

## **WATER FOR THE MAASAI, KENYA CASE #140**

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This case describes a borehole rehabilitation project in Southern Kenya, East Africa and discusses ways and means to take culture and traditions into consideration in water projects.

### **ABSTRACT**

#### ***Title of case***

Water for the Maasai

#### ***Subtitle***

A borehole rehabilitation project in Southern Kenya, East Africa

#### ***Description***

In the Kajiado district in southern Kenya, pastoral nomads called Maasai, reside with their own specific culture, traditions and worldview. The ancient volcanic area in the district is quite dry, and for half of the year there is no water in the rivers. Groundwater is therefore important for the water supply to the Maasai. Boreholes are available roughly every 25 km within the district; however several of them are not working. The operating boreholes are used daily or every other day by the Maasai and their cattle. When it rains the Maasai get water from rain water pools. Temperatures are high in Kenya, cattle walk into the pools to drink and soon the water pools are polluted by excrements of the animals. This water contains a lot of bacteria and is not good for human consumption and causes diseases. It's better to use water for human consumption from the boreholes the whole year. In the dry season, many months each year, there are no pools at all. Some years it does not rain at all. Then both cattle and men depend on borehole water. At visits people are taught not to drink surface water from pools because of bacteria and pollution from cattle and wild animals.

The "Water for the Maasai" project was initiated in 1997 with the purpose of rehabilitating as many boreholes as possible in the Kajiado district. This has been carried out through the donations and experience of the Water Supply Company Drenthe (The Netherlands) in close harmony with AMREF (African Medical & Research Foundation) Flying Doctors, an NGO operating in the region. The project period is some ten years. The first five years has focused on the rehabilitation of boreholes, while the next five-year period is expected to concentrate on financing, operation, maintenance and building up an association that takes over the whole project after ten years, including some technical men of the AMREF staff and the cars they use. All activities will be done in close cooperation between the Maasai, the donor and the NGO. Participation, education, training and long term guidance are the key issues in this cooperation. The Maasai pay contribution to the association; 12% the first year, building up to 100 % over subsequent years.

Since the project's initiation, more than 60.000 Maasai people with over 100,000 cattle, goats and sheep have gained access to a source of good quality groundwater at relatively short distances. Through training, the Maasai now maintain the diesel engine on the borehole sites and are doing small repairs with AMREF helping if necessary. Due to respect for culture and traditions, the Water Supply Company Drenthe and the NGO AMREF have been able to foster a substantial amount of trust between themselves and the Maasai people.

The people have to pay for the water from boreholes and cattle owners pay for the water per cow.

### ***Lessons learned***

Building the necessary trust between Donors, NGOs and native populations takes time. This can be obtained by carrying out a pilot project, using a local NGO as a link between the Donor and native population, recognising cultural differences and by identifying the most suitable people to invest in for education and training. It is also very important to translate the significant financial contributions required into proportional terms that are more identifiable to the locals. It also became apparent that applying the idea effectively in one community would encourage others in the region to adopt the initiative.

### ***Importance of case for IWRM***

In this case study a successful approach to providing local development aid for water shortage problems to a native population is described. Although technical operations are part of the project, the importance of this case lies in providing services in differing social and cultural conditions.

Since the start of the project in 1997 about 40 communities (villages) have joined the project. This means that about 60, 000 Maasai have been involved. They have all paid 25% of the hardware and contributions for the association. IWRM focus is also seen from the high attention paid to education, training and capacity building and transfer of ownership.

Gender issues and empowerment of women is vital to the project. Women join committees and get influence in them, children in general have more time to go to school, and more girls go to school until the age of 18.

The Maasai will be owners of the project after 10 years, with full responsibility of organising in an association that also cares for salaries, technical personnel and cars. Today the Maasai grow corn and vegetables on large scale in order to generate money for improving living standards and the water supply system. They sell vegetables to hotels and neighbouring communities and are able to save money for the future. They are also able to supply water for cattle markets.

### ***Tools used***

- B1.9 Civil society institutions and community based organisations
- B2.1 Participatory capacity and empowerment in civil society
- B2.2 Training to build capacity in water professionals
- C4.2 Communication with stakeholders
- C7.1 Pricing of water and water services

### ***Keywords***

Maasai, community based organisations, participation, ownership, water supply in different cultural conditions.

