

TOWARDS THE DEVELOPMENT OF A SANITATION MARKETING PLAN

**Report to the
WATER RESEARCH COMMISSION**

by

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EXECUTIVE SUMMARY

INTRODUCTION

Sanitation includes not just toilets, but a range of elements, which are inter-related and of equal importance, such as physical infrastructure, hygiene-related behaviour, disposal of wastewater, excreta and other solid wastes, community participation in decision-making, improved health of millions, safer living environments, greater knowledge of sanitation-related health practices and improved hygiene. Sanitation services in many areas are far from satisfactory. The plight of the rural population nevertheless, is much worse (Alcock, 1999). Rural areas present unique challenges to sanitation improvement activities and in some situations, technical solutions are not the answer. Most of the challenges are attributed to the characteristics that set these areas apart from the urban sector. Rural areas are characterised by inferior infrastructure, low incomes, poor site conditions, unreliable water availability, high population density, and lack of legal land tenure and lack of recognition by formal governments. These characteristics are much more complex than those typifying urban areas and affect the sanitation status of rural communities (Danida, 2000; Black, 1996 and Bajracharya, 2003). This segment of the population, therefore, should be a focus of concern, but even the few institutions that recognise the problem and want to do something about it find that there exists little knowledge or experience about how to address this problem. Although there has been extensive research on water and sanitation related diseases in South Africa, there is a dearth of information on factors that can motivate people to adopt safe hygienic practices. Most of the available research deal with the health impacts and risks associated with poor sanitation. An increasing volume of literature suggests the need to focus on rural sanitation research in view of the magnitude of the sanitation problem in these areas (IRC, 2001; Morgan, 2001 and Hogrewe et. al, 2001).

The Constitution of South Africa (Act 108 of 1996) guarantees all South Africans the right to have access to dignity and respect and, to health and well being. This means that the right to sanitation is also safeguarded. In 1996, it was estimated that 21 million South Africans did not have access to adequate sanitation facilities, of which 85% was constituted the rural population (White Paper on Sanitation, 1996). In 2001, the White Paper on Basic Household Sanitation (2001) reported that the figure went down, though not significantly, to approximately 18 million. Inadequate sanitation has effects on health (e.g. water-borne diseases: diarrhoeal diseases, intestinal infections, polio, typhoid,

cholera, etc), economy (e.g. poverty, illness, illiteracy and lost income inclusive of GDP and GNP), environment (e.g. dispersed and diffuse pollution of water sources resulting in the water and faecal disease cycle for communities with untreated water supplies and increased downstream water treatment costs) and leads to social and psychological problems such as loss of privacy and dignity and exposure and increased risk to personal safety. This in the long-term affects the quality of life, education and development. Lack of access to basic sanitation also has a negative effect on people's dignity and privacy.

The White Paper on Water Supply and Sanitation (1994) and White Paper on Basic Household Sanitation (2001) indicate that sanitation lacks the priority that it should enjoy in relation to the burden that it places on society. It is not a popular topic at any level in society and it is neither viewed as an attractive career, or a political campaign issue. In addressing this legacy, national, provincial and local governments have taken a number of initiatives towards safe hygienic practices and to reduce the sanitation backlog. These include the establishment of the National Sanitation Co-ordinating Office (NASCO), Provincial Sanitation Task Teams (PSTTs), Multi-Annual Action Plan (MAAP), and Sanitation Communications committees. In the Eastern Cape, there are currently 22 existing sanitation projects. This represents at least 10 000 households. There are also 150 villages that have been impacted through the EU funded programme. Many of these have drawn up action plans in terms of their sanitation programmes. It is estimated that at present, at least 25 000 households are involved in firm action plans for sanitation improvements (Supply and Sanitation, 1994).

More worrying is the fact that, people continue to adopt unsafe hygienic practices, despite an array of diversified efforts that has been mounted towards alleviating this problem. This shows that sanitation and hygiene promotion requires far more than building demonstration toilets, although, safe disposal of human excreta is a major and necessary requirement for safe sanitation. Therefore, sanitation promotion should not only focus on the improvement of the physical infrastructure of toilet facilities, but personal, family and cultural hygiene practices and habits are also critical (White Paper on Water Supply and Sanitation, 1994; White Paper on Sanitation, 1996 and White Paper on Basic Household Sanitation, 2001). The complexity of sanitation presents the hard realities of the task before all sectors of society, particularly researchers.

In order to plan an effective marketing plan for sanitation promotion, the problem and its underlying causes have to be understood. Solutions must be informed by research and not based on assumption.

Only when the problem has been quantified and qualified can appropriate measures be taken to improve the situation. Since poor sanitation does not exist in isolation, the starting point is to identify and understand the environmental conditions, religious, social and cultural factors (i.e. traditional beliefs, perceptions, customary sanitation practices, habits, priorities) within a particular household and community. Based on these, recommendations could be made on the development of a marketing plan for sanitation promotion. It is in the light of this, that the current study was conducted.

STUDY OBJECTIVES

The overall objectives of the study were:

- To identify critical success factors that motivate people to adopt safe hygienic practices
- To make recommendations for the development of a village-level participatory marketing plan for sanitation promotion

METHODOLOGY

This study drew on the insights and experiences of a wide range of participants. Three purposive samples constituted the study. The first sample group consisted of members of the PSTT (EC) and SANTAG (KZN) comprised the various provincial government departments, district and local municipalities and NGOs which are active in research and implementation and private sector agencies. The second sample group consisted of representatives from various development interest groups such as local government departments, tribal authorities, traditional healers, traditional leaders, farmers association, Community Policing Forum, councillors, disabled people's organisation, taxi associations, and political organisations from Ngqushwa Local Municipality. The third sample group was constituted by 14 villages spread across the 14 wards of the Ngqushwa Local Municipality. All people interested in sanitation issues including women, nurses, teachers, the youth, village health workers, various community structures and pressure groups, were involved in the study. The approach used in the study was participatory in nature in order to recognise and foster local knowledge and skills and to help communities to define problems, evaluate local institutional capacities and prioritise opportunities for development. The study was introduced at provincial, local and community levels in order to gain the support of all stakeholders. Before commencing with information gathering, the study team had to make preparations regarding the area, the people and the project. All sources and resources were examined in order to ensure the smooth running of fieldwork. A community profile study and a

transect walk were undertaken. Since hygiene issues are very personal and potentially very sensitive, care was taken to use those techniques that will accommodate the sensitivity of the issue, as well as the modesty of the target groups. Both quantitative and qualitative data collection methods were used. The quantitative methods included 14 structured group interviews using Duncker's KAP questionnaire and 494 structured individual interviews using the questionnaire developed from literature. The qualitative data collection methods included 15 unstructured interviews using seven guiding questions derived from literature (Appendix C). Four (4) group interviews were conducted with PSTT members, Five (5) with Nqgushwa Local Municipality Officials and one (1) with SANTAG (KZN), one (1) with DWAF (KZN), one (1) with DWAF (EC), one (1) with Mvula Trust (EL), one (1) with RSS (EL) and one (1) with Umgeni Water (KZN). These groups were facilitated by the LDA research team from June to December 2002.

KEY FINDINGS

The objectives of the study were to determine factors that can motivate people to adopt safe hygienic practices and based on those make recommendations for the development of a marketing plan. There were several key issues raised in the study and strategic interventions that could be taken into consideration not only in the development but also in the implementation of a marketing plan for the promotion of safe hygienic practices. The key issues include socio-economic status; water supply status; sanitation status; hygiene practices; hygiene perceptions; target groups; motivating factors for adoption of safe hygienic practices; hygiene promotion and marketing; and implications for future research endeavours.

SOCIO-ECONOMIC STATUS

The communities were characterised by inferior infrastructure (e.g. poorly constructed houses, lack of electricity and poor road conditions), poor site conditions, unemployment, low incomes, poor living conditions, low literacy levels and lack of recreational facilities. There was a general lack of human, physical, organisational and natural resources in the communities. The lack of basic services affected the sanitation status of the communities. The health of the communities was generally poor because of poor diet, dirty surroundings and unavailability of water. Consequently, community members suffered from diseases such as worms, eye infections, diarrhoea, cholera, bilharzia, malaria, and typhoid. It is important to consider the cost of promoting safe hygienic practices, given the fact that the Eastern Cape

is one of the poorest provinces in the country and that the villages under study were characterized by a high level of unemployment and those who were working earned below the poverty datum line. Most of those working were employed in primary activities such as subsistence farming and mining and a few were employed in the secondary sector such as manufacturing, construction and utilities. Unemployment and lack of income have been mentioned as factors that impede the adoption of safe hygienic practices. International experience shows that once people's basic needs are met, sanitation improvements can easily take place (White Paper on Basic Household Sanitation, 2001). Promoting the adoption of safe hygienic practices cannot be done in isolation and indifference to the immediate needs of communities. Therefore, a holistic, integrated and inclusive programme that incorporates the social and economic development of communities should be adopted. Integration requires the collaboration and cooperation of the various stakeholders together with the communities to determine the assets, activities, adaptive strategies and needs of communities for the adoption of safe hygienic practices.

Strategic intervention: Community development as an intervention strategy with the sustainable livelihood approach be considered to incorporate the development and implementation of a marketing plan for safe hygienic practices. This approach would capacitate community members to earn an income for the purchase of food and may also enable them to purchase water or requirements for water treatment, essential services and products for safe hygienic practices.

WATER SUPPLY STATUS

Clean water supply was irregular, inadequate and inaccessible because existing natural water supply sources (such as perennial rivers, springs, fountains, dams) and manufactured water supply sources (such as street taps, yard taps, and tanks) were limited and some did not produce water which was safe for human consumption. Inadequate water supply was also attributed to bursting pipes, lack of money to fix broken taps, taps being closed and drought. Water sources were poorly maintained. Without regular water supply and proper maintenance of water sources, it is almost impossible for people to adopt safe hygienic practices. The communities identified inadequate water supply as a de-motivating factor for adoption of safe hygienic practices. It is not surprising, therefore, that 71.4% of community members reported not being able to have a full body wash on a regular basis. Irregular water supply also impacted on the capacity to keep water containers clean and hygienic. The intermittent water supplies and scarcity of water affect the poor both in terms of livelihoods and health. They lead to deteriorating water quality and this is mostly felt in rural areas where population pressure, competing demand of agriculture, industry and domestic users are mostly concentrated.

Strategic intervention: The sanitation-marketing plan should advocate for the expansion and development of water regular supplies. The improvement of water supplies is likely to stimulate/motivate communities to look at other improvements needed, including sanitation.

SANITATION STATUS

There was a lack of essential services for safe disposal of water and other domestic waste. Rivers, streams, canals, gullies and ditches were often destinations of most untreated human excreta and household waste. Such waste accumulated on streets, in open spaces, between houses, in stagnant pools and on waste land. Sewerage oxidation ponds, septic tanks and water reticulation, all forms of toilet structures were generally poor to non-existent. Schools were built with no latrines and a number of communities used the bush for defecation. Toilets were not properly maintained, poorly designed and in certain instances toilets could not be shared due to cultural beliefs. Most of the children under the age of 12 years did not use the toilet because they were considered unsafe. Rural communities tend to be ignored by municipal authorities, which find themselves overwhelmed by the urban communities' sheer numbers and need, which far outstrip the capacity of the local planners and government. A lack of basic services, in particular the lack of adequate excreta management threatens the public health and the environment of rural areas as a whole. The removal and safe disposal of excreta and wastewater from washing, bathing, and other domestic uses in rural settlements are critical health and environmental needs. Lack of adequate sanitation and inadequately maintained or inappropriately designed sanitation systems affect the quality of life and place an added financial and health burden on poor families. They constitute a range of population risks to health (e.g. water-borne diseases), the economy (poverty, illness, illiteracy and lost income), the environment (e.g. dispersed and diffuse pollution of surface and ground water sources), which in turn makes it difficult for people to adopt safe hygienic practices. The suggestions made by participants were that sanitation technologies must be appropriate to the resource-base of the community and the physical environment in which they are located. Technologies must be acceptable to the community. The systems must be manageable and not make excessive demands on the time or resources of the community. Toilets must be placed at reasonable distance because toilets placed at a distance from home are not used because they create inconvenience for and anxiety, particularly to women and the elderly. Sanitation systems are to be made sustainable in this fast changing political, sociological, economic and technological environment. They should be designed, constructed and operated with the participation of potential consumers. The use of local resources (including building materials) should be encouraged. Local community members

should be empowered to build the sanitation infrastructure. Where skills already exist, they could be developed further to suit the needs of the specific community.

Strategic intervention: Providing access to hardware is not enough as change in behaviour is required for the full health benefits to be achieved. The availability of appropriate sanitation facilities is very important. The sanitation-marketing plan should emphasise that behaviour and facilities should work hand in hand if value-added benefit of sanitation is to be maximised. It is therefore recommended that the sanitation facilities in the villages be improved for easy accessibility and adequacy. Where there are already sanitation infrastructures, households could be assisted to upgrade facilities to ensure that they are safe and hygienic.

HYGIENE PRACTICES

To a large extent communities did not practice safe hygienic practices. Some of the community members did not practice personal hygiene such as washing hands before handling food, before eating, after a visit to the toilet, after cleaning house and after work or rubbish disposal because of lack of hand washing facilities and irregular water supply. It was particularly indicated that men do not wash their hands after passing urine. Household hygiene was to a greater extent not practised because there were households without toilets or with poor toilet facilities, which resulted in poor disposal of childrens' faeces and some families using the "bush" for defecation. Some households left their water containers uncovered or half covered to "capture" rain water. The containers were not washed regularly, drinking water was generally untreated due to lack of money to buy disinfectants and lack of knowledge and dirty water was thrown in front of the house due to the lack of drainage systems. Uncovered drinking water encouraged animals to drink from the water containers since there were no demarcation areas around households. Good health, hygiene and sanitation start at home. Local government should support the household and other spheres of government to ensure that good sanitation has a lasting positive effect on the health of individuals, the community and society. Sanitation planning, implementation and monitoring should be co-ordinated through dedicated forums at national, provincial and local levels to ensure that sanitation reaches households in an effective manner. Community hygiene was also not satisfactory due to poor technical awareness and inadequate water and sanitation facilities. Further, community hygiene was of an unacceptable state because of poor designs in facilities, lack of maintenance and cleaning of public toilets, irregular water supply and cultural norms and values. The main causes of poor or lack of hygienic practices at personal, household and community levels were related to lack of water supply and facilities, poor facilities for the safe

disposal of water and other domestic waste and lack of sanitation facilities. There were incidences of diseases such as diarrhoea, worms, bilharzia and malaria, which usually result from inadequate sanitation.

Strategic intervention: The marketing plan should demonstrate that hygienic practices cannot be viewed in isolation because they are a product of technical awareness, water availability and facilities and availability of proper sanitation technologies. Therefore, a successful marketing plan should take these factors into consideration.

HYGIENE PERCEPTIONS

Sanitation was narrowly viewed as a toilet issue. Communities generally did not perceive urinating on open spaces, behind the house or on the roads among males as bad hygiene practise. Some communities perceived covering food *for visitors only*, boiling drinking water *for children only*, cleaning a toilet *without detergents*, touching children faeces, as safe hygienic practices. The communities perceived safe hygienic practices as "rich people's affair". They believed that only rich people can afford toilets- toilets were associated with dignity, privacy and status. Some preferred to defecate in the "bush" because they perceived toilets, especially inside ones as "Western culture". Encouraging children to defecate behind the house was not perceived as unsafe hygiene practice because it was safer for children. The viewpoints of the participants show the importance of understanding perceptual problems and dealing with them; as sanitation marketing largely concerns altering perceptions and practices of users and providers.

Strategic intervention: The marketing plan, with knowledge of consumers at its core, is a promising means of addressing perceptual problems. Effective feedback could serve as a basis for improved hygiene behaviour and advancement, perceived by individuals as worthwhile and valuable.

TARGET GROUPS

There was a general consensus that sanitation is everybody's responsibility. Each person, young and old, male and female, rich and poor, educated and uneducated has a role to play. Men were identified because traditionally they had freedom of speech and as heads of households, their word is usually final. Women were also indicated as one of the target groups because they could easily spread the message about hygiene practices and be influential in their own households, ensuring that all family members adopt safe hygienic practices. Other target groups identified were: traditional leaders have who command and respect in most rural/traditional areas; children are more likely to learn and adapt to

behavioural change; politicians are influential; government departments have authority; and religious denominations because they enjoy respect from communities. Volunteer groups e.g. health workers; families (men and women) play a significant role in family building. Councillors; civic structures; youth; teachers; principals; medical doctors; traditional doctors; businesses and cultural groups were also identified as having a critical role to play towards adoption of safe hygienic practices.

Strategic intervention: Programmes should be tailor-made for the different target groups in the community, that is, there should be programmes that are relevant for children, for mothers, etc that could incorporate health education and safe hygiene practices. They should use the demand-responsive approach, that is, be consumer oriented, equally address the needs, preferences and behaviours of children, women and men

MOTIVATING FACTORS

While the key findings discussed above implicitly highlighted the factors that played a role in the communities' inability to adopt safe hygienic practices, this sub-section highlights the factors that the communities thought could motivate them to adopt safe hygienic practices. The study showed that the motivating factors for adoption of safe hygienic practices are varied and complex. Though not mutually exclusive and for the purposes of simplicity these factors can be grouped into four linked and overlapping categories, namely: social factors, educational factors, environmental factors and economic factors. Social factors that could motivate people to adopt safe hygienic practices include improvement of living standards, availability of basic needs, poverty alleviation and community participation in sanitation programmes (from conceptualisation, design, implementation and evaluation). Educational factors include training, advocacy (e.g. introducing awareness programmes that take into consideration the values, culture and beliefs of communities and use of indigenous knowledge and experience); capacity building, social mobilisation, access to information and information exchange. Environmental factors include infrastructural development; access to water supply sources such as house connections; public stand pipes, bore-holes, protected springs; access to excreta disposal sources such as connection to the sewer or septic tank and VIPs; care and maintenance of water sources and excreta disposal sources; appropriate technologies and flexible systems; supportive and enabling environment. Economic factors include employment and reliable income. These findings suggest that improvement of physical infrastructure alone is not sufficient for ensuring adoption of safe hygienic practices and that no single agency has the capacity to address all these factors.

Strategic intervention: The various stakeholders should be brought together to work in collaboration and co-operation to benefit the communities in developing the sanitation marketing plan. Some of the stakeholders involved in the provision of community services such as the Department of Health, Department of Water Affairs and Forestry, Department of Education, Department of Social Development, Department of Agriculture; non-government organizations and consultants.

HYGIENE PROMOTION AND MARKETING

While the communities were aware of re-hydration mixtures for diarrhoea; medicines and bandages for treating burns and cuts, bites; and insect repellent for mosquitoes, a need for more awareness and knowledge on safe hygienic practices was expressed. All groups expressed the necessity of a hygiene awareness workshop and indicated that it should address cleanliness, collection of waste, safe disposal of faeces, food storage, disease prevention, sanitation facilities and erection of toilets. The literacy level in the villages was generally low although some villages had basic adult education intervention. Unhygienic practices, certain cultural beliefs in relation to hygiene, fears and perceptions of hygienic practices would have to be changed through raising awareness and education. For example, in some of the communities sanitation was viewed as a toilet issue and that only rich people can afford toilets and therefore only rich people can adopt safe hygienic practices. Furthermore, in other communities children's faeces were not perceived as harmful and not washing hands after toilet use was not perceived as bad practice. Hygiene awareness programs should focus on influencing behaviour at personal, household and community levels. The findings suggest hygiene awareness programmes should use an integrated approach (e.g. should not focus solely on sanitation but should also address poverty). Awareness and education programmes on health and safe hygiene practices should be developed and implemented with the participation of the communities. Individuals from the villages selected by the community structures could be trained as health education trainers in order to promote ownership. Delivery of information on safe hygienic practices could take place through local structures such as health centres and clinics, pharmacies, households, clubs, local businesses and schools and through local people such as latrine builders, community health workers and local material suppliers. Social mobilisation can be done through local institutions such as schools and religious organisations), local leadership (political, traditional and administrative e.g. chiefs and councillors) and stakeholders (NGOs, Private sector) and existing support groups (Service clubs, Artists/entertainers, womens' groups). Advocacy through target audience identification, developing an information base, building and mobilising intersectoral partnerships for joint activities and creating awareness among partners.

While promoting ownership may appear to initially slow down delivery, in the long run the increased sustainability outweighs the short-term gains made from rapid early delivery. Demand-responsive and integrated approaches are to be introduced, based on community ownership and management of rural Water Supply and Sanitation (WSS) facilities, with increased attention paid to promotion, gender awareness and participatory planning. For this reason community participation is a key requirement in the conceptualization, selection, planning, design, implementation, and maintenance of all sanitation projects. The goal is to make the adoption of safe hygienic practices a public concern and a public responsibility, rather than one that only the service provider considers important and sustainable.

Strategic intervention: The communities would benefit from the better use of resources, human, natural and physical, if a coordinating structures were established with the communities playing a central role. Partnerships should be formed at all levels to mobilize skills and capacities needed and use local communication channels to reach members of rural communities, particularly home visits, small group meetings and community meetings.

RECOMMENDATIONS TOWARDS THE DEVELOPMENT OF A SANITATION MARKETING PLAN

The recommendations towards the development of a marketing plan for sanitation have been presented in terms of the different elements of the "marketing mix", which are commonly known as the "four P's", namely: Product; Price; Place; Promotion. Two other P's have been added. These are the Partnership involved and the Policy environment.

PRODUCT

Products refer to sanitation technologies, services and safe hygiene practises which incorporate improved water systems, latrines; household behaviours such as proper use and maintenance of latrines, hand washing, covered storage of water, human excreta disposal, personal and public hygiene, solid and liquid waste disposal, vector control and keeping drinking water safe. More knowledge is needed on how the private sector markets its products and apply these to sanitation products. There is a need to stimulate demand for toilets and for adoption of safe hygienic practices and to expand demand through local, innovative communication strategies. Communication that aspires to increase demand must be combined with simultaneous measures to ensure access and availability of the product or service sought. Sanitation technologies need to suit local materials and building practices, local and

economic conditions, and local cultural practices and beliefs. In this way, many practical problems can be avoided, and local ownership of the technology is more likely to develop. Latrines are consumer products and their design and promotion should follow good marketing principles, including a range of options. Designs need to be attractive to consumers and based on consumer preferences, affordable prices and designs appropriate to local environmental conditions. Communal facilities need to be carefully considered as they are difficult to access, too distant from households, do not preserve the right to privacy and are particularly detrimental for women and children and elderly, who should be the most frequent users of these services. As the main criterion for technology choice, planners should endeavour to find out directly from the main users what features the proposed service needs to have. They should pay attention to the uses of water in household activities such as laundry, food preparation, washing children and cleaning house.

PRICE

Price refers to what the consumer pays in order to obtain the product (sanitation technologies) or service (safe hygienic practices). The price may be monetary or it may involve intangible costs in terms of, for example, time and effort required to access the product or service from the nearest outlet. A critical factor in pricing sanitation products and services is the willingness of people to pay. The willingness of people to pay is largely dependent upon people's perception of the demand. If people do not perceive the demand for a service or product, they are unlikely to pay for it. The price set should be affordable even to low income groups. Setting an appropriate price for each level of service is an important part of any marketing adventure. The price of a product or service can significantly influence the quality used. The price is a key incentive for users to continue with the service (sustainability). Where possible, people are willing to pay for the type of service they want. The right of all people to an affordable, basic level of service should not be compromised. It should be ensured that the method of payment is the preferred one as there are usually a number of options for payment. To avoid complexity, collective decision making may be needed to narrow choices. Special provision may have to be made for the poorest individuals and families, in terms of subsidy. Issues relating to economic efficiency and resource scarcity should be taken into consideration when price for services are made and issues concerning the right to what is often considered basic level of service.

