

Using water and sanitation as an entry point to fight poverty and respond to HIV/AIDS: The Case of Isulabasha Small Medium Enterprise

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Abstract

South Africa is faced by a number of challenges that include low water and sanitation coverage in rural and peri-urban areas, high unemployment and increasing inequality between the rich and the poor as indicated by a Gini coefficient of 0.77; the second highest inequality in the world after Brazil. The situation is compounded by high HIV prevalence with South Africa having the largest HIV infection in the world. This case study demonstrates how water and sanitation is used as an entry point to address these major challenges and to empower communities. The project has two main components: the Small Medium Enterprise (SME) that trades in water and sanitation facilities and a community garden that ensure food security and nutrition for people living with HIV/AIDS. Income generated through these activities is ploughed back into the community through construction of sanitation facilities, maintenance of water pipes and paying school fees for orphans. In addition to creating employment, the project has also empowered the community to mobilize and address other challenges such as gender, child abuse and crime.

The case study identifies weaknesses with projects designed solely to provide domestic drinking water and sanitation and calls for an integrated approach that uses water and sanitation as an entry point to unlock opportunities and empower the targeted communities.

Key Words: Small Medium Enterprise, HIV/AIDS; Job Creation, Water; Sanitation

1 INTRODUCTION AND BACKGROUND

South Africa has made significant economic progress in the past decade. Although economic growth slowed down in 2009 as a result of the global recession, the overall macro-economic outlook (2009-2013) is generally positive (SARB, 2009). The country has also made laudable achievements in extending public services such as education and health to the formerly disadvantaged black majority between 1994 and 2008. However the country is faced by a number of challenges that include low water and sanitation coverage particularly in rural areas; high unemployment rate coupled with increasing inequality; as well as HIV/AIDS and its associated challenges.

1.1 Access to water and sanitation services

Close to 6 million South Africans do not have access to a reliable source of safe drinking water while 13 million do not have access to adequate sanitation (DWAF, 2008). Figure 1 shows water and sanitation coverage in South Africa. Consequently, water and sanitation related diseases still have a considerable public health significance in the country. For example, diarrhoea is among the top ten causes of death in South Africa claiming 13600 lives annually (or 2% of all deaths) –this translates to 2 lives lost every hour (WHO, 2002). In addition, 479000 Disability Adjusted Life Years or DALYs¹ are lost annually due to diarrhoea (ibid.).

¹ The Disability Adjusted Life Year or DALY is a health gap measure that extends the concept of potential years of life lost due to premature death (PYLL) to include equivalent years of 'healthy' life lost by virtue of being in states of poor health or disability (1). The DALY combines in one measure the time lived with disability and the time lost due to premature mortality. One DALY can be thought of as one lost year of 'healthy' life and the burden of disease as a measurement of the gap between current health status and an ideal situation where everyone lives into old age free of disease and disability.

1.2 Unemployment and Inequality

One of the main challenges facing South Africa is the persistence of a very high level of unemployment. Unemployment rate in South Africa, narrowly defined to include only those who are actively seeking employment was 26.7% in 2005, not much different from that of 1994 when the country achieved democracy (OECD, 2007). Unemployment broadly defined to include discouraged workers (*i.e.* those who have stopped looking for work), stood at 38.8% in the same year. Individuals who had completed grades 8 to 11 (*i.e.* form 1 to form 5 or secondary education) made up the largest portion of the unemployed population (43.2%), while only 4.2% of the unemployed were individuals with postsecondary schooling (*ibid.*). This highlights the need to create employment for the low-skilled.

Closely linked to unemployment, is the issue of high and increasing inequality. In 2004, South Africa was remarkably number 55 in the world (*i.e.* out of 171 countries) based on the Gross Domestic Product (GDP) index which is a measure of economic growth. However, in the same year South Africa ranked number 121 on the Human Development Index (HDI) which is a broader measure of welfare showing that benefits of economic growth are not reaching poorer households (WB, 2006). South Africa's Gini coefficient which is a measure of inequality actually increased from 0.69 in 1996 to 0.77 in 2001 (HSRC, 2004). In 2002, SA had the second highest inequality coefficient in the world after Brazil.

