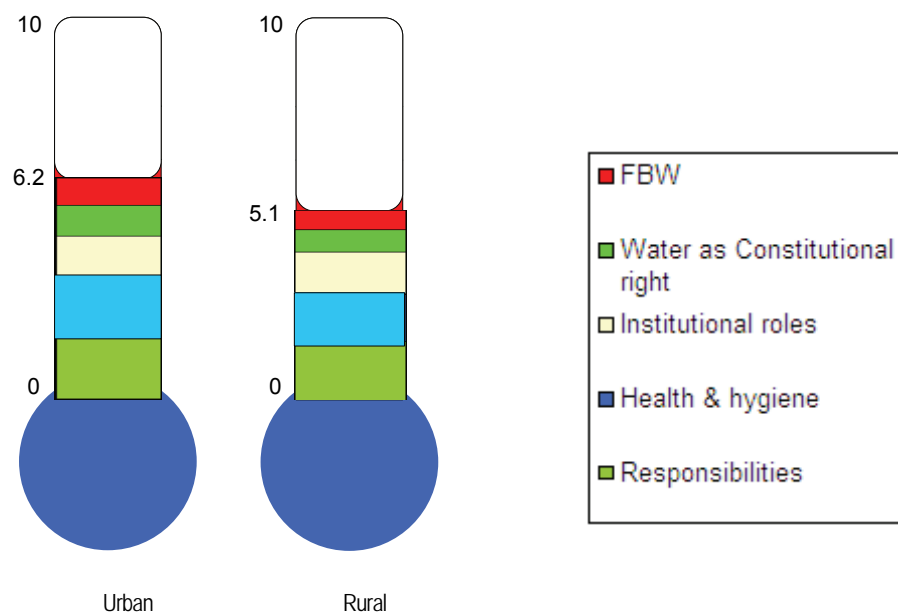|	National scores	Urban scores	Rural scores
FBW	0.669	0.768	0.519
Water as Constitutional right	0.757	0.858	0.602
Responsibilities	1.680	1.708	1.636
Health & Hygiene	1.520	1.684	1.271
Institutional Roles	1.134	1.163	1.100

Figure 15: Composite barometer scores for urban and rural

The results indicate that, although differences remain, progress has been made in the rural areas. For example, both urban and rural respondents scored high on the Responsibility and Institutional Roles categories. In all the other categories, urban respondents scored higher than rural respondents. Urban people are still significantly better informed regarding key water services concepts than rural people.

Living Standard Measure (LSM)

The chart below illustrates the distribution of the composite barometer scores for each LSM group.

Distribution of composite barometer scores per LSM group
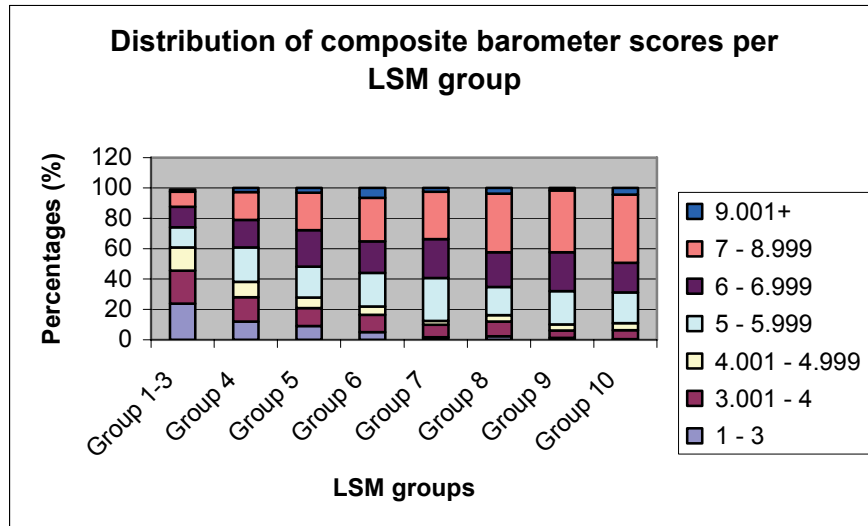
Figure 16: Distribution of composite barometer score per LSM group

LSM group 1-3 represents 32.8% of the adult population. The living standards of this group are marked by a traditional hut/shack/house in the rural areas or in informal settlements, high percentages of functional illiteracy (22% in Group 1, 15% in Group 2), radio as the dominant medium, a low average monthly income (R1094/month for Group 2), and a high level or formal unemployment (41% for Group 2). 24% of LSM groups 1-3 scored between 1 and 3 on the composite barometer. In contrast, 39% of LSM7 – 10 scored between 7 and 8.999. In general, the percentage of the people with low scores decreases in the higher LSM groups, whereas the percentage of people with higher scores increases.

Gender

Gender differences are not statistically significant[6], neither with regard to the composite barometer score, nor the distribution of composite scores.

Free Basic Water (FBW)

Have you heard of Free Basic Water?

40.8% of the adult population have heard of Free Basic Water, 59.2% have not. Awareness correlates in an interesting way with LSM groups as Figure 16 illustrates. There are three groups of patterns:

- In LSM groups 1-5, the awareness gap gets smaller as LSM increases.

- In LSM groups 5-7, the pattern is stable, with more people who don't know what FBW is than people who do know.

- Between LSM 7 and 8, the number of people who have heard of FBW overtakes those who don't know. Between LSM 8 and 9 the difference is stable; only in LSM 10 the gap starts to widen.

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[6] The differences that were found in the randomly selected sample were not large enough that one can infer that they will be applicable to the population.
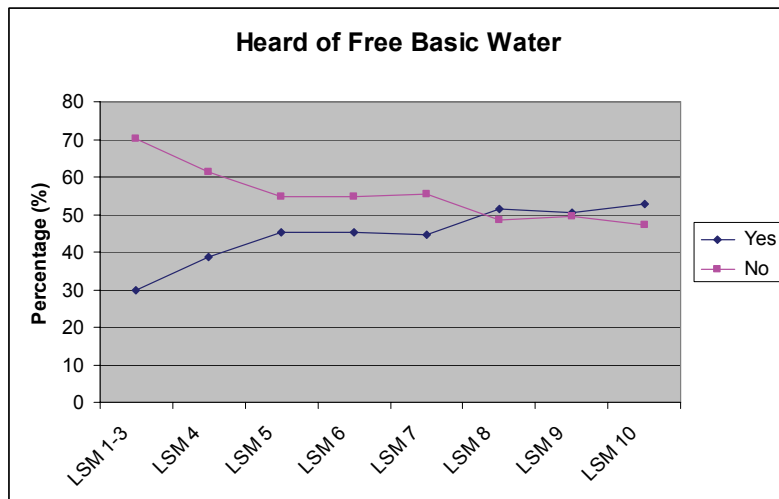
Heard of Free Basic Water

Figure 17: Have you heard of Free Basic Water per LSM group?

The provinces where the largest percentage of people has heard of Free Basic Water are the Free State and Gauteng with 50.1% and 50.4% respectively. In the remainder of the provinces positive awareness varies between 30% and 40%. People in rural communities (34.6%) are the least aware of Free Basic Water, in comparison to people living in Metropolitan areas (44.1%) and other urban areas (46.3%).

50.8 % of the age group 35-49 have heard of Free Basic Water. The age groups 16-24, 25-34 and 50+ are not as well informed.

The results of this study confirm the DWAF/DFID study on customer care and protection (DFID 2005) regarding knowledge of Free Basic Water, as well as the results of the community project undertaken by eThekwini Metro:

> "Specifically there is confusion in relation to the operation of the free basic water strategy; although 38.8% report they are receiving the 200 litres free per day, the remaining 61.2% either report they do not or they don't know."

What does the term Free Basic Water mean?

A similar interesting pattern is seen when LSM is cross tabulated with the various meaning options. This was a single answer question.
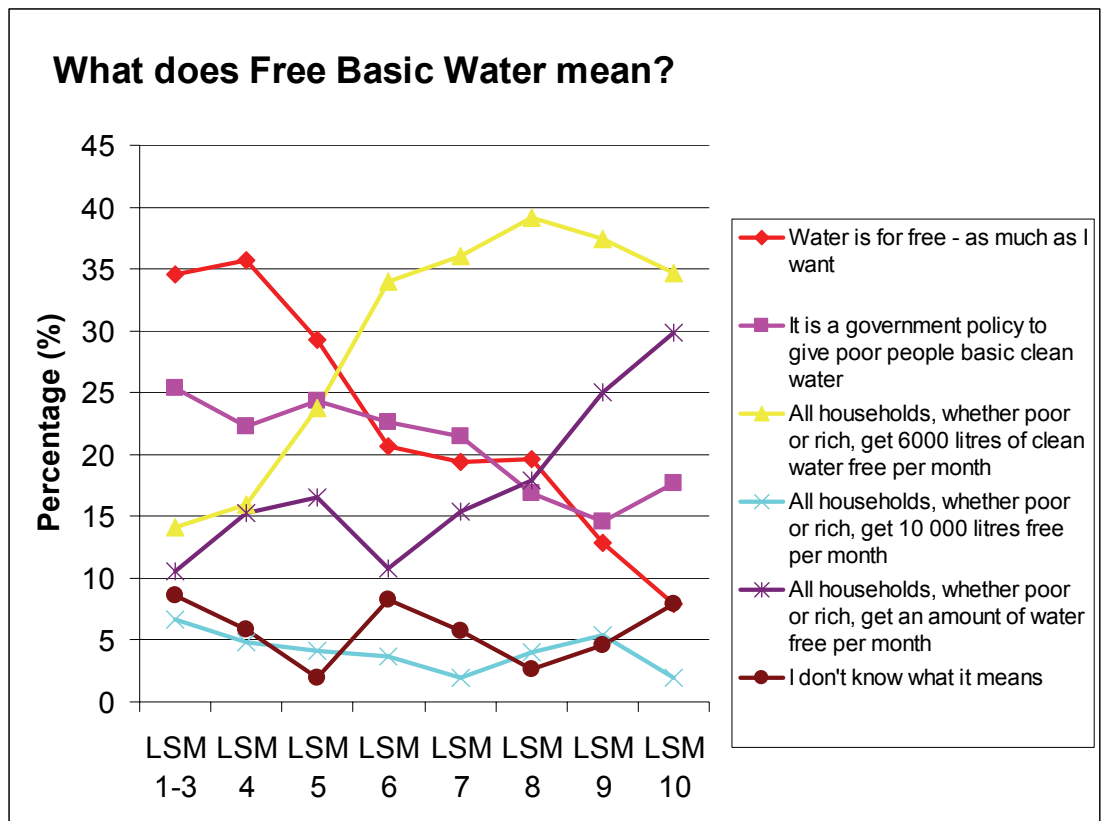
Figure 18: What does the term Free Basic Water mean?

