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Calabash Cisterns for Domestic Rainwater Harvesting, the case of Narok County, Kenya

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Collecting domestic water from the Mara river

International Rainwater Harvesting Alliance IRHA

IWA the international water association

RAINWATER HARVESTING & MANAGEMENT

Calabash Cisterns for domestic Rainwater Harvesting, the case of Narok County, Kenya

- Story of the NGO Clean Water, Healthy Village
- Extending capacity through sharing and training
- Promoting rainwater harvesting and storage in Narok county
- International exchanges and confidence building

Clean Water, Healthy Village:CWHV

- Water in coastal Guinee Bissau is saline. Rain is however regular. Collecting rain is common practice, but inefficient due to lack of storage.
- Disease was rife in the villages, especially cholera.
- Clean water was needed. A group of local men started experimenting with the construction of a cistern of 5000 l, based on a design jointly developed with Paul Akkerman, a Dutchman living in the community. The Calabash Cistern was born.
- Since 2008, with Dutch financing, the NGO has been supporting and developing Calabash construction in the Buba area in Guinea Bissau. The concept was based on ferrocement technology employing local skills and local materials, at an affordable cost.

- To date over 4000 systems have been built. Outbreaks have stopped.

Clean Water, Healthy Village

Extending capacity through sharing and training

- Networking initially led to requests from DR Congo and Nigeria for training. Other countries followed.
- From 2014 training is provided on demand. The requesting party provides for the training facilities, and CWHV sends the trainers. Following the training CWHV often finances a further 8 cisterns to ensure confidence building among the masons.

- To handle the demand, CWHV has published manuals in English, French and Portuguese languages since 2019. These are regularly updated and are available for download @ cleanwaterhealthyvillage.com.
- The capacity building has yielded a further 1500 cisterns so far in 16 African countries

Clean Water, Healthy Village

Extending capacity through sharing and training

The capacity to build calabash cisterns has travelled from Guinea Bissau, to DR Congo, Nigeria, Kenya, Malawi, Tanzania, Madagascar, Ghana, Guinee Conakry, Senegal, Uganda and Burkina Faso. Rwanda is likely the next destination.

The objective is to develop local capacity. Local teams that can provide services in rainwater harvesting system development in their own area.

Further experience sharing happens through a dedicated WhatsApp group. Interestingly differences in language have not been an important issue.

Tatirano Social Enterprise, Madagascar, built a rainwater system based on the 10 m3 calabash cistern for a local hospital in Madagascar (Tatirano.org)

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CWHV Kenya in Olekoros

- CWHV operates from two centres: Buba in Guinea Bissau and Olekoros in Narok County, in Kenya. Both centres have some capacity for hosting training sessions on rainwater harvesting and the construction of a Calabash as a storage cistern.
- We maintain three training teams that will also go out to construct RWH calabashes. Altogether we have 3 senior masons.
- In the last 4 years CWHV Kenya has built 300 Calabash cisterns in the Masai area, and another 50 in other parts of Kenya.

CWHV Kenya in Olekoros

Promoting rainwater harvesting and storage in Narok county

- Olekoros was selected for installation of Calabash cisterns as the area has many dispersed homesteads and only some contaminated streams to collect domestic water from. As it rains regularly and in sufficient quantities, 5000 l rainwater storage cisterns will do in most parts.

CWHV Kenya in Olekoros

Women Self Help Group Emburkutia

- In December 2022 a group of women from Emburkutia set up a self help group. They were trained by CWHV in early 2023 and have since constructed 6 Calabash cisterns for rainwater harvesting.
- The group has set up a savings account and want to construct more cisterns. CWHV has initially sponsored their work through training and a small grant. Gradually they will be able to construct more cisterns and substantially reduce their daily water collection burden.
- A great initiative, only possible as a lot of costs can be saved through community self-help.

CWHV Kenya in Olekoros

International exchanges and confidence building

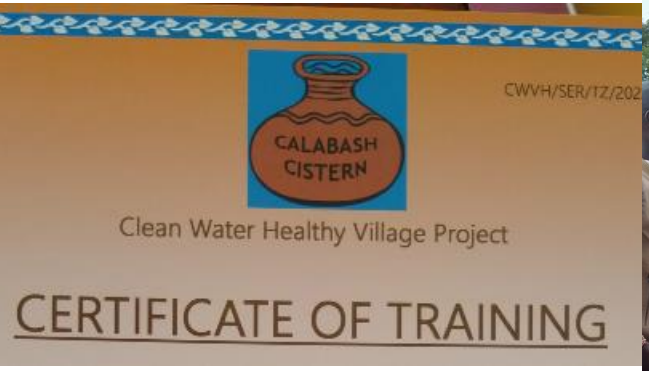
- Trainers of CWHV Kenya has participated in training programmes in Malawi, Tanzania and Guinea Bissau. These face-to-face exchanges of experiences help a lot in ensuring consistency of product and quality control. It is also good fun to see how others are resolving issues. It offers a lot of learning.
- The trainers have in turn become hands-on trainers for NGO teams in Malawi, Tanzania and Uganda. Currently we are discussing a training programme for a NGO in Rwanda.

CWHV Kenya in Olekoros

International exchanges and confidence building

- After training in January 22, the Caritas Kasese team and some private entrepreneurs have constructed 25 rainwater harvesting systems in schools in the hills above Kasese town in Western Uganda. Twenty 5000 l Calabashes were built and five of 10’000 l. There is a lot of interest to start building cisterns for households as many settlements will not be connected to a central water system for the foreseeable future.

Recent RWH training in Serengeti



Dr. Amsabi Mrimi visiting Nyansurura village, Alfred at left

In June 2022, Dr. Amsabi Mrimi, MP for Serengeti District, visited Alfred Tobiko of Clean Water- Healthy Village NGO in Olekoros, Kenya, to learn about cost-effective Calabash Cisterns for rainwater storage. His visit led to a training programme in November 2022 in Serengeti for 8 masons. Dr. Amsabi aims to stimulate construction of RWH Calabash Cisterns in the many villages around Serengeti National Park, so that women do not have to enter the park in search of water. 10 cisterns have so far been built as part of this activity.

Thank you for your attention