## **MAIN TEXT**

### **1 Problems**

In Southern Kenya, in the Kajiado district – the highlands between Nairobi and the Tanzanian border, groups of Maasai populate the vast grasslands (savannahs). They originate from nomadic tribes, who moved along with their cattle in search for fresh grazing pastures. These Maasai people have their own specific culture, traditions and worldview. At present the Maasai are still in the process of settling within communities, with different families who chose living together. They live in huts, made of branches and cow manure, the women do the housekeeping and the children herd the goats and sheep. These families are fully dependent on their cattle, sometimes comprising thousands of animals.

Naturally, water is of vital importance to these people and their animals. Like most arid regions however, rainwater pools and ponds are scarcely available in the Kajiado district. The ancient volcanic area is quite dry and for half of the year there is no water in the rivers. Surface water is heated in this tropical area to 30 ° Celsius in a short period of time and can be a source of harmful bacteria. The best option for health is to use groundwater from boreholes.

In the district there is a borehole available roughly every 25 km, if it is working. The Maasai men bring their cattle from the savannah to the borehole daily or every other day.

The districts inhabitants primarily depend on man-made wells, mostly drilled between 1970 and 1990. These wells, having deteriorated over the years, are now in need of repair. Most boreholes, including the generators and pumps (called gensets in this description) are malfunctioning or not working at all. Some are clogged, with collapsed walls; others equipped with broken pumps or damaged aggregates. In addition to the costs of repair being too high for the Maasai, another critical aspect is that there is no system to maintain and manage the existing water supplies. In the past, a donor would provide a new pump or generator for free and then leave. When the newly supplied generator failed, the Maasai would need to move to another borehole as no donors were available to provide new generators. This approach to aid provision has proven to be unsuccessful for many boreholes throughout the district.

The Maasai are highly dependent on the water. They need it for sheep, cows and donkeys. When there is no water or fresh grass the men have to move around with the cattle. Women and children who live in villages are highly dependent on water from the boreholes. The whole community has had to learn that they have to pay for the water supply that whole year and not just when there is no water in the pools.

### **2 Decisions and Actions Taken**

The ten year long “Water for the Maasai” borehole rehabilitation project started in 1997. Prior to undertaking the work, the donor Water Supply Company Drenthe put a lot of energy into a pre-assessment of the situation to determine how to best assist the Maasai communities. Of primary interest were the areas physical geographic and social geographical aspects (i.e. how to provide assistance without infringing upon the culture and traditions of the Maasai)

The project aims were formulated after the physical and social aspects were determined to have been adequately studied. The project aims included ; the rehabilitation of as many boreholes as possible in the Kajiado district ; the creation of an association responsible for borehole operation and maintenance within the first 5 years ; and the financial and technical transfer of the project in the following 5 year

period. After ten years it is expected that the project will be owned by the Maasai. The project is based on a formula which aims to provide ownership to the Maasai through a) increased education in the administrative and technical aspects of the work, b) on-the-ground training, and c) cooperation between the Donor, NGO and the Maasai for trust-building. The eventual goal will be the financial involvement by the Maasai for themselves.

In the project Water Supply Company Drenthe from Holland and AMREF Flying Doctors (NGO) are working together closely. Water Supply Company Drenthe provides their experience, funding sources, and guides the project. The non-governmental health organisation of Africa, AMREF, facilitates the project.

After a community states their intent to participate in the project, Water Supply Company Drenthe prepares a proposal for the hardware required and outlines the financial commitments the Maasai must undertake to implement the project.

Two prerequisites for Maasai communities to be able to take advantage of the project are:

1) An elected water committee must be formed to handle issues regarding the project on behalf of the group.

A bank account needs to be opened by the Water Committee and the community must prove that it saves enough money to pay for 25% of the hardware for rehabilitating the boreholes and operation and maintenance.

2) The donor and NGO focus on the direct involvement of the Maasai in project activities. Should the Maasai community wish to modify or abandon the project, it is their prerogative to do so as they are not forced to participate by the donor or the NGO.

### **3 Outcomes**

After five years, 34 boreholes were rehabilitated for 34 Maasai communities. A total of 60, 000 Maasai-people with over 100,000 cows, goats, and sheep have been provided access to a relatively close source of good quality groundwater. In Figure 1 the locations of the rehabilitated wells are presented. Between 2003 and 2006 an additional 6 communities will join the project, which would make the total number of served Maasai up to 65,000.