1.3 Poverty

Poverty remains stubbornly high and affects the lives of up to about 40% of the population (OECD, 2007). Poverty is the main characteristic of South Africa's rural areas. For most rural communities service provision and infrastructure has been inconsequential and rural health and education facilities are starved of resources. Not surprisingly, poverty levels in rural areas are often double those in urban areas. According to Butt, 2006, one in ten South Africans is malnourished, one in four children is stunted, and 45% of the population lives on less than \$2 a day. He further points out that, in 1999, it was estimated that around 45-55% of all South Africans lived in conditions of poverty.

1.4 HIV and AIDS

HIV/AIDS is one of the major challenges confronting the country. According to the UNAIDS Annual Report (2007), South Africa is the country with the largest number of HIV infections in the world. An estimated 5.7 million people live with HIV. Meeting the water and sanitation needs of these people is a major challenge. Although these problems are discussed separately and the conventional response is for each agent or government department to focus on one issue in line with its main thrust of business, at the household level these problems are intrinsically linked and often manifest themselves at the same time.

1.5 Objectives of the paper

The linkages between water, sanitation and hygiene (WASH), poverty and HIV/AIDS have long been recognised and several authors (WaterAid, 2002; Kaminga and Wegelin-Schuringa 2005; Ngwenya and Kgathi 2006; Obil et al., 2006; WSP, 2006; Bery and Rosenbaum, 2007; Clacherty and Alana Potter, 2007; Manase, 2008) have analysed these linkages in detail. However, there is still a dearth of information on

how to address these linkages in practice when designing and implementing projects. The focus so far has been at policy level through for example calls for the integration of water in national Poverty Reduction Strategies (WB, 2002; WB, 2006; Poverty-Environment Partnership, 2006) or through the development of guidelines on mainstreaming HIV/AIDS in the water sector (HIP, 2006; UNHabitat, 2007). This paper contributes towards filling this knowledge gap by demonstrating how WASH can be used as an entry point to address poverty and HIV/AIDS at the project level. Using water, sanitation and hygiene (WASH) as an entry point to address other challenges facing communities is an approach highly recommended by the United Nations Water Supply and Sanitation Collaborative Council (WSSCC, 2002). One of the 4 key themes of the global WASH for All Campaign launched in 2000 and spear-headed by the WSSCC is that “water, hygiene and sanitation are entry points for poverty alleviation” (WSSCC, 2002, pp. 3). South Africa launched its national WASH campaign in March 2002 and adopted the global theme on “WASH as an entry point for poverty alleviation” as one of its main national themes (DWAF, 2002).

The paper first discusses the linkages between WASH, Poverty and HIV/AIDS before presenting the methodology and a description of the study site. This is followed by a discussion of the project approach and results achieved so far. The paper concludes by summarising the discussion and making preliminary recommendations since the project is still in the implementation phase.

2 Linkages between WASH, Poverty and HIV/AIDS

Better understanding of the linkages between WASH and poverty (especially the potential role of water in poverty alleviation) have led to the adoption of more poverty-focused approaches in the water sector such as Integrated Water Resources Management (IWRM) and the integration of water in national Poverty Reduction Strategies (Poverty-Environment Partnership, 2006). Although there are issues with implementation of these approaches (Mosley, 2004) there is ample evidence that suggest a shift in approach away from traditional technical and sectoral approaches based on infrastructure development alone towards integrated, demand-led approaches that emphasis the role of water in economic growth and poverty alleviation (Poverty-Environment Partnership, 2006). South Africa has just launched

its national strategy on “Water for Growth and Development 2009-2013” (DWAF, 2009).

2.1 The WASH Poverty Nexus

Globally, about 900 million people do not have access to safe drinking water while nearly one third of the world’s population, some 2.5 billion people, do not have adequate sanitation (tearfund, 2009). The majority of them, over 1 billion, are poor living on less than US\$2 per day. The issue of ensuring that the poor have access to safe drinking water and adequate sanitation has therefore and aptly been prominent in international discussions, and a specific goal to reduce by half, by 2015 the number of people without access was included in the internationally agreed Millennium Development Goals (MDGs) (UNDP, 2009). However, the contribution of WASH to poverty reduction goes far beyond just drinking water and sanitation. Water for example, is essential for improving the health and livelihoods of the poor, ensuring wider environmental sustainability and eradicating hunger.