PROMOTION

Promotion consists of the judicious use of advertisements, public relations, promotions, media advocacy, inter-personal selling - comprehensive information-sharing in respect of all aspects. The focus is on creating and sustaining demand for product. While there is already substantial demand for the more obviously beneficial services like water or electricity, sanitation is commonly low on people's priorities for improved services. People need to be aware of the benefits in order for them to be willing to invest their own resources into those improvements and adopt safe hygienic practices. Promotion should not be seen as something done outside, though external agencies may provide the initial catalyst. Sanitation promotion is the task of everyone in the community. There is a need to unpack hygiene and sanitation promotion, identify locally available institutions and skills for the various specialised roles and try to procure from outside any skills which are lacking locally. Promotion can be done by sanitation improvement teams such as, the health authorities, local latrine builders, community health workers, local material suppliers, and the households to address the overall needs. Women have proved to be effective promoters and builders of latrines, they are more committed to their community's welfare. Different messages are needed for men and women and different means of delivery also. This is also true of other groups, such as the poorest, the elderly and so on. Hygiene promotion requires a combination of approaches. The approaches should be bottom-up approach, demand-responsive, consumer oriented, sector-wide, integrated, participatory and multi-sectoral. Professional campaigns should be based on thorough and professionally conducted formative research to ensure that the messages harness the motivations, which actually lead people to adopt safe hygienic practices. Promoting sanitation should be a continuous activity as in all other public health promotions aimed at preventing disease. This is necessary to sustain past achievements and to ensure that future generations do not become complacent as diseases decrease. Amongst others, the media used for promotion of sanitation should include posters, pamphlets, leaflets, stickers, tee shirts and flash cards. More importantly, indigenous methods should be used. Promotional work should be undertaken by existing village health workers and village water minders who have been trained in promotion and health education. The health, hygiene and cleanliness benefits should be central to all promotional methods. Sanitation promotion may include establishing neighbourhood sanitation committees, providing sanitation messages through health centres, radio and local drama, school sanitation promotion, latrine construction, institutional adjustment and advocacy of experiences. Community based sanitation promotion methods and techniques should be encouraged, as communities would identify with them more than conventional methods, which are brought by outsiders. Existing conventional methods seem

to be unsuccessful. Traditional methods are also affordable while some of the conventional methods have cost implications which communities might find unaffordable.

PLACE

Place refers to the mechanism adopted for distribution to enhance accessibility of the product or services. Location of sanitation resources is essential to either reduce costs or increase the chances of consumers use of products or at least opportunities to make inquiries. The important points to consider is proximity to water and sanitation resources, proximity to distribution channels, availability of facilities, availability of efficient and skilled labour, linkages and infrastructural facilities. Good location is one of the critical factors in marketing, therefore choice of location should be carefully considered. This implies that a place has to have accessible water supplies and sanitation technologies. There is therefore, a need to assess potential local resources, not only in relation to technical and financial inputs, but also in terms of human resources i.e. individuals and groups whose opinions carry weight in communities and whose actions can affect their development. Special units to work with communities for implementing awareness and information programmes to encourage positive attitudes towards safe hygienic practices may be established. Incentives and instruments to protect water sources to encourage waste water reuse, as ways of easing water shortage problems and to facilitate collection and treatment of wastewater could be used.

PARTNERSHIP

The public or communities are not a single homogenous entity but is made up of a variety of different groups, differentiated by many factors (including age, gender, livelihood, social and economic status and location). Each group or market segment is associated with a set of priorities, perceptions and demand. This should be reflected in the promotion strategy. Sanitation promotion requires a partnership at all levels in order to mobilise the skills and capacities needed. Partnerships should include government departments and also a wide range of stakeholders such as the private sector, NGOs, researchers and the media (radio, television and the press). Appropriate messages should be targeted at the key market segments. Promoting safe hygienic practices can be greatly assisted by active support from popular opinion leaders. Particular efforts should be made to bring and keep such individuals on-site. Examples include traditional leaders, a key member of administration, a local teacher and the sister in charge of the local clinic. The methods of communication may range from public meetings; local

theatre groups, schools, and leaflets from water service provider, school plays and home visits. Focus area in promoting health and hygiene include washing hands after going to toilets and before a meal, while preparing a meal, improving existing latrines and opting for safe latrines, disposing of waste in an environmentally aware manner, treating water by boiling it or using Jik. A single agency, no matter how dedicated and well organised cannot possibly reach out and make a significant impact. It has become necessary to evolve partnerships between agencies on the one hand, and between the agencies and the community on the other. Avenues for optimal synergy need identification. A key challenge, is, accordingly, to build partnerships between the private sector, NGOs, appropriate agencies of government. The multidisciplinary nature of sanitation as it affects health, education, gender, the environment and the overall economy should be recognised. A wide-range of stakeholders should be involved throughout planning, design and review of sanitation activities. This would result in strong convergence on policy, and mutually agreed undertakings to resolve problems quickly and move the process forward. Memoranda of understanding should be signed among civil society, NGOs, external support agencies and government and communities co-ordination bodies should be initiated. The community must be involved in planning, construction, management, maintenance and ongoing promotion of safe hygienic practices. This contributes to a sense of ownership that is imperative for sustainability. Government should generate political will at every level. Communities are more motivated to change when they know political will exists.

POLICY

Policies should be improved at all levels. Agencies responsible for creating a supportive environment for sanitation, in general, have had ineffective and counterproductive policies at all levels. These include more attention to water supply and little to excreta management and hygiene education, a focus on short-run outputs (hardware) rather than long-term behaviour change. More fundamentally, a philosophical approach to the problem, upon which sound policy can be based, is often lacking. Government sanitation policy should facilitate and enhance partnership among the private sector, NGOs, community-based organisations and local authorities in achieving improved sanitation. Involvement of the private sector should be encouraged by national government. Promotion of private sector involvement in service delivery through district authorities are encouraged to develop and utilise local private-sector capacity for design, construction and operation and maintenance of rural water supply and sanitation facilities and for the supply and distribution of spare parts and appropriate equipment. The policies should actively encourage the establishment of inter-institutional and

interdisciplinary working groups with decision-making powers. Transparency and accountability, flexible and responsive institutional mechanisms for providing sanitation services, with a larger role for communities and community organisations and the private sector should be ensured. Political commitment is needed to create an environment in which demand for sanitation can grow, and which, in turn, can strengthen political will. The issue of political will is thus both a cause and an effect of the other problems, and a key to successful sanitation promotion.

CONTRIBUTION TO THE STATE-OF THE-ART

The present study has implications for policy-makers, programme planners, academics, and practitioners in the field of water and sanitation in terms of policy and programme formulation, curriculum development, and service delivery. The study will assist in the improvement of sanitation promotion in rural communities thereby resulting in the improvement of the quality of life of rural people. The results of the study will also (1) Serve as a knowledge base on which the national, provincial, local governments as well NGOs and the private sector can build strategies for promoting good sanitation practices (2) Enable local government institutions to understand local people's behaviour and attitudes towards sanitation (3) Contribute to the development of well informed integrated development plans (IDP's) and Water Services Development Plans (WSDP) (4) Enhance improved understanding and utilisation of participatory approaches in health and hygiene promotion. If all the necessary ingredients are not available, then the product is incomplete. For safe hygienic practices to be adopted then there should be regular water supply, adequate water and solid waste disposal, safe human excreta disposal, and keeping drinking water safe.

IMPLICATIONS FOR FUTURE RESEARCH ENDEAVOURS

Sanitation has special features and requirements that distinguish it as a field in its own right. Therefore, research and scientific study specifically on sanitation are necessary to help enable practitioners to make better decisions. Ultimately, this will lead to more successful and sustainable sanitation programmes. There is a need to co-ordinate and promote interdisciplinary research and foster links between organisations in the field. Improved co-ordination and communication between researchers and users and among researchers will optimise resource utilisation. Development and maintenance of local research capacities in the field is necessary. Research will foster in local authorities an interest in research in this field. The communities should be involved in research planning, execution and

implementation through the use of participatory methods. More research is needed to explore ways of institutionalising sanitation improvements within communities and for integrating sanitation into other health and social programmes, e.g. literacy, income generation, nutrition, HIV/AIDS. Research is also needed to determine behaviour change indicators, health-impact indicators, long-term success indicators, monitoring and evaluation framework for measuring success at national and community levels. Other research topics might focus on:

- Development of methods for assisting communities in identifying and using indicators
- The key barriers to private sector involvement
- The optimal mix of responsibilities between the public and private sectors
- How to choose an appropriate mix of technologies for rural areas with different levels of income
- How to achieve low-cost, culturally-sensitive technologies
- Critical review of low-cost and least-cost technologies
- Models of how social marketing and participatory methods can best be combined
- Critical review of methodologies to change hygiene behaviours
- Through case-studies of countries, determine the characteristics of high achievers and low achievers in sanitation and from these derive lessons learned
- Alternative financing and cost recovery mechanisms
- The cost effectiveness of alternative strategies for the control of faecal-borne diseases
- Last but not least, the recommendations made in this study need to be field-tested to determine their applicability.

TECHNOLOGY TRANSFER

The findings will be disseminated through the following: Publications in SAPSE accredited journals, conference papers, stakeholder feedback workshops, and on-line databases, media (e.g. radio, newspaper and TV)

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ACRONYMS

CBO	Community Based Organisation
EHP	Environment, Health & People
HHP	Health and Hygiene Practices
IDP	Integrated Development Plan
IRC	International Research Centre for Water Supply and Sanitation
ISD	Institutional and Social Development
LDA	Limakhozu Development Agency
MAAP	Multi Annual Action Plan
NASCO	National Sanitation Co-ordinating Office
NGO	Non Governmental Organisation
ORT	Oral Re-hydration Therapy
PHAST	Participatory Hygiene and Sanitation Transformation
PHE	Participatory Hygiene Education
PRA	Participatory Rural Appraisal
PSC	Project Steering Committees
PSTT	Provincial Sanitation Task Team
RRA	Rapid Rural Appraisals
RSS	Rural Support Services
SARAR	Self Esteem, Associative strength, Resourcefulness, Action planning and Responsibility for follow -through
UNICEF	United Nations Children's Fund
VIP	Ventilated Improved Pit
VWC	Village Water Committee
WASH	Water and Sanitation for Health Project
WEDC	Water, Engineering and Development Centre, (UK)
WELL	Water and Environmental Health at London and Loughborough
WHO	World Health Organisation
WRC	Water Research Commission
WSA	Water Services Authority
WSDP	Water Services Development Plans
WSSCC	Water Supply and Sanitation Collaborative Council
WSP	Water Service Provider

TABLE OF CONTENTS

Executive Summary	i
Acknowledgements	xviii
Acronyms	xix

CHAPTER ONE: SANITATION CONTEXT

1.1. Introduction	1
1.2. Study Objectives	3
1.3. The Sanitation concept	3
1.4. The Sanitation scenario in South Africa	4
1.5. Potential application of the research product	6
1.6. Report structure	7
1.7. The Sanitation scenario in Africa	7
1.8. The need for Sanitation social marketing	9
1.9. Definition of concepts	13

CHAPTER TWO: RESEARCH METHODOLOGY

2.1. Description of the area of study	15
2.2. Samples	15
2.3. Research Approach	16
2.4. Gaining Support and Partnership	16
2.4.1. At Provincial Level	17
2.4.2. At Local Level	17
2.4.3. At Community Level	17
2.5. Preparation for Field work	18
2.5.1. Community Profile Study	18
2.5.2. Community Transect Walk	18
2.6. Data collection methods	18
2.6.1. Qualitative data collection methods	19
2.6.2. Quantitative data collection methods	19
2.7. Data checking	20
2.8. Data analysis	20

CHAPTER THREE: RESEARCH FINDINGS

3.1.	Situational Analysis	21
3.2.	Transect Walk Observation	22
3.3.	Unstructured Group Interviews Results	22
3.3.1.	Resources	23
3.3.2.	Hygiene Practices	24
3.3.3.	Perceptions	25
3.3.4.	Target Groups	26
3.3.5.	Constraints	26
3.3.6.	Success Factors	27
3.3.7.	Marketing and Promotion	29
3.4.	Structured Group Interviews Results	29
3.4.1.	Water Sources	29
3.4.2.	Water Uses	30
3.4.3.	Excreta Disposal	30
3.4.4.	Domestic and Environmental Hygiene	31
3.5.	Section E: Individual Structured Interviews Results	31
3.5.1.	Well developed infrastructure	32
3.5.2.	Raising awareness and education	33
3.5.3.	Accessibility and affordability	33
3.5.4.	Care and maintenance	34
3.5.5.	Appropriate technology and flexible systems	34
3.5.6.	Appropriate programmes	34
3.5.7.	Local participation	35
3.5.8.	Leadership commitment	35
3.5.9.	Marketing and promotion	35

CHAPTER FOUR: DISCUSSION OF KEY FINDINGS

4.1.	Socio-economic status	44
4.2.	Water Supply Status	45
4.3.	Sanitation Status	46
4.4.	Hygiene Practices	47
4.5.	Hygiene Perceptions	48
4.6.	Target Groups	48
4.7.	Motivating Factors	49
4.8.	Hygiene Promotion and Marketing	50
4.9.	Implications for future research endeavours	51

CHAPTER FIVE: RECOMMENDATIONS TOWARDS THE DEVELOPMENT OF A SANITATION MARKETING PLAN

5.1.	Product	53
5.2.	Price	54
5.3.	Promotion	54
5.4.	Place	56
5.5.	Partnership	56
5.6.	Policy	57
5.7.	Conclusion	58
List of References		59

APPENDICES

Appendix A	Xhosa structured individual interviews questionnaire	61
Appendix B	English structured individual interviews questionnaire	68
Appendix C	Unstructured group interviews guiding questions	75
Appendix D	Community profile semi-structured questionnaire	76
Appendix E	Structured group interviews questionnaire	80
Appendix F	Statistics on Ngqushwa Local Municipality	91
Appendix G	Previous local studies	96
Appendix H	Previous UNICEF Projects	98

CHAPTER ONE

SANITATION OVERVIEW

1.1. INTRODUCTION

Sanitation services in urban areas are far from satisfactory. The plight of the rural population nevertheless, is much worse (Alcock, 1999). Rural areas present unique challenges to sanitation improvement activities and in some situations, no technical solutions will prove viable. Most of the challenges are attributed to the characteristics that set these areas apart from the urban sector. Rural areas are characterised by inferior infrastructure, low incomes, poor site conditions, unreliable water availability, high population density, lack of legal land tenure and lack of recognition by formal governments. These characteristics are much more complex than those typifying urban areas; they affect the sanitation status of rural communities (Danida, 2000; Black, 1996 and Bajracharya, 2003). This segment of the population, therefore, should be a focus of concern, but even the few institutions that recognise the problem and want to do something about it find that there exists little knowledge or experience about how to address this problem. Although there has been extensive research on water and sanitation related diseases in South Africa, there is a dearth of information on factors that can motivate people to adopt safe hygienic practices. Most of the available research deal with the health impacts and risks associated with poor sanitation. An increasing volume of literature suggests the need to focus on rural sanitation research in view of the magnitude of the sanitation problem in these areas. (IRC, 2001; Morgan, 2001 and Hogrewe et. al, 2001). By necessity, government institutions, bilateral and multilateral aid organisations, the engineering sector, and NGOs, all are being compelled to shift more of their attention and resources to the sanitation needs of rural populations.

The Constitution of South Africa (Act 108 of 1996) guarantees all South Africans the right to have access to dignity and respect and, to health and well being. This means that the right to sanitation is also safeguarded. In 1996, it was estimated that 21 million South Africans did not have access to adequate sanitation facilities, of which 85% was constituted by rural population (DWAF, 1996). In 2001, DWAF reported that the figure went down, though not significantly, to approximately 18 million. Inadequate sanitation has effects on health (e.g. water-borne diseases: diarrhoeal diseases, intestinal infections, polio, typhoid, cholera, etc); economy (e.g. poverty, illness, illiteracy and lost income

inclusive of GDP and GNP); environment (e.g. dispersed and diffuse pollution of water sources resulting in the water and faecal disease cycle for communities with untreated water supplies and increased downstream water treatment costs) and leads to social and psychological problems such as loss of privacy and dignity and exposure and increased risk to personal safety. This in the long-term affects the quality of life, education and development. Lack of access to basic sanitation also has a negative effect on people's dignity and privacy.

DWAF (1994 & 2001) contend that sanitation lacks the priority that it should enjoy in relation to the burden that it places on society. It is not a popular topic at any level in society and it is neither viewed as an attractive career, or a political campaign issue. In addressing this legacy, national, provincial and local governments have taken a number of initiatives towards safe hygienic practices and to reduce the sanitation backlog. These include the establishment of the National Sanitation Co-ordinating Office (NASCO), Provincial Sanitation Task Teams (PSTTs), Multi-Annual Action Plan (MAAP), and Sanitation Communications committees. In the Eastern Cape, there are currently 22 existing sanitation projects. This represents at least 10 000 households. There are also 150 villages that have been impacted through the EU funded programme. Many of these have drawn up action plans in terms of their sanitation programmes. It is estimated that at present, at least 25 000 households are involved in firm action plans for sanitation improvements (DWAF, 1994).

More worrying is the fact that, people continue to adopt unsafe hygienic practices, despite an array of diversified efforts that has been mounted towards alleviating this problem. This shows that sanitation and hygiene promotion requires far more than building demonstration toilets, although, safe disposal of human excreta is a major and necessary requirement for safe sanitation. Therefore, sanitation promotion should not only focus on the improvement of the physical infrastructure of toilet facilities, but the personal, family and cultural hygiene practices and habits are also critical (DWAF, 1994; 1996; & 2001). The complexity of sanitation presents the hard realities of the task before all sectors of society, particularly researchers.

In order to plan an effective marketing plan for sanitation promotion, the problem and its underlying causes have to be understood. Solutions must be informed by research and not based on assumptions. Only when the problem has been quantified and qualified can appropriate measures be taken to improve the situation. Since poor sanitation does not exist in isolation, the starting point is to identify and understand the environmental conditions, religious, social and cultural factors (i.e. traditional beliefs, perceptions, customary sanitation practices, habits, priorities) within a particular household and

community. Based on these, recommendations could be made on the development of a marketing plan for sanitation promotion. It is in the light of this, that the current study was conducted.

1.2. STUDY OBJECTIVES

The overall objectives of the study were:

- To identify critical success factors that could motivate people to adopt safe hygienic practices
- To make recommendations for the development of a village-level participatory marketing plan for sanitation promotion

1.3. THE SANITATION CONCEPT

In the past, sanitation has been seen mainly as a technical issue (toilet building, providing sewer systems, maintenance, etc) while other aspects (i.e. education, training, community participation) have been given secondary consideration (DWAF, 2001). According to UNICEF (1997) hardware components have seized the lion's share of the budget to neglect or outright dropping of "software" components such as: community education and participation, training, hygiene education, and other non-technology aspects). Increasingly sector professionals have realised that the definition of sanitation must be broadened to include a range of elements, which are inter-related and of equal importance, such as physical infrastructure, hygiene-related behaviour, disposal of wastewater, excreta and other solid wastes, community participation in decision-making, improved health of millions, safer living environments, greater knowledge of sanitation-related health practices and improved hygiene. It is now recognised that toilets are just one element in a range of factors that make up good sanitation. Sanitation involves principles and practices relating to the collection, removal, or disposal of human excreta, refuse and waste water as they impact upon users, operators and the environment (DWAF, 1994 & 2001).

Good sanitation includes appropriate health and hygiene awareness and behaviour, and acceptable, affordable and sustainable sanitation services. In other words, sanitation is a process whereby people demand, effect and sustain a hygiene and healthy environment at personal, household and community levels. Personal hygiene include washing hands after going to the toilet or changing the nappies of babies, before food preparation or the handling of drinking water. Household hygiene include keeping the home clean and toilet clean, disposal of refuse and solid waste, cleanliness in areas where food is stored and prepared, and ensuring that food and drinking water are kept covered and uncontaminated.

Community hygiene include the community working together for better health and a cleaner environment and issues relating to the disposal of excreta, sullage, and solid waste (refuse) as well as issues relating to the vending of food, the keeping of animals and storm water drainage. Sanitation is aimed at reducing people's exposure to diseases by providing a clean environment in which to live and measures to break the cycle of disease. This usually includes disposing of or hygiene management of human and animal excreta, refuse and wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene and keeping drinking water clean. It involves both behaviours and facilities which work together to form a hygienic environment. It is believed that improved sanitation facilities will reduce the incidence of disease only if there is improved hygiene practice and behaviour as well. The foregoing discussion demonstrates that sanitation encompasses the broader dimensions including solid and liquid waste removal, storm water, indoor air pollution (one of the biggest problems in rural areas for upper respiratory tract infections) and above all the behavioural changes related to personal hygiene and health. The minimum acceptable basic level of sanitation according to DWAF (2001) is:

- Appropriate health and hygiene awareness and behaviours
- A system for disposing of human excreta, household waste water and refuse, which is affordable to the users, safe, hygienic, and easily accessible and which does not have an unacceptable impact on the environment
- A toilet facility for each household

The increased awareness in South Africa of the need to provide an improved standard of living for a large percentage of the population has led to the identification of many problem areas that require attention (Fourie & Reyneveld, 1993). These include raising awareness, training and capacity building, promoting and marketing sanitation. The current study is a response to this need and the focus is on exploring motivating factors for safe hygienic practises and making recommendations for the development of a marketing plan for sanitation promotion.

1.4. THE SANITATION SCENARIO IN SOUTH AFRICA

Providing adequate sanitation facilities for the poor remains one of the major challenges in all developing countries as sanitation facilities are not adequate in many countries including South Africa (Alcock, 1999). In 1996, as stated earlier on in the introduction, it was estimated that 21 million South Africans did not have access to adequate sanitation facilities (DWAF, 1996) and in 2001, it was

estimated that 18 million South Africans still do not have access to adequate sanitation facilities (DWAF, 2001). Those who have inadequate sanitation may be using the bucket system, unimproved pit toilets or the bush. In addition there is a disturbing increase in poorly designed or operated water-borne sewerage systems. When these fail, the impact on the health of the community and others downstream, and the pollution of the environment, are extremely serious as witnessed by the 1.5 million cases annually of diarrhoea in children under the age of 5 and the cholera outbreaks (DWAF, 2001). The inadequate excreta disposal facilities mentioned above, combined with unhygienic practices, represent South Africa's sanitation problem. Often the unhygienic practices are related to: a lack of access to health and hygiene education, lack of sanitation facilities, inadequate water supplies, poor facilities of the safe disposal of water and other domestic waste and inadequate toilet facilities and hand washing facilities. Poor sanitation affects the quality of life, and in many cases, can result in diseases, which place an additional financial, and health burden on poor families. There is a need for adequate sanitation - safe, hygienic, easily accessible, acceptable and affordable systems of disposing human excreta, wastewater and household refuse and for hygiene awareness programmes targeted at all levels. Adequate sanitation is an important way to minimise or manage the negative impact of human settlement on the environment. It contributes to enhancement of the quality of life through improved general health conditions and well being of the people (Danida, 2000). Lack of adequate sanitation and inadequately maintained or inappropriately designed systems constitute a range of population risks to the environment, especially to surface and ground water resources, which in turn pose a threat to health. There is a need for appropriate sanitation systems. The operating and maintenance costs of the sanitation technology must be affordable and cost-effective to the community on an ongoing basis. The sanitation technology must maintain the integrity of the natural environment. It must not contribute to contamination of water resources or the creation of health hazards. The effects of the sanitation problem in South Africa are fourfold (DWAF, 2001):

Health impact: The impact of inadequate sanitation on the health of the poor is significant in terms of the quality of life and the education and development potential of communities. The health problems associated with poor sanitation are diarrhoea and dysentery, typhoid, bilharzia, malaria, cholera, worms, eye infections, skin diseases and increased risk for bacteria, infections and disease for people with reduced immune systems due to HIV/AIDS.

Economic impact: Whilst the financial cost of providing a basic level of sanitation is easily quantifiable, the economic cost of inadequate sanitation on the health of the community and on the environment is not so easily quantifiable. Poor health keeps families in a cycle of poverty and lost income. Poor sanitation results in huge health expenditures, which could otherwise be avoided through

the provision of adequate services. The national cost of lost productivity, reduced educational potential and curative health care is substantial. Investing in sanitation can lead to reduced morbidity and mortality and increased life expectancy. Savings in health care costs; sick leave; higher worker productivity; better learning capacities of school children; increased school attendance, especially by girls; strengthened tourism and national pride; and reduced water treatment costs.

Environmental effects: Inadequate sanitation leads to disperse pollution of water sources. This in turn increases the cost of downstream water treatment, as well as the risk of disease for communities who use untreated water. A lack of adequate sanitation or inadequately maintained or inappropriately designed systems can constitute a range of pollution risks to the environment, especially the contamination of surface and ground water sources. Factors that affect the impact of sanitation systems on water quality are size and density of the settlement being served; sensitivity (or class) of the receiving water resource; type of sanitation system; capacity of the service provider to manage the system and depth of ground water and the soil type. Pollution resulting from inadequate sanitation systems is associated with water borne disease caused by direct contact with faecal contaminated water, the growth of aquatic plants (mostly algae) and depletion of oxygen in the water column, which can result in the loss of bio-diversity.

Social and psychological problems: toilets placed at a distance from home, inadequate communal facilities, inadequate disposal of waste and other poor sanitation practices result in loss of privacy and dignity, exposure and increased risks to personal safety. It is especially women and elderly who are the most inconvenienced. Although school attendance of girls in South Africa is high compared to other developing countries, it is internationally recognised that poor sanitation facilities at schools can be one of the main reasons for girls to drop out.