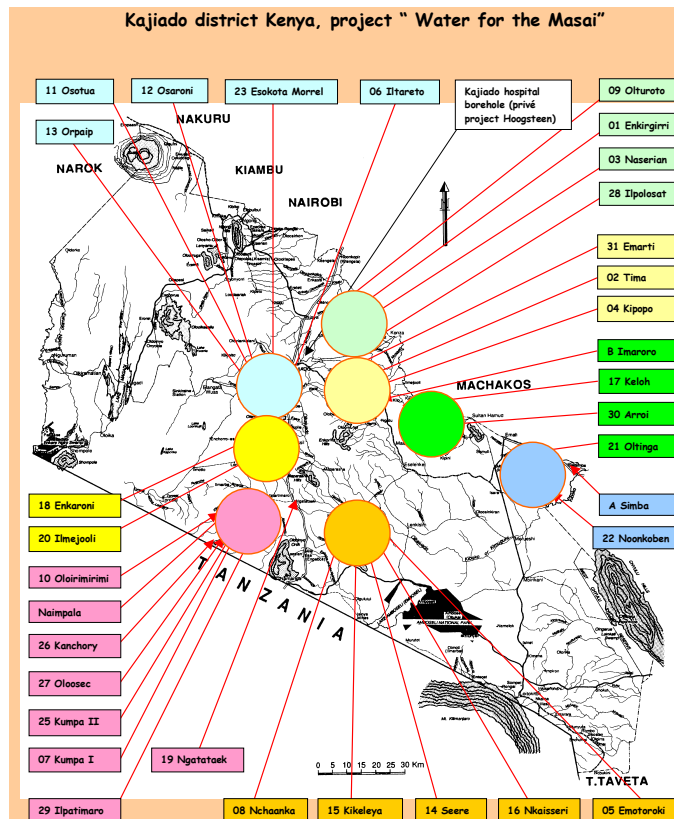


Figure 1: Map with communities and clusters

Good quality groundwater at a relatively short distance is now accessible throughout the year. Through the project training the Maasai people now maintain the diesel engines on the borehole sites, with the AMREF crew providing some assistance with repairs if necessary. Due to the donor and NGO's respect for culture and traditions of the Maasai peoples, there has been a great build up of trust between them. This trust was facilitated through the use of a local NGO and group meetings that include the donor once or twice per year.

Training in relation to the project is also in organizational terms. If a Maasai community wants to join the project they have to agree to all details and regulations. That is they have to pay for 25% of the hardware, be responsible for it and as owners of the equipment be trained to maintain it. Furthermore, they must install a water committee (6 men, 4 women), pay contribution for the association (to be fully self supporting at the end of the project, get training in capacity building and be able to run the organisation, open a bank account for saving money. Support from the NGO AMREF will continue for a long time and the technical people from AMREF will get salary from the association after the project has finished in order to ensure that boreholes do not fall into disrepair.

In order to let the 34 communities cooperate in one Association, the communities are clustered in 6 Borehole Cluster Association Committees (BCAC). In 2003 the Water Supply Company Drenthe, AMREF and the Maasai have begun to merge the six BCAC's into one Association. This Association for the district will contain a warehouse for spare-parts and repairs. This Association will be guided for at least another five years. In Figure 2 the scheme of association building is presented:

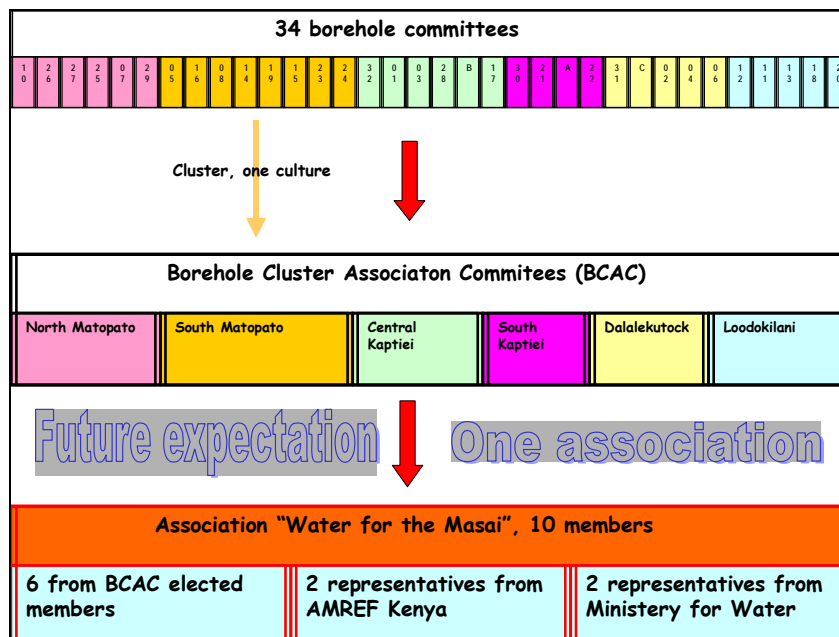


Figure 2: Scheme of association building

The aim for 2007 is that the Association will be fully self-supporting. The Maasai families will contribute financially to gain ownership and responsibility for the association, including technical personal, cars, spare part stores, etc. To support the activities, the Maasai will pay 12 % of all costs in 2004, and will gradually take over the total amount of costs by 2006. All Maasai agreed to pay and received training to run the associations. They were trained by AMREF people, who will be depending on their salary from the Maasai associations. This mutual relationship is one of the keys to the success of the project.

Aid programs often give little or no attention to the cultural, traditional and technical differences of the local communities the donors are trying to assist. Misunderstandings and distrust often result in project failure within a very short period, it is therefore critical to note that the success of the “Water for Maasai” project can be attributed to the Maasai’s, the NGO’s and Donor’s respect for one-another’s cultures, traditions, and technologies through a comprehensive trust-building initiative.

#### 4 Lessons learned and reproducibility

Building up trust between the donor and the Maasai should be of critical attention. It was achieved by setting up a pilot project in the region as soon as possible to illustrate to the people that the donor is committed.

It takes time to convince populations like the Maasai to contribute to the hardware costs to gain ownership. This was primarily due to two reasons:

The concept of paying for foreign assistance is new for many Maasai communities, and it takes time to convince the communities of the value of the project.

The Maasai people have their own view on the world, and the donor has to recognise this. The best way to provide professional and culturally sensitive training and education is to cooperate with a local NGO working in the area. Better still would be to have some employees of the NGO to be from the communities themselves, or to have a solid background of the cultures and traditions of the communities. Past ‘cooperation’ with foreigners has not always been favourable to the Maasai people, so there can be significant barriers to trust building.

Be extremely attentive to cultural differences. These include:

Donors must be sensitive to cultural values in order to avoid making propositions that are unreasonable to the local people. (i.e. telling a Maasai to sell a cow to participate

in the project may seem like a good deal to the donor, but the value of that cow in Maasai society is considerably higher than that of the donor's.). It is important to sufficiently explain the costs and benefits of financial transactions on the local scale. Recognise community competition. Equipment installed in one community should not be simply moved to another without consent as a means to relieve the burden on the donor.

Do not try to profit on the community's acceptance of your assistance – (i.e. taking photos without permission that could be perceived as a measure to make money selling the pictures to others)

Patience is necessary in developing countries due to the extremely poor technical and economic conditions in some regions.

Invest in education to the right people. For example with the Maasai, boys aged between 12 and 20 years (called the Moran) traditionally have many rights with apparently relatively few responsibilities. These teenagers are often uninterested in the proposed training and are therefore generally not suitable for the execution of the tasks involved. But most young people now do attend school.

Be aware of the fact that trying to manage an aid project from a distance can be very inefficient. In this project, it was very difficult to communicate with the Maasai during the rainy season, as the local NGO could not reach the communities.

The incomes of people in the developing world is so vastly different from those in developed countries that even mentioning the total amount of the project budget can be incomprehensible or frightening to the community. It is advised that budgets be presented as they relate to each family to avoid unnecessary concern over budget costs.

Applying the idea effectively in one community will generate others in the region to adopt the initiative.

## **5 Contacts, references, organisations and people**

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Organisations :

WMD (Dutch Water Supply Company) in the province of Drenthe  
AMREF (African Medical & Research Foundation)

References and websites:

[www.aquaforall.nl](http://www.aquaforall.nl)

[www.wmd.nl](http://www.wmd.nl)

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