2.2 Linkages between WASH and HIV/AIDS

The link between WASH and HIV/AIDS is rather complex given the different faces and dimension of HIV/AIDS (Kamminga and Wegelin-Schuringa, 2005). However, the linkages can be categorised into two broad reciprocal relationships; a) the effects of WASH services on the wellbeing of People Living With HIV/AIDS (PLWH) and b) the effects of HIV/AIDS on the delivery of WASH services.

2.2.1 Effects of WASH services on the wellbeing of PLWH

Water is life and this is more so for people living with HIV and AIDS given their compromised immune system which make them more vulnerable to opportunistic infection (Kamminga and wegelin-Schuringa, 2005; Ngwenya and Kgathi, 2006;). Water of safe quality is required when taking medication and when preparing formula feeding for infants with HIV positive mothers. If a mother is HIV positive, there is a

one in three risk of her transmitting the virus to her baby through breast feeding, “even if the child was born HIV negative” (Kamminga and Wegelin-Schuringa, 2005). Infected mothers are therefore persuaded not to breastfeed their children yet the chances of that child dying from diarrhoea are very high when there is no safe water to prepare formula feeds or when cleaning and water handling practices are not hygienic (ibid.). According to Bery and Rosenbaum (2007), diarrheal diseases which are water borne or water washed are the most common opportunistic infections (OIs) experienced by people living with HIV and AIDS in Africa and elsewhere. A random case control study by Lule *et al.* (2005) reported in Bery and Rosenbaum, found that PLWH in the intervention group (i.e. households randomised to use home chlorination, safe water storage and basic hygiene) reported 25% fewer episodes² of diarrhoea and 33 % fewer days with diarrhoea compare to the group where the intervention was basic hygiene education only (Bery and Rosenbaum, 2007).

In addition to safe quality, water for PLWH should also be of adequate quantity to meet their drinking and bathing needs. Ngwenya and Kgathi (2006) reported that end-stage, bed-ridden PLWH needed 20 to 80 additional litres of water per day depending on the severity of the patient’s symptoms, especially diarrhoea. According to the same authors, caregivers who experienced periodic water shortages reduced the frequency of bathing patients from twice daily to once daily or not at all thus affecting the dignity and wellbeing of the patients. Furthermore, sanitary environments and good hygiene practices are pertinent to reduce OIs among PLWH. Lule (2005) reported that the presence of a latrine in the family compound was associated with fewer episodes of diarrhoea among PLWH, fewer days with diarrhoea and fewer days of work lost due to diarrhoea. A study on the effects of handwashing with soap on diarrhoea rates in PLWH in the United States by Huang and Zhou reported a 58% reduction in diarrhoeal incidence from 2.92 episodes of diarrhoea to 1.24 episodes (Bery and Rosenbaum, 2007).

² An episode of diarrhea was defined as “a discrete case of diarrhea having a specific beginning and end and usually lasting from several days to several weeks”(Bery and Rosenbaum, 2007).

2.2.2 *Effects of HIV/AIDS on WASH service delivery*

The water sector, as is the case with any other sector in Southern Africa has been affected by HIV/AIDS in a variety of ways. First, HIV and AIDS erode household income due to increased medical bills and general livelihood insecurities (Obi *et al.*, 2006). Consequently, HIV/AIDS affected households fail to pay their water bills. This reduces the budget for WASH which in turn affects the delivery of WASH services forcing affected households to resort to unsafe sources (Ashton, 2001) with debilitating health impacts, especially for PLWH.

AIDS has also increased orphans and child-headed households who may not have the financial resources to pay for water services in areas where these services are charged. Also child-headed households may not be aware of hygienic water handling and sanitation practices (Obi *et al.*, 2006).

