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WATER, SANITATION AND HYGIENE:
SUSTAINABLE DEVELOPMENT AND MULTISECTORAL APPROACHES

A demand-driven multi-input area development approach to water and sanitation in Cabo Delgado, Mozambique

I. Amaral & T. Duarte, Mozambique

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In order to address the issue of unsustainable water points and lack of interest in sanitation facilities in Cabo Delgado, the Aga Khan Foundation in Mozambique (AKF(M)) takes a demand responsive multi-sectoral approach. The water and sanitation programme facilitates the community in realising the importance of access to safe water and sanitation facilities and changing the beliefs and practices with respect to using and sustaining the interventions. The programme involves coordinating all sectors within the programme area, including health, education, agriculture and civil society, to contribute to the water and sanitation efforts of the programme area. This concerted effort brings together all stakeholders, including the community, civil society, the private sector and government.

Introduction

Aga Khan Foundation (AKF)'s Water Supply and Sanitation Project (WSSP), a component of its Coastal Rural Support Programme in Mozambique (CRSP(M)), facilitates sustainable and equitable improvements in the living standards of women and men in vulnerable rural communities. The comprehensive and coordinated programme, which focuses on the most disadvantaged populations in Cabo Delgado, has five main objectives: increase rural incomes, enhance food security, improve overall health status, increase access to quality education, and strengthen the capacity of communities, civil society organizations and government to manage development over the long-term.

Increasing access to safe water, in combination with sanitation infrastructure and hygiene promotion reinforces the benefits of the other sectoral programmes of rural development, health and education. It also heightens the communities' confidence in development interventions and provides substantial benefits in terms of reduced diarrhoeal morbidity and labour for women.

In recognizing that safe water and sanitation systems and practices are sustainable only through the active involvement of a community, AKF's demand driven approach informs and mobilises communities and encourages them to support infrastructure, manage water systems effectively and adopt hygiene behaviours that contribute to improved health and well-being.

Background

The Government of Mozambique developed a National Water Policy (NWP) in 1995 which included a framework for activities in the water and sanitation sector, thereby facilitating greater private sector participation, the establishment of a regulatory board for water, and a defined water tariff policy. In spite of these actions, the 2004 Poverty Reduction Strategy Paper noted that the water sector remained a priority and in need of substantial investment as only 35.8% of the country's population had access to potable water. Also, although studies suggest that 46.8% of the Mozambican population has access to adequate sanitation services, coverage in rural areas is very low and prevalence of diarrhoea remains high. Most communities use 'the bush' and poor hygiene and sanitation practices are in effect. For example, in the targeted coastal districts of Cabo Delgado, it is culturally acceptable to defecate on the beach and bush; latrines are neither built nor used.

The Rural Water Transition Plan of the NWP shifted delivery of water supply and sanitation from a supply driven to a demand driven approach (MOPWH, 2003). Cabo Delgado, one of the poorest and most resource-constrained provinces in Mozambique, began to introduce this demand driven approach in 1997. However, there has been limited uptake of the approach over the last few years because: a) the high cost of existing pumps and spare parts in relation to the communities' willingness and ability to pay; b) the absence of low-cost technology options; c) an ineffective and non-functional supply chain of spare parts for hand pumps in rural areas; e) the absence of active monitoring of water points to detect and correct potential problems; and f) the almost complete absence of any serious investment in sanitation infrastructure and appropriate hygiene promotion practices.

AKF's Water Supply and Sanitation Project (WSSP)

AKF's WSSP aims to increase water supply and sanitation coverage for over 144,000 beneficiaries giving particular attention to the needs of the poorest rural communities in the Ibo, Quissanga, Macomia, Pemba Metuge and Meluco districts in Cabo Delgado. The five year project (2006 – 2011), funded by the European Commission (EC) and the Canadian International Development Agency (CIDA), is a multi-input area development programme which coordinates activities among the civil society, health, education and agriculture sectors. The activities of each department contribute to the water and sanitation programme as outlined in Table 1 below.