1.5. POTENTIAL PRACTICAL APPLICATION OF THE ANTICIPATED RESEARCH PRODUCT

The present study has implications for policy-makers, programme planners, academics, and practitioners in the field of water and sanitation in terms of policy and programme formulation, curriculum development, and service delivery. The study will assist in the improvement of sanitation promotion in rural communities thereby resulting in the improvement of the quality of life of rural people. The results of the study will also (1) Serve as a knowledge base on which the national, provincial, local governments as well NGOs and the private sector can build strategies for promoting good sanitation practices (2) Enable local government institutions to understand local people's behaviour and attitudes towards sanitation (3) Contribute to the development of well informed

integrated development plans (IDP's) and Water Services Development Plans (WSDP) (4) Enhance improved understanding and utilisation of participatory approaches in health and hygiene promotion. If all the necessary ingredients are not available, then the product is incomplete. For safe hygienic practices to be adopted then there should be regular water supply, adequate water and solid waste disposal, safe human excreta disposal, and keeping drinking water safe.

1.6. REPORT STRUCTURE

Chapter One presents an overview of the sanitation problem. The chapter provides an introduction, study objectives, an overview of the sanitation concept, the sanitation scenario in South Africa, the sanitation scenario in Africa; the need for sanitation social marketing; definition of concepts; and potential application of the anticipated research product.

Chapter Two presents the research methodology which covers the description of the area of study; the study samples; the research approach; gaining entry at provincial, local and community levels; preparation for field work; data collection; data checking; and data analysis.

Chapter Three presents the data collected in the study. The data collected during the community profile study; community transect walk; unstructured group interviews; structured group interviews(KAP study), and structured personal interviews, has been presented.

Chapter Four provides a discussion of the key issues raised in the study and also highlights the strategic interventions that could be taken into consideration, not only in the development but also in the implementation of a sanitation marketing plan. The key issues raised include socio-economic status of communities, water supply status; sanitation status; hygienic practices; hygienic perceptions; target groups; motivating factors for adoption of safe hygienic practices; hygiene promotion and marketing.

Chapter Five presents recommendations in respect of the development of a marketing plan for sanitation using the different elements of the marketing mix, commonly known as the four P's - Product, Price, Place and Promotion and an additional two P's, namely: Partnership and Policy are discussed. This report draws from experiences of a wide range of participants, insights from up-to-date literature, success stories within South African government and international sanitation experiences.

1.7. THE SANITATION SCENARIO IN AFRICA

In Africa, over half of the population is without access to adequate water and more than two-thirds lack sanitary means of excreta disposal (The African Water Page, 1999). Most rural areas in Africa have no effective means of off-site disposal of excreta (e.g. waterborne sewage systems or collection and

treatment systems for latrine contents). Rivers, streams, canals, gullies and ditches are the destinations of most untreated human excrement and household waste. Such waste accumulates on streets, in open spaces between houses, in stagnant pools of water and on wasteland. In addition, most waterborne sewage collected is disposed untreated into rivers that also serve as sources of water for drinking and bathing for families living in rural areas. Rural communities overwhelmingly lack adequate arrangements for waste and excreta disposal. Latrines in rural areas are often poorly designed and maintained and may not be used by all family members. In some rural areas defecation occurs in open areas within the settlement, on the perimeter of the settlement, or in the drainage ditches. Rural settlements experiencing regular or even irregular water supply, pour flush toilets with soak-away or septic tanks may exist, relying either on household or community septic tanks. However, the septic tanks often are poorly maintained and undersized. Waste water from bathing and washing is typically spilt right outside houses, where it may soak into the ground or form stagnant pools in poorly drained areas. Where sewers exist, they are virtually always open drainage canals. The ground by the side of the shelters or in the alleyways serves as a frequent substitute for urinals (IRC, 2001). In general, residents have improvised sanitation systems in rural areas to satisfy their perceived needs. Lack of access to safe water and hygiene sanitation remains one of the root causes of poverty as it is the poor, especially women and children, who suffer most due to poor living conditions, diseases and foregone opportunities (WSSCC, 1998 & Sole et al, 1993). Significant efforts over the last two decades have improved access but not enough to keep pace with population growth especially in fast expanding informal settlements on the fringes of the cities (Black, 1996). There are more people without adequate services today than a decade ago. In most countries public expenditure for water and sanitation and aid flows have levelled off or declined. Every year, 2.5 million children die of diarrhoea that could have been prevented by good sanitation: millions more suffer the nutritional, educational, and economic loss through diarrhoeal disease that improvements in sanitation, especially human excreta management, can prevent. Human excreta are responsible for the transmission of diarrhoea, schistosomiasis, cholera, typhoid, and other infectious diseases affecting thousands of millions.

Overall, WHO (Simpson-Hebert & Wood, 1998) estimates that nearly 3.3 million people die annually from diarrhoeal diseases, and that a staggering 1.5 thousand million suffer, at any one time, from parasitic worm infections stemming from human excreta and solid wastes in the environment. Heavy investments have been made in water supply since 1980, but the resulting health benefits have been severely limited by poor progress in other areas, especially the management of human excreta. In addition to this toil of sickness and disease, the lack of good excreta management is a major

environmental threat to the world's water resources, and a fundamental stumbling block in the advancement of human dignity. According to WASH Technical Report (Hogrewe, Joyce & Perez, 1993) an estimated 600 million people in developing countries now live in life-and health-threatening homes and neighbourhoods, primarily in rural settlements which are characterised by inferior infrastructure, low incomes and lack of recognition by formal governments. These characteristics affect the sanitation status of these communities. The sanitation challenges present in rural areas are unique and they demand to be confronted head-on. Many rivers in rural areas are literally large open sewers. Surface and ground water contamination is widespread in many developing countries, and the resulting environmental degradation is more apparent along rivers and sea-coastal areas. Sanitation and the promotion of hygiene are still neglected and need to be given much higher priority by all actors (The African Water Page, 1999 and Eales, 2003). There is no doubt that if a nation has to protect, develop and build its future, then it has to be clean, healthy and provide a happy environment (DWAF, 2001). Today, the largest killer of children (US mortality and morbidity) is water borne diseases. Researchers have concluded that only a combination of safe water, environmental sanitation and hygiene reduces the morbidity level significantly and really cuts the mortality rate (with support of ORS) into less than one third of what it is today. This is a simple and easily affordable solution and the beginning of the change of the quality of life as well as the approach to sustainable development. The question still remains as to how much the activity or activities actually contribute to the development process and does it really effect in the poverty alleviation? Economists and also various health experts have concluded a number of times that mere provision of safe water has neither an attractive IRR (Internal Rate of Return) in those projects and hardly any work has been done for sanitation. Large rural projects for sanitation have been financed before the technology and operational costs prove then to be difficult to maintain and hardly can be said to have contributed to the reduction of poverty. This situation threatens the health of rural communities, hence the current study.

1.8. THE NEED FOR SANITATION SOCIAL MARKETING

Effective communication is a key ingredient in any social marketing intervention that seeks to encourage adoption of socially beneficial safe hygienic practices. Sanitation programmes face numerous challenges in their efforts to change sanitation practices and sustain improvements in sanitation behaviour. To address these, they must enhance the user's contribution in defining needs and how to meet them. The marketing plan, with knowledge of consumer preferences at its core, is a promising means of addressing issues concerning the demand for sanitation products, provision of

sanitation services, and changing sanitation behaviours. Social marketing involves building up an understanding of the target group (s), usually through research, to determine the most effective way to meet the group's needs as expressed by its members (Bajracharya, 2003). It refers to the application of commercial marketing concepts, tools, resources, skills and technologies to encourage socially beneficial behaviour among those segments of the population not served, or not adequately served by existing public and private systems. Social Marketing of sanitation is not very different from the marketing of a commercial product. The principles are the same and some of the main principles are to offer (a) few products but well field tested with brand name (like VIP), (b) of good quality even if it is low cost, (c) range and choice for selection and (d) continuous feedback mechanism through customer contact for change or improvement of the products and (e) clear message with the product as to how to use and maintain it. The tools for such a marketing concept are PHAST or SARAR, but they all follow the same basic principles of marketing as in a commercial sector. The social marketing technique has been used extensively in international health programmes (Simpson-Hebert and Wood, 1998), especially for distribution of contraceptives and oral re-hydration therapy (ORT). It is also frequently used for bringing about changes in socially significant attitudes and behaviour in such diverse areas as smoking, drug use, and heart disease and organ donation (WSSCC, 1998). The social marketing approach is based on knowledge of consumer preferences; it is means of addressing the creation of demand for sanitation products, provision of sanitation services and changing sanitation behaviours. It can be used to promote use of products such as toilets and household behaviours such as proper use and maintenance of toilets, hand washing and proper waste disposal. For social marketing to succeed, there is a need to involve the intended target groups and groups that influence them in the formulating and testing of products, programme strategies, advocacy messages and promotion materials. Social marketing is recognised as having immense potential in expanding the outreach and coverage potential of sanitation products and services.

According to Simpson-Hebert and Wood (1998) sanitation programmes benefit from a social marketing approach as follows:

- Water and sanitation projects have often not taken adequate account of individual and community behaviour that affects people's use of the facilities provided. Expected health benefits were therefore not realised, despite the safe water provided to thousands of communities worldwide.

- Goals of sanitation projects have tended to focus on the number of latrines constructed or the number of people provided with access to latrines, and failed to consider promotion of the many behaviours – hand washing, safe excreta disposal, good personal and household hygiene, safe food handling, the avoidance of unsafe water sources and protection of pumps and wells - that largely determine whether new facilities bring health benefits.
- Sanitation programmes have been more concerned with the "supply" of sanitation products, and materials rather than with assessing the needs and preferences of intended beneficiaries. Yet responding to these needs and p
- References could contribute to the design of appropriate and acceptable solutions to sanitation problems and help make improvements in sanitation sustainable. "Demand-led" sanitation places emphasis on what people want and how they can contribute to these efforts. Demand creation is also part of commercialized marketing, and may also have a role in sanitation programmes, provided the product in question is actually something consumers want and/or need.
- To be successful, social programmes must meet the needs of the target group in a way that they prefer; this is often called consumer-orientation, an important facet of social marketing. Consumer orientation has been shown to be successful in a number of social programmes dealing with family planning, nutrition, immunisation, oral re-hydration, smoking, cancer detection, use of seat belts and prevention of heart disease and AIDS. It is a particularly valuable approach for solving problems that are related to behaviour, rather than technology.

Some accomplishments in social marketing include (Simpson-Hebert and Sara Wood, 1998):

- The 30 per cent decline in infant mortality in Egypt due to promotion and marketing of oral re-hydration salts.
- Improved use of contraception in Bangladesh. Around 44 per cent of men in Bangladesh talked to their wives about family planning within 1 2 months of a campaign launch and contraceptive prevalence increased by 1 0 per cent.
- Improved child nutrition in Indonesia. In this country, 85 per cent of women now feed their children a mixed food with green leaves, which has led to improved nutritional status of 40 per cent of Indonesia's children under two years of age.
- A decrease of almost 50 per cent in deaths due to diarrhoea in Honduras following a programme to educate mothers about the use of oral re-hydration salts.

The strength of social marketing as a behaviour change strategy is that it enhances access to and demand for goods and services. It combines advocacy and communication for hygiene education with the power of commercial brand advertising. It enables people to connect the information they receive with easy access and availability of the product and this enables them to act upon the information bombarded at them. Social marketing may facilitate the practice of safe hygienic practices by enhancing affordability and availability of relevant products and services to low income groups. Communication approaches based solely on imparting information may not work as well with difficult to reach groups, as for instance, more participatory behaviour change communication that builds skills in identification of the problem, articulation of symptoms and problems, and negotiation. Communication that aspires to increase demand must be combined with simultaneous measures to ensure access and availability of the product or service sought (Rosensweig & McGahey, 2002).

The “Four Ps” which forms the basis of commercial marketing, i.e. product, price, place and promotion are used in social marketing campaigns. Product may be a physical product, such as a toilet or a change in behavior, e.g. hand washing after defecation. Price in social marketing may be a physical exchange of value, such as a commercial transaction, but it can also refer to the price involved in changing a behavior. Place means the distribution channels used to make the product, service, or concept available to the target group. For a concept, the place would refer to the media through which the target group learns about that concept. Promotion means to raise or advance a cause, raise the profile and status of the cause, further the growth and expansion of the cause and to further its popularity. In the public health sense of the word, it also involves providing the enabling mechanism to others so that they may take up the cause armed with effective tools. It covers the broad range of channels through which the campaign messages are directed to the target group. Channels for promotion include mass media (television, radio, magazine and newspapers), and traditional methods such community theatre, folk singers and interpersonal communication. Despite years of rhetoric, good intentions and hard work, there is in fact making little or no progress in improving sanitary conditions. Given the magnitude of the problem, why is there so little progress? The barriers to progress are varied and complex, but could generally be grouped into the following linked and overlapping categories (Solo et al, 1993 and Morgan, 2001).

Economic and financial constraints: Key economic and financial constraints include the high cost of water and sanitation to families of low income and the shortage of capital for investment. While even the lowest-income families can usually afford potable water as it is delivered, the provision of indoor connections close to the house can become unaffordable because of attendant costs that are not taken

into account in project feasibility studies. These include: external delivery costs, land legalisation and regularisation costs and the initial connection fee and additional such costs to the family.

Institutional constraints: Major institutional constraints to adoption of good hygiene practices are primarily the result of the effective public works systems. Public works systems have long been recognised as complicated and disorganised. The focus on getting the public works companies to apply financial discipline by increasing their charges and collection of payments makes investment in rural areas increasingly unattractive. This approach has tended to emphasise eliminating deficits and providing autonomy at the expense of addressing consumer needs.

Structural constraints: The greatest bottleneck to getting services to the poor is indifference, and even hostility, at local, national and international levels. Turning around people and institutions takes time, and it takes far good leaders.

Environmental constraints: Fresh water is an increasingly scarce resource. Global consumption rose six-fold between 1990 and 2000 and the rate of increase in consumption is accelerating. The impact of this water scarcity is felt mostly in rural areas, where the combined effects of population pressure, economic growth, deteriorating water quality and the competing demands of agriculture, industry and domestic users are most concentrated. Traditionally, the response has been to expand existing supplies and develop new supplies. The cost of doing so has increased sharply. Research has shown that in some cities the unit cost of water has doubled with every successive project (Bhatia & Falkenmark, 1993 and Hogrewe et al, 1993.). Intermittent water supplies, deteriorating water quality and falling water tables are the result. Whilst this has an effect on those fortunate enough to be connected to a piped water supply, the impact of water scarcity is felt most of all by the poor, both in terms of their health and livelihoods. With the poor making 40% of the population in developing countries (Black, 1996), the economic and social consequences are of global significance.

1.9. DEFINITION OF KEY CONCEPTS

Sanitation	Intervention to reduce people's exposure to diseases by providing a clean environment in which to live measures to break the cycle of disease. This usually includes disposing of or hygiene management of human and animal excreta, refuse and wastewater, the control of disease vectors and the provision of washing facilities for personal and domestic hygiene. Sanitation involves both behaviours and facilities which work together to form a hygienic environment (DWAF, 2001).
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Promotion	To raise or advance a cause, raise the profile and status of the cause, further the growth and expansion of the cause and to further its popularity. In the public health sense, it involves providing the enabling mechanism to others so that they may take up the cause armed with effective tools (WSSCC, 1998).
Social marketing	it involves building up an understanding of the target group (s), usually through research, to determine the most effective way to meet the group's needs as expressed by its members (Bajracharya, 2003).
Safe Hygiene Practices	Safe human excreta disposal, personal and public hygiene, solid and liquid waste disposal, vector control and keeping drinking water safe (Duncker, 2001).

CHAPTER TWO

RESEARCH METHODOLOGY

De Vos (1998) define research methodology as a blue-print or detailed plan of how a research study is to be conducted. This blue-print or plan offers the framework according to which data to investigate the research hypothesis or question are to be collected in the most economical manner. This chapter presents the study's research methodology which covers the description of the area of study, the study sample, the research approach, gaining entry at provincial, local and community level, preparation for field work, data collection, data checking and data analysis.

2.1. DESCRIPTION OF THE AREA OF STUDY

The study was undertaken in one of the nine provinces of South Africa, namely Eastern Cape Province. This province consists of seven district municipalities, namely: Oliver Tambo (Kei), Amatole, Western, Chris Hani (Stormberg), Ukhahlamba (Drakensberg), Alfred Nzo and East Griqualand Kei (Wild Coast). One district municipality was identified for the study - namely Amatole District Municipality (ADM). The ADM is divided into 8 local municipalities which are Nxuma (Adelaide), Mquma (Butterworth), Nkonkobe (Fort Beaufort), Mbashe (Idutwa), Great Kei (Komga), Ngqushwa (Peddie), Amahlathi (Stutterheim) and Buffalo City (EL/KWT). The study was confined to the Ngqushwa Local Municipality. This local municipality was chosen because LDA had facilitated water and sanitation projects in the area and identified the need for research on safe hygienic practices. Ngqushwa Local Municipality has 14 wards with a total population of 93 997, made up of 20 757 households. The population is evenly spread across the 14 wards. The average number of people per ward is 6 714 (1 483 households). The average household size is 4.5% persons (PIMS Centre, 2001).

2.2. SAMPLES

This study draws on the insights and experiences of a wide range of participants. Three purposive samples constituted the study. The first sample group consisted of members of the PSTT (EC) and SANTAG (KZN) comprised from the various provincial government departments, district and local municipalities and NGOs which are active in research and implementation and private sector agencies. The second sample group consisted of representatives from various development interest groups such

as local government departments, tribal authorities, traditional healers, traditional leaders, farmers association, Community Policing Forum, councillors, disabled people's organisation, taxi associations, and political organisations from Ngqushwa Local Municipality. The third sample group was drawn from the 112 villages of the Ngqushwa Local Municipality. The villages are spread in 14 wards. Due to time and budget constraints, it was impossible to conduct the survey in 112 villages. A decision was therefore made to identify one village per ward; thus 14 villages were identified through the use of the nominal group technique. The 14 villages identified were Macibi, Dubu, Dlova, Mtati, Qaukeni, Wooldridge, Gcinisa North, Gcinisa South, Bongweni "A", Nobumba, Luxolweni, Lower Qheto, Ntloko, and Mpeko. All target groups in sanitation issues including women, nurses, teachers, the youth, village health workers, various community structures and pressure groups, were involved in the study.

2.3. RESEARCH APPROACH

The approach used in the study was participatory in nature in order to recognise and foster local knowledge and skills. Hall and Hall (1996) contend that research strategies, which overlook the key role of local people and relevant stakeholders, are likely to be short-lived and limited in their impact. Bearing this in mind, a commitment to participatory methods is discernible in the study from the beginning to the end of the study. People were not being “used” merely to develop academic theory. There was a genuine exchange of information. Informants were respected as “experts” in the social process under research. Therefore, the style and methods of research were collaborative, thus enabling the multidisciplinary teams of specialists, rural leaders and communities to work more closely together and to understand better their problems, needs and opportunities. The approach helped communities to define problems, evaluate local institutional capacities and prioritise opportunities for development. The traditional skills and external technical knowledge were integrated towards bringing together the development needs of community groups and the resources and technical skills of government, donor agencies and NGOs.

2.4. GAINING SUPPORT AND PARTNERSHIP

De Vos (1998) states that it is imperative to introduce the study to gatekeepers who control access to the setting in order to gain support and to provide a sense of ownership/partnership. Having identified and defined the project and the sample, the project was introduced at various levels.

2.4.1. AT PROVINCIAL LEVEL

In order to obtain co-operation and support, the aims and objectives of the study were introduced and discussed with the authority figures to obtain their permission to work in their areas or jurisdictions. The process to advocate and introduce the study involved making two presentations at the PSTT in order to explain the purpose and objectives of the research and the role that the PSTT was expected to play. The stakeholders identified as critical in terms of information sharing for the project were relevant provincial bodies and departments (such as PSTT, DWAF, Health and Education Departments); local government representatives (from the district municipalities, government departments, and Eastern Cape Local Government Association); Implementing Agents (NGO Coalition and Social consultants); and local community structures (e.g. Ward Councillors, Traditional leaders, Farmers Association, CPF, etc).

2.4.2. AT LOCAL LEVEL

The Mayor of Ngqushwa Local Municipality was approached and the aims and objectives of the study were introduced and discussed with her. Subsequently a stakeholders' workshop took place involving the various structures within the Municipality. In this workshop, information was provided regarding: the communities that require the project most; the social structures operating in the communities; the communication channels to introduce the project in those communities and the right people to first speak to in the process of introducing the project to the communities.

2.4.3. AT COMMUNITY LEVEL

Authority structures in the identified villages were visited to explain the purpose and objectives of the research. The study was introduced to chiefs, councillors and headmen using a letter of permission from the Ngqushwa Local Municipality. Subsequently community mass meetings were held in each of the identified 14 villages to introduce the study to the community members, including the expected contribution from every member of the community to the research process. The communities were also informed that a feedback session would occur at the end of the study to inform them of the results of the information gathering session.

2.5. PREPARATION FOR FIELD WORK

Before commencing with information gathering, the study team had to make preparations regarding the area, the people and the project. All sources and resources were examined in order to ensure the smooth running of fieldwork. A community profile study and a transect walk were undertaken.

2.5.1. COMMUNITY PROFILE STUDY

A community profile study was conducted to obtain basic information about the villages that had been identified for the study. The researchers and field workers conducted a community profile study through the use of a semi-structured questionnaire (Appendix D). The questionnaire was administered during community group meetings to community members and individual interviews were also held with leaders in order to determine the social, cultural, economic and political dynamics of each community. The community profile study focussed also on the current conditions of the communities in relation to water, sanitation, and infrastructure.

2.5.2. COMMUNITY TRANSECT WALK

The field workers and the researchers undertook a community walk in order to familiarise themselves with the physical context of the communities in which hygiene practices occur. Observations were made on the location of water sources in each of the 14 villages, the condition of these water sources, the location of sanitation facilities, their use, sanitation practices, the location and condition of rubbish pits and toilets. This helped in gathering hygiene information on issues that were too sensitive to ask during group discussions or during individual interviews. The observers made notes as they went along which culminated in transect maps. A map of each village, indicating public facilities related to health and hygiene, water sources, schools, rough lay-out of the yards, churches, market places, meeting places, were drawn as reflected in the succeeding chapter.

2.6. DATA COLLECTION METHODS

There are various techniques for data gathering. The general rule is that no single method or technique on its own is perfect for assessing hygiene practices and knowledge. Since hygiene issues are very personal and potentially very sensitive, care was taken to use those techniques that accommodated the

sensitivity of the issue, as well as the modesty of the target groups. The techniques used in the study had to be easy to use and easily understood by the target groups since complex techniques would hamper the target groups in providing relevant information, as they would be concentrating on mastering the technique rather than providing the information. Both primary and secondary data were collected using qualitative and quantitative data collection methods. The data was collected through the use of both qualitative and quantitative (KAP survey) data collection methods such as community profile study, transect walk, unstructured group interviews, structured group interviews, and personal interviews. The limitation of KAP study is that respondents in KAP surveys often tell the interviewer what they think she wants to hear or what they think will bring the greatest benefits. In recognising this limitation, qualitative methods such as unstructured group interviews were used in order to gain deeper insight on sanitation issues.

2.6.1. QUALITATIVE DATA COLLECTION METHODS

Qualitative methods included unstructured group interviews; workshops and community transect walks. Fifteen (15) unstructured group interviews were conducted by researchers among sanitation stakeholders using seven guiding questions derived from literature (Appendix C). Four (4) group interviews were conducted with PSTT members, Five (5) with Nqgushwa Local Municipality Officials and one (1) with SANTAG (KZN), one (1) with DWAF (KZN), one (1) with DWAF (EC), one (1) with Mvula Trust (EL), one (1) with RSS (EL) and one (1) with Umgeni Water (KZN). These groups were facilitated by the LDA research team from June to December 2002.

2.6.2. QUANTITATIVE DATA COLLECTION METHODS

The quantitative methods included structured group interviews and structured individual interviews. Fourteen structured group interviews were conducted among the 14 groups representing each of the 14 identified villages, using the KAP questionnaire adopted from Duncker's study (2001). The KAP study was used to obtain information on existing knowledge, attitudes and practices regarding sanitation. Each researcher/research assistant was assigned approximately 4 villages to take charge of in terms of data gathering. Each researcher/research assistant was assigned 2 fieldworkers per village. The fieldworkers assisted in conducting group interviews. All the villages assigned to each researcher met at a common venue for group interviews and participants had to travel to the identified venues and were reimbursed for their travelling. Some of the group interviews took place during the weekend

because of the unavailability of some community members during the week. All in all, 14 group interviews were undertaken with an average of 10 members, consisting of both males and females. Four hundred and ninety four (494) structured personal interviews were conducted by 28 field workers (two per village, one male and female) identified from the 14 villages. The interviewees included people who were more knowledgeable about the aspects of community life, such as the elderly people, health workers, the tribal authority, the teachers, the local councillors, women's groups, youth leagues, religious organisations and community policing forums. The questionnaire, comprising both close and open-ended questions was pilot tested and adjusted accordingly in order to get the intended responses.