- For lower LSM groups the term Free Basic Water means mainly that 'Water is for free – as much as I want'. This meaning gradually drops as the LSM increases.

- The graph shows that that LSM 6-10 are the best informed of the exact amount (6000 litres) of Free Basic Water. Interestingly, the exact amount of FBW seems to be less of a concern for LSM 9 and 10. The fact that many municipal accounts reflect Free Basic Water, as well as the fact that most of the consumers in the LSM bracket 6-10 receive accounts, could have contributed to this result.

- Respondents from LSM groups 1-4, who did not select the free basic water option, seem not very sure of the exact amount of water that households receive without charge.

- 5.3% of respondents conceded that, although they have heard of Free Basic Water, they do not know what the term means. This was the case despite the fact that possible meanings were given and they could have made a guess.

Composite barometer scores, cross-tabulated with meanings of FBW (Figure 18), show that knowledge of the exact amount of FBW that households receive per month correlates with high barometer scores. It also shows that the perception that 'water is free - as much as I want' drops as the WS barometer score increases.
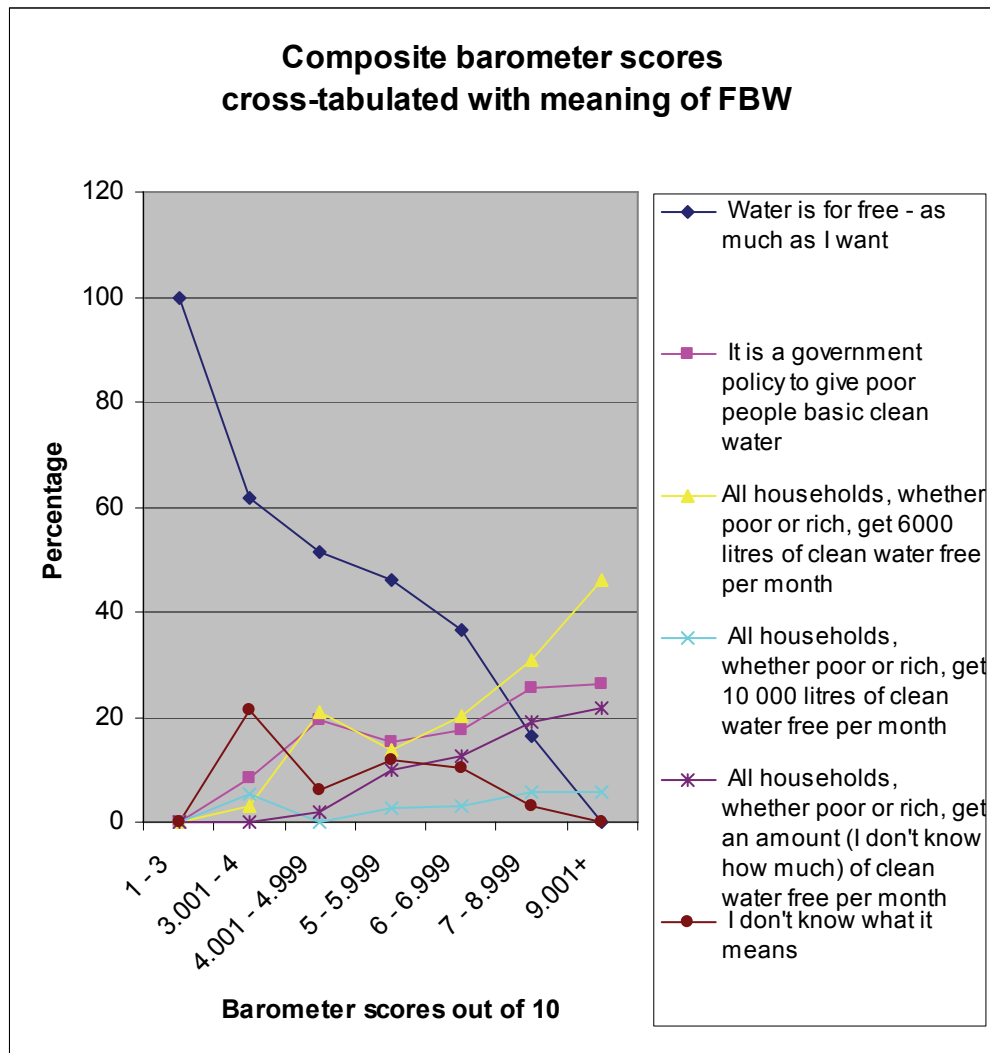
Figure 19: Composite barometer scores cross-tabulated with meaning of FBW

Source of Free Basic Water information

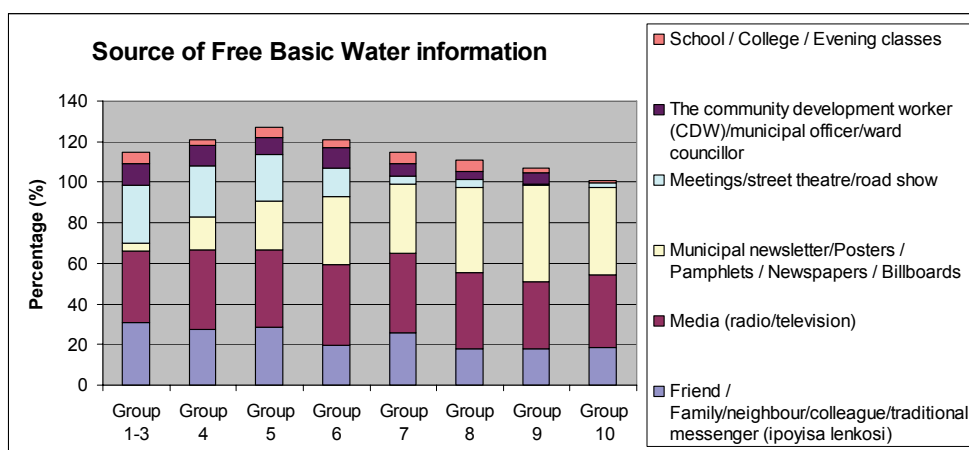Respondents who have heard of Free Basic Water were asked what the source of their awareness was.

Source of Free Basic Water information

Legend:
- School / College / Evening classes
- The community development worker (CDW)/municipal officer/ward councillor
- Meetings/street theatre/road show
- Municipal newsletter/Posters / Pamphlets / Newspapers / Billboards
- Media (radio/television)
- Friend / Family/neighbour/colleague/traditional messenger (ipoyisa lenkosi)

Figure 20: Source of information per LSM Group

- Note: multiple answers were possible; therefore the percentages do not add up to 100%.

- All LSM groups access information from a variety of sources. It is therefore correct to distribute Free Basic Services messages through a variety of communication channels.

- All LSM groups received information on Free Basic Water through the *media* and *friends/family/neighbours etc*.

- Written material such as *Municipal newsletters/posters/pamphlets/ newspapers/billboards* seems to be more accessible to the higher LSM groups than to LSM 1-3.

- LSM groups 1-6 are more likely to access information through *meetings/street theatre/road shows* than LSM 7-10.

The City of Cape Town (58%) and Emfuleni (43.2%) are particularly successful with their *municipal newsletter/posters/pamphlets/newspapers/billboards* as sources of information about Free Basic Water.

Table 9

	Friend/ family/ neighbour/ colleague/ traditional messenger (ipoyisa lenkosi)	School/ college/ evening classes	Media (radio/ television)	Municipal newsletter/ posters/ pamphlets/ newspapers/ billboards	Meetings/ street theatre/ road show	The community development worker (CDW)/ municipal officer/ward councillor
Water is for free - as much as I want	26%	38.1%	27.5%	13.6%	28.2%	27.2%

The table above shows that people get wrong information from different sources: 38.1% of respondents who answered 'Water is for free - as much as I want' said the source for their information was school/college/evening classes etc.

The source of information for respondents who answered that Free Basic Water means 'All households get 6000 litres of clean water per month' was municipal newsletters/posters/newspapers/billboards (43%). The media (27.4%) and meetings/ street theatre/road shows (26.6%) was also a good source of this information; 19% of respondents said they received the information through family/friends etc and community development worker/municipal offices/ward councillors; 10% said they received the information at school/college/evening classes.

Constitutional rights

The right to water

According to the Constitution of the RSA (1996),

> 27(1) Everyone has the right to have access to sufficient food and water.
>
> (2) The State must take reasonable legislative and other measures to achieve the progressive realization of each of these rights.

The Water Services Act (Act 108 of 1997) defines the 'right to access to sufficient water' as a right to 'a right of access to basic water supply and basic sanitation. The legislation reads as follows:

> 3. (1) Everyone has a right of access to basic water supply and basic sanitation.
>
> (2) Every water services institution must take reasonable measures to realise these rights.
>
> (3) Every water services authority must, in its water services development plan provide for measures to realise these rights.

The Water Services Act does not define 'basic'. Basic water and sanitation is defined in the Strategic Framework for Water Services (2003) in terms of quantity, quality and accessibility.

a. A Basic Water Supply Facility is the infrastructure necessary to supply 25 litres of potable (drinkable) water per person per day supplied within 200 metres of a household and with a minimum flow of 10 litres per minute (in the case of communal water points) or 6000 litres of potable water supplied per formal connection per month (in the case of yard or house connections).

b. A Basic Water Supply Service is the provision of a basic water supply facility, the sustainable operation of the facility (available for at least 350 days per year and not interrupted for more than 48 consecutive hours per incident).

c. A Basic Sanitation Facility is the infrastructure necessary to provide a sanitation service which is safe, reliable, private, protected from the weather, ventilated, keeps smells to the minimum, is easy to keep clean, minimises the risk of the spread of sanitation-related diseases, and enables safe and appropriate treatment and/or removal of human waste and wastewater.

d. A Basic Sanitation Service is the provision of a basic sanitation facility which is easily accessible to a household, the sustainable operation of the facility, including the safe removal of human waste and wastewater.

