

MAXIMIZING THE BENEFITS FROM WATER AND ENVIRONMENTAL SANITATION

Reducing poverty in Sudan through community water supply

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This paper is written by the Water & Sanitation Adviser to the EU's Humanitarian Plus Programme in Sudan and is based on over three years experience in Sudan and 25 years experience working in Africa. The paper focuses on one of the HPP projects implemented by a Sudanese NGO; El Sugya Charity Organization, who constructed a 30,000 cu.m hafir (water reservoir to collect run-off water) for and with a group of previously neglected villages in North Kordofan State. The paper shows how the NGO built up a partnership with the community before, during and after construction of the hafir and describes how people were involved. But this is not just another water supply project as it has radically changed life in the villages for the better. The construction and filling of the hafir proved to be a catalyst for the State government to do something to assist the communities after decades of neglect. The paper goes on to critically assess how the various interventions have had quite a dramatic effect in alleviating poverty, which is endemic to many rural area of Sudan and has been exacerbated by the 21-year civil war that has adversely affected all of Sudan, not just the south. The paper concludes with some practical learning points for practitioners, civil servants and members of civil society organizations.

Introduction

This paper addresses the following MDGs in the context of Sudan, the largest country in Africa by far:

Poverty eradication

- To halve by the year 2015, the proportion of the world's people whose income is less than \$1 a day.
- Adopt new measures to strengthen institutional arrangements for sustainable development.

Water and sanitation

- Halve by the year 2015, the proportion of people without access to safe drinking water.
- Halve by 2015, the proportion of people who do not have access to basic sanitation.

Environment

- Develop integrated water resources management and water efficiency plans by 2005.

Environmental health

- Reduce, by 2015, mortality rates of infants and children under 5 by two thirds.
- Combat malaria, tuberculosis, and other diseases and enhance health education.

This paper examines how a water supply intervention by a local NGO funded by the European Union is having a significant impact on not only increasing peoples access to safe water and improved sanitation, but also in alleviating poverty in a variety of ways.

Background

The coverage for access to safe water supply in Sudan is about 50%, according to the government. However, as many water points (up to 50% in some localities) are not working (Unicef 2002) it is estimated that only about 25% of the country's 32 million population (projected from 1991 census) enjoy a safe and reliable water supply. Sanitation figures are not available but it is estimated (by Unicef and MoH) that fewer than 10% of the population have access to improved sanitation facilities i.e. a pit latrine. These figures relate to the northern half of the country which is under the Government of Sudan (GoS), the situation is worse in south Sudan in the vast areas that have been under Sudan Peoples Liberation Army/Movement control since the early 1980s.

Dampair villages

The 12 villages around Jebel Dampair in Um Ruwaba Locality of North Kordofan State, were a good example of communities lacking a safe water supply and adequate sanitation. About 20 years ago an earthquake caused the springs at the base of the jebel (mountain) to suddenly and catastrophically dry up forcing women and children to spend about six hours a day walking to, queuing at and walking back from a hafir (man made depression to collect run off water) in the neighbouring village. They carried water in 20 litre jerry cans on donkeys.

The State Water Corporation, the government body responsible for rural water supply, have determined that there is no accessible groundwater in the area, which is underlain by basement rock. There were no latrines; people simply used the bush. Hand washing was not widely practiced.

El Sugya Charity Organisation, a local NGO, conducted an assessment in 2002, which revealed that there was a high incidence of diarrhoea in the area, especially among children under five.

But the most common disease was and still is malaria.

El Sugya Charity Organisation

This NGO which has been working in the water and sanitation sector in Sudan for the last 10 years, responded to a written request from the Dampair community to do something about this unacceptable situation by submitting a proposal to construct a 30,000 cu.m hafir, construct 50 model pit latrines and conduct a comprehensive hygiene education program. This proposal was submitted to the Humanitarian Plus Programme of the European Union.

European Union in Sudan

The EU has been involved in development activities in Sudan since the 1980s. After breaking off diplomatic relations in 1992 because of the civil war, the Humanitarian Plus Programme was launched in 2002 with EDF funding and operated by ARCADIS-Euroconsult (The Netherlands), to assist rural communities to rehabilitate basic infrastructure whilst building the capacity of community organisations to maintain and manage such infrastructure.

Dampair Hafir

El Sugya engaged a contractor to excavate the hafir and seconded an engineer from SWC to supervise the work. Meanwhile, people in the 12 villages were briefed by the hafir management committee on how the water source would be managed. The completed hafir was fenced and the inlet and outlet wells were lined with concrete rings. Lengths of 12" pipe were laid in the inlet and outlet trenches, which had been dug by the community. A small centrifugal pump and a steel overhead tank were installed as part of the distribution system. Finally, concrete troughs for watering livestock were built and a tap stand was constructed for the community to collect water.