2.7. DATA CHECKING

Periodic feedback sessions were held to present the results of the data collection to the participants to check the reliability of the data (Participant checking). Rapport and trust was built with community members and this enabled the research team to gain a deeper understanding of the communities in which they conducted the study (Prolonged and intense interactions with the community). The teams working in each of the 14 communities had regular meetings to cross-check the quality of each other's data sets (Parallel studies and team communications). The project team and the WRC steering committee explored important aspects of the study that might have been overlooked by the research team and corrective measures were undertaken (Peer reviews).

2.8. DATA ANALYSIS

Thematic content analysis was used in assessing qualitative data and the SPSS (version 11.0) was used to analyse quantitative data. The data gathered from the different sources was triangulated in order to ensure validity and reliability of the findings. The data has been presented in a simple, meaningful sequential and interpretable form in chapter 3.

CHAPTER THREE

RESEARCH FINDINGS

This chapter presents the data collected in the study in five sections. The results have been presented according to the following categories: situational analysis; transect walk observation; unstructured group interviews; structured group interviews and structured personal interviews.

3.1. SITUATIONAL ANALYSIS

The communities under study belonged to the Ngqushwa Local Municipality. The majority of the villagers were in the working age group as they were below 65 years of age and females constituted the majority of the population in each of the 14 villages. Communities adhered to their Xhosa cultural patterns, values and practices. It was indicated that there was a high level of unemployment and that those who were working earned below the poverty datum line. Most villagers were employed in the primary activities (farming and mining) and a few were employed in the secondary sector (manufacturing, construction and utilities). There was a complete lack of secondary industries in the area. Villages commonly used pit toilets. However, some households had no toilet facility at all and they used the bush for defecation. No maintenance was carried out and super structure is relocated to a new pit when the old pit is full. There were no recognised solid waste disposal facilities in the communities. The households either had no services at all or dumped their waste on a communal site or on their own unorganised dumps. No treatment facilities were available to service septic tanks. The stakeholders interviewed felt that there was a need for proper sanitation.

Participants indicated that there were mobile clinics that operate once monthly in each village. TB and HIV/AIDS were cited as common diseases across the villages. All villages had at least one primary and one high school. However, the literacy level was generally low and in some villages adult basic education was provided to alleviate this problem. Most villages had no recreation facilities. Some of the roads were in a state of disrepair and were inaccessible due to lack of maintenance. Some of the villages had electricity supplied by Eskom, however, other villages were in the process of receiving electricity from Eskom's rural electrification programme currently in operation. Very few villages had access to telephones in their houses, however they indicated that they had access to other forms of telecommunication services such as cellular phones.

3.2. TRANSECT WALK OBSERVATION

The field workers and the researchers undertook a community walk in order to familiarise themselves with the physical context of the community in which hygiene practices occur. Observations were made on the location of water sources in each of the 14 villages, the condition of these water sources, the location of sanitation facilities, their use, sanitation practices, the location and condition of rubbish pits and toilets. The observers made notes as they went along. Maps of each village, indicating public facilities related to health and hygiene, water sources, schools, rough lay-out of the yards, churches, market places, meeting places, were drawn. The results of the transect walk have been presented graphically at the end of the chapter. They generally depict that each community had either a river or dam or both as water sources. Streams and rivers as reflected on the maps are used for more than one function (e.g. drinking water, washing clothes and bathing in the same stream). There are communities that have taps, but the quality of the water is shown as not being good (See Ntloko Village "sour" and "sweet" water taps). Some of the community maps show that sanitation facilities are available in the community including toilets, rubbish pits (e.g. Lower Qeto). There is one map, the Dubu village, which actually reflects the bush where community members defecate. Most of the houses are not fenced, domestic animals such as cows, chickens, donkeys, pigs move freely (e.g. Mpeko Village). One map (Qaukeni village) clearly shows the "food chain" in practise - a man defecating and the chicken feeding from the faeces. The graphics show communal land that has been cultivated and some small home gardens.

3.3. FINDINGS FROM UNSTRUCTURED GROUP INTERVIEWS

Four unstructured group interviews were conducted with PSTT members, five with Ngqushwa local municipality officials, 1 with SANTAG (KZN), 1 with DWAF (KZN) and 1 with Umgeni Water (KZN) using seven guiding questions derived from literature. The seven questions posed in the group interviews (Appendix C) served as guidelines for organizing data. The data was analyzed and recurrent themes were determined. The recurrent themes, which emerged in relation to each question have been presented in the results with selected direct quotations from the participants offered as illustrations. Direct quotations were used to retain what Hall and Hall (1996) refer to as the richness of the data as it allows participants to speak for themselves.

3.3.1. RESOURCES

The responses to the question "What are the Physical (e.g. Infrastructure), Natural (e.g. Rivers), Human (e.g. Skills and Capacities), and Organisational (e.g. Structures) resources available in the communities" are presented in this sub-section.

Physical resources: All the groups mentioned that the physical resources were not in a good state and needed repair and maintenance. They further indicated that sewerage oxidation ponds, conservancy tanks and septic tanks were poor across rural settlements. All forms of toilet structures were generally poor to non-existent. The communities did not have effective means of off-site excreta disposal. Rivers, streams, canals, gullies and ditches were often destinations of most untreated human excreta and household waste. Such waste accumulated on streets, in open spaces, between houses, in stagnant pools and on waste land.

Natural resources: In so far as the natural resources were concerned, participants stated that the number of natural resources such as perennial rivers, springs and fountains were limited and some did not produce water which was safe for consumption. Therefore, water supply/reticulation were irregular and inadequate. The inadequate supply of water was also attributed to bursting pipes, lack of money to fix broken taps, taps being closed and drought.

Human resources: According to the participants, human resources lacked technical expertise and were limited (e.g. shortage of water treatment operators was identified).

Organisational resources: Organisations lacked co-ordination and capacity; integration of resources; maximum utilisation of existing human resources; accountability and reimbursement and utilisation of local supplies. Poor communication among stakeholders, the lack of political will, lack of competency and deliberate political manipulation and sabotage impacted on the optimum utilization of organisational resources.

Generally, the groups indicated that there are inadequate physical, natural, human and organisational resources across communities. The communities are characterised by inadequate water supplies, poor maintenance of toilet structures; poor facilities for safe disposal of water and other domestic waste and inadequate toilet facilities. This state was generally attributed to the fact that the Eastern part of the Eastern Cape Province is less resourced than the Western part. The more East-ward the communities, the lesser the resources and vice versa. The following expressions summarise the inadequacy of resources in the communities:

"In some communities girls do not go to school during their menstruation period because there are no toilets at school or existing ones lack privacy"

"There are cases where a school has 300 learners but there is no single toilet"

"Sometimes the distance between the household and the toilet is too long and poses a threat at night, especially for women and girls who might get raped"

"There are communities where the whole street shares one toilet and one water tap and some have no communal taps at all"

"There is roughly 1 engineer in every 50 000 people in South Africa compared to Japan which has 1 engineer in every 600 people"

3.3.2. HYGIENE PRACTICES

In response to the question on current common bad hygienic practices in the communities; the groups were of the view that: sometimes the community members do not wash hands after changing babies' nappies, before handling food, before eating, after a visit to the toilet, after house cleaning and after work or rubbish disposal because of irregular water supply. Others did not wash food before eating, especially fruits. Men did not wash their hands after urinating and they urinated in open spaces (e.g. behind the house, on the street, next to the car, etc). There was poor disposal of children faeces and solid waste because of lack of essential services for waste disposal. Most mothers who used disposable nappies threw them in the veld. Water containers were sometimes left uncovered or half covered so as to ensure that "capture" of rain water. The communities shared water with animals because of lack of demarcation areas around households. The communities drank untreated water from unprotected streams, due to lack of money to buy disinfectants. A number of communities used the "bush" for defecation due to lack of toilets; poor technical awareness in communities (e.g. seepage problems); lack of maintenance and cleaning of public toilets and facilities, cultural norms and beliefs regarding certain practices, poor designs in public facilities. The following expressions highlight some of the hygiene practices:

"Most houses are not fenced, domestic animals come in the yard to drink water from the containers"

"During some traditional ceremonies, people do not wash meat in order to retain its nutrients"

"Hundreds of people wash hands in the same container at funerals"

"It is sometimes perceived as a disgrace for the father in law to use a toilet used by the daughter in law"

"Sometimes one has to defecate outside in order to examine the faeces to see if s/he has been bewitched or not"

"Sometimes community members would not use the toilet because they are afraid that there could be *muti* on the toilet seat to bewitch them"

"Most men do not wash their hands after passing urine. They just urinate and continue chopping meat at social functions"

3.3.3. PERCEPTIONS

In response to what did communities perceive as "good" and "bad" hygiene practices, the groups views were that communities perceived covering food *for visitors*, boiling drinking water *for children only*, cleaning a toilet *without detergents*, burning household waste and sweeping household ground, as good hygienic practices. They further stated that the communities perceived child drinking with mouth from a pipe, urinating *openly* by women, fetching water from the dam with feet inside the dam, urinating *openly* in the dam, cleaning child's bottom with leaves, swimming in the dam where drinking water is fetched, children eating outside with animals, as bad hygienic practices. The participants indicated that communities do not perceive children faeces as harmful. One participant said "they touch children's stools and say *ngumtwana lo!*" which literally means "*this is a child!*" It was also indicated that in some communities there are people who perceive safe hygienic practices as rich people's affair. They believed that only rich people can afford toilets- toilets are associated with dignity, privacy and status. Some preferred to defecate in the "bush" because they perceived toilets, especially inside ones as western culture. Encouraging children to defecate behind the house was not perceived as bad practice because it was safer for children. Urinating next to the road when travelling long distances was not perceived as bad practice. Sanitation was narrowly viewed as a toilet issue. Communities generally did not perceive urinating in open spaces e.g. next to cars, behind the house or on the street among males as bad practise. The following expressions were captured:

"Toilets are not user-friendly for children"

"People have "Cama" (urinating) stations when they travel long distances"

"People prefer to defecate in the bush because they do not want to become like whites"

3.3.4. TARGET GROUPS

In response to the question: "What groups should be targeted to participate in hygiene and sanitation programmes", it was felt that sanitation is everybody's responsibility. Men were identified because traditionally they had freedom of speech and as heads of households, their word is usually final. Women were also indicated as one of the target groups because they can easily spread the message about hygiene practices and they can be influential in their own households in ensuring that all family members adopt safe hygienic practices. Other target groups identified were: traditional leaders as they have command and respect in most rural/traditional areas; children because they are more likely to learn and adapt to behavioural change; politicians are influential; government departments have authority; and religious denominations because they enjoy respect from communities. Volunteer groups e.g. health workers; families (men and women) play significant role in family building. Councillors; civic structures; youth; teachers; principals; medical doctors; traditional doctors; businesses and cultural groups were also identified as having a critical role to play towards adoption of safe hygienic practices. The following expressions were captured:

"We must join hands together to fight unhygienic practices"

"It is easy to bend the bow while it is still wet"

"If you educate a woman, you educate the nation"

"Charity begins at home"

3.3.5. CONSTRAINTS

The groups identified the following constraints to implementing safe hygienic practices:

- Distorted attitudes, beliefs, myths, practices and perceptions;
- Lack of community participation;
- Lack of co-ordination/resources;
- Lack of low cost appropriate technical options/ Inappropriate technologies;
- Reactive programmes/ Political departmental bias to programmes (e.g. water not broader sanitation).
- Lack of funding/ Funding logistics;
- Lack of political will and commitment;

- Lack of awareness / Ignorance;
- Poor state of infrastructure (e.g. roads; poor services e.g. irregular water supply);

Participants expressed that the key economic and financial constraints included the high cost of water and sanitation to families of low income and the shortage of capital for investment. They were of the view that while even the lowest-income families can usually afford potable water as it is delivered, the provision of indoor connections close to the house can become unaffordable because of service costs that are not taken into account in project feasibility studies. Environmental constraints included scarcity of water, population pressure, economic growth, deteriorating water quality and the competing demands of agriculture, industry and domestic users.

"Consultants are expensive, communities cannot afford their services, though they are good in what they do"

"Education without resources is meaningless"

"Some technologies are not appropriate for communities. The "One size fits all" approach is not working"

"Authorities wait for a crisis (e.g. cholera outbreak) and react by introducing programmes which are not sustainable. As soon as the crisis is over, they sit back and relax"

3.3.6. SUCCESS /MOTIVATING FACTORS

In response to the question "What could motivate communities to adopt safe hygienic practices?", the following motivating factors were highlighted: creating role models; promotion of self esteem; improvement of living standards; poverty alleviation; promotion of community involvement and participation; awareness programmes and programmes that demonstrate effect. The views were that the purpose of the programmes should be to help support communities in their efforts towards safe hygienic practices; pragmatically help their chances for development and advancement; provide instruction in specific skills and knowledge critical to adoption of safe hygienic practices; answer questions and provide important insights as well as offer emotional support. They should promote behaviours and facilities together to maximise health and socio-economic benefits. The programmes should employ a systems approach because good sanitation is a harmonious resolution among four factors: waste, the physical environment, the local population's cultural beliefs and attitudes and technology. If one of the ingredients is overlooked, then the product will not be sustainable. They

should take a learning approach - show flexibility, change and innovation and empower people to take ownership of sanitation decisions and responsibility for sanitation. The programmes should build on existing practices, based on local beliefs and practices and work towards lasting improvements and "mention the unmentionable" and they should take a learning approach; continually monitor and evaluate and feedback the lessons learned into projects and programmes. They also should support human dignity in all interventions because sanitation is not only about health. Other success factors mentioned were subsidisation of projects i.e. VIPs; community participation (role in conceptualisation, inception and implementation phases of the programmes); adopt a holistic approach towards sanitation; proper education and good infrastructure; scarring tactics; community responsibility especially unified approach adopted by the entire community grouping; proper disposal of waste to prevent pollution of water sources and spread of disease; awareness that if water is not conserved by 2020 there will be no safe water for human consumption. It was indicated that community involvement was one of the critical success factors. An active participation of the community members in the decision making process is a key ingredient for the sustainability of sanitation investments. Link with other partners to promote safe hygienic practices and networking e.g. encourage schoolteachers to include hygiene promotion as part of the normal curriculum and encourage child-to-child activities to improve links between children in school and community outside the school; encourage community health workers, medical staff, herbalists and traditional healers to include hygiene promotion and preventative health care practices as part of their work; encourage savings and credit programmes to support hygiene promotion initiatives such as local soap production, solid waste collection and recycling, water vending and encourage mass media to support and include hygiene promotion as part of their work. Other success factors were stated as well-developed infrastructure, raising awareness and education, accessibility and affordability of resources, care and maintenance of physical resources, appropriate and flexible technologies that take into account community values, perceptions and practices.

"Focus should be on children. It is difficult to teach an old dog new tricks"

"Programmes should emphasise poverty and related problems rather than solely focusing on sanitation"

"At the moment communities participate but they are subjected to this and that"

"Programmes should equally address the needs, preferences and behaviours of children, women and men"

"Programmes should address the long-held beliefs through mentioning the unmentionable"

3.3.7. MARKETING AND PROMOTION

The groups responded as follows to the question of how can safe hygiene practices be marketed and promoted to various target groups: cleaning campaigns to be used however not sustainable; focus on poverty versus sanitation; integrated approach; media to advertise; bill boards; word of mouth; radio talk shows; awareness campaigns (road shows); involvement of locals (e.g. through competitions); understand attitudes, perceptions and beliefs of rural communities towards sanitation; dramas; introduction of school programmes; home-produced posters and pamphlets; making use of celebrities and TV. Community based sanitation promotion methods such as installing neighbourhood sanitation committees, providing sanitation messages through health centres, radio and local forum theatre were encouraged. Health education and hygiene promotion by health clubs was also suggested. Marketing messages should focus on promoting the acceptability of safe hygienic practices, improving access and availability of a wide range of education, information, products and services for the under-served, low income vulnerable communities. Further, provision of affordable sanitation products and services, with more equitable distribution so as to reach the low income groups and to enhance access to and demand for goods and services is critical. The following expressions were captured:

"Messages should be clear and simple"

"Posters should fit the local conditions"

3.4. FINDINGS: STRUCTURED GROUP INTERVIEWS

Fourteen (14) structured group interviews were conducted on groups representing each of the 14 identified villages, using the KAP methodology adopted from Duncker (2001). The total number of respondents was 71. Each group had an average of 5 members. Separate male and female group sessions were conducted to facilitate open discussion on sensitive issues. Each group was facilitated by 2 trained moderators.

3.4.1. WATER SOURCES

Several questions were asked to determine the availability of water. Water sources identified by the majority (42.9%) during rainy seasons were dams, drums and tanks, followed by street taps (28.6%) and the river (21.4%) and only 7.1% used yard taps. Rivers, street taps, were the main sources of water

during dry season as they constituted 28.6% respectively with yard taps and springs constituting 7.1% respectively. In spite of the various sources of water used during rainy and dry season, a substantial percentage (92.9%) indicated that they did not get enough water for drinking and the most prevalent reasons for that were cited as burst pipes, lack of money to fix broken taps, taps being closed and drought. Because of the lack of water it was indicated that community members do not have a full body wash regularly (71.4%). About 43% of the participants indicated that they have water committees whose responsibilities were seen as the maintenance of the broken taps and monitoring their use, to make sure that there is water supply, repair damaged pipes, taps and reservoirs and attend to any other water related issues. More than half of the participants (57.1%) indicated that they collected water in open buckets. Three quarters (75%) of the participants indicated that they kept water outside the house and 58.3% do not fully cover the water. About 36% indicated that the water containers were also used for refuse collection. Positive responses revealed that participants felt that it was necessary to wash containers (85.7%) and to cover containers (71.4%). While those who covered the water had done so for hygienic reasons, those who did not cover their containers did not do so because they wanted to capture rain water due to scarcity of water.

3.4.2. WATER USES

Water was generally untreated (71.4%). The most frequently cited reasons for not treating the water were lack of knowledge and lack of sufficient income to purchase disinfectants. The wastewater was thrown away in the veld (92.9%); only a handful said it was used for gardening purposes (7.1%), even though 64.3% had vegetable gardens. The reasons for throwing water in the veld were that the water was no longer useful, lack of knowledge and because there was no drainage system. The positive responses on the practice of washing hands revealed that participants washed hands after changing baby's nappy (78.6%); before handling of food (57.1%); before eating (50%); after a visit to the toilet (92.9%); after house cleaning, work and/or disposing rubbish (71.4%); after touching or getting in contact with animals (57.1%) and other - i.e. before milking the cow and after waking up.

3.4.3. EXCRETA DISPOSAL

The solid waste was either thrown away in the veld (23%), in the rubbish pit (38.5%) or burned (38.5%) and the reasons cited among others were a lack of essential services for waste disposal. All the participants indicated that people relieve themselves in the veld if there is no toilet in the yard. Some

participants indicated that men and women use the same toilet. However, it was reported that children under the age of 12 did not use the toilet because they might drown, the toilets were dangerous and were not of good standard. The mothers who reported to use disposable nappies, indicated that they threw them in the veld after use either because they do not have toilets or the toilets are far away from the houses.

3.4.4. DOMESTIC AND ENVIRONMENTAL HYGIENE

The responsibility for cleaning toilets was generally perceived as everybody's (64.3%). The health of the community was generally considered not to be good (78.6%) because of poor diet, no money to buy water treatments, not enough clean water available and dirty surroundings. Further explanations given ranged from unemployment, lack of knowledge on how to eat a balanced diet, no health workers, poverty, lack of resources, inadequate facilities and infrastructure, no clinics and lack of water. Positive responses on the prevalence of diseases cited in the last six months were in descending order: skin disease (92.9%), worms (64.3%), eye infection (42.9%), diarrhoea (28.6%), bilharzia (21.4%) and malaria (7.1%). The positive responses regarding awareness of treatment methods for diseases showed that the participants were generally aware of re-hydration mixtures for diarrhoea (64%), medicines and bandages for treating burns (71.4%), antiseptics and bandages for treating cuts, bites, etc (71.4%), insect repellent for mosquitoes, flies, fleas, etc (71.4%). However, all participants expressed the necessity of a hygiene awareness workshop and indicated that it should address cleanliness, collection of waste, safe disposal of faeces, food storage, water storage, disease prevention, sanitation facilities and erection of toilets.

3.5. FINDINGS: INDIVIDUAL STRUCTURED INTERVIEWS

Four hundred and ninety four (494) structured personal interviews were conducted by 28 field workers (two per village, one male and female) identified from the 14 villages. The aim of the structured interviews were to determine the factors that can motivate people to adopt safe hygienic practices and the current de-motivating ones. More than half of the participants were aged between 26 years and 50 years (64.1%) with males (52.3%) slightly more than females (47.7%). The majority of the participants were married (54.1%) and the rest were either divorced (1.0%), separated (.4%), widowed (1.4%) or single (43.1%). The majority of the villagers (64.8%) worked for various government departments, private organisations, NGOs, clinics, and schools, meanwhile the remaining

percentage of participants were unemployed (35.2%). In terms of educational background, the majority had secondary education (63%), followed by tertiary education (20.2%), then primary education (14.7%) with the lowest percentage being that of villagers who reported to have had no formal education at all (.4%).

The motivating factors for adoption of safe hygienic practices are varied and complex, but could generally be grouped into the following linked and overlapping categories:

- Well-developed infrastructure
- Awareness and education
- Accessibility and affordability
- Care and maintenance
- Appropriate technology and flexible systems
- Appropriate programmes
- Local participation
- Leadership commitment
- Marketing and promotion

The motivating factors have been presented in details below.

3.5.1. WELL DEVELOPED INFRASTRUCTURE

Participants generally indicated infrastructural characteristics such as well-built houses with electricity, toilets, good sewerage system and clean water as the motivating factors at individual (48.6%) and family levels (54.9%). At school level both well-built classrooms with electricity, toilets, good sewerage system and clean water (42.3%) Similarly, well-built houses with electricity, toilets, good sewerage system and clean water (23.3%) were rated as the main motivating factors at community level. Provision of sanitation resources was perceived as the main motivating factor for adoption of safe hygienic practices at local municipality level (60.3%), at district municipality level (46.3%), at provincial level (44.1%) and at national level (42.3%). Similarly, participants identified various demotivating factors such as unclean water, unavailability of water, no electricity (37.0%), no well-built houses and no toilets (16.6%), unemployment (17.2%) and lack of knowledge (14.0%) at individual level. At family level: unclean water, unavailability of water, no electricity (25.9%), no well-built

houses and no toilets (21.3%), unemployment (11.5%) and lack of knowledge (9.1%) about safe hygienic practices were identified as the main de-motivating factors. At school level: unclean water, unavailability of water, no electricity (39.10%), no well-built classrooms, dirty surroundings and no toilets (49.6%), and lack of knowledge (14.0%) about safe hygienic practices were identified as the main de-motivating factors. At community level: unclean water, unavailability of water, no electricity (33%), no well-built houses and toilets (48%), and lack of knowledge (25.6%) about safe hygienic practices were identified as the main de-motivating factors. At local municipality, district municipality, provincial and national levels, the same factors stated under community level were cited as the main de-motivating factors even-though the percentages were slightly different.

3.5.2. RAISING AWARENESS AND EDUCATION

Only positive responses are reported, therefore the percentages do not add up to 100%. Education on safe hygienic practices at individual level (42.3%) and community level (25.7%) was perceived as a motivating factor for people to adopt safe hygienic practices. It was stated that effective hygiene education should emphasise the health risks associated with inadequate sanitation (94.3%). An overwhelming majority felt that continuous promotion and advocacy for sanitation was necessary (93.0%). Ineffective promotion and low public awareness (78.3%), cultural taboos and beliefs (70.5%), ignorance of people (83.6%), lack of capacity building at community level (82.1%), lack of hygiene education and training (89.0%), negligence of people (81.5%) and poor sanitation habits e.g. not washing hands before eating (79.7%) were said to be de-motivating factors for adoption of safe hygienic practices. Wrongly held assumption that sanitation is a toilet issue only (84.5%) and unavailability of broadly skilled personnel (92.6%) were regarded as de-motivating factors for the adoption of safe hygienic practices.