Awareness of the Constitution

54.4% of adults have heard of the Constitution, 45.6% have not.

Gender differences are significant: 59% of adult males have heard of the Constitution versus 50% of females.

The Cities of Tshwane and Buffalo City scored significantly higher than the other metros on their awareness of the Constitution.

Awareness of the Constitution correlates with urban and higher LSM groups as the figure below shows. The pattern is however very different from that of awareness of FBW.
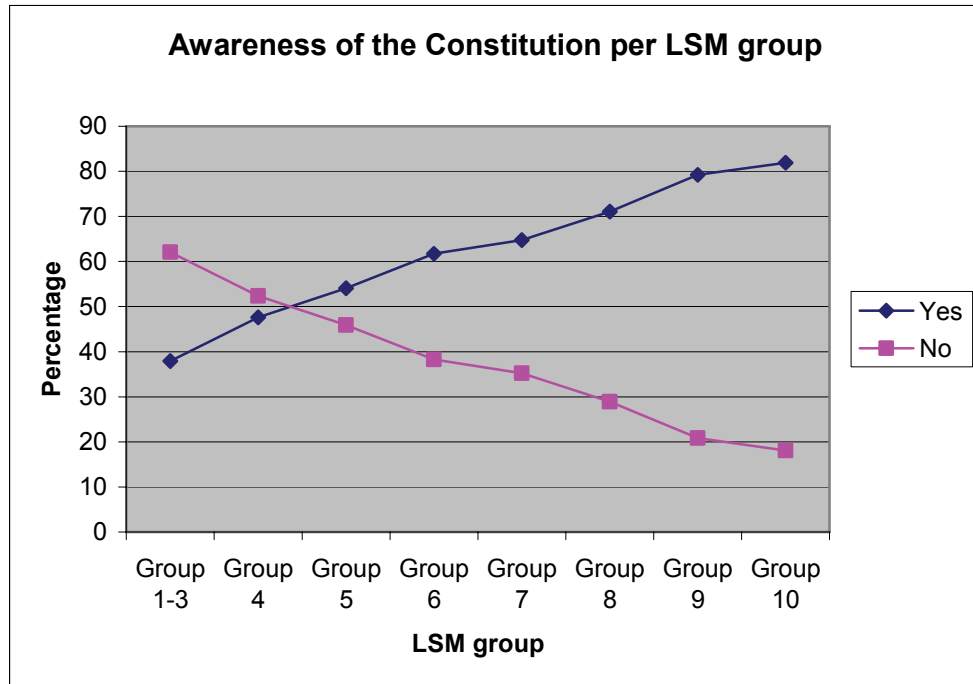
Awareness of the Constitution per LSM group

Figure 21: Awareness of the Constitution per LSM group

Awareness of the Constitution is, similar to awareness of Free Basic Water, a predictor of a high composite barometer score as Figure 21 illustrates.
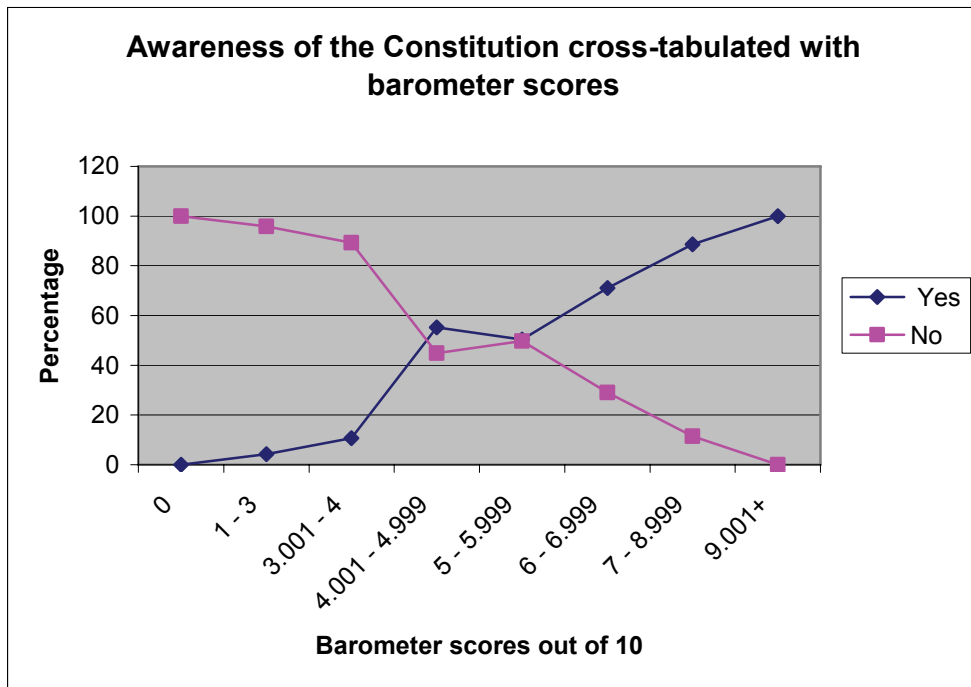
Figure 22: Awareness of the Constitution cross-tabulated with barometer scores

Awareness of water as a constitutional right

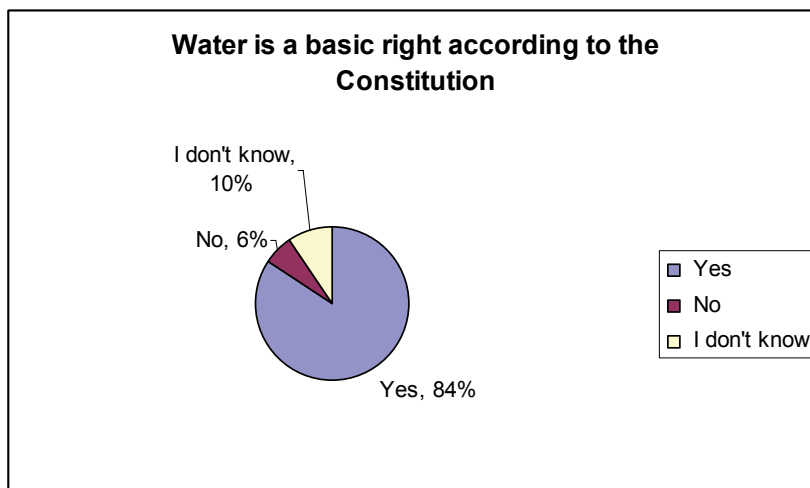84% of those who know about the Constitution believe that 'according to the Constitution water is a basic right'.

Figure 23

What does the right to water mean?

Each of the statements below were asked separately to respondents who had indicated that they had heard of the Constitution and that they considered water to be a basic right according to the Constitution.

Table 10

Everybody has the right to safe water for drinking, washing and cooking	
Yes	98.8%
No	1.2%

Everybody has the right to a tap with clean water within 200 metres of their yard	
Yes	92.4%
No	7.6%

Everybody has the right to a safe, easy to clean and private toilet facility	
Yes	97.6%
No	2.4%

Everybody has the right to get all the water they use for free	
Yes	67.3%
No	32.7%

Everybody has the right to a flush toilet	
Yes	92.9%
No	7.1%

Everybody has the right to a tap inside their home	
Yes	95%
No	5%

- It is clear that the general public does not know what the Constitution says about the right to water.

- 92.9% of the general public think water as a basic right means that everyone has the right to a flush toilet and 95% think it means everybody has the right to a tap inside their homes.

- 67.3% of the population said water as a basic right means that everyone has the right to get all the water they use for free. This shows that there is some understanding that you need to pay for the water you use if you use more than the free basic amount.

- 96% of respondents who answered that Free Basic Water means 'water is for free – as much as I want' said that according to the Constitution 'everybody has a right to a flush toilet'. 91% of respondents who answered correctly that Free Basic Water means 'all households whether rich or poor get 6000 litres of clean water free per month' said everybody has the right to a flush toilet according to the Constitution.

South African's are clearly confused or uninformed about what water as a basic right means.

Correlation between awareness of FBW and the Constitution

The figure below shows that there is a correlation between respondents who have heard of the Constitution and of Free Basic Water, and respondents who have not heard of either.
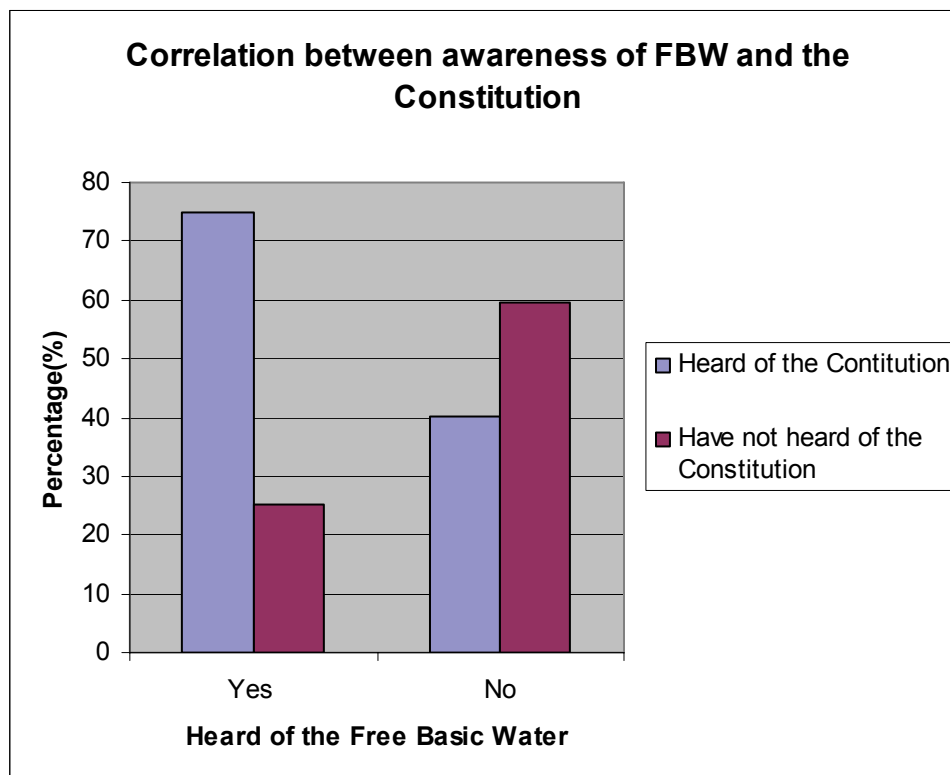

Figure 24

Responsibility to pay for water services

Respondents were given various scenarios and they had to select the scenario that best applied to their household. One of the five options referred to non-payment/poor payment, and it was phrased in such a way that respondents could give the answer without losing face.

    a.   We pay our water and sanitation account every month

    b.   We don't get a water and sanitation account

    c.   We don't pay our water and sanitation account every month, because it is too high/we don't have money/we don't trust the meter reading

    d.   We get an account, but we use less than the free basic amount, so we don't have to pay

    e.   We buy water from a neighbour/kiosk or water vendor.