Case study – Quissanga District

At the provincial government level, the main CRSP partner is the Provincial Directorate of Public Works and Housing (DPOPH), through its Water and Sanitation Department (DAS). For the purpose of better coordination on the implementation of the project, AKF signed a Memorandum of Understanding (MoU) to outline the roles and responsibilities of each stakeholder. The DPOPH was responsible for defining the priorities among the five districts.

The baseline study of Quissanga district showed that 50% of existing water points were operational, but many were not well maintained or water was being used for drinking purposes even with its higher level of turbidity. In terms of sanitation practices, the study showed that only less than 4% of the population used improved latrines, approximately 30% used traditional pit latrines which were technically unsafe, more than 40% use the "cat system" (digging up); and nearly 25% used open defecation, in the bush or in the beach.

Community mobilisation took place and key messages were delivered to encourage communities to take initiative and request a water point. By the end of 2007, water and sanitation committees (WSCs) had been elected in 40 communities in Quissanga. Water and Sanitation Commitees were formed in each village to oversee the management, operation and financing of activities; however, they are part of a larger village development organisation (VDO). The VDOs, the governance structure in the village, comprise one member from each interest group, e.g. health committee, school committee, farmers' associations, etc. This approach ensures broad representation and inclusiveness. This approach also facilitates the integrated approach to development promoted by CRSP(M) and ensures that activities are coordinated to optimise existing resources and to prevent the duplication of activities. **Capacity building** began with training provided to WSCs to learn how to plan and implement projects, set and collect fees, and maintain and operate water points and sanitation facilities. Communities were then encouraged to take the initiative and request a water point by completing and submitting an Expression of Interest (EoI) form to the District Government. Of the 40 committees formed, 38 had submitted their applications for water points.

With community mobilisation, village members were not only interested in contributing cash towards infrastructure development, but also put in labour and extra cash towards building a 20Km road connecting the remote district to the main road.

Infrastructure development started with hydrogeological surveys, construction of water points, and rehabilitation of WSS infrastructure. The project launched a competitive process to identify and contract private sector companies to carry out construction and rehabilitation of water points. If locations did not provide an adequate supply of safe water, the company was responsible for re-installing water points in an alternative location. Approximately 5% of the total cost of the contract was retained for a period of one year to ensure accountability on the part of the company.

In cases where demand was present and cost remained a major barrier to the purchase and construction of latrines, community members were able to **pay in installments.** This prevented exclusion of community members who needed latrines and expressed the desire to have them.

To derive maximum project impact, CRSP(M) has designed a strategy to stimulate demand for household sanitation facilities that complement its efforts to increase access to safe water supply. This includes construction of a series of latrines in **'model' homes** that demonstrate to communities the health benefits and practical requirements of establishing household sanitation structures. The model home component is complemented by a comprehensive Information, Education and Communication (IEC) campaign.

To complement household/community sanitation initiatives, the project has worked with schools to improve sanitation practices and behaviour. The school sanitation component started with an assessment of the current sanitation in all schools, in collaboration with the **education component** of AKF. Data on the kind of infrastructures, number of pupils, type of soil and the possible size of latrines were collected. CRSP(M) education facilitators worked with existing school councils and parent committees to ensure that separate and well-protected latrines were constructed for girls and boys. Ongoing management of the facilities is the responsibility of the boys and girls Sanitation and Hygiene Clubs supported by School Management Committees (SMCs), composed of parents and teachers, with periodic supervision and technical assistance from CRSP(M). The school latrines serve as demonstration sites for other schools and the whole community in the district.

Hygiene awareness remains a key focus of the **health unit**, with training delivered to school children and communities. Behaviour change communication campaigns are carried out in parallel with activities related to water supply and sanitation infrastructure development, sanitation management and the establishment of WSCs. Local beliefs and practices form the basis for developing messages that are culturally sensitive, appropriate and effective. Through CRSP(M)'s existing cadre of community health volunteers and facilitators, key messages are disseminated using participatory and interactive methodologies (i.e. radio announcements and stories, theatre groups, education materials, posters, t-shirts, etc.).