3.5.3. ACCESSIBILITY AND AFFORDABILITY

Only positive responses are reported, therefore the percentages do not add up to 100%. Access to water supply resources such as house connections, public stand-pipes, bore-holes with hand pipes, protected springs, etc (91.9%) and access to excreta disposal sources such as connection to the sewer or septic tank, pour-flush latrine, ventilated improved pit (93.9%) were said to be the motivating factors for adoption of safe hygienic practices. Inadequate and poorly used resources (79.9%) were said to be de-

motivating factors. Availability of income (76.9%) was considered one of the key motivating factors for adoption of safe hygienic practices.

3.5.4. CARE AND MAINTENANCE

Only positive responses are reported, therefore the percentages do not add up to 100%. Properly maintained water sources (86.5%) and properly maintained excreta disposal sources (92.0%) and well maintained water sources -fencing, cut grass, soak-away, drains - (90.0%) as well as existence of care takers for preventive maintenance (94.7%) were said to be motivating factors for adoption of safe hygienic practices.

3.5.5. APPROPRIATE TECHNOLOGY AND FLEXIBLE SYSTEMS

Only positive responses are reported, therefore the percentages do not add up to 100%. Safe, acceptable and affordable sanitation technologies (92.1%) and flexible sanitation systems , incorporating respect for community values, perceptions and practices (92.2%) as well as co-ordination, networking and partnerships among stakeholders in sanitation (90.6%) were cited as motivating factors for adoption of safe hygienic practices. Lack of technologies that could be easily maintained (84.5%). Excessive focus on the technical aspects of water and sanitation projects (67.0%) were cited as factors that de-motivate people to adopt safe hygienic practices.

3.5.6. APPROPRIATE PROGRAMMES

Only positive responses are reported, therefore the percentages do not add up to 100%. Sanitation programmes that change long-held beliefs through mentioning the unmentionable (84.5%); sanitation programmes that equally address the needs, preferences and behaviours of children, women and men (89.8%); sanitation programmes that adopt approaches which recognise and allow optimal use of valuable community attributes such as participatory approaches (90.6%); sanitation programmes focusing on behaviour and facilities together (88.6%) were cited as motivating factors for adoption of safe hygienic practices. Inappropriate approaches which do not acknowledge the cultural, economic, and social contexts (79.2%) were seen as contributing towards de-motivating people to adopt safe hygienic practices.

3.5.7. LOCAL PARTICIPATION

Only positive responses are reported, therefore the percentages do not add up to 100%. Active local participation in sanitation issues (94.7%). Women were seen to have the potential to play an influential role in making sure that each family member practices safe hygiene (44.7%) and teaching children about safe hygienic practices (31.2%). Similarly men were seen to have the potential to play an influential role in making sure that each family member practices safe hygiene (52.0%) and in digging pits for toilets and for rubbish (24.3%) and in ploughing vegetable gardens (13.8%). Children were perceived as having potential to learn and teach others about safe hygienic practices (56.7%). Councillors (80.6%), traditional leaders (89.7%), implementing agencies (80.8%) were perceived as instrumental in playing a supportive role towards the adoption of safe hygienic practices. Promotion of safe hygienic practices was seen to be an activity that could be undertaken by the local media (94.5%), government departments (76.9%), schools (93.9%), research institutes (65.6%). Churches could preach messages that support safe hygienic practices (94.5%). The community was seen to have the potential to play a central and active role in all the activities that relate to sanitation (94.7%).

3.5.8. LEADERSHIP COMMITMENT

Only positive responses are reported, therefore the percentages do not add up to 100%. Political commitment from the top and at all levels (67.5%) was seen as one of the motivating factors for adoption of safe hygienic practices. Lack of enabling environment (86.0%), the attitude that responsibility for sanitation lies somewhere (80.7%), lack of political will (55.7%), lack of local support for sanitation programmes (83.2%), limited consideration of service sustainability (81.5%) and weak sector institutions (78.2%), lack of monetary and social benefits (79.6%), low prestige and recognition for sanitation (77.2%) were all regarded as de-motivating factors towards the adoption of safe hygienic practises.

3.5.9. MARKETING AND PROMOTION

Only positive responses are reported, therefore the percentages do not add up to 100%. Participants cited various marketing and promotion methods for adoption of safe hygienic practices. The positive responses included television (97.1%), radio (97.8%), newspaper (81.0%), magazine (68.5%), posters and pamphlets (81.9%), home visits by village health worker (94.3%), education talks (94.3%), bill boards (69.3%), drama (67.7%), dance (49.4%), demonstrations/marches/fun runs (70.0%),

educational campaigns (92.4%), events: sanitation days, clean up days, etc (91.4%) and competitions (90.3%).

FIGURE 1: GCINISA NORTH VILLAGE

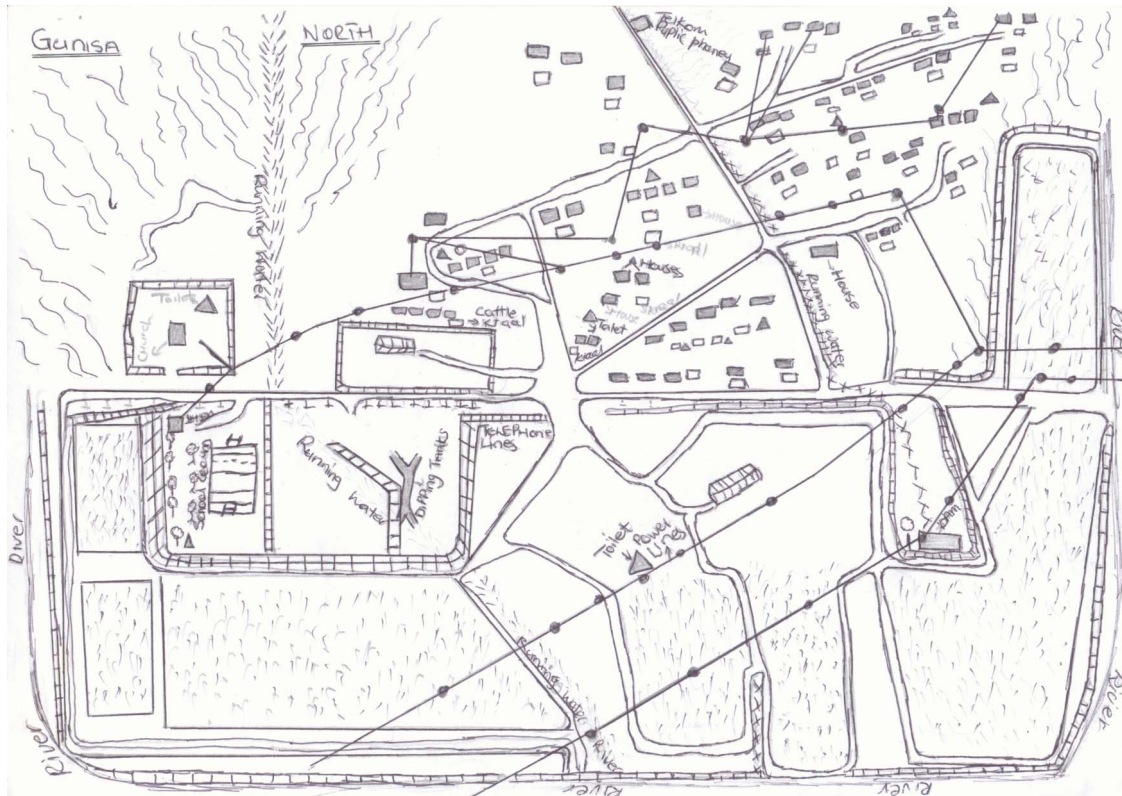


FIGURE 2: MACIBI VILLAGE



FIGURE 3: GCINISA SOUTH VILLAGE



FIGURE 4: LOWER QETO VILLAGE

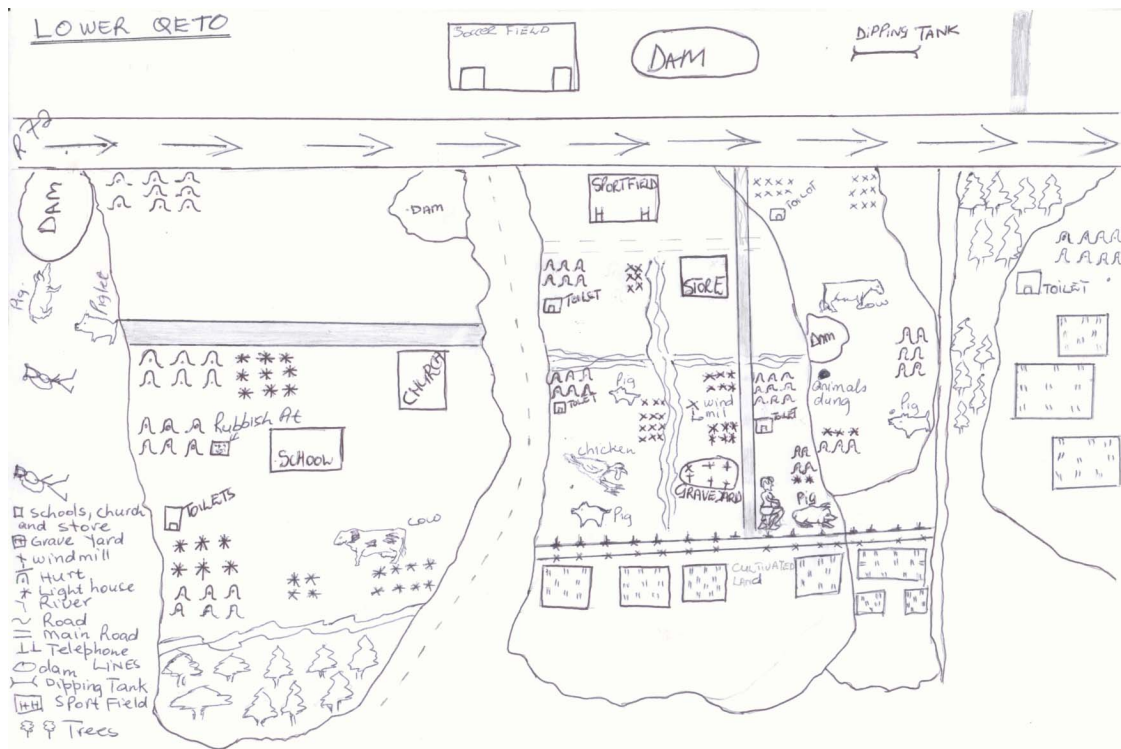


FIGURE 5: ELUXOLWENI VILLAGE



FIGURE 6: MPEKO VILLAGE

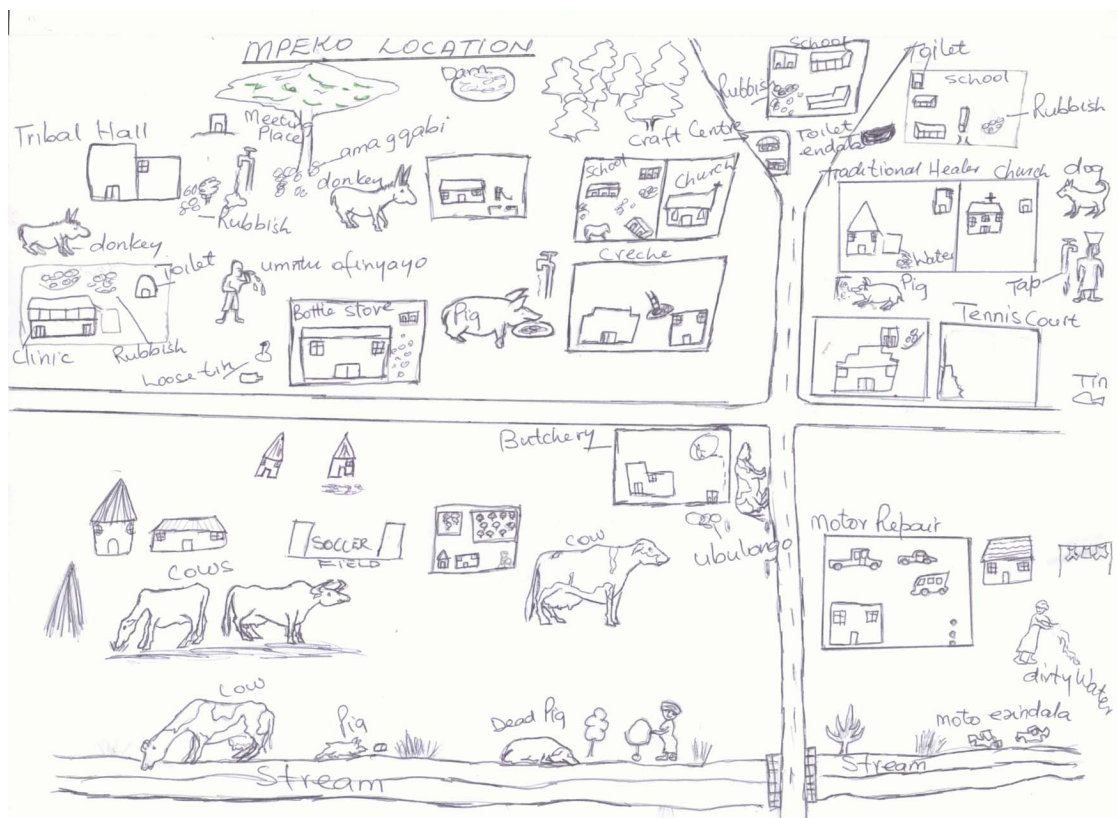


FIGURE 7: WOOLRIDGE VILLAGE

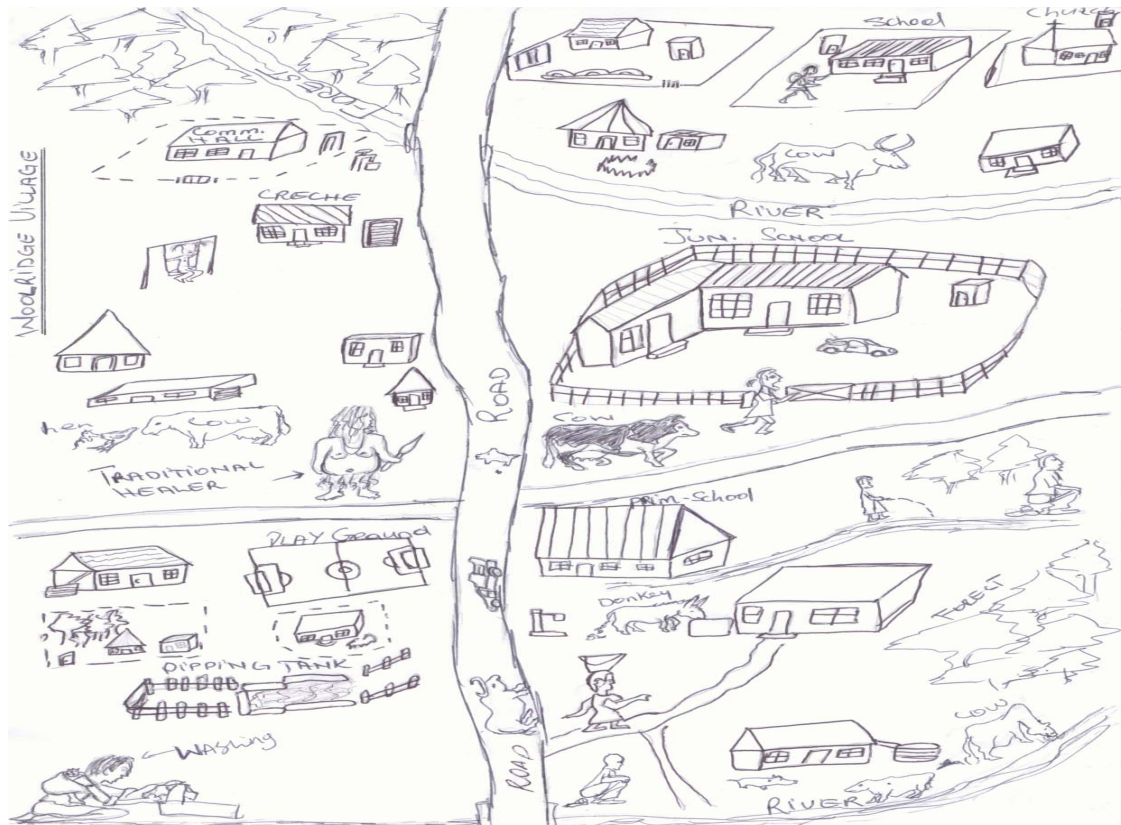
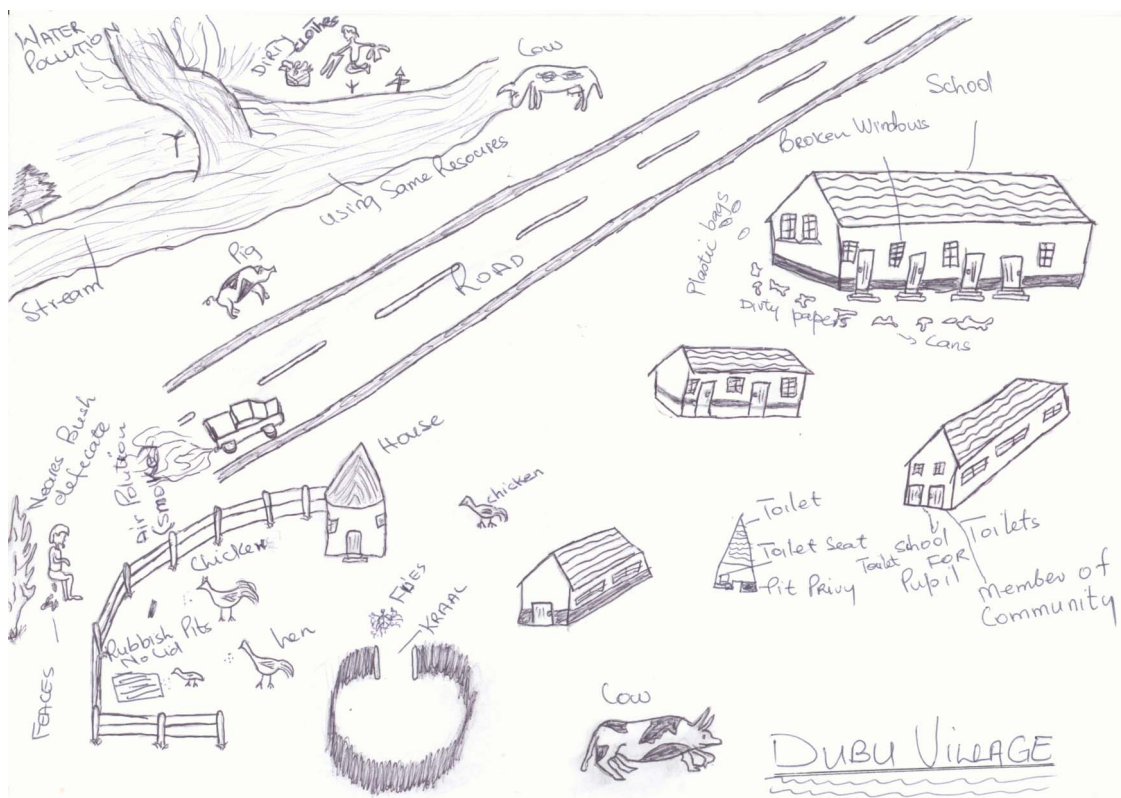


FIGURE 8: DUBU VILLAGE



A hand-drawn map of a village area. At the top, a horizontal line represents a fence, with the text 'KEY = 6.4 KM 1 FENCE' written above it. The map features several clusters of simple house drawings. A road, labeled 'Road Four to Village' with an arrow, runs diagonally from the bottom left towards the center. A river, labeled 'MGWANQRA RIVER', flows along the bottom. A dam, labeled 'DONGWEN DAM', is situated in the river. Various animals are depicted: a cow, a goat, a pig, and a dog. A person is shown carrying a water pot on their head. Other labels include 'School', 'CRE', 'WATER TANKS', 'HEN', and 'WASTE'. The drawing is done in a simple, sketchy style with black lines on a white background.

[illegible]

FIGURE 11: MTATI VILLAGE



FIGURE 12: NTLOKO VILLAGE

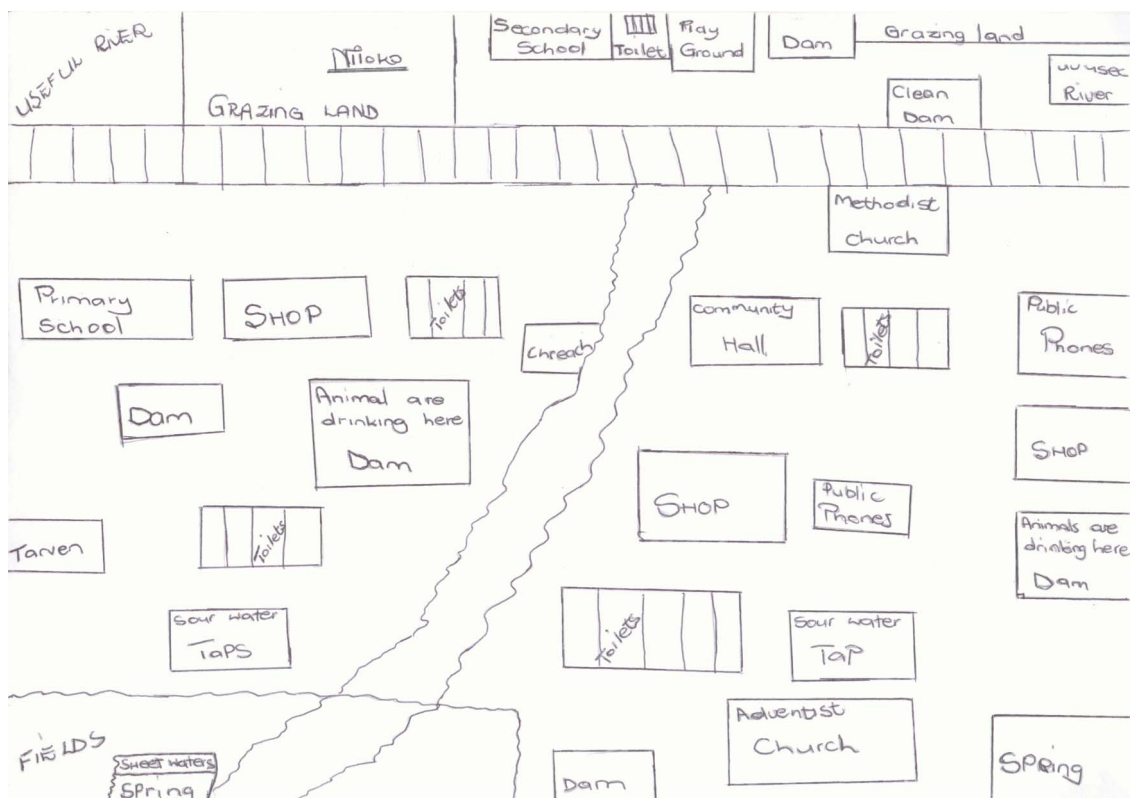


FIGURE 13: NOBUMBA VILLAGE



FIGURE 14: QAUKENI VILLAGE



CHAPTER FOUR

DISCUSSION OF KEY FINDINGS

The objectives of the study were to determine factors that can motivate people to adopt safe hygienic practices and based on those make recommendations for the development of a marketing plan. This chapter discusses the key issues arising from field investigations and recommends strategic interventions that may be taken into consideration, not only in the development, but also in the implementation of a marketing plan for the promotion of safe hygienic practices. The key issues include socio-economic status; water supply status; sanitation status; hygiene practices; hygiene perceptions; target groups; motivating factors for adoption of safe hygienic practices; hygiene promotion and marketing; and implications for future research endeavours.

4.1. SOCIO-ECONOMIC STATUS

In summary with regard to the socio-economic environment, in the area of study, it could be concluded that the communities surveyed were characterised by inferior infrastructure (i.e. poorly constructed houses, lack of electricity and poor road conditions), poor site conditions, unemployment, low incomes, poor living conditions, low literacy levels and lack of recreational facilities. There was a general lack of human, physical, organisational and natural resources in the communities. The lack of basic services affected the sanitation status of the communities. The health of the communities was reported to be poor because of poor diet, dirty surroundings and unavailability of water. Consequently, community members reportedly suffered from diseases such as worms, eye infections, diarrhoea, cholera, bilharzia, malaria, and typhoid. It is important to consider the cost of promoting safe hygienic practices, given the fact that the Eastern Cape is one of the poorest provinces in the country and that the villages under study were characterized by a high level of unemployment and those who were working earned below the poverty datum line. The community profile survey results showed that most of those working were employed in primary activities such as subsistence farming and mining and a few were employed in the secondary sector such as manufacturing, construction and utilities. Unemployment and lack of income have been mentioned as factors that impede the adoption of safe hygienic practices.