25% of people who have the responsibility to pay for water services (options a and c), admit that they do not pay their account every month for some or other reason.

Although this behaviour is probably under-reported, it is still significant that so many people were prepared to say that they don't pay for municipal services.

Non-payment/poor payment correlates with the lower LSM groups as Figure 24 illustrates, indicating that people in the lower LSM groups should be educated and encouraged to bring their consumption down to 6000 litres per household per month, or to what they can afford.
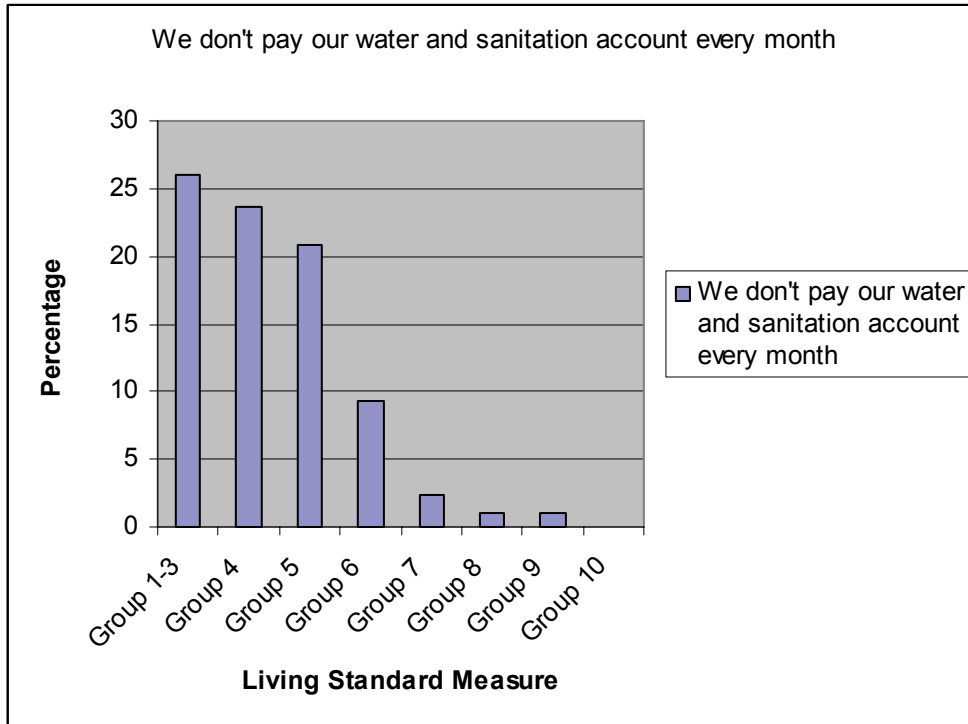

Figure 25

Non-payment/poor payment correlates with low composite barometer scores. **This means that people with low knowledge and awareness regarding key aspects of water services tend not to pay their accounts.**
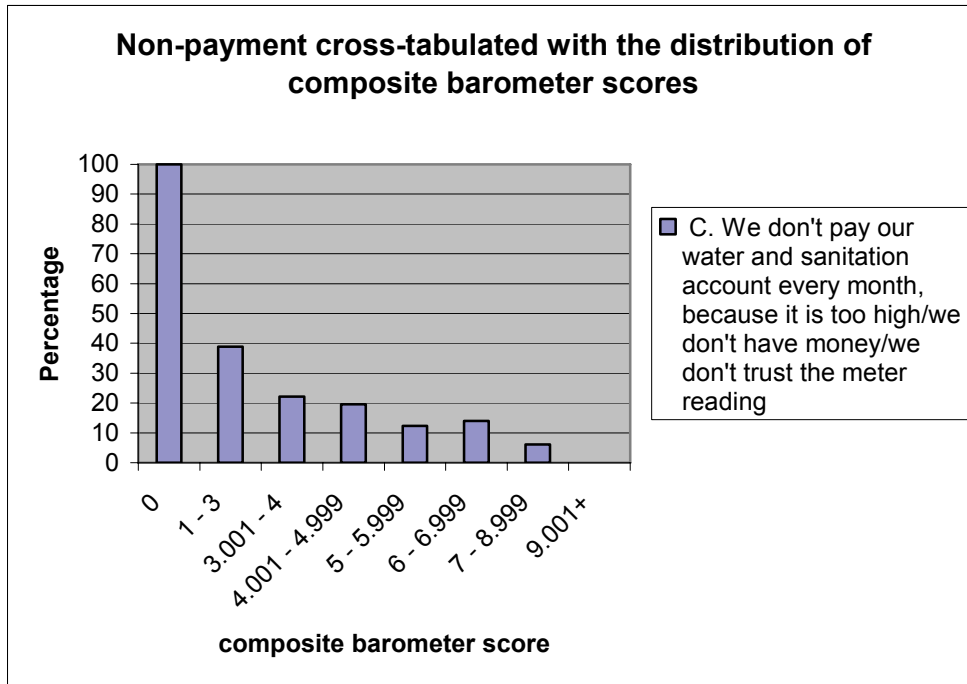
Figure 26

Responsibility to report broken/stolen infrastructure

What do you do if there is a burst pipe or broken tap in your street? (Urban only)

People in the youngest age bracket (16-24) are the least likely to report broken infrastructure.

People in the lower LSM groups are less likely to report broken infrastructure than people in the higher LSM groups as illustrated by the figure below.

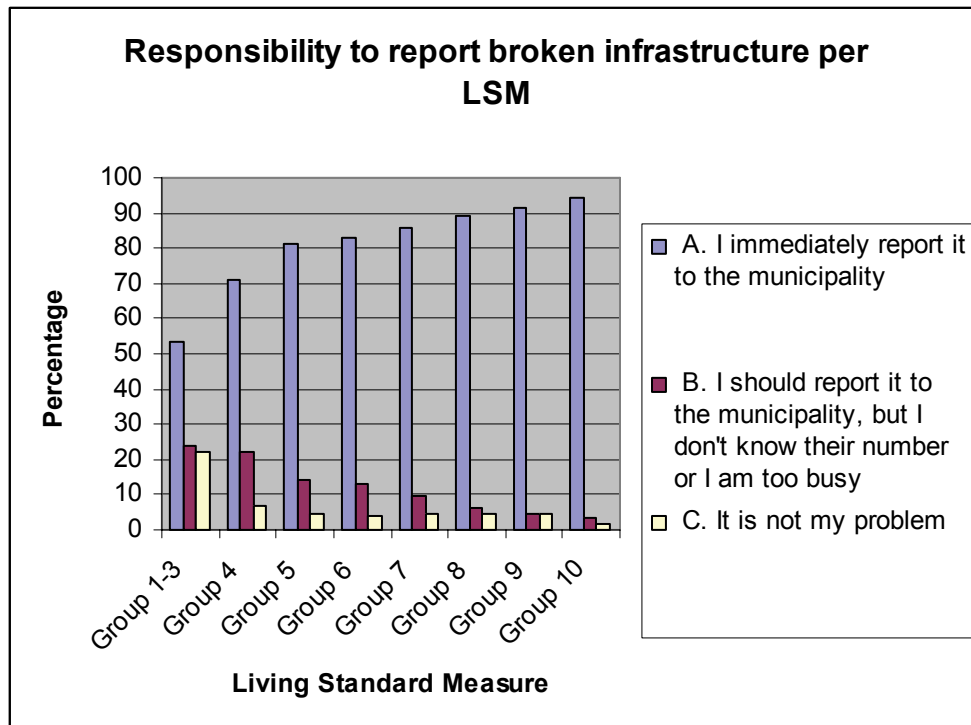**Responsibility to report broken infrastructure per LSM**

Figure 27

The reasons for this result are probably complex and could be any, or a combination of the following (not suggesting that the list is finite):

- The individual indeed does not know how, or where, to report broken infrastructure

- The individual does not have the resources to participate in a cumbersome reporting process

- The individual does not have to pay for water services or get water from a non-municipal source and therefore does not care if wastage occurs. (See also the result below)

- The individual is not well informed and does not realise the implications of broken infrastructure.

Interestingly, responsible behaviour correlates with higher composite barometer scores, i.e. an urban individual who is well-informed about water services matters is more likely to report broken infrastructure as Figure 27 illustrates.

Correlation between responsibility to report broken infrastructure and the distribution of composite barometer scores
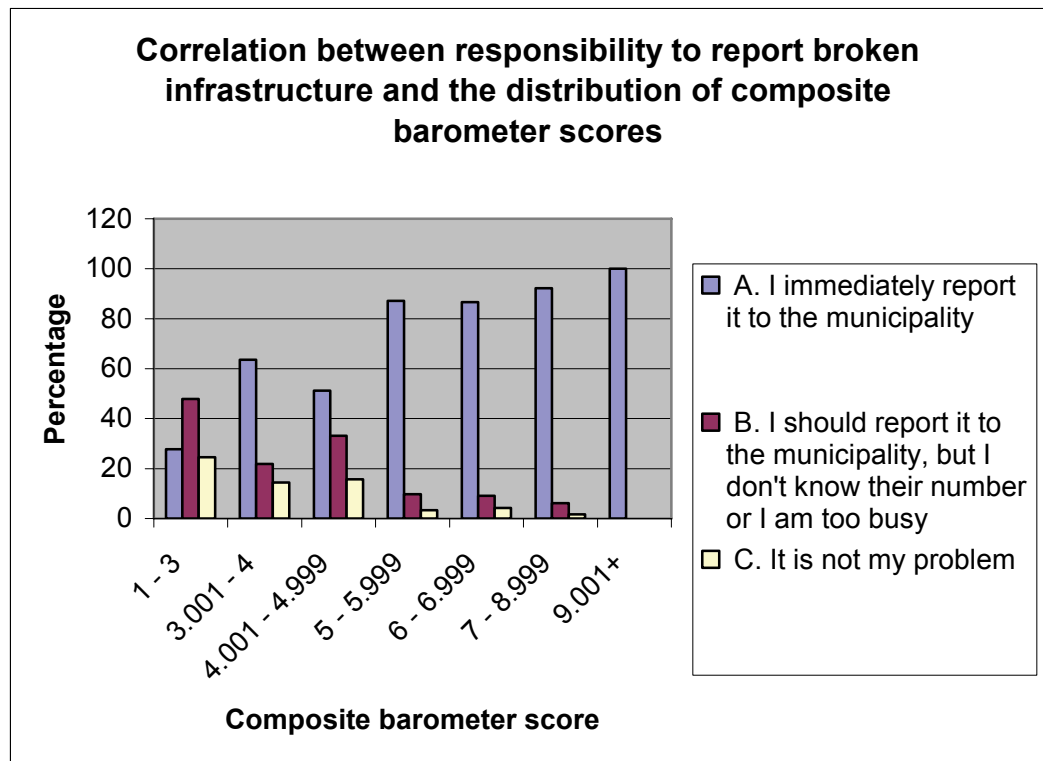
Figure 28

People who are liable to pay for water, even if they don't pay regularly, are more likely to report broken infrastructure than people who do not get an account or who buy water from a neighbour/kiosk or water vendor.