At the institutional level, HIV/AIDS has affected WASH service delivery through absenteeism of water operator due to ill-health, and loss of human capital due to AIDS related deaths. In Botswana, Ngwanya and Kgathi (2006) reported high frequency absenteeism by water operators due to HIV/AIDS related illnesses or attendance to funerals as one of the major reason for unreliable water supply.

More broadly, HIV/AIDS is intricately linked to poverty alleviation and has been identified as one of the major obstacles to reaching the Millennium Development Goals (MDGs) (UNDP, 2001; Kammanga and Schuringa, 2005). Poverty increases vulnerability to HIV infection through for example high risk behaviour such as prostitution for survival, while AIDS exacerbates poverty through loss of income due to absenteeism or death of a bread winner (UNAIDS, 2006).

3 Methodology

The study uses one of the projects undertaken by the Department of Water Affairs and Forestry (DWAF) and the Council for Scientific and Industrial Research (CSIR) of using WASH as an entry point to address poverty and job creation in one of the rural communities in South Africa. The project involves the support of a Small Medium

Enterprise (SME) in the community and income generated is ploughed back into the community. The project also includes the establishment of a community garden to support the community care for people living with HIV/AIDS.

Purposive sampling was used to select Mvunyane a remote, poor rural area in KwaZulu-Natal (KZN) Province. Mvunyane is located approximately 35km south of Vryheid and consists of six villages which fall under ward 14 in Abaqulusi Local Municipality of the Zululand District Municipality. Mvunyane is described as “deep rural”, isolated former homeland with very high incidences of poverty and HIV, and poor water and sanitation coverage (IDP, 2002).

The Community-Centred Capacity Development (CCCD) conceptual framework developed by the United Nations Children’s Fund (UNICEF) was applied in this project. Community-Centred Capacity Development “is the strengthening and nurturing of a community’s ability to take control of its own destiny and to manage and direct its development process through an interactive process of Assessment, Analysis and Action (Triple A)” (UNICEF, 2005). Several meetings were held during which community members were asked to assess their situation by identifying and ranking their major problems; analyse priority problems using the causality conceptual framework (i.e. identifying the immediate, underlying and root causes of the problem); and finally develop an action plan to address the identified problems.

Information gathered through community meetings was supplemented by a detailed baseline survey. Proportionate systematic random sampling was used to select 600 out of a total of 1500 households that make up Mvunyane. The household list was used as the sampling frame. Six hundred household questionnaires which asked for both qualitative and quantitative information on household characteristics, household economy, water and sanitation, and HIV/AIDS were administered.

4 Results of the baseline survey and discussion

4.1 Socio-economic profile of the households

Of the 600 respondents interviewed, the majority (64.5%) are female and 35.5% are male. In the majority of cases (75%) the household-head or the spouse (20%) was interviewed. However, in 5% of the cases adult household members above 20 years

old were the respondents. Most of the households are female-headed (54%) and the majority of the household-heads (69%) are between 41 and 60 years old. Education level among the household-heads is very low; 35% have no formal education at all and an additional 30% only went up to primary school level (Grade 7).

The population in the study area is relatively young, with the majority of the population (84.5%) between the ages 1 to 40 years. About 45.2% of the population fall within the economically active group (20-60 years). However, it is also this part of the population that is most under the potential threat of HIV/AIDS infection yet at the same time it is also the productive age group.

The data also show that about 34.5% of the total population is currently of school-going age, with the majority of the population between Grade 8 and 12 (Secondary school). This has implications for the delivery of good education, health and welfare facilities. Half of the population is younger than 21 years of age and only about 4.9% are pensioners. This implies a high dependency rate and an increased strain on already tight household budgets.

Household income in the study area is very low with 45% of the households generating an income of less than 1000 South African Rands (R)³ per month. The majority of the households (65%) live below the national poverty datum line of R353 per person per month (Figure 2). The most important source of income for the majority of the households (60%) is salaried employment followed by pension (20%) and then social grants (10%). Other sources of income include formal and informal businesses and farming. Much of this income is spent on food (80%), followed by medication (10%) and electricity (5%).

4.2 Water, Sanitation and HIV/AIDS Situation

4.2.1 Access to basic water

Easy access to safe and sufficient water is crucial for the general population and indispensable for people living with HIV/AIDS (Kamanga and Schuringa, 2005). Although this study targeted the general population, some of the households included in the survey have PLWH.

