Annex 2

Case Study 2: Improving economic livelihood opportunities in Tanzania

Effective partnership

WaterAid is working with rural and urban communities in Tanzania to improve poor people's access to sustainable water and sanitation services. A key partnership within the Tanzania programme is 'WAMMA' in Dodoma Region. WAMMA [WaterAid, Ministry of Water {Maji}, Ministry of Community Development {Maendeleo} and Ministry of Health {Afya}] is an integrated approach to water supply, hygiene education and sanitation projects. It has been developed over a number of years, as a result of close collaboration between WaterAid and the regional and district authorities in Dodoma. WAMMA is a good example of how an evolutionary government/ NGO partnership has helped Tanzanian villagers to attain better access to water and sanitation services.

WAMMA is a democratic partnership and encourages motivated and empowered communities to manage their own water and sanitation projects. Communities are best placed to suggest improvements to their own water and sanitation services, and the WAMMA partnership has encouraged community led development. The programme has also incorporated an innovative participatory health dimension to improve hygiene education. Over the last few years the programme has developed the capacity of field workers and empowered them to become dynamic agents for change.

Water resources

Dodoma Region has a total annual rainfall of 400 to 600mm, mostly falling in a single rainy season from December to March. There is virtually no rainfall from May to November. There are few perennial rivers and seasonal rivers flow only after heavy rain storms in the rainy season. Shallow water is available during the rainy season but most wells, which are normally dug in the beds of seasonal rivers, dry out by June. Only a few areas support shallow wells throughout the year. There are several natural springs located in the hills of Kondoa and Mpwapwa Districts in Dodoma Region. Most have a yield of about 1 litre per second. The majority of the villages in the region rely on water from the basement aquifer. The aquifer is either the weathered overburden (regolith) or the weathered/fractured bedrock. Most boreholes obtain water from the latter and are typically 100 to 200 metre in depth. Successful siting of boreholes in both the regolith and the fractured granite is problematic. During the 1950s, 1960s and 1970s many boreholes were drilled, though there are still a number of villages which do not have access to a perennial water supply. With a low water table and a high demand for water from individual boreholes, many villages use diesel engine driven pumps to extract the water from the boreholes.

Cost of water

During 2003-2004 WaterAid worked in approximately 25 villages in Dodoma. Nala is one example of where, until recently, many women and children were forced to walk 5

hours a day to collect water. Women were forced to wake at 4 in the morning to collect water for their families. During 2003-2004 WaterAid worked with the local government and community to install a new water pump and engine and train village pump attendants in Nala. Throughout the year further taps have been installed and there are now 10 distribution points within the village. The community have agreed to small user fees to pay for a pump attendant to maintain equipment and monitor water usage and a security guard to protect the equipment. Community members now pay about 1p per 10 litres for clean water. The community, through specialised hygiene promoters, teachers and a children's water committee, has also begun hygiene training. There have been noticeable changes since water services have improved in Nala. There has been increased community control over their water and sanitation services and hygiene behaviour. For women and children there has been increased choice over use of time. Improved hygiene behaviour relating to use of water and sanitation is beginning to lead to improved health with a reduction of water-borne diseases.

Water – improving rural livelihood activities

In rural livelihood activities water is a vital asset. People who use brewing, livestock keeping, gardening and cooking to improve their economic livelihoods need access to reliable, clean water. In a study of livelihood activities in 5 villages in Dodoma (WaterAid 2003) WaterAid found that brewing uses 6 – 10 buckets of water and results in as much as Tsh6,000 gross income per batch, within a one-week production cycle (2039 Tsh = £1). Raising cattle uses 30-40 litres of water a day and goats 5 litres a day, which give a gross income from milk production of up to Tsh 500 per day. Vegetable and fruit gardening uses from 7,500 – 9,375 litres per season for one crop. Gross income from vegetable gardening per season will range from Tsh 2,100 to Tsh39,000 per 30m² plot. In some villages brick making is also a livelihood activity, using 2 litres of water per block produced.

Individual case study on improved economic livelihoods: Joyce Mtenda Chitunda café

Since the introduction of improved water and sanitation services in Nala Joyce Mtenda Chitunda has been able to set up a small business. She has opened a small café next to the road from Dodoma which serves breakfast, lunch and drinks to villagers and truck drivers.

Before the improvement in water services in Nala Joyce would not have been able to consider opening a business that relies heavily on a good water source. She had to walk 5 hours a day to collect water and was hardly able to collect enough water for her children's needs, let alone a thriving business. The lack of clean water in the village had a devastating impact on Joyce's life; she lost one child to diarrhoea, partly attributable to the unclean water source that had previously been used by the community and a lack of knowledge about good hygiene practices.

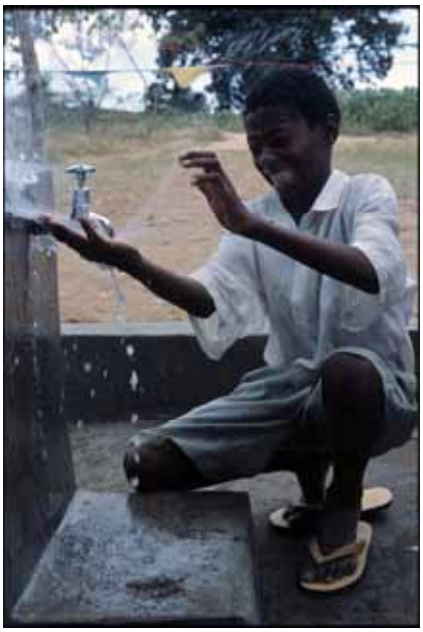
The café now benefits from the accessible taps that have been installed in Nala village. Joyce is able to collect 50 litres of water every morning and evening, at a cost of 1p per 10 litre bucket. Before the tap was installed small scale private vendors would sell water

for 10 times this amount (200 Tshs for a 20 litre bucket). The installation of a tap near the café ensures that customers are able to wash their hands and Joyce is able keep the premises clean at little extra cost.

Improved access to water has also meant that other villagers are able to improve their production of fruit and vegetables. Although they do not necessarily use the water for their crops, they have more time to attend their crops and have more time to access local markets. Joyce often uses this local produce within the café.

According to Joyce, since the introduction of safe and accessible water there has been a decrease in the incidence of stomach illnesses and skin irritants among children. Children are encouraged to participate in the newly set up tap committees and maintenance teams. The tap committees ensure that people are responsible for keeping the tap clean, especially oiling the tap, brushing the area, and participating in hygiene education.

Nala water source before the construction of a water point.



The existing Nala waterpoint

‘’I feel very, very good today because this is the last time I will have to collect water from this dirty hole. We will get clean, safe water from a tap today. I am excited because I won’t have to walk so far anymore. The best thing for me about clean water is that I can leave home anytime and go to the tap and there won’t be queues of people waiting for this water hole to fill up again. I will have more time and hopefully that means I will be able to earn more money.’’ **Joyce Mtenda Chitunda on the day that the community opened the Nala waterpoint.**