The contractor handed over the completed works in July 2003 and the hafir soon filled with water as a result of adequate rainfall in the area. The management committee preferred not to start using the facility until a small seasonal pond which people use for domestic water during the wet season had dried up. So people started to draw water from the protected hafir in September, about a month after the rains had stopped.

Management of the Hafir

The hafir management committee with the help of El Sugya drew up guidelines for the use of the hafir. These were made known to the public through a general meeting and everyone agreed to follow these guidelines. Among the issues dealt with were:

- Tariff to be charged for domestic water and for livestock.

- The pump operator to be responsible for orderly collection of water and for supervising animal watering.
- The management committee to be responsible for setting the opening and closing times for getting water and for deciding when to start using the hafir and when to stop using it.
- Those judged too poor will be exempted from the tariff.
- Priority will be given to domestic water supply over livestock.

El Sugya drew up an agreement with the community in which the community through the management committee, agreed to release 80% of the revenue for the first year to El Sugya as payment for El Sugya in overseeing the management for the initial period and to compensate the organisation for the hygiene education costs it incurred immediately after construction ended.

Official opening of the Hafir

The management committee and El Sugya decided to have an official opening ceremony for the hafir in order to draw political and media attention to this long neglected area, as well as to give the community the opportunity to formally thank the EU for assisting them to get a reliable, safe and convenient water supply after many years without one.

Consequently, the Wali or Governor of North Kordofan State and his considerable entourage rolled up to the high profile opening ceremony on 25th February 2004. After inspecting the hafir and hearing how the community had benefited from this facility in terms of reduced time spent collecting water, better overall health and income from sale of water to nomadic livestock owners and to other villages outside the original 12, the Wali promised that the state government would build and staff a primary school and a health unit to serve people in this area. He also said that the SWC would be instructed to conduct an assessment into subsurface dams on and constructing shallow wells adjacent to the nearby Khor Habil seasonal stream in order to provide more people with a safe water supply.

Spin off effects

Six months after the Wali's visit, the promised school and clinic had not materialised. (Politicians are all the same!) However, the community, inspired by the success of the hafir, had organised themselves and built their own school out of local materials. On seeing this, the state Ministry of Education supplied a couple of teachers and is paying their salaries. For the first time ever, children, especially girls, are being educated in the Dampair area instead of having to walk 10 km to the next village.

Likewise, the community mobilised again to construct a small health unit, which is staffed by a medical assistant from the Ministry of Health.

Because of the increase in the number of people coming to the area to get water for themselves and their livestock,

local entrepreneurs have set up grinding mills in some of the villages which is generating income for them and their families.

Poverty alleviation

This initiative has helped in a practical way to reduce poverty in this area by:

- Reducing the time spent on fetching water thus enabling women to engage in more productive activities.
- Reducing the incidence of diarrhoea in young children thus giving women more time for other activities.
- Bringing primary education nearer thus increasing the enrolment of girls enabling them to become literate and therefore better equipped to engage in small businesses and to engage with the state government regarding access to basic services.
- Providing income to the community from sale of water to nomadic livestock owners.
- Reducing money spent on buying water from vendors who used to bring water in drums by truck to the village.
- Building community confidence so that they can engage with the authorities and other NGOs to gain access to better basic services.
- Encouraging entrepreneurs to establish small businesses in the area thus generating employment and cash flow into the community.
- Putting this neglected area on the political and social map such that the authorities can no longer ignore the needs of the people there.
- Encouraging other similar communities in the area to also approach El Sugya and other local NGOs for assistance to undertake development projects which will have similar economic and social spin off effects

Learning points

(For other NGOs, government institutions and donors)

This paper has shown that for a comparatively small outlay of donor funding, (€50,000 in this case), significant and potentially long-lasting social and economic benefits can be gained by the host community in terms of alleviating and eventually eliminating poverty altogether.

It has also shown that the initial intervention of constructing a hafir (not exactly rocket science) can have profound spin off benefits once the local political decision makers are made aware of what local NGOs in partnership with donors are doing in their area to lift the population out of extreme poverty.

The paper has also demonstrated that local entrepreneurs can start small businesses once there is a certain level of cash flow, business confidence and political good will and support in an area.



Photograph 1. Dampair hafir with Jebel Dair beyond

Concluding remarks

MDGs can be achieved if donors have the flexibility and confidence to support local organisations that are committed to helping their people to alleviate poverty in all its many forms and manifestations.

This is as opposed to supporting big international organisations with their huge overhead and running costs, who are distant from the communities and whose impact on the ground has been shown on many occasions to be rather minimal and unsustainable.

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