What did you do when the pump broke or was stolen? (rural only)

Rural respondents were asked if they had any experience of a broken or stolen water pump. 32% said yes. Only respondents with this experience were asked what did they do. The reason for the filter was to avoid speculation. The result was then extrapolated to the total rural population.

In contrast to the urban population, most rural people took some action when the infrastructure that supplies them with water breaks, or are stolen.

Report to the municipality	34%
Report to the traditional leadership, civic organisation, water management committee	23%
Fix it themselves or get somebody to fix it	24%
Wait for the municipality to check the pump or don't know what to do	13%

It confirms the finding above that people directly affected by broken infrastructure are more likely to take action than those that perceive themselves not to be affected.

Health and hygiene

Is it important to wash your hands with soap and water after you have been to the toilet?

Respondents received a show card with the following options:

A. Yes, but sometimes I forget or I am in a hurry (23.5%)
B. No, I don't think it is necessary, only when your hands are really dirty (2.1%)
C. Yes, but we don't have water or soap in or near our toilet (9.95%)
D. Yes and I always do it (64.5%)

They were subsequently asked to give the field worker the number of the option that best applied to them. They did not have to read out the option.

Great care was taken to phrase the question in such a way that respondents felt comfortable to accurately report undesired behaviour. 36% of respondents felt comfortable enough to report undesired behaviour.

Predictors of behaviour are:

- Age: 35+ are more likely to wash their hands than the younger age groups

- Gender: Women are significantly more likely to wash their hands after they have been to the toilet than men.

- Province: People in North-West, the Northern Cape and Limpopo are the least likely to wash their hands after they have been to the toilet. People in the Free State are the most forgetful and 'in a hurry' when it comes to health and hygiene habits.

- LSM: Better education and access to running water and soap in toilets are probably the reason why desired behaviour correlates with the higher LSM groups.

- Composite barometer score: Desired behaviour correlates positively with high composite barometer scores as Figure 28 illustrates.
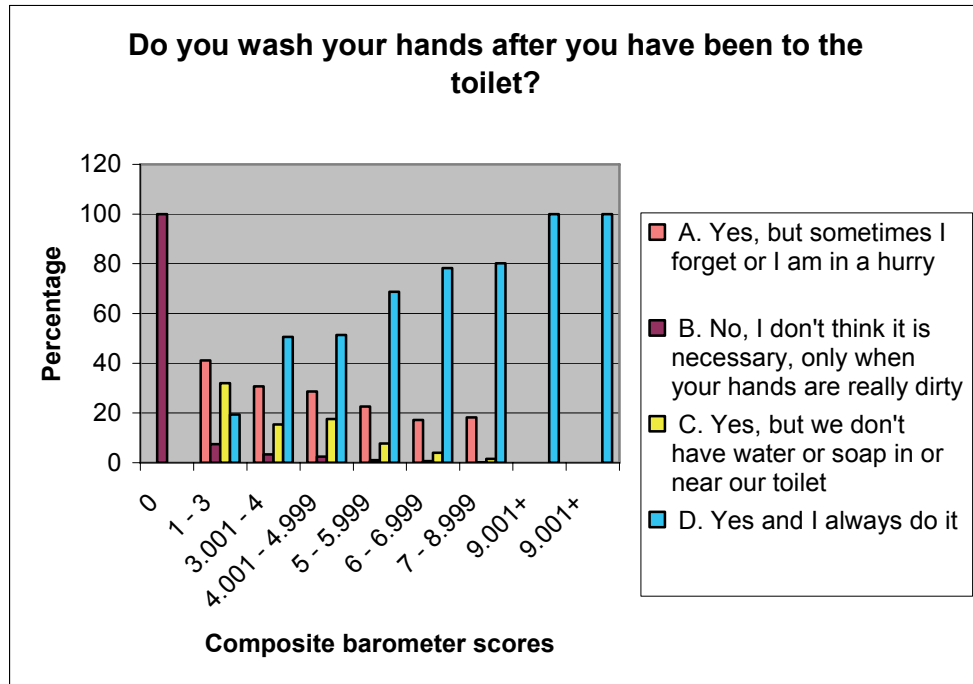
Figure 29

Desired behaviour correlates with having seen posters/radio messages etc. that told you to wash your hands with soap and water after you had been to the toilet.
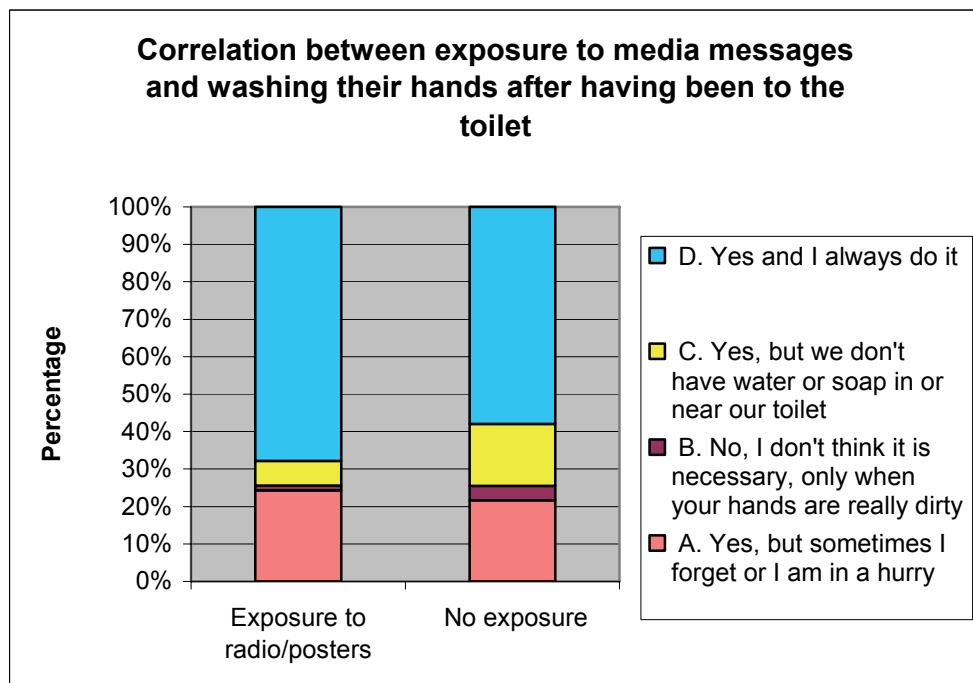

Figure 30

- 70% of young people in the age group 16-24 reported that they had seen or heard messages that promote washing your hands after you have been to the

toilet; yet this age group did not behave more responsibly than, for example, the 50+ group of which only 58% had been exposed to health and hygiene messages.

- The Eastern Cape (83%) and Gauteng (70%) reported high exposure to health and hygiene messages.

- LSM groups 1-6 were the main target audience of the WASH campaign, interestingly, LSM groups 5-8 reported the highest exposure to health and hygiene messages.

What can one do to make water safe for drinking? (rural only)

Respondents were given various options. Multiple answers were possible. Figure 30 reflects the results in descending order.