³ 1USD = R7.7 as of 29 June, 2009

Households in Mvunyane collect water from multiple sources depending on the intended use of the water. Among the 600 households interviewed, the majority reported fetching water from yard taps (84%), communal token-operated taps (70%), protected well or borehole 40%, piped water inside the house (6%) and from rain water harvesting (10%) (Figure 3). However it is important to note that all the yard taps in this area are illegal connections from the main line that supplies communal taps that were installed by DWAF. The water supply situation in Mvunyane is generally erratic. For example, in one of the villages Esimashwini, only 6 out of the 24 token-operated communal taps (that is you have to insert prepaid token to get water) are operational. The community in this village had to vandalise the token system and install illegal connections in order to get water.

The unreliability of water in the community indicates poor water supply management and maintenance. There are no proper institutional arrangements with regards to water supply in Mvunyane, all these issues are handled by Zululand District Municipality (ZDM) on an ad-hoc basis. Initially DWAF was the water services authority and upon restructuring the responsibility now lies with the Zululand District Municipality which has not effectively taken over. The situation is further complicated by the fact that Mvunyana is governed by a tribal authority and there are no clear water supply roles and responsibilities between the municipality and the tribal authority.

In terms of water quantity 43% of the households use less than 50 litres of water per day, and a further 49% use between 50 – 100litres of water (Figure 4). However, it emerged during focus group discussions that the community can go for up to 3weeks without water. Given that the average household size in Mvunyane is 5 people, the average quantity of water used per capita per day of 15litres is far less than the 25 litres recommended by the National Water Act (DWAF, 2007). This has immense implications for PLWH since water quantity is a crucial factor in caring for PLWH, especially in the late stages of AIDS (Bery and Rosenbaum, 2007). Although this baseline survey was not specifically designed to determine the water needs of PLWH, a home-based care study in Ngamiland, Botswana by Ngwenya and Kgathi (2006) reported that caregivers required an additional 20 to 80 liters of water per day, depending on the severity of the patient's symptoms, especially diarrhoea.

4.2.2 Access to basic sanitation

Adequate sanitation is equally important for poverty alleviation (WEDC, 2007) and for the prevention of opportunistic infections among PLWH (Bery and Rosenbaum, 2007). Of the 600 households interviewed in the baseline survey, the majority (88%) reported having access to ventilated improved pit latrines (VIPs), 0.8 % use simple pit latrines while 0.8% have no toilet facility at all (Figure 5). Although the majority of the households have access to some sort of sanitation facility it is important to note that most of the facilities are in bad condition and may not be effective in preventing flies from leaving the toilets. Only 19% of the facilities were classified as being in good condition (i.e. having a vent pipe with fly screen, a roof and a door).

Having no proper sanitation is a major challenge particularly for women and people in advanced stages of AIDS. During the focus group discussions it emerged that those without toilets go to the bushes or open areas to relieve themselves. Lack of access to sanitation violates one's human rights and dignity. Presence of decomposing human waste in open spaces means people are more vulnerable to catch water-borne diseases.

4.3 HIV/AIDS awareness and knowledge in the community

The household survey indicated that the community is aware of HIV/AIDS with 89% of the households having access to HIV/AIDS information. The common source of information is radio and television; most of the households (80%) have at least one radio. A significant proportion of the interviewed households (35%) reported having been affected directly by HIV/AIDS through death of a spouse or child or caring for at least one family member living with HIV/AIDS. The results also indicate that 23% of the households have experienced rape of a household member.

5 The project intervention

As alluded to earlier, the Community-Centred Capacity Development (CCCD) conceptual framework which allows communities to assess their situation, identify and analyse problems and develop action plans to address the identified problems was

applied in this project. In order to put WASH in the broader development context, communities were asked to discuss their problems in general; the CSIR team members introduced themselves just as researchers and not water and sanitation experts. In order to allow equal participation, the community was split into the following three groups; men, women and the youth. Each group was asked to identify and rank key problems facing the community in general. These lists were exchanged allowing each group to discuss and rank problems identified by the other two groups. The groups were then brought together and worked together to come up with five most pressing problems facing the community. After several hours of deliberation the community came up with the following list in order of priority: i) unemployment, ii) water, iii) roads, iv) HIV/AIDS, and v) crime.