International experience shows that once people's basic needs are met, sanitation improvements can easily take place (DWAF, 2001). Promoting the adoption of safe hygienic practices cannot be done in

isolation and indifference to the immediate needs of communities. Therefore, a holistic, integrated and inclusive programme that incorporates the social and economic development of communities should be adopted. Integration requires the collaboration and cooperation of the various stakeholders together with the communities to determine the assets, activities, adaptive strategies and needs of communities for the adoption of safe hygienic practices.

Strategic intervention: Community development as an intervention strategy with the sustainable livelihood approach should be considered to incorporate the development and implementation of a marketing plan for safe hygienic practices. This approach would capacitate community members to earn an income for the purchase of food and may also enable them to purchase water or requirements for water treatment, essential services and products for safe hygienic practices.

4.2. WATER SUPPLY STATUS

It was found that in most case clean water supply was irregular, inadequate and inaccessible. Existing natural water supply sources (such as perennial rivers, springs, fountains, dams) and manufactured water supply sources (such as street taps, yard taps, and tanks) were limited and some did not produce water which was safe for human consumption. Inadequate water supply was also attributed to burst pipes, lack of finance for operation and maintenance and drought. Water sources were poorly maintained. Without regular water supply and proper maintenance of water sources, it is almost impossible for people to adopt safe hygienic practices. The communities identified inadequate water supply as a de-motivating factor for adoption of safe hygienic practices. It is not surprising, therefore, that 71.4% of community members reported not being able to have a full body wash on a regular basis. Irregular water supply also impacted on the capacity to keep water containers clean and hygienic. The intermittent water supplies and scarcity of water affect the poor both in terms of livelihoods and health. They lead to deteriorating water quality and this is mostly felt in rural areas where population pressure, competing demand of agriculture, industry and domestic users are mostly concentrated.

Strategic intervention: The sanitation-marketing plan should advocate for the expansion and development of regular water supplies. The improvement of water supplies is likely to stimulate/motivate communities to look at other improvements needed, including sanitation.

4.3. SANITATION STATUS

Most of the areas surveyed indicated that there was a lack of essential services for safe disposal of waste water and sullage. Rivers, streams, canals, gullies and ditches were cited as destinations of most untreated human excreta and household waste. It was observed that such waste accumulated on streets, in open spaces, between houses, in stagnant pools and on waste land. The participants indicated that sewerage oxidation ponds, septic tanks and water reticulation, all forms of toilet structures were generally poor to non-existent. Schools were built with no latrines and a number of communities used the bush for defecation. Toilets were not properly maintained, poorly designed and in certain instances toilets could not be shared due to cultural beliefs. Most of the children under the age of 12 years did not use the toilet because they were considered unsafe.

Rural communities tend to be ignored by municipal authorities, which find themselves overwhelmed by the urban communities' sheer numbers and need, which far outstrip the capacity of the local planners and government. A lack of basic services, in particular the lack of adequate excreta management threatens the public health and the environment of rural areas as a whole. The removal and safe disposal of excreta and wastewater from washing, bathing, and other domestic uses in rural settlements are critical health and environmental needs. Lack of adequate sanitation and inadequately maintained or inappropriately designed sanitation systems affect the quality of life and place an added financial and health burden on poor families. They constitute a range of population risks to health (e.g. water-borne diseases), the economy (poverty, illness, illiteracy and lost income), the environment (e.g. dispersed and diffuse pollution of surface and ground water sources), which in turn makes it difficult for people to adopt safe hygienic practices. The suggestions made by participants were that sanitation technologies must be appropriate to the resource-base of the community and the physical environment in which they are located. Technologies must be acceptable to the community. The systems must be manageable and not make excessive demands on the time or resources of the community. Toilets must be placed at reasonable distance because toilets placed at a distance from home are not used because they create inconvenience for and anxiety, particularly to women and the elderly. Sanitation systems are to be made sustainable in this fast changing political, sociological, economic and technological environment. They should be designed, constructed and operated with the participation of potential consumers. The use of local resources (including building materials) should be encouraged. Local community members

should be empowered to build the sanitation infrastructure. Where skills already exist, they could be developed further to suit the needs of the specific community.

Strategic intervention: Providing access to hardware is not enough as change in behaviour is required for the full health benefits to be achieved. The availability of appropriate sanitation facilities is very important. The sanitation-marketing plan should emphasise that behaviour and facilities should work hand in hand if value-added benefit of sanitation is to be maximised. It is therefore recommended that the sanitation facilities in the villages be improved for easy accessibility and adequacy. Where there are already sanitation infrastructures, households could be assisted to upgrade facilities to ensure that they are safe and hygienic.

4.4. HYGIENE PRACTICES

To a large extent communities did not practice safe hygienic practices. Some of the community members did not practice personal hygiene such as washing hands before handling food, before eating, after a visit to the toilet, after cleaning house and after work or rubbish disposal because of lack of hand washing facilities and irregular water supply. It was particularly indicated that men do not wash their hands after passing urine. Household hygiene was to a greater extent not practised because there were households without toilets or with poor toilet facilities, which resulted in poor disposal of childrens' faeces and some families using the "bush" for defecation. Some households left their water containers uncovered or half covered to "capture" rain water. The containers were not washed regularly, drinking water was generally untreated due to lack of money to buy disinfectants and lack of knowledge and dirty water was thrown in front of the house due to the lack of drainage systems. Uncovered drinking water encouraged animals to drink from the water containers since there were no demarcation areas around households. Good health, hygiene and sanitation start at home.

Local government should support the household and other spheres of government to ensure that good sanitation has a lasting positive effect on the health of individuals, the community and society. Sanitation planning, implementation and monitoring should be co-ordinated through dedicated forums at national, provincial and local levels to ensure that sanitation reaches households in an effective manner. Community hygiene was also not satisfactory due to poor technical awareness and inadequate water and sanitation facilities. Further, community hygiene was of an unacceptable state because of poor designs in facilities, lack of maintenance and cleaning of public toilets, irregular water supply and cultural norms and values. The main causes of poor or lack of hygienic practices at personal, household

and community levels were related to lack of water supply and facilities, poor facilities for the safe disposal of water and other domestic waste and lack of sanitation facilities. There were incidences of diseases such as diarrhoea, worms, bilharzia and malaria, which usually result from inadequate sanitation.

Strategic intervention: The marketing plan should demonstrate that hygienic practices cannot be viewed in isolation because they are a product of technical awareness, water availability and facilities and availability of proper sanitation technologies. Therefore, a successful marketing plan should take these factors into consideration.

4.5. HYGIENE PERCEPTIONS

Sanitation was narrowly viewed as a toilet issue. Communities generally did not perceive urinating on open spaces, behind the house or on the roads among males as bad hygiene practise. Some communities perceived covering food *for visitors only*, boiling drinking water *for children only*, cleaning a toilet *without detergents*, touching children faeces, as safe hygienic practices. The communities perceived safe hygienic practices as "rich people's affair". They believed that only rich people can afford toilets- toilets were associated with dignity, privacy and status. Some preferred to defecate in the "bush" because they perceived toilets, especially inside ones as "Western culture". Encouraging children to defecate behind the house was not perceived as unsafe hygiene practice because it was safer for children. The viewpoints of the participants show the importance of understanding perceptual problems and dealing with them; as sanitation marketing largely concerns altering perceptions and practices of users and providers.

Strategic intervention: The marketing plan, with knowledge of consumers at its core, is a promising means of addressing perceptual problems. Effective feedback could serve as a basis for improved hygiene behaviour and advancement, perceived by individuals as worthwhile and valuable.

4.6. TARGET GROUPS

There was a general consensus among participants that sanitation is everybody's responsibility. Each person, young and old, male and female, rich and poor, educated and uneducated has a role to play. Men were identified because traditionally they had freedom of speech and as heads of households, their word is usually final. Women were also indicated as one of the target groups because they could easily spread the message about hygiene practices and be influential in their own households, ensuring that all family members adopt safe hygienic practices. Other target groups identified were: traditional leaders

have who command and respect in most rural/traditional areas; children are more likely to learn and adapt to behavioural change; politicians are influential; government departments have authority; and religious denominations because they enjoy respect from communities. Volunteer groups e.g. health workers; families (men and women) play a significant role in family building. Councillors; civic structures; youth; teachers; principals; medical doctors; traditional doctors; businesses and cultural groups were also identified as having a critical role to play towards adoption of safe hygienic practices.

Strategic intervention: Programmes should be tailor-made for the different target groups in the community, that is, there should be programmes that are relevant for children, for mothers, etc that could incorporate health education and safe hygiene practices. They should use the demand-responsive approach, that is, be consumer-oriented, equally address the needs, preferences and behaviours of children, women and men

4.7. MOTIVATING FACTORS

While the key findings discussed above implicitly highlighted the factors that played a role in the communities' inability to adopt safe hygienic practices, this sub-section highlights the factors that the communities thought could motivate them to adopt safe hygienic practices. The study showed that the motivating factors for adoption of safe hygienic practices are varied and complex. Though not mutually exclusive and for the purposes of simplicity these factors can be grouped into four linked and overlapping categories, namely: social factors, educational factors, environmental factors and economic factors.

- Social factors that could motivate people to adopt safe hygienic practices include improvement of living standards, availability of basic needs, poverty alleviation and community participation in sanitation programmes (from conceptualisation, design, implementation and evaluation).
- Educational factors include training, advocacy (e.g. introducing awareness programmes that take into consideration the values, culture and beliefs of communities and use of indigenous knowledge and experience); capacity building, social mobilisation, access to information and information exchange.
- Environmental factors include infrastructural development; access to water supply sources such as house connections; public stand pipes, bore-holes, protected springs; access to excreta disposal sources such as connection to the sewer or septic tank and VIPs; care and maintenance of water sources and excreta disposal sources; appropriate technologies and flexible systems; supportive and enabling environment.
- Economic factors include employment and reliable income.

These findings suggest that improvement of physical infrastructure alone is not sufficient for ensuring adoption of safe hygienic practices and that no single agency has the capacity to address all these factors.

Strategic intervention: The various stakeholders (Department of Health, Department of Water Affairs and Forestry, Department of Education, Department of Social Development, Department of Agriculture; Non Governmental Organizations and consultants) should be brought together to work in collaboration and co-operation to benefit the communities in developing the sanitation marketing plan.

4.8. HYGIENE PROMOTION AND MARKETING

While the communities were aware of re-hydration mixtures for diarrhoea; medicines and bandages for treating burns and cuts, bites; and insect repellent for mosquitoes, a need for more awareness and knowledge on safe hygienic practices was expressed. All groups expressed the necessity of a hygiene awareness workshop and indicated that it should address cleanliness, collection of waste, safe disposal of faeces, food storage, disease prevention, sanitation facilities and erection of toilets. The literacy level in the villages was generally low although some villages had basic adult education intervention. Unhygienic practices, certain cultural beliefs in relation to hygiene, fears and perceptions of hygienic practices would have to be changed through raising awareness and education. For example, in some of the communities sanitation was viewed as a toilet issue and that only rich people can afford toilets and therefore only rich people can adopt safe hygienic practices. Furthermore, in some communities children's faeces were not perceived as harmful and not washing hands after toilet use was not perceived as bad practice. Hygiene awareness programs should focus on influencing behaviour at personal, household and community levels. The findings suggest hygiene awareness programmes should use an integrated approach (e.g. should not focus solely on sanitation but should also address poverty). Awareness and education programmes on health and safe hygiene practices should be developed and implemented with the participation of the communities. Individuals from the villages selected by the community structures could be trained as health education trainers in order to promote ownership. Delivery of information on safe hygienic practices could take place through local structures such as health centres and clinics, pharmacies, households, clubs, local businesses and schools and through local people such as latrine builders, community health workers and local material suppliers. Social mobilisation can be done through local institutions such as schools and religious organisations),

local leadership (political, traditional and administrative e.g. chiefs and councillors) and stakeholders (NGOs, Private sector) and existing support groups (Service clubs, Artists/entertainers, womens' groups). Advocacy through target audience identification, developing an information base, building and mobilising intersectoral partnerships for joint activities and creating awareness among partners. While promoting ownership may appear to initially slow down delivery, in the long run the increased sustainability outweighs the short-term gains made from rapid early delivery. Demand-responsive and integrated approaches are to be introduced, based on community ownership and management of rural Water Supply and Sanitation (WSS) facilities, with increased attention paid to promotion, gender awareness and participatory planning. For this reason community participation is a key requirement in the conceptualization, selection, planning, design, implementation, and maintenance of all sanitation projects. The goal is to make the adoption of safe hygienic practices a public concern and a public responsibility, rather than one that only the service provider considers important and sustainable.

Strategic intervention: The communities would benefit from the better use of resources, human, natural and physical, if a coordinating structures were established with the communities playing a central role. Partnerships should be formed at all levels to mobilize skills and capacities needed and use local communication channels to reach members of rural communities, particularly home visits, small group meetings and community meetings.

4.9. IMPLICATIONS FOR FUTURE RESEARCH ENDEAVOURS

Sanitation has special features and requirements that distinguish it as a field in its own right. Therefore, research and scientific study specifically on sanitation are necessary to help enable practitioners to make better decisions. Ultimately, this will lead to more successful and sustainable sanitation programmes. There is a need to co-ordinate and promote interdisciplinary research and foster links between organisations in the field. Improved co-ordination and communication between researchers and users, and amongst researchers will optimise resource utilisation. Development and maintenance of local research capacities in the field is necessary. Research will foster in local authorities to take an interest in this field. The communities could be involved in research planning, execution and implementation through the use of participatory methods. More research is needed to explore ways of institutionalising sanitation improvements within communities and for integrating sanitation into other health and social programmes, e.g. literacy, population, nutrition, HIV/AIDS. Research is also needed to determine behaviour change indicators, health-impact indicators, long-term success indicators,

monitoring and evaluation framework for measuring success at national and community levels. Important research topics identified were:

- Development of methods for assisting communities in identifying and using indicators
- The key barriers to private sector involvement
- The optimal mix of responsibilities between the public and private sectors
- How to choose an appropriate mix of technologies to rural areas with low, middle and high income
- How to achieve low-cost, culturally-sensitive technologies
- Critical review of low-cost and least-cost technologies
- Models of how social marketing and participatory methods can best be combined
- Critical review of methodologies to change hygiene behaviours
- Through case-studies of countries, determine the characteristics of high achievers and low achievers in sanitation and from these derive lessons learned
- Alternative financing and cost recovery mechanisms
- The cost effectiveness of alternative strategies for the control of faecal-borne diseases
- Last but not least, the recommendations made in this study need to be field-tested to determine their applicability.

CHAPTER FIVE

RECOMMENDATIONS TOWARDS THE DEVELOPMENT OF A MARKETING PLAN FOR SANITATION

The conclusions towards the development of a marketing plan for sanitation are addressed in terms of the different elements of the "marketing mix", which are more commonly known as the "four P's": a Product; its Price; its Place; its Promotion. Two other P's have been added, namely: the Partnership involved and the Policy environment. A good marketing plan broadly aims to define the consumer, the products or services they want, and the most effective promotion and advertising strategies for reaching those consumers. It clarifies objectives, appropriate actions, projected income, pricing structures, costs and potential profitability. The overall objectives of the marketing plan for sanitation promotion should be (1) to promote the acceptability and adoption of safe hygienic practices; (2) to improve access to and availability of a wide range hygiene and sanitation education information, products and services for the rural under-served, low-income vulnerable populations; (3) to provide more affordable sanitation products and services, with more equitable distribution so as to reach the low income groups and (4) to enhance access to and demand for goods and services.

5.1. PRODUCT

Products refer to sanitation technologies, services and safe hygiene practises which incorporate improved water systems, latrines; household behaviours such as proper use and maintenance of latrines, hand washing, covered storage of water, human excreta disposal, personal and public hygiene, solid and liquid waste disposal, vector control and keeping drinking water safe. More knowledge is needed on how the private sector markets its products and apply these to sanitation products. There is a need to stimulate demand for toilets and for adoption of safe hygienic practices and to expand demand through local, innovative communication strategies. Communication that aspires to increase demand must be combined with simultaneous measures to ensure access and availability of the product or service sought. Sanitation technologies need to suit local materials and building practices, local and economic conditions, and local cultural practices and beliefs. In this way, many practical problems can be avoided, and local ownership of the technology is more likely to develop. Latrines are consumer products and their design and promotion should follow good marketing principles, including a range of options. Designs need to be attractive to consumers and based on consumer preferences, affordable

prices and designs appropriate to local environmental conditions. Communal facilities need to be carefully considered as they are difficult to access, too distant from households, do not preserve the right to privacy and are particularly detrimental for women and children and elderly, who should be the most frequent users of these services. As the main criterion for technology choice, planners should endeavour to find out directly from the main users what features the proposed service needs to have. They should pay attention to the uses of water in household activities such as laundry, food preparation, washing children and cleaning house.

5.2. PRICE

Price refers to what the consumer pays in order to obtain the product (sanitation technologies) or service (safe hygienic practices). The price may be monetary or it may involve intangible costs in terms of, for example, time and effort required to access the product or service from the nearest outlet. A critical factor in pricing sanitation products and services is the willingness of people to pay. The willingness of people to pay is largely dependent upon people's perception of the demand. If people do not perceive the demand for a service or product, they are unlikely to pay for it. The price set should be affordable even to low income groups. Setting an appropriate price for each level of service is an important part of any marketing adventure. The price of a product or service can significantly influence the quality used. The price is a key incentive for users to continue with the service (sustainability). Where possible, people are willing to pay for the type of service they want. The right of all people to an affordable, basic level of service should not be compromised. It should be ensured that the method of payment is the preferred one as there are usually a number of options for payment. To avoid complexity, collective decision making may be needed to narrow choices. Special provision may have to be made for the poorest individuals and families, in terms of subsidy. Issues relating to economic efficiency and resource scarcity should be taken into consideration when price for services are made and issues concerning the right to what is often considered basic level of service.

5.3. PROMOTION

Promotion consists of the judicious use of advertisements, public relations, promotions, media advocacy, inter-personal selling - comprehensive information-sharing in respect of all aspects. The focus is on creating and sustaining demand for product. While there is already substantial demand for the more obviously beneficial services like water or electricity, sanitation is commonly low on people's

priorities for improved services. People need to be aware of the benefits in order for them to be willing to invest their own resources into those improvements and adopt safe hygienic practices. Promotion should not be seen as something done outside, though external agencies may provide the initial catalyst. Sanitation promotion is the task of everyone in the community. There is a need to unpack hygiene and sanitation promotion, identify locally available institutions and skills for the various specialised roles and try to procure from outside any skills which are lacking locally. Promotion can be done by sanitation improvement teams such as, the health authorities, local latrine builders, community health workers, local material suppliers, and the households to address the overall needs. Women have proved to be effective promoters and builders of latrines, they are more committed to their community's welfare. Different messages are needed for men and women and different means of delivery also. This is also true of other groups, such as the poorest, the elderly and so on. Hygiene promotion requires a combination of approaches. The approaches should be bottom-up approach, demand-responsive, consumer oriented, sector-wide, integrated, participatory and multi-sectoral. Professional campaigns should be based on thorough and professionally conducted formative research to ensure that the messages harness the motivations, which actually lead people to adopt safe hygienic practices. Promoting sanitation should be a continuous activity as in all other public health promotions aimed at preventing disease. This is necessary to sustain past achievements and to ensure that future generations do not become complacent as diseases decrease. Amongst others, the media used for promotion of sanitation should include posters, pamphlets, leaflets, stickers, tee shirts and flash cards. More importantly, indigenous methods should be used. Promotional work should be undertaken by existing village health workers and village water minders who have been trained in promotion and health education. The health, hygiene and cleanliness benefits should be central to all promotional methods. Sanitation promotion may include establishing neighbourhood sanitation committees, providing sanitation messages through health centres, radio and local drama, school sanitation promotion, latrine construction, institutional adjustment and advocacy of experiences. Community based sanitation promotion methods and techniques should be encouraged, as communities would identify with them more than conventional methods, which are brought by outsiders. Existing conventional methods seem to be unsuccessful. Traditional methods are also affordable while some of the conventional methods have cost implications which communities might find unaffordable.

5.4. PLACE

Place refers to the mechanism adopted for distribution to enhance accessibility of the product or services. Location of sanitation resources is essential to either reduce costs or increase the chances of consumers use of products or at least opportunities to make inquiries. The important points to consider is proximity to water and sanitation resources, proximity to distribution channels, availability of facilities, availability of efficient and skilled labour, linkages and infrastructural facilities. Good location is one of the critical factors in marketing, therefore choice of location should be carefully considered. This implies that a place has to have accessible water supplies and sanitation technologies. There is therefore, a need to assess potential local resources, not only in relation to technical and financial inputs, but also in terms of human resources i.e. individuals and groups whose opinions carry weight in communities and whose actions can affect their development. Special units to work with communities for implementing awareness and information programmes to encourage positive attitudes towards safe hygienic practices may be established. Incentives and instruments to protect water sources to encourage waste water reuse, as ways of easing water shortage problems and to facilitate collection and treatment of wastewater could be used.

5.5. PARTNERSHIP

The public or communities are not a single homogenous entity but is made up of a variety of different groups, differentiated by many factors (including age, gender, livelihood, social and economic status and location). Each group or market segment is associated with a set of priorities, perceptions and demand. This should be reflected in the promotion strategy. Sanitation promotion requires a partnership at all levels in order to mobilise the skills and capacities needed. Partnerships should include government departments and also a wide range of stakeholders such as the private sector, NGOs, researchers and the media (radio, television and the press). Appropriate messages should be targeted at the key market segments. Promoting safe hygienic practices can be greatly assisted by active support from popular opinion leaders. Particular efforts should be made to bring and keep such individuals on-site. Examples include traditional leaders, a key member of administration, a local teacher and the sister in charge of the local clinic. The methods of communication may range from public meetings; local theatre groups, schools, and leaflets from water service provider, school plays and home visits. Focus area in promoting health and hygiene include washing hands after going to toilets and before a meal, while preparing a meal, improving existing latrines and opting for safe latrines, disposing of waste in

an environmentally aware manner, treating water by boiling it or using Jik. A single agency, no matter how dedicated and well organised cannot possibly reach out and make a significant impact. It has become necessary to evolve partnerships between agencies on the one hand, and between the agencies and the community on the other. Avenues for optimal synergy need identification. A key challenge, is, accordingly, to build partnerships between the private sector, NGOs, appropriate agencies of government. The multidisciplinary nature of sanitation as it affects health, education, gender, the environment and the overall economy should be recognised. A wide-range of stakeholders should be involved throughout planning, design and review of sanitation activities. This would result in strong convergence on policy, and mutually agreed undertakings to resolve problems quickly and move the process forward. Memoranda of understanding should be signed among civil society, NGOs, external support agencies and government and communities co-ordination bodies should be initiated. The community must be involved in planning, construction, management, maintenance and ongoing promotion of safe hygienic practices. This contributes to a sense of ownership that is imperative for sustainability. Government should generate political will at every level. Communities are more motivated to change when they know political will exists.

5.6. POLICY

Policies should be improved at all levels. Agencies responsible for creating a supportive environment for sanitation, in general, have had ineffective and counterproductive policies at all levels. These include more attention to water supply and little to excreta management and hygiene education, a focus on short-run outputs (hardware) rather than long-term behaviour change. More fundamentally, a philosophical approach to the problem, upon which sound policy can be based, is often lacking. Government sanitation policy should facilitate and enhance partnership among the private sector, NGOs, community-based organisations and local authorities in achieving improved sanitation. Involvement of the private sector should be encouraged by national government. Promotion of private sector involvement in service delivery through district authorities are encouraged to develop and utilise local private-sector capacity for design, construction and operation and maintenance of rural water supply and sanitation facilities and for the supply and distribution of spare parts and appropriate equipment. The policies should actively encourage the establishment of inter-institutional and interdisciplinary working groups with decision-making powers. Transparency and accountability, flexible and responsive institutional mechanisms for providing sanitation services, with a larger role for communities and community organisations and the private sector should be ensured. Political

commitment is needed to create an environment in which demand for sanitation can grow, and which, in turn, can strengthen political will. The issue of political will is thus both a cause and an effect of the other problems, and a key to successful sanitation promotion.

5.7. CONCLUSION

The recommendations made above suggest that the marketing plan for sanitation should be designed to meet particular circumstances of a community, taking into account local opportunities and constraints. The marketing plan should adopt a demand responsive approach while at the same time moving from creating a demand for safe hygienic practices to meeting an articulated need for health and hygiene educational awareness and information. The recommendations made on the development of a marketing plan have not been field tested. Opportunities are needed to pilot the development and implementation of a marketing plan in a rural community. The results could be used to produce best practice guidelines to encourage its uptake elsewhere.