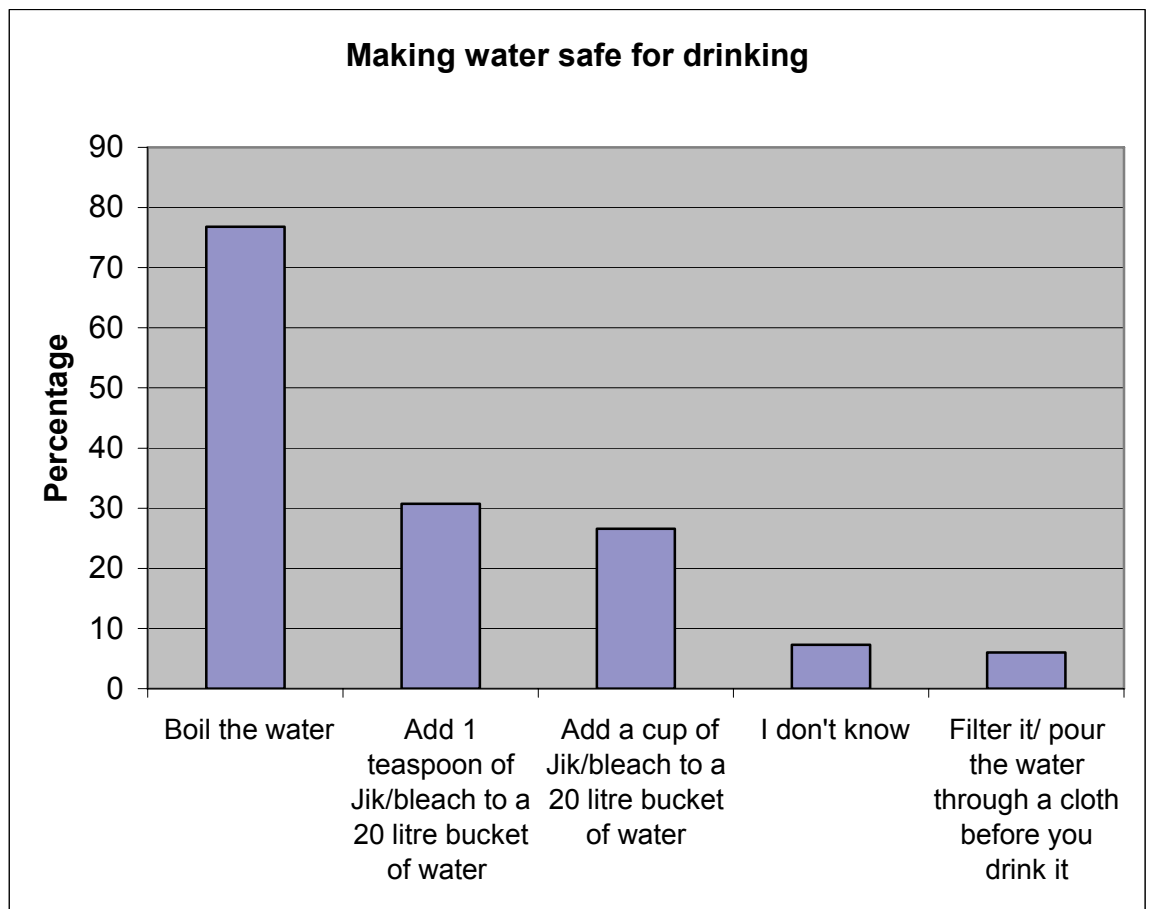**Making water safe for drinking**

Figure 31

- 77% knew that you should boil water to make it safe for drinking.

- Respondents were unsure as to how much Jik/bleach should be added to a bucket of water.

- Respondents were not well informed about the need to filter water. Only 6% selected the option.

- 7.3% of rural adults indicated that they did not know how to make their water safe for drinking.

Knowledge of how to make water safe for drinking purposes correlates with higher composite barometer scores. However, the uncertainty as to how much Jik/bleach should be added occurs across all barometer scores, for example 26% of people with a barometer score of 1-3 points said you should add a cup of Jik/bleach, whereas 28% of people with a barometer score of 9+ said the same.

Institutional roles

Who is responsible for your water and sanitation services?

It is well known that municipalities are responsible for water services.

- On average, 70.6% of adults know that municipalities are responsible.

- This fact is significantly less known in the youngest age bracket (16-24).

- People in the Northern Cape and North-West are the least informed of this fact (51%).

- 10% of adults believe that DWAF is responsible for their water services. Most of them are in the younger age bracket.

- Only 55% of rural people know that municipalities are responsible for water services. 13% said that traditional authorities were responsible for water services, and 11% said that DWAF were responsible.

- Knowledge that municipalities are responsible for water services correlates with higher composite barometer scores as Figure 31 illustrates:
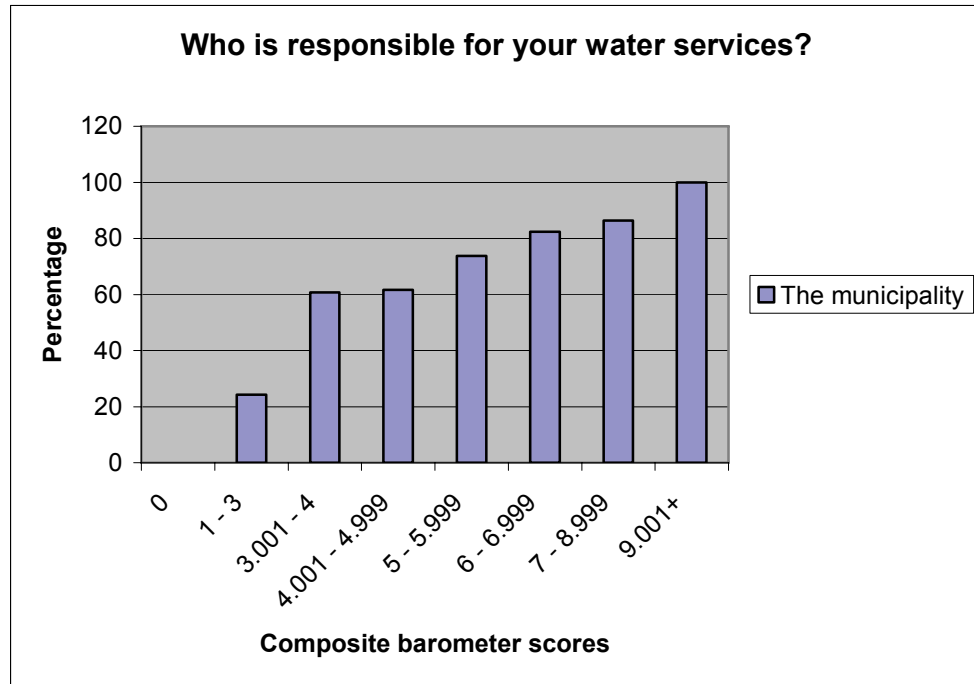
Who is responsible for your water services?

Figure 32

Do you know who your Ward Councillor is (urban only)?

Only urban respondents were asked this question. Only 35% of adults know who their ward councillor is. 57% don't know and 8% don't know what a ward councillor is.

- The figure is particularly high amongst the white and coloured populations. Only 10.7% and 15% respectively knew who their ward councillor was.

- Only 23.2% of people in Gauteng know who their ward councillor is. 12.7% don't know what a ward councillor is. In comparison, 53% of people in the Free State know who their ward councillor is.

- Knowledge of who your ward councillor is correlates inversely with LSM groups. LSM groups 1-4 are the best informed as to who their ward councillor is, whereas the higher LSM groups are the worst informed.

- Residents of eThekwini, Buffalo City and Msuduzi are relatively well informed as to who their ward councillors are.

- Knowledge of who your ward councillor is correlates with composite barometer scores as the figure below illustrates.
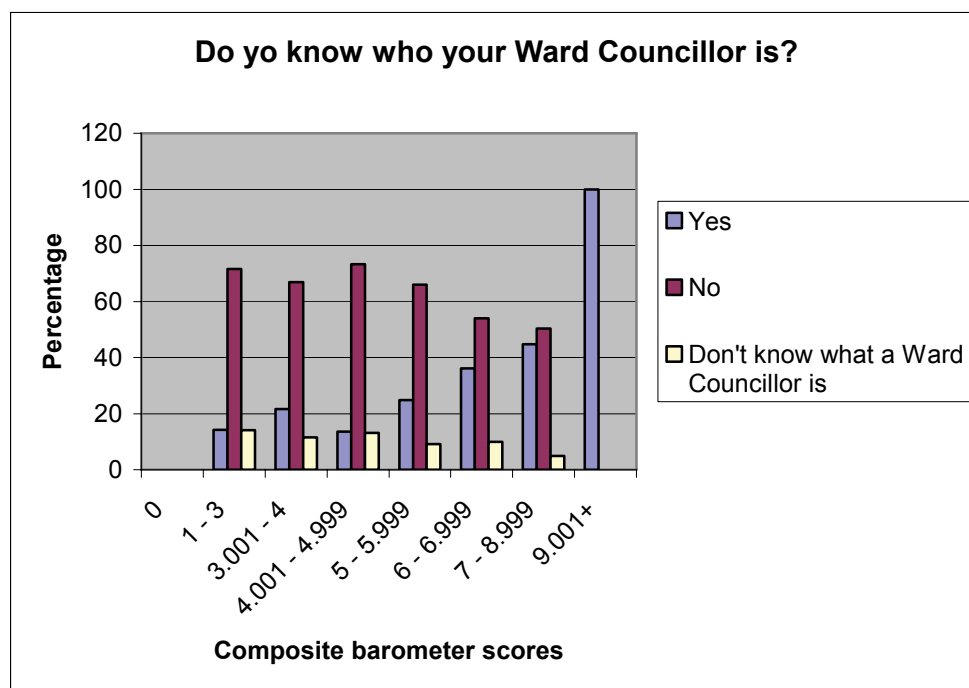
Do yo know who your Ward Councillor is?

Figure 33

Other findings

Attendance at meetings

- Only 16% of urban adults, and 23% of rural adults, have attended any of the following types of meetings during the past two year:

        A Mayoral imbizo
        A Ward Committee meeting
        A tribal meeting about water and sanitation services
        Any other meeting where water and sanitation services were discussed
        A project meeting (e.g. a project to build toilets)

- For urban areas, meetings are the best attended in Buffalo City and Emfuleni.

- Black people attend more meetings than any other population group; whites are the least likely to attend meetings. This result was confirmed when preferred communication channels were asked.

- Most of the meetings in the category 'Other meeting where water and sanitation services were discussed' were arranged by ward councillors or a civil society organisation.

Preferred communication methods: media/meetings, individual face-to-face, combination of media

The totals of the various options were as follows:

Table 11

Radio	51.9%
Television	33.6%
Meetings	29.75
Written material (posters, pamphlets, booklets)	28.7%
SMS	8%
e-mail	2%
Street theatre	4%
Community development worker	9.8%
Friends/neighbours	9.7%
On my account	14.2%
Tribal messenger	9.4%

LSM groups 1-6, which have been the focus of both the FBW and WASH campaigns, indicated their highest channel preferences as follows:

Table 12

	LSM 1-3	LSM 4	LSM 5	LSM 6
Radio	59%	63%	59%	48%
Television		30%	36%	44%
Meetings	41%	37%	36%	28%
Tribal messenger	21%			

For these LSM groups, other communication channels that feature, although the percentages are below 20%, are community development workers and friends and neighbours.

It seems that these LSM groups have a high preference for interpersonal contact. The success that WSAs and WSPs have when they interact with households on an interpersonal level (for example the Citizen's voice project in Cape Town Metro, Johannesburg Water and Madibeng) is further evidence of the importance of interpersonal contact. The feedback from the field workers confirmed this need when they quoted respondents as saying: "When will somebody come to help us?"

The communication preferences of rural people are similar to that of LSM 1-6.

LSM groups 7-10 have a preference for non-interpersonal information such as television, and written communication, either in the form of pamphlets, posters, etc. or notices on their accounts.

What do people need more information on?

The information needs point out areas that should be addressed in future communication campaigns.