The community was then asked to analyse each problem by identifying the immediate, underlying and root causes of the problems; that is developing the problem tree (UNICEF, 2005) for each problem with the branches as the immediate cause, the trunk as the underlying cause and the roots as the root cause of the problem. Issues of unemployment among the youth and the resultant turn to crime, lack of spare parts for operation and maintenance of water facilities and the plight of PLWH featured prominently during the discussions. With technical assistance from the CSIR team the community finally developed an integrated action plan to address the identified problems. The action plan is an innovative way of using WASH as an entry point to address poverty and HIV/AIDS in Mvunyane. The final action plan has the following 8 main components: i) problem, ii) causes, iii) objectives, iv) activities, v) by whom, vi) resources, vii) outcomes, and viii) timeframes.

In terms of the approach, the action plan has two main projects; a youth-based small scale commercial enterprise that trade in water and sanitation components (Isulabasha SME) and a community garden that address the nutritional needs of the PLWH and the general community. This approach is in line with South Africa's water sector support program led by DWAF and dubbed "Masibambane", which seeks to address both the social and economic aspects of water and sanitation by using WASH as an entry point to unlocking growth and development in the targeted communities in addition to providing basic water and sanitation services. In 2002,

DWAF launched the national WASH campaign for South Africa with the following key themes:

- Water, sanitation and hygiene can save lives
- Water, hygiene and sanitation for people: women and children come first
- Reforms are critical to improving water and sanitation services for the poor
- Water, hygiene and sanitation (WASH) are entry points for poverty alleviation (DWAF, 2002).

The project in Mvunyane is in line with the 4th principle of using water, hygiene and sanitation (WASH) as an entry point for poverty alleviation. Several authors (Manase et al., 2003; Makoni et al., 2004; and Katsi et al., 2007) have documented how promoting productive use of water at household level while at the same time addressing gender issues can generate income and create employment for the locals. This project builds upon these lessons and scales up such findings by creating a formal commercial community owned small-medium enterprise.

5.1.1 Support to Isulabasha small-medium enterprise

During the community meetings it emerged that a youth organisation named Isulabasha already existed in the area. The Isulabasha originated as a Water and Sanitation Project found and funded by the Department of Water Affairs and Forestry (DWAF) and DANIDA through the Mvula Trust, and started prior to the creation of local governments. The project was initially a youth project, hence the name “Isulabasha” which means the “plan of the youth”.

This project which started effectively in June 2008, found it appropriate to revive Isulabasha as opposed to building new structures. Isulabasha comprise 10 committee members. All the committee members attended refresher courses on financial management and participatory operation and maintenance of water systems. The committee in consultation with the community members identified six people who were trained as water minders, plumbers and pump operators. However, before these recruits could go to work there was a need to rehabilitate the water facilities first and financial resources were required.

Funds to rehabilitate water facilities were raised through the commercial arm of Isulabasha; the Isulabasha SME created by the CSIR. The CSIR developed a handwashing dispenser as part of its research on appropriate technologies for sustainable water supply and sanitation. The CSIR-Handwashing dispenser is a simple technology consisting of two main components; a 2 litre Coca Cola plastic bottle which acts as the water container and a plastic valve fitted at the top of the 2 litre bottle. The Handwashing dispenser can be fitted easily on a strategic position on the wall of the VIP making it easy for all family members including children and the elderly to wash their hands after visiting the toilet. Each complete unit costs R21. Before November, 2008 the CSIR was selling the handwashing dispenser through out South Africa from its head office in Pretoria thus causing logistical nightmares for buyers in remote rural areas. In November 2008, the Isulabasha SME was established as the selling point for KwaZulu-Natal Province and was provided with the first 5000 units free of charge. Within a month Isulabasha sold 1500 unit and realised a gross income of R31500. Part of this income was used to rehabilitate two abandoned water pumps in Esimashwini which is one of the 6 villages in Mvunyane. In addition, two Jojo tanks were also installed thus affording communities a more regular water supply. Before this intervention, households reported break-downs of up to 3 weeks. However, since January 2009, Esimashini has received regular water supply and no major breakdown has been reported.