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APPENDIX A

UPHANDO NGEMEEKO EZINOKUKHUTHAZA ABANTU BASEBENZISE IINDLELA EZIKHUSELEKILEYO ZEZEMPILO

1. Unobangela woluphando kukufumana iimeko ezinokukhuthaza abantu basebenzise iimeko ezikhusekileyo zezempilo
2. Oluphando luqhutywa yiLimakhozu Development Agency
3. Oluphando luxhaswe ngezimali yikomishoni yophando lweza manzi (WRC) ese Pitoli
4. Umasipala wase Ngqushwa uye wachongwa njengesithili sophando
5. Imvume yokukhuba oluphando ifunyenwe ku sodolophu, iinkosi no ceba baka masipala wase Ngqushwa
6. Ulwazi olufumaneka koluphando luya kunceda ekuphuhliseni kwale lali nasekukhuthazeni ugutyulo (sanitation)
7. Igama lakho alifuneki ukuze uthethe ngomzimba ongenaxhala yaye ungafihlisi
8. Unalo nelungelo lokungathathi inxaxheba koluphando
9. Ingxelo ngeziphumo zoluphando ziyaku fumaneka xa ziceliwe ngulowo uzifunayo
10. Imibuzo ingabhekiswa kwinkokheli yelinge u Gqr RN NUNTSU kulomnxeba (043) 702 9286

Igama Lomphandi : _____

Umhla wondliwano-ndlebe : _____

Indawo yodliwano-ndlebe : _____

Ixesha lodliwano-ndlebe: _____

Msebenzi mni : _____

ICANDELO A: Ulwazi malunga nawe

1. Iminyaka : _____
2. Isini : _____
3. Igama lelali ohlala kuyo : _____
4. Imeko yomtshato : _____
5. Imeko yomsebenzi : _____
6. Elona banga likhulu oliphume: _____
leleyo

ICANDELO B: Imeko ezisa kwindlela ezikhuselekileyo zezempilo

7. Zeziphi iimeko ezinokukhuthaza abantu basebenzise iimeko ezikhuselekileyo zezempilo
- 7.1 Emntwini ngamnye:

- 7.2 Kusapho ngalunye:

- 7.3 Kumgangatho wesikolo:

- 7.4 Kumgangatho wasekuhlaleni:

- 7.5 Kumgangatho ka masipala wakho (Ngqushwa):

- 7.6 Kumgangatho wesithili sakho (Amatole):

- 7.7 Kumgangatho wephondo (Mpuma Koloni):

- 7.8 Kumgangatho womzantsi Afrika:

ICANDELO C: Iimeko ezingayimpumelelo ezinoku setyenziswa kwiimeko ezikhuselekileyo zezempilo

- 1=Eyona yona inkulu kakhulu
2=Enkulu
3=Encinci
4=Eyona yona incinci kakhulu

Phawula olona luhlu ulukhethayo usebenzise amaqondo angentla

Bangakhuthazeka njani abantu ukuze basebenzise ezimeko zikhuselekileyo zezempilo ukuba kukho:	1	2	3	4
8. Ukufikeleleka emanzini anje ngamanzi agxibelalanisa (zindlu, imibhobho yamanzi ka wonke wonke, imingxunya ekubholwa kuyo amanzi, imithombo ephunjelweyo njalo njalo				
9. Ukufikelela kwimeko zogutyulo ezinje ngokufikelela esurijini (sewerage) nakumatanki anjalo, imingxunya ephuculiweyo engena umoya njalo-njalo				
10. Imithombo yamanzi egcinwe kakuhle				
11. Imithombo yogutyulo egcinwe kakuhle				
12. Neemeko eziphucukileyo zokukokosa amanzi (Abiyelwe, kuchetywe ingca, kungahlanjelwa impahla kufutshane nemithombo yamanzi njalo-njalo)				
13. Ubuchwepheshe bezogutyulo obukhuselekileyo, obamkelekileyo nobufikelelekayo				
14. Ukubakho kwanenkathalo ukukhusela, ukugcina kakhuhle nemfumdo ngezempilo				
15. Iimeko zogutyulo ezithwala iimeko zonke, nezihlonipha iimeko zokuphila ekuhlaleni				
16. Imfundo ngezempilo enefuthe yaye igxininise kwingozi zezempilo ezinxulumene nokungabikho kogutyulo olwaleleyo				
17. Ukusebenzisana nokwakha amaqhina ozakuzelwano phakathi kwabantu aban enxaxheba kwezogutyulo				
18. Ukhuthazo oluqhubekekayo kwezogutyulo				
19. Ukuzimisela kwezopolitiko ukusukela phezulu ukuya ezantsi				
20. Ukufumaneka kwabantu bezogutyulo abanoqeqesho oluthe gabalala				
21. Kubekho ingeniso				
22. Iinkqubo zezogutyulo ezinokuguqula iinkolelo zakudala ngokunkhakanya ezingenakukhanywa				
23. Iinkqubo zezogutyulo ezichaza ngokulinganayo iimfuno neemeko zokuziphatha kwabantwana, amakhosikazi, amadoda				
24. Iinkqubo zezogutyulo ezisebenzisa iindlela ezikuvumayo ukusetyenziswa izakhono ezibalulekileyo zasekuhlaleni ezinje ngokuba bonke bathathe inxaxheba				

25. Iinkqubo zezogutyulo ezitsolise kwiimeko zokuziphatha nezixhobo ngokudibeneyo				
26. Inxaxheba egqibeleleyo yabahlali kwiimeko zezogutyulo				

ICANDELO D: Iimeko ezingakhuthaziyo kwezempilo ekhuselekileyo

27. Zeziphi iimeko ezingabakhuthaziyo abantu ukuba basebenzise iimeko ezikhuselekileyo zezempilo

27.1 Kumntu ngamnye:

27.2 Kusapho ngalunye:

27.3 Kumgangatho wesikolo:

27.4 Kumgangatho wasekuhlaleni:

27.5 Kumgangatho ka masipala wakho (Ngqushwa):

27.6 Kumgangatho wesithili sakho (Amatole):

27.7 Kumgangatho wephondo (Mpuma koloni):

27.8 Kumgangatho womzantsi Afrika:

ICANDELO E: Imiqobo kuphuculo lwezogutyulo

- 1= Ndivuma kakhulu
2= Ndiyavuma
3= Andivumi
4= Andivumi kakhulu

Phawula olona luhlu ulukhethayo usebenzise amaqondo angentla

IZINTO	1	2	3	4
28. Ukugxininisa okungaphaya kobugcisa bamanzi namalinge ogutyulo				
29. Ujongo oluncikane lwenkonzo ezinzileyo				
30. Icandelo lwamaziko angomelelanga				
31. Isivumo esisezantsi malunga nogutyulo				
32. Ubuncwane obungonelanga nobusetyenziswa kakubi				
33. Iindlela ezingagqalanga nezingazi vumiyo iinkalo zenkcubeko, zoqoqosho nezasekuhlaleni				
34. Ukhuthazo olugenafuthe nokuvundlisa uluntu olusezantsi				
35. Iinkolelo kwakunye nezinto eziyingqambi kwinkcubeko yoluntu.				
36. Imikhwa emibi yezogutyulo umzi ukungahlambi izandla phambi kokutya.				
37. Inkxaso elambathayo yase kuhlaleni kwiinkonzo zogutyulo				
38. Intswelo yobuxhaka-xhaka obunokugcinwa bukho ngokulula				
39. Intswelo yabantu nendawo enako ukwenza izinto zibonwe ngamehlo				
40. Intswelo yokwakha okupheleleyo kumgangatho wasekuhlaleni				
41. Intswelo yamaqithi-qithi ezezimali nawase kuhlaleni				
42. Intswelo yomdla wezopolitiko				
43. Ingqondo ethi uxanduva lwezogutyulo bulele kwabanye abantu				
44. Iingcinga ezingalunganga ezicinga ukuba ugutyulo yindlu yangasese kuphela				
45. Intswelo yoqeqesho ndawonye nemfundo ngezempilo				
46. Ukungabathatheli ingqalelo abantu				
47. Ukungazi kwabantu				

ICANDELO F: Abathathi-nxaxheba nemisebenzi yabo ekukhuthazeni ezogutyulo

48. Zeziphi iindima ezinokudlalwa ngabathathi-nxaxheba balandelayo ukuqinisekisa ukuba abantu bathobela iinkozo ezi khusekileyo zezempilo (safe hygienic practices)

48.1 Amakhosikazi:

48.2 Amadoda

48.3 Abantwana:

48.4 Abatyalimali:

48.5 Ooceba:

48.6 Inkokheli zemveli:

48.7 Amaqumrhu afezekisayo:

48.8 Iphepha ndaba nonomthotholo wengingqi:

48.9 Amasebe karhulumente:

48.10 Amaziko ezophando:

48.11 Izikolo:

48.12 Abahlali:

48.13 Iityalike:

48.14 Okunye, nika inkcazo

ICANDELO G: Ubuchule ekukhuthazeni ezogutyulo:

1= Eyona yona inkulu kakhulu

2= Enkulu

3= Encinci

4= Eyona yona incinci kakhulu

Phawula olona luhlu ulukhethayo usebenzise lamaqondo angetla

Ubuchule ekukhuthazeni ugutyulo	1	2	3	4
49. Umabonakude				
50. Unomathotholo				
51. Iphepha ndaba				
52. Imagazini				
53. Amaxwebhu anemifanekiso				
54. Utyelelo lwamakhaya ngabasebenzi bezempilo basemaphandleni/ezilalini				
55. Iintetho ngezemfundo				
56. Iibodi (bill boards)				
57. Umdlalo weqonga				
58. Ezomdaniso				
59. Imingcelele/ukuzonwabisa ngokubaleka				
60. Amalinge Ezemfundo				
61. Iimini zezogutyulo nezoku coca nje-nje				
62. Ukhuphiswano				

ENKOSI KAKHULU NGENTSEBENZISWANO YAKHO!!!

APPENDIX B

**STUDY ON FACTORS THAT CAN MOTIVATE PEOPLE TO ADOPT SAFE
HYGIENIC PRACTICES**

1. The purpose of this study is to determine the factors that can motivate people to adopt safe hygienic practices
2. The study is conducted by Limakhozu Development Agency
3. The study is funded by the Water Research Commission, based in Pretoria
4. Ngqushwa Municipality has been identified as an area of study
5. Permission regarding conducting the study was obtained from the Mayor, Chiefs and Councillors in Ngqushwa Municipality
6. Information acquired in this study will assist in developing a Village-level Marketing Plan for Sanitation Promotion
7. Your name is not required in order to ensure anonymity and confidentiality
8. You have the right to refuse to participate in the study
9. A report about the findings will be made available upon request
10. For enquiries please contact Dr RN Nuntsu, project leader at 043-7029286 (Tel)

Name of interviewer: _____

Date of interview: _____

Place of interview: _____

Time of interview: _____

Type of work: _____

SECTION A: BIOGRAPHICAL DATA

1. Age: _____
2. Gender: _____
3. Village name: _____
4. Marital status: _____
5. Employment status: _____
6. Highest standard passed: _____

SECTION B: MOTIVATING FACTORS TO SAFE HYGIENIC PRACTICES

7. Which factors can motivate people to adopt safe hygienic practices?

7.1. At Individual Level:

7.2. At family Level:

7.3. At School Level:

7.4. At your community Level:

7.5. At your Local Municipality Level:

7.6. At your District Municipality Level:

7.7. At your Provincial Level:

7.8. At National Level:

SECTION C: SUCCESS FACTORS TO ADOPTION OF SAFE HYGIENIC PRACTICES

1 = Very large extent

2 = Large extent

3 = Limited extent

4 = Very limited extent

Tick in the appropriate column using the above scale

To what extent can people be motivated to adopt safe hygienic practices if they have/there is:	1	2	3	4
8 Access to water supply resources such as house connections, public stand-pipes, bore-holes with hand pipes, protected springs, etc				
9 Access to excreta disposal sources such as connection to the sewer or septic tank, pour-flush latrine, ventilated improved pit, etc				
10 Properly maintained water sources				
11 Properly maintained excreta disposal sources				
12 Good general condition of water sources (fencing, cut grass, soak-away, drains)				
13 Safe, acceptable and affordable sanitation technologies				
14 Existence of care takers for preventive maintenance and hygiene education				
15 Flexible sanitation systems , incorporating respect for community values, perceptions and practices				
16 Effective hygiene education which emphasise the health risks associated with inadequate sanitation				
17 Co-ordination, networking and partnerships among stakeholders in sanitation				
18 Continuous promotion and advocacy for sanitation				
19 Political commitment from the top and at all levels				
20 Availability of broadly skilled personnel				
21 Availability of income				
22 Sanitation programmes that change long-held beliefs through mentioning the unmentionable				
23 Sanitation programmes that equally address the needs, preferences and behaviours of children, women and men				
24 Sanitation programmes that adopt approaches which recognise and allow optimal use of valuable community attributes such as participatory approaches				
25 Sanitation programmes focusing on behaviour and facilities together				
26 Active local participation in sanitation issues				

SECTION D: DE-MOTIVATING FACTORS TO SAFE HYGIENIC PRACTICES

27. Which factors de-motivate people to adopt safe hygienic practices?

27.1. At Individual Level:

27.2. At Family Level:

27.3. At School Level

27.4. At Community Level:

27.5. At your Local Municipality Level:

27.6. At your District Municipality Level:

27.7. At your Provincial Level:

27.8. At National Level:

SECTION E: BARRIERS TO IMPROVEMENTS IN SANITATION

1 = Strongly Agree

2 = Agree

3 = Disagree

4 = Strongly Disagree

Tick in the appropriate column using the above scale

Items	1	2	3	4
28 Excessive focus on the technical aspects of water and sanitation projects				
29 Limited consideration of service sustainability				
30 Weak sector institutions				

31	Low prestige and recognition for sanitation				
32	Inadequate and poorly used resources				
33	Inappropriate approaches which do not acknowledge the cultural, economic, and social contexts				
34	Ineffective promotion and low public awareness				
35	Cultural taboos and beliefs				
36	Poor sanitation habits e.g. not washing hands before eating				
37	Lack of local support for sanitation programmes				
38	Lack of technologies that could be easily maintained				
39	Lack of enabling environment				
40	Lack of capacity building at community level				
41	Lack of monetary and social benefits				
42	Lack of political will				
43	The attitude that responsibility for sanitation lies somewhere				
44	Wrongly held assumption that sanitation is a toilet issue only				
45	Lack of hygiene education and training				
46	Negligence of people				
47	Ignorance of people				

SECTION F: STAKEHOLDER ROLES IN SANITATION PROMOTION

48. What roles can the following stakeholders play in order to make sure that people adopt safe hygienic practices?

48.1. Women

48.2. Men

48.3. Children

48.4. Donors

48.5. Councillors

48.6. Traditional leaders

48.7. Implementing agencies

48.8. Local media

48.9. Government Departments

48.10. Research Institutions

48.11. Schools

48.12. Community

48.13. Churches

48.14. Other, specify:

SECTION G: TECHNIQUES IN SANITATION PROMOTION

Using the scale below, indicate the extent to which each of the sanitation promotion techniques reflected on the table can be successful:

1 = Very large extent

2 = Large extent

3 = Limited extent

4 = Very limited extent

Tick in the appropriate column

Sanitation Promotion technique	1	2	3	4
49 Television				
50 Radio				
51 Newspaper				
52 Magazine				
53 Posters and pamphlets				
54 Home visits by Village health worker				
55 Education talks				
56 Bill boards				
57 Drama				
58 Dance				
59 Demonstrations/marches/fun runs				
60 Educational campaigns				
61 Events: sanitation days, clean up days, etc				
62 Competitions				

THANK YOU FOR YOUR CO-OPERATION

APPENDIX C

UNSTRUCTURED GROUP INTERVIEWS' GUIDING QUESTIONS

Group guiding questions

Resources

What are the Physical (Infrastructure), Human (Skills and Capacities), Natural (River) and Organisational (Structures) resources available in the province?

Practices

What are the current common hygienic practices (both good and bad) and programs (consider issues for different social groups)

Perceptions

What do people perceive as "good" and "bad" sanitation?

Target groups

What groups should be targeted (primary, secondary, others) to participate in hygiene and sanitation programmes?

Constraints

What are the constraints in implementing safe hygienic and sanitation practices?

Success factors

What could motivate communities to adopt safe hygienic and sanitation practices?

Marketing and Promotion

How can safe hygiene practices be marketed and promoted to various target groups?

APPENDIX D

COMMUNITY PROFILE SEMI-STRUCTURE QUESTIONNAIRE

1. IDENTIFYING PARTICULARS

- Name of village
- Size of village
- Nearest town
- Distance in Km
- Accessibility by vehicle (good/difficult when wet/inaccessible)

2. ORIGIN AND HISTORICAL DEVELOPMENT

- When was it established and by whom
- Historical level of development

3. POPULATION COUNT

- What is the total population of this village
- Male adults below 65 years
- Female adults below 65 years
- Males under 16 years
- Female under 16 years
- Male pensioners
- Female pensioners

4. SOCIO-CULTURAL ASPECTS

- Predominant lifestyles
- Cultural patterns, values and practices
- Ethnic grouping inclinations
- Voluntary associations

5. LEGAL/CONSTITUTIONAL SYSTEM

- What form of government or local authority is available in this community?
- Who causes things to happen and in what manner?

6. POLITICAL PARTY ORGANISATIONS

- How many political parties are there?
- Are there any pressure groups and how influential are they?
- How do people elect their representatives?
- How many MP's, blockmen, councillors are there?

7. TRADITIONAL STRUCTURES

- Are there any traditional leadership structures in place?
- Who are they?
- Do they participate in project meetings?

8. ECONOMIC LEVEL

- What is the economic level of the people?
- Are there any distinct classes amongst the people
- Are the people having a share in the greater economy of their society?
- How is tax collected?

9. EXISTING SYSTEMS/FACILITIES

9.1. Housing

- How is the housing condition of the area?
- What are the choices people have regarding housing?
- What is the total number of sites in this area?
- What are the procedures to be followed if one wants a house?
- Who controls housing?

9.2. Water and Sanitation

- Estimated population size currently with access to functioning safe water supply
- Typical number of hours per day when water is available
- Estimated population served with adequate excreta disposal (toilets, sewer, etc)
- Is there any water and sanitation agencies, how are they staffed?
- Are there any other general sanitation problems that rate high in your village, what are they?

9.3. Health

- How many health providing centres are there?
- What are they?
- How spread are they from each other?

9.4. Education

- Is there any compulsory education and if not, what is available?
- What is the total number of universities, technikons, high schools, secondary, primary, elementary schools, creches and nursery schools?
- Is there any form of adult education?
- What is the level of literacy in this area?

9.5. Recreation/sport

- Are there any recreational facilities?

- Are the available facilities utilised to the full?

9.6. Transport

- What means of transport are available?
- How mobile are people?
- What is the condition of the roads?

9.7. Postal and telecommunication

- How are the postal services?
- Are there private/public telephones?
- What are the problems as far as postal services are concerned?
- Is there any local newspaper?
- Are there any libraries?

9.8. Security measures and justice

- Who keeps law and order and how is this enforced?
- Are there any courts?

9.9. Churches/religions

- How many churches are there?
- How is the church attendance?
- Are the majority of people Christians?

9.10. Business centres

- Are there any business centres?
- How much is the buying power?

10. PROBLEM AREAS

- What are the actual problem areas in this village?
- What are the special problems of people?

11. INTEGRATED SERVICES

- Are the people of the village able to integrate their services?
- What roles are teachers, social workers, environmental health officers, church ministers, nurses, etc playing to co-ordinate services?

12. RESEARCH PROJECTS IN THE LAST THREE YEARS

- Which research projects were undertaken?
- Who funded them?

- What were the successes?
- What were the problems?
- Who decided on the project and how?

13. GENERAL REMARKS

APPENDIX E

STRUCTURED GROUP INTERVIEWS' QUESTIONNAIRE

Hygiene Interview Schedule
 Focus Group Discussion
 For

Page 1 of 11

INTERVIEW SCHEDULE FOR FOCUS GROUP DISCUSSIONS

Date: _____ Name of interviewer: _____

Name of community: _____

Number of respondents in the group: _____

M	F
---	---

1. WATER SOURCE
 Please take note not to provide the options to the interviewees, only mark off what they mention.

1.1 What is the community's potable (clean) water source in the rainy season?

☐ river/stream
☐ yard taps
☐ street taps

☐ gutters
☐ spring
☐ other

1.2 What is the community's potable (clean) water source in the dry season?

☐ river/stream
☐ yard taps
☐ street taps

☐ gutters
☐ spring
☐ other

1.3 How often is water collected from the above mentioned source?

☐ once a day
☐ more than twice a day
☐ every second day

☐ twice a day
☐ other

1.4 Who fetches the water from the above mentioned water source?

☐ men
☐ women
☐ children

1.5 What containers are used for water collection?

☐ plastic jerry can with lid
☐ open bucket
☐ other

☐ plastic jerry can without lid
☐ bucket with a lid

1.6 Does the community sometimes not get enough water for drinking? ☐ Yes ☐ No

1.7 What is the reason for that?.....

.....

.....

2. WATER STORAGE

Please take note not to provide the options to the interviewees, only mark off what they mention.

2.1	Tick the box corresponding to the item that best describes how the community stores its potable water. * The container is ☐ 200 l drum ☐ 100 - 150 l container ☐ other..... * The container is made of ☐ metal ☐ plastic ☐ other..... * The container is stored ☐ inside ☐ outside ☐ other..... * The container is stored ☐ in direct sunlight ☐ in the dark / shadowed place * The container is ☐ covered properly ☐ uncovered ☐ half covered * The container is ☐ the same as used for collection ☐ different from the one used for collection
2.2	Do the members of the community think it is necessary to keep the storage containers used for drinking water covered? ☐ Yes ☐ No
2.3.	Why?
2.4	Do the members of the community think it is necessary to wash the storage containers used for drinking water regularly? ☐ Yes ☐ No
2.5	Why?
2.6	How often do the members of the community wash the storage containers used for drinking water? ☐ once a day ☐ more than twice a day ☐ every second day ☐ twice a day ☐ other

3. WATER TREATMENT

Please take note not to provide the options to the interviewees, only mark off what they mention.

3.1	Tick the box corresponding to the item that best describes how the community treats its drinking water. ☐ Boiling ☐ Jik ☐ Alum stone ☐ Other..... ☐ No treatment
3.2	Why does the community use that method?

3.3 If the community does not use any treatment method, what is the reason for that?

.....

3.4 List all the methods of treatment that the community members are aware of.

.....

.....

4. WASTE WATER DISPOSAL/REUSE

Please take note not to provide the options to the interviewees, only mark off what they mention.

4.1 Tick the box corresponding to the item that best describes what the community does with waste water.

- ☐ Throw it away in the veld ☐ Use it to water the garden ☐ For building purposes
☐ Other.....

4.2 Why does the community use that method?

.....

4.3 What happens to the water after each washing of the hands?

- ☐ It is thrown away in the veld ☐ Use it to water the garden ☐ For building purposes
☐ Saved for next hand washing ☐ Other.....

4.4 What happens to the water after each washing of the body?

- ☐ It is thrown away in the veld ☐ Saved for next wash ☐ For building purposes
☐ Other.....

5. SOLID WASTE DISPOSAL/REUSE

Please take note not to provide the options to the interviewees, only mark off what they mention.

5.1 Tick the box corresponding to the item that best describes what the community does with solid waste (kitchen waste, cans, plastic bags, etc).

- ☐ Throw it away in the veld ☐ Throw it in rubbish pit ☐ Burn it
☐ Other.....

5.2	Why does the community use that method?
.....	
5.3	Does the community reuse cans and plastic bags? ☐ Yes ☐ No
5.4	What does the community do with the cans and plastic bags?
.....	
5.5	What do they do when the rubbish pit is full?
.....	

6. SANITATION

Please take note not to provide the options to the interviewees, only mark off what they mention.

6.1	If there is no toilet in the yards, where do the people go to relieve themselves? ☐ In the veld ☐ In the stream ☐ Other people's toilets ☐ Communal toilets ☐ Other.....
6.2	Do men and women use the same toilet? ☐ Yes ☐ No
6.3	If not, why not?
.....	
6.4	Do children under the age of 12 use the toilet? ☐ Yes ☐ No
6.5	If not, why not?
.....	
6.6	Whose responsibility is it to clean the toilet? ☐ men ☐ women ☐ children ☐ Everybody ☐ No one
6.7	Do mothers use plastic (disposable) nappies for their babies? ☐ Yes ☐ No
6.8	If yes , how do they dispose of the used plastic nappy? ☐ In the veld ☐ In the stream ☐ Other people's toilets ☐ Communal toilets ☐ Other.....
6.9	Do mothers use cloth (re-useable) nappies? ☐ Yes ☐ No
6.10	If yes , where do they dispose of the faeces? ☐ In the veld ☐ In the stream ☐ Other people's toilets ☐ Communal toilets ☐ Other.....
6.11	Why do they dispose of the faeces in that way?
.....	