Table 13

	Metro	Other urban	Rural
(a) Free basic water	49.7%	55.1%	61.4%
(b) Tariffs, billing and meter reading	38.6%	33.5%	16.4%
(c) How to repair leaks	24.4%	21.9%	19.2%
(d) How to maintain a clean toilet	14.7%	18.2%	28.2%
(e) When will I get clean water/When will I get a flush toilet?	12.5%	18.9%	43.2%
(f) How to use water wisely	41.3%	41.8%	41.7%
(g) Water and sanitation laws	29.5%	25.9%	24.8%

7. Conclusions and recommendations

Conclusions

This study investigated the state of community awareness with reference to key water services aspects.

The study identified that community involvement was one of the key success factors for effective water services management. Closely linked to community involvement, is awareness and knowledge of, and desired behaviour with regard to core aspects of:

- Free Basic Water

- Constitutional Rights

- Responsibilities

- Health and Hygiene methods

- Institutional roles

In meeting the study objectives of establishing the current state of community awareness of water services, the study developed and applied an innovative tool/instrument: the barometer instrument was used successfully to give a 'reading' of the current state of knowledge and awareness amongst the South African public regarding five key water services knowledge areas. In fact, the barometer instrument can be applied to measure the results (the top triangle of the Macnamara pyramid) of any community consultation process.

The composite barometer scores gave an overall indicator of the knowledge/ awareness/behaviour that was tested. However, without a baseline, or a definite expected outcome (e.g. 0.5+ for FBW), the score cannot be used to evaluate the success of the Free Basic Water or WASH campaigns. Different role players will evaluate the results differently, because they would have different expectations of what the South African public know/understand/do. It is therefore important to repeat the barometer study in order to measure change and/or improvement.

The results have shown that the composite barometer score is a powerful predictor of patterns of behaviour regarding payment, reporting broken infrastructure in an urban context and health and hygiene.

Key findings of people's awareness of water services issues are as follows:

- The literature review emphasises the importance of a participatory approach to development communication in international and local best practice. Although limited, DWAF used participatory methods when developing the WASH

campaign. DWAF officials could not confirm that participatory methods were used in the development of the FBW media campaign. This might have impacted on the findings. There are still serious gaps in knowledge/awareness regarding Free Basic Water.

- Qualitative information has indicated that infrastructure without water, or with regular interruptions, is common in some non-metropolitan and rural areas. In such instances, people buy water from shops, neighbours or water vendors. This is a disturbing fact, because these people are not receiving a basic water supply, despite having a tap inside their yards or homes.

- Knowledge and awareness of basic concepts such as the Constitution and Free Basic Water were found to be disappointing, particularly amongst the lower LSM groups (LSM 1-6).

- South Africans are confused or uninformed about what water as a basic right means.

- People have very high aspirations about water and sanitation services. 90%+ of people who have heard of the Constitution believe that it is their constitutional right to get water and a flush toilet in their homes.

- The majority of people are aware of the responsibility for payment and of health and hygiene behaviour, but they do not necessarily practice it, for various reasons.

- Non-payment/poor payment correlates with low composite barometer scores. **This means that people with low knowledge and awareness regarding key aspects of water services tend not to pay their accounts.**

- People who are liable to pay for water, even if they don't pay regularly, are more likely to report broken infrastructure than people who do not get an account or who buy water from a neighbour/kiosk or water vendor.

- The correlation between knowledge/awareness of basic health and hygiene behaviour and exposure to the WASH messages indicated that the WASH programme had a significant impact on the knowledge and awareness of South Africans with regards to health and hygiene. There is no baseline with which to compare reported behaviour.

- South Africans are well informed about the fact that local government is responsible for water services. However, awareness of the ward structure and ward councillors is not yet well established, particularly amongst white and coloured people.

- It is recommended that the results of this study be used as a baseline. Follow-up studies can track improvement or changes in knowledge/awareness and behaviour.

- It could be very useful for communicators to develop a campaign in conjunction with a barometer as a measure of expected behaviour. In this way the inputs, outputs and eventual results of a campaign can be linked right from the start. Development communication campaigns should be evaluated in terms of an improvement in knowledge/awareness/behaviour in the target group, especially where public money is involved.

- The barometer instrument can be applied to other knowledge areas, for example, a basic services barometer, an AIDS barometer or a safety barometer as part of the build-up to 2010.

- Since LSM groups 1-6 are particularly vulnerable, more should be done to support and encourage desired behaviour.

- Participatory methods should be employed in planning development communication. A lack of knowledge/awareness of basic concepts is easily overlooked, leading to misunderstandings and unrealistic expectations.

- More focused interpersonal interventions are necessary to bring rural consumers on par with urban consumers. These would include meetings, community development workers/municipal development officials, community networks, community media and tribal messengers. South Africans cannot exercise their constitutional rights if they have never heard of the Constitution.

- A booklet/pamphlet that summarises municipalities' obligations in terms of community consultation and provides practical guidelines and best practices is recommended for the communication managers/officials of municipalities.

- Literature on best practice such as the WIN/DPLG lesson series, or projects such as the Citizen's Voice or eThekwini's Khanyisa project should be made available to all municipalities to learn from and to apply in their own context.

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Appendix 1

Barometer scores appear in brackets. Please note that not all questions are scored for the barometer. Questions on community consultation, information needs, preference for communication channels, as well as service levels are not scored. Questions on service levels have been included for cross-tabulation purposes.

Service level

1) **(SHOW CARD)** What is the main source of water for your household?
ONE MENTION ONLY

   a) Piped water inside the dwelling or yard
   b) Community standpipe within 200 metres from your house
   c) Community standpipe further than 200 metres from your house
   d) Borehole, spring, rain water tank, dam, pool, river, stream

2) **(SHOW CARD)** What toilet facility does your household mainly use?
ONE MENTION ONLY

   a) Flush toilet which is connected to the municipality's sewer system
   b) Flush toilet with a septic tank
   c) Flush toilet (IF RESPONDENT DOES NOT KNOW IF TOILET IS TYPE a) or b))
   d) Ventilated pit latrine (VIP)
   e) Chemical toilet
   f) Other type of pit latrine, bucket or veld

   Free Basic Water

3) Have you heard about Free Basic Water?
   a) Yes [1]
   b) No [0]

   IF YES IN 3:
4) What does the term Free Basic Water mean? **SHOW CARD. SINGLE MENTION**. [7]
   a) Water is for free – as much as I want. [0]
   b) It is a government policy to give poor people basic clean water. [1]
   c) All households, whether poor or rich, get 6000 litres of clean water free per month. [1]
   d) All households, whether poor or rich, get 10 000 litres of clean water free per month [1]

---

[7] See revised instruction to fieldworkers

e) All households, whether poor or rich, get an amount (I don't know how much) of clean water free per month [1]

f) I don't know what it means. [0]

IF YES IN 3:

5) Where did you hear about Free Basic Water? DO NOT PROMPT. CODE.
   MULTI MENTION
   a) Friend/Family/neighbour/colleague/traditional messenger (ipoyisa lenkosi)
   b) School/College/Evening classes
   c) Media (radio/television)
   d) Municipal newsletter/Posters/Pamphlets/Newspapers/Billboards
   e) Meetings/street theatre/road show
   f) The community development worker (CDW)/municipal officer/ward councillor
   g) Other **(SPECIFY)**

Water as a constitutional right

6) Have you heard about the Constitution?
   a. Yes [1/2]
   b. No [0]

7) **IF YES IN 6).** What does the Constitution say, is water a basic right? DO NOT PROMPT.
   a) Yes [1/2]
   b) No [0]
   c) I don't know. [0]

8) **IF YES IN 7) What does water as a basic right mean?**
   READ OUT. CHANGE ORDER OF STATEMENTS. MULTI MENTION
   a) Everybody has the right to safe water for drinking, washing and cooking. [1/3]
   b) Everybody has the right to a tap with clean water within 200 metres of their yard. [1/3]
   c) Everybody has the right to a safe, easy to clean and private toilet facility. [1/3]
   d) Everybody has the right to get all the water they use for free. [0]
   e) Everybody has the right to a flush toilet. [0]
   f) Everybody has the right to a tap inside their home. [0]

Responsibilities

9) **(SHOW CARD) SINGLE MENTION.** Which statement best applies to your household?
   a) We pay our water and sanitation account every month. [1]
   b) We don't get a water and sanitation account. [1]
   c) We don't pay our water and sanitation account every month, because it is too high/we don't have money/we don't trust the meter reading. [0]
   d) We get an account, but we use less than the free basic amount, so we don't have to pay. [1]
   e) We buy water from a neighbour/kiosk or a water vendor. [1]

URBAN RESPONDENTS:

10) **(SHOW CARD)If t**here is a burst pipe or broken tap in your street, what do you do? **DO NOT PROMPT. SINGLE MENTION.**
    a) I immediately report it to the municipality. [1]
    b) I should report it to the municipality, but I don't know their number or I am too busy. [0]
    c) It is not my problem. [0]

RURAL RESPONDENTS:

11) Has a pump that provides water to your community ever broken or been stolen?
    a) Yes
    b) No

IF YES IN 11:

12) What did you do when the pump broke or was stolen? **DO NOT PROMPT. PRECODE.**

SINGLE MENTION.
a) We reported it to the municipality. [1]
b) We reported it to the traditional leadership/civic organization/water management committee. **STATE WHICH ONE OF OPTIONS WAS SELECTED**…………….. [1]
c) We did not know what to do. [0]
d) We waited for the municipality to come and check the pump. [0]
e) We got somebody to repair/replace the pump. [1]
f) Other. (SPECIFY)

Water quality, health and hygiene

13) **ASK BOTH URBAN AND RURAL RESPONDENTS. (SHOW CARD)** Is it important to wash your hands with soap and water after you have been to the toilet? **PUT QUESTION ON THE SHOWCARD. JUST GIVE ME THE LETTER**
Note: the respondent gets two scores, one for knowledge and one for behaviour.
a) Yes, but sometimes I forget or I am in a hurry. [1 + 0]
b) No, I don't think it is necessary, only when your hands are really dirty. [0 + 0]
c) Yes, but we don't have water or soap in or near our toilet [1 + 0]
d) Yes and I always do it [1 + 1]

14) Have you seen or heard any posters/radio messages etc that told you to wash your hands?
a) Yes
b) No