In addition to providing the initial bunch of handwashing dispensers, the CSIR also supported Isulabasha by linking it with potential customers in KwaZulu-Natal Province namely the District Municipalities, private contractors and Non-Governmental Organisations such as Mvula Trust. The CSIR also assisted with securing office equipment (a computer, furniture, fax, telephone and internet) and office space at the nearest town, Vryheid to bring Isulabasha more exposure to the market. Isulabasha has expanded its activities to include charging for photocopying, fax, and phone services. These are the activities that promote the SME's operations and enhance economic viability while at the same time expanding and promoting water sanitation and hygiene in the community.

Between January and May 2009, the average monthly income and running costs for Isulabasha were R21000 and R10500 respectively. This translates to a monthly profit

of R10500. This money is currently being used to rehabilitate water facilities in three more villages.

5.1.2 Community Garden for people living with HIV/AIDS

Although HIV/AIDS is not a water-related disease, the issues are closely linked. For example, many of the opportunistic infections that kill people living with HIV/AIDS are transmitted through contaminated water and unsanitary living conditions (WSP, 2008). The links also include safe drinking water for home-based care and infant feeding; and food security and income generation through productive use of water. Therefore increasing food production and food security through community gardening can be one of the solutions to assisting people living with HIV/AIDS in these communities.

Community gardening meets varying needs of diverse communities, especially those in marginalized neighbourhoods struggling with hunger and poverty. The community garden which is run by Isulabasha addresses lack of access to fresh produce in Mvunyane. Therefore the garden is crucial in meeting the community's nutritional needs and food security. The community garden allows people to grow crops they may not be able to find elsewhere, this can mean being able to maintain a traditional diet and be healthier and happier. One of the Isulabasha committee members donated his 2 hectares piece land for the community garden. The CSIR then assisted the community by linking them with the department of Agriculture for advice on best crops to plant in the area, and also by securing equipment to fence the area. Since there is not enough water in this area, the CSIR is provided a Jojo tank which is being used to store water for irrigating the vegetables.

The community harvested its first crop in October 2008. Then, only half of the garden was planted and much of the vegetable was used to feed PLWH. However, in December 2008 the community managed to plant the whole 2 hectares and produced surplus vegetables which were sold to the general community and a child feeding point. Between February and May 2009 the community generated an average income of R7400 per month and the average input costs (seeds, fertiliser and pesticides) were R21000 per month. At the moment the income is mainly saved in the bank since the

community would like to expand its activities. The community has been approached to supply a local supermarket and the local chief gave them a boost by allocating them a 7 hector piece of land to enable them to meet the growing demand for vegetables.

6 Conclusion

Mvunyane is facing a number of challenges that include poor water supply and sanitation, poverty as well as HIV/AIDS and its associated challenges. Although this project is still in its infancy it is already demonstrating how water and sanitation can be used as an entry point to address these challenges. Earlier projects that focused solely on water and sanitation were not sustainable pointing to the need for more holistic approaches and community participation in planning, implementation and operation and maintenance. Preliminary results from Esimashwini where this project is almost in full swing suggest that the water supply situation has improved as evidenced by the fact that no major breakdown has been reported to the CSIR by the village pump minder. Before this intervention communities used to go for up to 3 weeks without water as reported during the baseline survey. The community ownership of the project and enthusiasm is amazing. There are also signs of community mobilisation beyond this project as illustrated by the formation of women clubs to curb child abuse and other crimes in the area.

The importance of integrated planning that includes all the relevant sectors such as the water sector, Local Municipality and the Ministries of Health and Agriculture can not be over emphasised. Getting all these stakeholders to work smoothly together is a challenge still facing the project although progress is being made. It is strongly recommended that water and sanitation projects should integrate HIV/AIDS and job creation. Local Integrated Development Plans (IDP) at municipal level should be used as an instrument to achieve this integration.

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