Establishing an **effective supply chain** is essential to maintaining the project benefits and enabling community ownership over the long term. The programme is working towards engaging the private sector to provide spare parts through a commercial network, which would involve government, manufacturers, distributors, traders and local shop keepers. In addition, CRSP(M) is exploring a credit scheme to help local shops pay upfront costs of stocking spare parts as an incentive to participate in the supply chain.

With the rehabilitation of water points, community members were encouraged to use the waste water for the vegetable gardens, leading to greater vegetable yields for the community. The **rural development** unit of the programme provided technical support in choosing the best seeds and methods for production. The community at large benefited from the increased yield and were able to buy more products. Profits are able to be used for cash contribution for upfront charges and operation and maintenance costs of the water points and for the construction of latrines.

For the **evaluation** component of the project, CRSP(M) introduced a logbook for non-literate users to enable village members to capture relevant information on the functioning of each village water point. This instrument and other data collection tools also gather information on hygiene and sanitation practices, the use of the water points, and the replacement of spare parts. The information is shared with the community and project staff. Monitoring and evaluation instruments have also been developed and used by CRSP(M) to assess the functioning of WSCs. The results are documented and incorporated into subsequent trainings. Evaluation assessments will be carried out in the mid-term and final stage of the project. Lessons learned will be disseminated through reports and workshops.

To ensure that lessons learned at the community level are made available to **national policy makers**, a Cabo Delgado technical advisory group called Water and Sanitation Group has been established by DPOPH. This group includes the Department of Health, a water and sanitation spare parts supplier representative, other organizations working in water and sanitation (including AKF, CARE and Helvetas) and a private sector representative water and sanitation. CRSP(M) works with the DAS, DPOPH and others to **build capacity** to plan, budget and monitor and to use data to make decisions on the direction, content and results of the water supply and sanitation programme. The meetings provide a forum where experiences and lessons learned can be shared so as to identify appropriate solutions to problems on the ground and to be able to propose solutions at the policy level.

Some of the challenges faced in the Quissanga district include:

- Many community members tend to use latrines at night but continue to defecate in the open during the working day. Latrines tend to be built in the villages and near the homes of the village members; however, most of the days are spent in the fields tending to crops.

- Cultural aspects such as the faeces of the father-in-law could not be deposited in the same place as the faeces of the daughter-in-law results in continued open defecation.
- Funds are insufficient to respond to the demand for water points. There have been more EoIs than can be fulfilled.

Some of these cultural and social factors need to be addressed through greater awareness-raising of the risk of unsafe water and sanitation practices and possibly through more latrines being built in new locations. Also, greater support from the government and private sector is needed to respond to the demands of the communities.

Conclusions

The demand responsive approach is an effective method of creating ownership of the water point and placing importance on sanitation infrastructure by the community. The multi-sectoral approach allows the community to realise the importance of access to safe water and sanitation facilities and to changing the beliefs and practices with respect to using and sustaining the interventions.

The AKF intervention is designed to increase dramatically the availability of safe water sources and to ensure the sustainability of water points. To achieve this objective, AKF is taking a multi-sectoral approach while piloting alternative, low-cost technologies and creating stronger, more effective partnerships between communities, civil society organizations, the private sector and government. AKF will continue to work with all stakeholders in the water and sanitation sector in Cabo Delgado, reflect on current practices, and introduce innovative approaches to sustain water and sanitation coverage in the context of extreme poverty and limited public sector capacity.

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Contact details

Ivone Amaral
Av. 25 de Setembro 984 Pemba
Tel: +258 272 21187/8
Fax: +258 272 21189
Email: Ivone.amaral@akf-mz.org
www.akdn.org

Terêncio Duarte
Av. 25 de Setembro 984 Pemba
Tel: +258 272 21187/8
Fax: +258 272 21189
Email:
www.akdn.org