15) **ONLY ASK RURAL RESPONDENTS (SHOW CARD)** What can one do to make your drinking water safe?
SHOW CARD. **MULTI MENTION. CHANGE ORDER.**
a) You can boil the water. [1/3]
b) You can add ½ a cup of Jik/bleach to a 20 litre bucket water and let it stand for an hour. [0]
c) You can add 1 teaspoon of Jik/bleach to a 20 litre bucket of water and let it stand for an hour. [1/3]
d) You can add medicine/muti. [0]
e) You can filter it/pour the water through a cloth before you drink it. [1/3]
f) You can add a tablespoon of handy andy/sunlight/sta soft/spirits to a 20 litre bucket of water. [0]
g) I don't know. [0]

Institutional roles

16) Who is responsible for your water and sanitation services? **SHOW CARD. ONE MENTION ONLY.**
a) The ANC. [0]
b) The municipality. [1]
c) The department of Water Affairs and Forestry. [0]
d) The department of Health. [0]
e) The traditional authority. [0]
f) The mayor of my town. [0]
g) Other. (SPECIFY)

17) **URBAN RESPONDENTS ONLY:** Do you know who your Ward Councillor is?
Note: The name of the ward councillor is asked to verify the 'yes' answer and to minimise false answers.
a) Yes. GIVE THE NAME. ……………………. [1]
b) No. [0]
c) I don't know what a Ward Councillor is. [0]

Community consultation

18) **(SHOW CARD)** Have you attended any of the following during the past 2 years?
MULTI MENTION

	Once	Twice	More than twice	None
a. A Mayoral imbizo				
b. URBAN: A Ward Committee meeting **RURAL:** A tribal meeting about water and sanitation services				
c. Any other meeting where water and sanitation services were discussed (SPECIFY)				
d. A project meeting (e.g. a project to build toilets)				

19) How would you prefer to receive information on water and sanitation services?
SHOW CARD. **MULTI MENTION.**
   a) Radio
   b) Television
   c) Meetings
   d) Written material (posters, pamphlets, booklets)
   e) SMS
   f) E-mail
   g) Street theatre
   h) Community development worker
   i) Friends/neighbours
   j) Tribal messenger (iphoso lenkhosi)
   k) On my account

20) What do you want to know more about? **SHOW CARD**
   a) Free basic water
   b) Tariffs, billing and meter reading
   c) How to repair leaks
   d) How to maintain a clean toilet
   e) When will I get clean water/When will I get a flush toilet?
   f) How to use water wisely
   g) Water and sanitation laws
   h) Other (SPECIFY)

Appendix 2

Cross-tabulations

Table 14

Q.No	Table Type	Base (Filters)	Side	Top	Additional Specifications		Heading/ Name
					Average	Propline	
C1	FT	All Urban and Rural Informants	C1	breaks			Main source of water for household.
C1, barometer score	X-tab	All Urban and Rural Informants	C1	composite barometer score			correlation between composite barometer score and service level for water
C2	FT	All Urban and Rural Informants	C2	breaks			Toilet facility in household
C2, barometer score	X-tab	All Urban and Rural Informants	C2	composite barometer score			correlation between composite barometer score and service level for saniation
C3	FT	All Urban and Rural Informants	C3	breaks			Heard of Free Basic Water
C4	FT	All Urban and Rural Informants who have heard of 'Free Basic Water'	C4	breaks			Meaning of term Free Basic Water
C5	FT	All Urban and Rural Informants who have heard of 'Free Basic Water'	C5	breaks			Who or what was the source of information
C4,C5	X-Tab	All Urban and Rural Informants who have heard of 'Free Basic Water'	C4	C5			Meaning of term Free Basic Water/ Who or what was the source of information - Cross Tab
C6	FT	All Urban and Rural Informants	C6	breaks			Heard about Constitution
C6, C3	X-tab	All Urban and Rural Informants	C6	C3			Heard about Constitution/ Heard of the term Free Basic Water
C7	FT	All Urban and Rural Informants who have heard about the Constitution	C7	breaks			Water - A Constitutional right
C8	FT	All Urban and Rural Informants who have heard about the Constitution and what the Constitution states	C8	breaks			Meaning of 'Water as a basic right'
C8, C4	X-tab	All Urban and Rural Informants who have heard about the Constitution and what the Constitution states	C8	C4			Meaning of 'Water as a basic right'/ Meaning of Free Basic Water

C9	FT	All Urban and Rural Informants	C9	breaks			Statements applicable to household
C9, C4, C7, C8, C3	X-tab	All Urban and Rural Informants	C9	C4, C7, C8,C3			Statements applicable to household/ Know/don't know term FBW/ Meaning of Free Basic Water/ Water a Constitutional right/
C10	FT	All Urban Informants	C10	breaks			Actions taken to report a burst pipe or broken tap
C9,C10	X-tab	All Urban Informants	C10	C9			reaction to burst pipe/payment behaviour - Cross Tab
C11	FT	All Rural Informants	C11	breaks			Community Pump ever been broken or stolen
C12	FT	All Rural Informants with broken or stolen community pump	C12	breaks			Actions taken to report a broken or stolen community pump
C6, C7, C12	X-tab	All Rural Informants with broken or stolen community pump	C12	C6,C7			Heard about Constitution/ Water - A Constitutional right/ Actions taken to report a broken or stolen community pump - Cross Tab
C13	FT	All Urban and Rural Informants	C13	breaks			Importance of washing your hands with soap and water
C14	FT	All Urban and Rural Informants	C14	breaks			Seen or heard any posters/radio messages that told you to wash your hands
C13,C14	X-tab	All rural informants	C13	C14			Correlation between hand washing behaviour / seen or heard any posters/radio messages that told you to wash your hands
C14, C5	X-tab	All Urban and Rural Informants	C14	C5			Seen or heard any posters/radio messages that told you to wash your hands/ Source of FBW messages
C15	FT	All Rural Informants	C15	breaks			Methods used to make drinking water safe
C16	FT	All Urban and Rural Informants	C16	breaks			Person/ Department/ Leader/ Organisation responsible for Water and Sanitation Services
C17	FT	All Urban and Rural Informants	C17	breaks			Awareness of Ward Councillor
C18	ST	All Urban Informants	Meetings	Scale			Meetings attended in the past 2 years - Summary
C18	ST	All Rural Informants	Meetings	Scale			Meetings attended in the past 2 years - Summary
C18	FT	All Urban Informants	Scale per meeting	breaks			Meetings attended in the past 2 years
C18	FT	All Rural Informants	Scale per meeting	breaks			Meetings attended in the past 2 years
C18cc	FT	All Urban and Rural Informants	Scale per meeting	breaks			What was the purpose of the meeting and who arranged the meeting
C19	FT	All Urban and Rural Informants	C19	breaks			Preferred method to receive information about water and sanitation services
C20	FT	All Urban and Rural Informants	C20	breaks			Information needs
Barometer scores per category	FT	All urban and rural informants	barometer scores	breaks			Barometer scores per barometer category (FBW; water as institutional right; responsibilities; water quality,health and
Barometer scores	FT	All urban and rural informants	barometer scores	breaks			Composite Barometer scores per break.Add province

Appendix 3

Structure for analysis of survey findings

The structure below was used to analyse the data tables.

Introduction

Outline of chapter.

Explain interpretation of scores.

Qualitative information from debriefing of fieldworkers will be referred to when relevant.

Demographic variables (Breaks):

Motivate selection of Urban/rural, gender, age, race group, LSM, WSA, province.

Barometer scores

Composite barometer scores

➢ Average Barometer score (BS) for country

➢ BS for rural and urban

➢ BS per LSM

➢ BS per WSA (for baseline purposes)

➢ BS per gender

➢ BS per age group

➢ BS per race group

➢ BS per province (for baseline purposes)

➢ BS per service level (C1, C2: basic level, above basic, below basic)

C1
a) Piped water inside the dwelling or yard (above basic
b) Community standpipe within 200 metres from your house (basic)
c) Community standpipe further than 200 metres from your house (below basic)
d) Borehole, spring, rain water tank, dam, pool, river, stream (below basic)

C2
a) Flush toilet which is connected to the municipality's sewer system (above basic)
b) Flush toilet with a septic tank (above basic)

c) Flush toilet (IF RESPONDENT DOES NOT KNOW IF TOILET IS TYPE a) or b))
(above basic)
d) Ventilated pit latrine (VIP) (basic)
e) Chemical toilet (above basic)
f) Other type of pit latrine, bucket or veld (below basic)

Discussion

1. General interpretation of national barometer score

2. Areas of strength

general knowledge/awareness,

technical knowledge (FBW, purify water),

attitude & behaviour (health and hygiene)

demographic variables (breaks)

2. Areas of weakness:

3. Relation between level of service (C1, C2) and barometer scores

Barometer scores per category

➢ Average BS scores for FBW, constitutional rights, responsibilities, Health and Hygiene and Institutional roles x breaks

		Breaks: Urban/rural; male/female, etc.		
FBW	Av Barometer scores			
Water as Constitutional right				
Responsibilities				
Water Qual, Health & hygiene				
Institutional roles				

<u>Discussion</u>

1. General interpretation of national barometer scores.

2. Free basic water

    General awareness/correctness of meaning - areas of weakness and strength

    Source of information

    Relation between meaning and source of information

3. Constitution

    General awareness: areas of strength and weakness

    Relation between awareness of FBW and Constitution

    Awareness of water as constitutional right

    Meaning of water as basic right: areas of strength and weakness

    Confusion between FBW and free water as a right (cross tab C8, C4)

4. Responsibility to pay

    Who pays and who don't: analyse breaks

    Irresponsible behaviour: analyse breaks

    Relation between knowledge of FBW (meaning) and payment behaviour (cross tab C9,C3,4

    Relation between meaning of water as constitutional right and payment behaviour. (cross tab C9 with C7,8)

5. Responsibility to report broken/stolen infrastructure

    Who act responsible and who don't: analyse breaks

    Responsible behaviour regarding payment compared to responsible behaviour to report broken infrastructure (urban only)

6. Sanitation health and hygiene

    Knowledge/awareness, behaviour – areas of weakness and strength

    Relation between positive knowledge and behaviour and posters/radio messages

7. Institutional roles

    Analyse breaks

    Correlation with knowledge of the Constitution

Other findings

1. Meetings attendance: analyse breaks

2. Preferred communication methods: media/meetings, individual face-to-face, combination of media

3. Do people prefer a single media or do they prefer an eclectic approach?

4. What do people need more information on?

5. Correlation between information needs and awareness of Free Basic Water.