7. NUTRITION

Please take note not to provide the options to the interviewees, only mark off what they mention.

7.1	Does the community have a vegetable gardens?	☐ Yes ☐ No
7.2	If not, where does the community get vegetables to eat?	
	☐ Buy it from the market	☐ From the neighbouring community
	☐ Other.....	
7.3	How often does the community eat vegetables?	
	☐ Daily	☐ Twice a week
	☐ Once a week	☐ Never
	☐ Other.....	

8. HYGIENE

Please take note not to provide the options to the interviewees, only mark off what they mention.

8.1	When do the members of the community wash their hands?	
	* After changing the baby's nappy?	☐ Yes ☐ No
	* Before handling of food and food preparation.	☐ Yes ☐ No
	* Before eating.	☐ Yes ☐ No
	* After a visit to the toilet.	☐ Yes ☐ No
	* After housecleaning, work and/or disposing of rubbish.	☐ Yes ☐ No
	* After touching or contact with animals.	☐ Yes ☐ No
	* Other.....	
8.2	Do all members of the community take a full body wash daily?	☐ Yes ☐ No
8.3	If yes , what happens to the water after each wash?	
	☐ it is thrown away ☐ used by someone else ☐ other.....	
8.4	If not daily, how often does the family get a full body wash?.....	
8.5	Does each member use piped, boiled or purified water for the wash?	☐ Yes ☐ No
8.6	If not , what is the water source for full body washes?.....	
		
8.7	Does the community think flies are a problem?	☐ Yes ☐ No
8.8	Why?	
8.9	What does the community think attracts flies?	

8.10 What does the community do when flies are around?

8.11 Why do they do that?
.....

9. PERCEPTION OF HEALTH

Please take note not to provide the options to the interviewees, only mark off what they mention.

9.1 Do the focus group consider the health of their community as good? ☐ Yes ☐ No

9.2 If **not**, best describe your reason:

- | | |
|---|---|
| ☐ I don't know what to do | ☐ Chronic condition or illness |
| ☐ No money for treatments | ☐ Poor diet |
| ☐ No or not enough clean water available | ☐ Other |

Explain:

.....
.....

10. DISEASES

Please take note not to provide the options to the interviewees, only mark off what they mention.

10.1 Did any member of your community suffer from diarrhoea during the last six months?
☐ Yes ☐ No

10.2 How many people suffered from diarrhoea during the last six months?
☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents

10.3 What does the community believe to be the cause for the diarrhoea?.....
.....

10.4 Does the community think it can be prevented? ☐ Yes ☐ No

10.5 How?.....
.....
.....

10.5 Did any member of your community suffer from worms during the last six months? ☐ Yes ☐ No 10.6 How many people suffered from worms during the last six months? ☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents 10.7 What does the community believe to be the cause for the worms? 10.8 Does the community think it can be prevented? ☐ Yes ☐ No 10.9 If yes, how?.....
10.10 Has any member of your community had bilharzia during the last six months? ☐ Yes ☐ No 10.12 How many people suffered from bilharzia during the last six months? ☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents 10.13 What does the community believe to be the cause of bilharzia? 10.14 Does the community think it can be prevented? ☐ Yes ☐ No 10.15 If yes, how?.....
10.16 Has any member of your community suffered from malaria during the last six months? ☐ Yes ☐ No 10.17 How many people suffered from malaria during the last six months? ☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents 10.18 What does the community believe to be the cause of malaria? 10.19 Does the community think it can be prevented? ☐ Yes ☐ No 10.20 If yes, how?.....
10.21 Has any member of your community suffered from eye infections during the last six months? ☐ Yes ☐ No 10.22 How many people suffered from eye infections during the last six months? ☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents

10.23 What does the community believe to be the cause for the eye infections?
.....

10.24 Does the community think it can be prevented? ☐ Yes ☐ No

10.25 If yes, how?.....
.....

10.26 Has any member of your community suffered from skin diseases during the last six months? ☐ Yes ☐ No

10.27 How many people suffered from skin diseases during the last six months?
☐ None ☐ 1 - 2 incidents ☐ 3 - 4 incidents ☐ 5+ incidents

10.28 What does the community believe to be the cause for the skin diseases?
.....

10.29 Does the community think it can be prevented? ☐ Yes ☐ No

10.30 If yes, how?.....
.....

10.31 If incidents did occur, what did the community do to make it better or to heal it?
.....

11. TREATMENT OF DISEASES

Please take note not to provide the options to the interviewees, only mark off what they mention.

11.1 If a family or community member is sick, which services does the community consult first?
☐ Traditional healer ☐ Medical Doctor ☐ Clinic /Hospital ☐ Health Worker
☐ Self treatment ☐ Other.....

11.2 If the community consult someone else, who do they consult?.....

11.3 Why do they consult the above mentioned person?
.....

11.4 What illnesses are treated by the traditional healer?

.....
.....

11.5 Are the community members aware of the following treatments?

- | | | |
|---|------------------------------|-----------------------------|
| * Re-hydration mixtures for diarrhoea. | ☐ Yes | ☐ No |
| * Medicines and bandages for treating burns. | ☐ Yes | ☐ No |
| * Antiseptics and bandages for treating cuts, bites, etc. | ☐ Yes | ☐ No |
| * Insect repellent for mosquitos, flies, fleas, etc. | ☐ Yes | ☐ No |

12. COMMUNITY INSTITUTIONAL CAPACITY

Please take note not to provide the options to the interviewees, only mark off what they mention.

12.1 Do you have a health committee in the village? ☐ Yes ☐ No

12.2 Who is the contact person for this committee?

12.3 Where can the person be contacted?

12.4 What do you think are the responsibilities of this committee?

.....
.....
.....

12.5 Do you attend the meetings?

12.6 What do they discuss at the meetings?

.....
.....
.....
.....

12.7 Do men and women attend the meetings or discussions?: ☐ Yes ☐ No

12.8 Do you have an Environmental Health Officer in your community?

12.9 Name:

12.10 Where can he/she be contacted:

12.11 Do you have a Community Health Worker in your community?

12.12 Name:

12.13 Where can he/she be contacted:

12.14 Do you have a water committee in the village? ☐ Yes ☐ No

12.15 Who is the contact person for this committee?

12.16 Where can the person be contacted?

12.17 What do you think are the responsibilities of this committee?
.....
.....
.....

12.18 Do you attend the meetings? ☐ Yes ☐ No

12.19 If yes, what do they discuss at the meetings?
.....
.....
.....

12.20 Do men and women attend the meetings or discussions?: ☐ Yes ☐ No

12.21 Do you have a sanitation committee in the village? ☐ Yes ☐ No

12.22 Who is the contact person for this committee?

12.23 Where can the person be contacted?
.....

12.24 What do you think are the responsibilities of this committee?
.....
.....
.....

12.25 Do you attend the meetings? ☐ Yes ☐ No

12.26 If yes, what do they discuss at the meetings?
.....
.....
.....

12.27 Do men and women attend the meetings or discussions?: ☐ Yes ☐ No

13. HYGIENE AWARENESS WORKSHOP

Please take note not to provide the options to the interviewees, only mark off what they mention.

13.1 Do you think a Hygiene Awareness Workshop for communities is necessary?

Q Yes Q No

13.2 What do you think should be addressed in a Hygiene Awareness Workshop in your community?:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Thank the respondents for their time and willingness to answer your questions.

APPENDIX F

STATISTICS OF MGQUSHWA LOCAL MUNICIPALITY

3.1. Population size and distribution

As indicated on the table below, the municipality has a total of 93 997, made up of 20 757 households. The population is fairly evenly spread amongst the wards as can be seen on the table. The average number of people per ward is 6 714 (1 483 households). The average household size is 4.5% persons per household.

Table 1: Population Distribution by Wards

Wards	Total Population	Total Households	Average household size
1	8 330	1 856	4.5
2	6 284	1 267	5.0
3	7 816	1 581	5.0
4	7 154	1 544	4.6
5	6 540	1 429	4.6
6	7 510	1 631	4.6
7	6 452	1 439	4.5
8	7 447	1 805	4.1
9	6 723	1 404	4.8
10	5 483	1 185	4.6
11	5 086	1 347	3.8
12	6 354	1 522	4.2
13	6 553	1 403	4.7
14	6 254	1 344	4.6
Total	93 997	20 757	4.5

Source: PIMS Centre, 2001

3.2. Age Composition

A study of the age structure of Ngqushwa Municipality reveals that as many as 51% of the total population is children between the ages of 0 to 19 years indicating young and growing population. 9 % of the population are over 65 years. Only 40% are in the working age group, implying that there is a high dependency on the economically working population. A further analysis also indicates that future growth and trends of the population need to be recognised in any future policy and investment decisions and services provision, infrastructural planning and provision of job opportunities.

Table 2: Age Distribution

Age Group	Population	%	Category
0-4	9 431	9.94	Pre-school going age
5-19	38 467	40.92	School going age
20-29	13 328	14.18	Active working age
30-49	15 713	16.72	Working age
50-64	8 454	8.99	Inactive working age
65+	8 282	8.79	Old age (pensioners)
Unknown	435	0.46	
Total	93 997	100.00	

Source: PIMS Centre, 2001

The gender ratio indicates that 47% of the population are males, whilst the remaining 53% are females. This is in line with the gender ratio of 46.6:53.4 in the Eastern Cape Province (SSA, 1996). The differences in this ratio might be attributed to a high mobility of the male population to the mining and other employment areas in the country in search of employment opportunities. Women head slightly more than half of the households (52%) within Ngqushwa Municipality.

3.3. Economic Context

The employment situation reflects that 30% of the population in the working group age are employed and 70% are unemployed. About 87% of the employed households earn less than the poverty line of R1100 per month. The high level of unemployment and low income might be responsible for the high poverty rate in the area. Of the employed households, 14% are in the primary activities (farming and mining), 17% of the employed in secondary sector (manufacturing, construction and utilities) and 69% are in tertiary sector. It should be indicated that there is complete lack of secondary industries in the area and the tertiary sector of the economy is dominated by high level of employment in social and service activities, with most jobs associated with state-owned employment.

3.4. Infrastructure

It is estimated that 50% of households have access to water supply from public stand pipes, 44% rely on natural resources and 38% on bore-holes especially in the rural villages. Only 4% has access to water on site and these are in the urban areas. Records indicate that only 14% total of the number of households have access to flush toilets. These are mainly in the urban area of Peddie and Hamburg. Most people use pit latrines (87%). However, some households (11%) have no toilet facility at all. 98% of the population needed proper sanitation. There is also a good network of roads linking to two major

towns - Peddie and Hamburg. There is also a good network of proclaimed gravel roads traversing the area. Of the 1154.47 km of roads, only 11.63% is paved and 88.37% is unpaved. Some of the roads are in a state of disrepair and are inaccessible due to lack of maintenance. Programmes and action plans to address this backlog are captured in the Municipality IDP. Eskom supplies electricity and carries out maintenance services in the area. Due to Eskom's rural electrification programme currently in operation, approximately 70% of the settlements within the municipality have access to electricity. Only 2% of the households have access to telephones in their houses. About 52% do not have access to telephone. 31% of the population have access to other forms of telecommunication services. The number of households with cell phones is unknown at this stage.

3.5. Sanitation

According to the Ngqushwa Amalgamation Plan, Peddie sanitation treatment facilities consist of a mechanical package treatment system, which is considered more adequate for the present inflow. However, more properties have not been connected to the existing sewer reticulation, apart from those in the town centre. In Hamburg, there are no treatment facilities and no facilities are also available to service septic tanks. In the rural areas pit latrines are commonly in use throughout the area. No maintenance is carried out and super structure is relocated to a new pit when the old pit is full. There are no sanitation treatment facilities in these areas. Records from PIMS Centre (See Table below) indicate that only 14% of the total number of households have access to flush toilets. These are mostly in the central areas of Peddie and Hamburg. Most people, 87%^, use pit latrine. About 98.30% of the population need proper sanitation.

Table 3: Access to Sanitation

Type	Flush	Pit Latrine	Bucket Latrine	None	Unspecified	Total
Number	288	17 978	206	2 199	86	20 757
%	1.3	86.61	0.99	10.61	0.41	100.0

The solid waste facility in Peddie is approved and licensed and considered adequate for the requirement. Collection method is door to door by means of tractor and trailer, twice per week. In Hamburg, the solid waste facility is in the process of being upgraded to meet DWAF requirements. Collection method is door to door by means of tractor and trailer, twice per week. There is no

recognised solid waste disposal facility in any of the rural areas (Ngqushwa Amalgamation Plan, 2001). Records from PIMS Centre reveals that only 2.72% of households adopt municipal refuse removal systems. The households in the rural areas either have no services at all (11%) or dump their waste on a communal site (1%). As indicated above, about 84% of the households, mostly from rural areas, dump refuse on their own unorganised dumps.

3.6. Water supply

Ngqushwa Municipality is blessed with dams and water treatment works that provide bulk services to the communities. Table below indicates the dams operated by the Amatola Water Board, which are located within the municipal area and supplying water to communities.

Table 4: Dams operated by Amatole Water in Ngqushwa Municipality Area

Dams	Capacities in Cubic metres	Firm Yield in Cubic metres/pa
Dabi Dam	0. 23	0. 50
Mankazana Dam	1. 85	1. 38
Ndlambe Dam	0. 06	0. 06
Ngwekazi Dam	0. 65	0. 15
Rura Dam	0. 05	0. 05
Total	2.84	2.14

Source: Amatole Water-Amanzi Annual Report (1999-2000)

Some six water treatment plants operated by Amatole Water and supplying total of 2.84 million litres of portable water daily, to the communities within the study area are indicated in Table below. These sources are considered adequate for the present purposes.

Table 5: Water Treatment Works in 2000/2001

Treated Water	Capacity (in litres)
Dabi Dam	0.72
Ngwekazi WTW	0.80
Peddie Regional WTW	6.56
Tyefu WTW	0.28
Wesley Coastal/Birha Scheme	4.30
Glemore (Exnuba) WTW	0.50
Total	13.16

Source: Amatole Water-Amanzi Annual Report (1999-2000)

In Peddie the water is supplied from the King's Lynn scheme operated by Amatola Water Board. This scheme is adequate for present purposes. In Hamburg, water is supplied by Amatola Water Board from Birha Scheme. Although this source is adequate for present purposes, Hamburg has three other bore-holes constituting the original town supply, which would be capable of supplying 25% of the average requirement. In the rural areas, the Amatola Water Board has implemented several schemes to supply water to the areas (Ngqushwa Amalgamation Plan, 2001). Generally, it is estimated that 50% of the households in Ngqushwa Municipality have access to water supply from public standpipes. 44% rely on natural sources and 38% on bore-holes especially in the rural areas. Only 4% have access to water on site and these are mostly in the urban areas.

Table 6: Access to water supply

Source	On Site	Public Tap	Tanker	Bore-hole	Natural	Dwellin g	Others	Unspeci fied	Total
Number	382	10 327	425	1 164	7 973	321	75	90	20 757
%	1.84	49.75	2.05	0.56	38.41	1.55	0.36	0.43	100.0

APPENDIX G

Previous local study undertaken in Peddie district on Health and Hygiene Promotion

District / Village / Population	Period of study	Methodology	Major Findings		Funders
			Common Good Practices	Common Bad Practices	
Peddie Mgwangqa 90 households	June 99	PHAST	- Covered water container - Boiling water - Hanged Kitchen utensils - Covered food - Using different container for fetching water from the bucket and drinking - Rain water tank - Cleaning a toilet - Burning household waste	- Open veld defecation - Uncovered water containers - Water fetched from the dam where animals are also drinking - People who vomits - Uncovered food - Using a mug with no handle - Cleaning child's bottom with leaves - Dog drinking from water container - Children swimming in dam	DWA
Peddie Nqwenerhana 107 households	July 99	PHAST	- Mother bathing a child - Hand washing - Fetching water from a tapstand - Closed bucket of water	- Disposal of faeces - Children swimming in the dam	DWA
Peddie Ncala 162 households	September 99	PHAST	- Fetching water from the tapstand - Hoeing - Washing hands - Defaecating in the toilet - Cooking women - Covering of food for visitors	- Child drinking with mouth from a pipe - Child defecation - Children swimming in dam - Urinating openly by both men and women	DWA
Peddie Chisirha 240 households	September 99	PHAST	- Using of mugs with handles to fetch water from buckets - Closing of water containers - Fetching water from the tap - Rain water harvesting - Sweeping grounds in household	- Washing of hands from the tap, water running all over - Children eating outside with animals - Outside wiwing especially Children - Drinking water directly from the taps - Swimming children in dams - Defaecating drunk people - Roaming animals all over the village	DWA
Kei Godini 373 households	August 99	PHAST	- Using a closed container to fetch water from tap - Burning refuse - Covered food - Mother hoeing - Woman cooking - Water containers next to a tapstand	- Fetching water from a dam with feet in the water - Dog drinking water from a bucket - Man Vomiting - Drinking directly with mouth from container - Defecating in the bush - Child openly urinating in the dam	DWA

APPENDIX H

Audit of Hygiene and sanitation promotion UNICEF projects

Type of project / Place	Objectives	Activities	Challenges/ constraints	Lessons learnt
Sanitation Promotion in Vietnam	To reduce water borne diseases (through sanitation education and low cost sanitation facilities); to raise awareness to create a safer environment for better living through a package of sanitation measures; to introduce low -cost appropriate technology; to develop a methodology and strategy; to make the project self-sustaining and self-expanding and to involve the community.	Strengthening infrastructure, conducting a base line survey; developing communication materials; conducting training; mobilising fund; finalising designs and estimates for low cost sanitary facilities; constructing sanitary facilities; involving the community- particularly women; facilitating augmenting of water supply; promoting immunisation, ORT, nutrition education and income generation activities; and monitoring.	Low economic condition limited funds	Commitment and involvement of the local peoples committee was key; that social mobilisation and project
Sanitation Project in Bangladesh	Provide a software component of hygiene education to the school water and sanitation programme; promotion of gender balance in caring for the environment, and supporting a decentralised approach to planning, implementation and monitoring.	A school package with <i>inter alia</i> games, comic books etc.; a media package using TV infomercial and radio spots; a sani mart to help build the marketing ability of local masons; interpersonal communication using health workers, religious leaders advocacy material targeting members of lowest level of local government.	Not provided	More transparent and accountable approaches with greater participation senses of community ownership school children effective medium to prompt parents to practice safe hygienic practices
Sanitation promotion in Nigeria	Reducing faecal borne diseases and thus improving health; sustained behavioural change vis a vis sanitation habits, taking into account existing beliefs	Social mobilisation, hygiene education, capacity building and income generating activities through the establishment of 'sani centres'	Not provided	Increased awareness of safe sanitary practices; need to conduct a study that a sustainable programme requires good institutional arrangement
Rural water supply, Hygiene education and Sanitation Program in Mali	Maximise health impacts of interventions; to reduce WES related diseases and increase access to water to reduce the workload of women and children by targeting.	Setting up low cost sanitation infrastructures, hygiene education for the eradication of dracunculiasis	Social- cultural obstacles difficulty in meeting demands for latrines; insufficient involvement of the population, lack of harmonisation of community participation principles little interest by private economic dealers; limited political commitment	Profited from favourable factors, that the results were obtained thanks to its varied activities and their integration. The method to be developed and spread out to other regions. To contribute more efficiently to the reduction of child mortality and morbidity due to diarrhoeal diseases and poor nutrition.

Sanitation and hygiene promotion in Tanzania	To promote research and policy analysis to strengthen advocacy and effect behaviour changes in the domestic domain of disease transmission	Mapping priority behaviour areas; participatory processes for community planning; capacity building for community analysis of constraining and enabling factors.	Need to facilitate a network of health professionals; design community based monitoring systems, maintain quality control and forge stakeholder's teamwork.	The commitment made during programme preparation and adequate resource earmarking; initiatives are seen as a consolidation of earlier efforts promoting self-financing sanitation and developing participatory assessment capacities; and a consistent team of health professional.
Participatory hygiene education and sanitation in Zimbabwe	Improve health and nutrition by reducing WES related diseases; to identify and change key hygiene behaviour to maximise the health of WES improvements and to increase the rate of latrine construction and associated works; disseminate PHE knowledge and skills.	To strengthen the indicators of behaviour change, and make PHE a standard part of basic training for health staff. PHE as a process	Not provided	Assure quality training provide support at all levels and build the confidence of implementers in the use of participatory approaches; strengthen reporting systems and assure the availability of PHE tools; use hygiene evaluation procedures; and institutionalise the PHE approach.
Water, Sanitation and hygiene education program in Zambia	To promote research and policy analysis	Institution/ capacity building, community management, sector co-ordination, appropriate technology, research and monitoring / evaluation	National interest, WGS commitment, capacity and consensus building.	Need for motivated and inter- sectoral WGS, linkages with a working group on in Zambia
Sanitation promotion in Myanmar	Consider Sanitation at national level, vast school network, encouraging private sector involvement, helping oneself concept rather than provider concept	National sanitation week, building sanitation facilities, Networking, conferences held.	Not provided	Inputs to the regional bodies meetings. Involve other partners in networking programmes.
Sanitation promotion in Indonesia	To promote healthy living through religious and social activities to improve standards of community health. To increase awareness of the importance of hygiene practices and adoption of these practice.	Training female village cadres to deliver hygiene message. Providing educational material.	Lack of commitment among regional leaders; that most district heads have yet to translate national commitment into local action plan	Commitment of the head of district who can influence budget allocation, improve sanitation if community approached in familiar manner particularly religious manner.
Sanitation promotion in China	Promotion of hygiene and sanitation; supply of safe water disseminate key messages, promoting community behavioural change	Advocacy meetings capacity building; developmental of communication strategies; grass root training; action research.	Low demand at grass root level and a lack of human resources and sector staff capacity.	Importance of strong government commitment at all levels and decentralisation of project; right policy at the right time. Low cost technology.

Sanitation promotion in Burkina Faso	To promote hygiene practices among mothers and children, to reduce child intestinal infections, develop reference model, evaluate the effectiveness of public health communication.	Installing neighbourhood committees, hygiene message through media, action research, and advocacy of experiments.	Time took to identify and formalise new forms of collaboration between the key stakeholders/partners	Recognising that it is difficult to maintain volunteer motivation. Also institutional clarity and division of responsibility is extremely important.
Sanitation promotion in Uganda	Raise the profile of sanitation through a political 'top down' process. And a 'bottom up' process.	Case study, a national working group on sanitation.	Not provided	The effect that a few highly committed individuals can have is tremendous; that the support and involvement of the president was crucial; it is necessary to lead by example promoting sanitation.
Sanitation promotion in India	Establishment of RSM, promote zero-subsidy, stimulate generation and awareness creation for sanitation and hygiene, and commercialise the provision of sanitary facilities.	Not provided	Not provided	RSM are cost effective economic and viable, open new area of improvement.
Urban Sanitation in Nigeria	Support communities to improve their environment, reduce household waste and excreta contamination; support government efforts by providing refuse collection and disposal facilities	Implementation of a pilot project in Ibadan	Liase with partners to ensure replication, build capacity through on the job training, fund technology R&D.	The need for pro-active financial and political support, women and children are committed stakeholders.
Urban Sanitation in Honduras	Intensified education on rational use and maintenance of sewage systems; exploring means to stimulate connection to the system at low costs; viability of constructing small off-site waste water and sanitation problems.	Peri-urban communities involvement, construction administration, maintenance and operation of the sewage systems through community water board	Misuse led to partial failure of the system, connection costs are too high, huge investments, water discharged without any treatments	Whether low cost sewage systems are a feasible solution for poor people is possible.
Urban Sanitation in Guatemala	To improve sanitary conditions and water supply and sanitation services.	Water supply, sanitation, hygiene education, reforestation	Lack of solid community organisation and participation, rigid government structure.	Education and technical training in health and sanitation helped community.
Urban sanitation in Brazil	To remove children and adolescents from garbage dumps; making their return to school possible and improve living conditions; to reduce infant, youth and maternal mortality rates among families of garbage pickers.	Technical support to seminars, producing materials and information gathering.	Limited comprehension of how incorporate environmental aspects is solutions create proposals for sustainable human development.	The project should be formulated with community participation, municipal and that of state entities