

Expanding Rainwater Collection in Elerai, Tanzania

Final Project Report

Funded by:

**Help Every Day
Denmark**



Administered by:
Kesho Trust (Tz)
Dar es Salaam, Tanzania

Implemented by:
Ereto Maasai Youth
Elerai, Tanzania



The Kesho Trust

EMAYO ERETO MAASAI YOUTH

Executive Summary

“EMAYO together with the community of Elerai as a whole appreciate very much the support of our partner organization, The Kesho Trust, and the support of the project donor organization, Help Every Day, for their technical and financial support respectively.”

Water is the most critical problem in the Maasai community of Elerai, located in Kilindi District of Tanzania. The Kesho Trust’s partner in Tanzania, Ereto Maasai Youth (EMAYO), developed a rainwater harvesting and storage project in Elerai with assistance from UNDP in 2008-2009, which developed thirty rainwater storage tanks at various bomas in the community. The main objective of the project was to reduce the length of time spent by pastoral women and girls on water collection and help them to use that time for other development activities especially around education and income generation.

Existing metal roofs on public buildings in the community of Elerai are under-utilized for rainwater collection and have the potential to collect significant quantities. Through funds provided by Help Every Day, and in partnership with Kesho Trust (Tz), EMAYO expanded the rainwater harvesting collection system to selected public buildings adding to the storage capacity already in existence from the bomas-based system. The project was very cost effective because the technology is understood and people in the village have been trained in the construction and maintenance of these facilities. Storage tanks were built and gutters added to public buildings for rainwater collection. In addition a water allocation management group was established to oversee the allocation of water resources from the public tanks. Women play a significant role in the development and management of these facilities because domestic water is their responsibility.

The following guidelines were established for the use of the water supply from public buildings:

- water for children at school at lunch time;
- drinking water for community meetings; and
- applications for individuals for emergency use unable to collect water because of illness (excluded from such emergency application would be those with their own tank, or those with a motor bike for transporting water).

The project was funded in September, 2012 by funds raised through Help Every Day. However, drought delayed the building of the tanks because of the stress on people of the community during such times and the lack of available water supply to actually construct the tanks. Materials were gathered and construction started when adequate rain had come to the area which was January, 2013. The tanks were finished in March, 2013. The delays in the project also affected the budget because costs had gone up significantly from the original budgeted amount which was prepared six months prior to actual purchase of materials. Thus in addition to the funds provided by Help Every Day, the community of Elerai contributed an additional 23% to complete the project .

Background

Elerai village, like many Maasai communities are often located at considerable distances from town centres, where government supplied water services are located. It falls on the shoulders of Maasai women to collect water for domestic purposes. Thus the women of Elerai have to walk on average 6 or 7 kilometres to Kibirashi, the nearest town for water for their families and community. Here they are met with long line ups at the few water points, frequent periods when water there is limited or not available and often are in conflict over water with the other town women.

The Kesho Trust has been supporting EMAYO in efforts to implement a rainwater and storage system in the village and this project builds upon the initial previously completed UNDP-funded effort which developed 30 rainwater harvesting tanks in the community. These tanks serve approximately 1,790 people in 26 bomas (homesteads) in the community, and over 460 students in two local schools.

Much of the initial system was boma-based, meaning it was for private domestic water supply shared among family members within a number of the bomas that make up the community. However, public buildings in the village which have increased in recent years typically have large roof areas that are metal clad and offer tremendous potential for water collection. Thus it was proposed to add rainwater harvesting systems to public buildings in the community, with the resulting rainwater collected for the communal use of the entire village.



Activities implemented

Liaison with village government and community at large

EMAYO recently established an Elerai Community Advisory Group (ECAG) which provides a forum for communications among EMAYO and the various interests in the village. For this project, meetings were held with EMAYO staff the ECAG and the Elerai village water committee to establish the roles and responsibilities of each with respect to the implementation of the project. Then EMAYO staff together with ECAG members conducted several meetings with the village council and the villagers to raise awareness and sensitize the community on the process and expected outcomes of the project. The villagers and the village government agreed to provided full support to ensure successful implementation of the project.

Established the village public water board

Together volunteers from the Kesho Trust, EMAYO staff and ECAG proposed a water board to manage the facilities to be constructed and developed an operational guideline to assist the water board during their day to day operations on public water issues. The village general assembly approved the public water board members and the board was given a mandate to work as per the established guideline which was approved by the village government.

Locate and purchase of construction materials including delivery

EMAYO staff together with the community artisans and members of the ECAG surveyed the price of the necessary building materials, then purchased and arranged for delivery of the materials to Elerai village. The majority of the materials come from Handeni as Kiberashi is not as well serviced.

Construction of the three rainwater harvesting systems

EMAYO staff, the community artisans, members of the ECAG and other community members all contributed to the successful construction of the three rainwater harvesting tanks in the three proposed sites - Elerai village government office, Catholic Community Church and the Lutheran Community Church. All three proposed locations had been agreed to by the community members. The community was organized and the work was done collaboratively by both men and women. The local artisans guided the participants in the construction work.



One of the community groups were motivated to build a tank using their own resources after seeing the work resulting from the Help Every Day project. Such initiative is very welcome and is one of the expectations of the rainwater harvesting and storage initiative from the outset. It demonstrates that with awareness of the appropriate and successful technology brought in through projects, community members who have resources can utilize the technology for their own benefit.



Challenges

Delays

Elerai can experience prolonged periods of drought and the rainy seasons [both short and long rains] have not been as predictable as in the past. The impact of this is that the community finds it difficult to concentrate on other community development issues when availability of water and pasture for livestock is so pressing.

In the case of this project, the proposal was submitted at the end of the long rains and the project was approved and money received during the dry season. It meant that while some preparatory work could be done, the actual labour of assembling of materials and construction was simply not possible until sufficient rain had come to relieve the pressure on the community so they could spend the time in construction activity and to actually provide an adequate supply of water for construction. While the short rains were expected in late 2012 [December] little rain actually came until into the new year which delayed the project even beyond the time frame which might have been expected.

Budget

Related to the challenge of delays is the impact of such delays on the project budget. Because the proposal was submitted in June, 2012 and purchase of materials did not actually take place until December and January, there was a significant difference in the cost of materials. Insufficient provision for escalating costs was made in the proposal. However, it is to the credit of the community that through negotiation they agreed to contribute the rest of the cost of construction. Their commitment was strong and they supplemented the funds to achieve the proposed goal of three public tanks. Similarly the levels of participation were good and people were keen to contribute to the work.

Conclusion

The construction of the three rainwater harvesting systems at Elerai village was successfully completed despite various challenges that delayed the completion of the project including the delay in community engagement in the project due to prolonged droughts. The support from Elerai village government and the community in general made this project successful.

The pastoralists at Elerai village are aware of the benefit of having the rainwater harvesting tanks from the previous project. They believe rainwater harvesting is of great important as ground water is rarely available for drilling and is a costly and unpredictable approach to water security. As a result there is a strong demand for more tanks within the community.

The total number of rainwater harvesting tanks now available in Elerai village is 36 tanks. The minimum need is 80 tanks for 80 bomas available at the village - at least one tank at each boma. Each boma has average of 5 families of average of 6 members. Therefore, the current requirement to reach the minimum target is at least 44 rainwater harvesting tanks.

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