I write. You win!

Alec Higgins
Freelance Copywriter
www.iwriteyouwin.com

Article

Written for:
FoodWaterShelter (www.foodwatershelter.org.au)

Description:
This piece was written for the website of foodwatershelter, a non-profit operating in Tanzania. The aim was to provide interesting content for supporters who look at the site frequently, as well as to show off a recent successful aid project.

foodwatershelter...

Home > news & events > news > water in a dry land

Planting the Seeds of Sustainability
Our Permaculture operations have matured to the point where we can now shift our focus to bringing these resilient and life-sustaining systems to the wider community.

water in a dry land

We've been partnering with another great organisation, called Coco, to bring rainwater harvesting to a nursery school in a rural area of Mwanaland. The school is in a very remote location, only reachable by car when the weather is favourable, and far from any public services. The area is very dry, and the nearest water source is a 2 to 3 hour walk away; all water is carried to the site in 20 litre buckets - always by women, occasionally with the help of donkeys.

Over the last few months, our Permaculture Team designed and installed a rainwater harvesting system, so that water from the roof of the school is diverted to large tanks for use by the students and the surrounding households. This alone has made a huge difference to quality of life, and the extra water has allowed us to begin work on installing a school garden that will increase food security and access to nutrition for all the kids.

We're now working with Coco to find ways to bring this simple but transformative technology to more households in the area, to reduce the

---

Water in a Dry Land

The first thing that strikes you about Olomayani Nursery School is its isolation. You can stand in the front door gazing over miles of sun-hardened hills, the only visible features a few twisted acacias and a distant cluster of thatch-roofed mud houses. It seems impossible that children walk to this school, but they do. The second thing is its dryness. The sun is inescapable; it seems to hit the ground with mass as well as heat and light, crushing the soil into a sand-colored concrete, and threatening to do the same to you if you stand there long enough.

Some way off, a group of women is crossing the dusty landscape in quiet single file. They walk slowly, with buckets on their heads, a few donkeys in front and a few children behind. They're fetching water. It's about 4 hours round-trip to the big reservoir in the valley, and most women make this trip three times a week during the dry season. Men do not carry water.

Our noisy arrival in the area - sputtering back and forth over cattle trails in a pick-up as we try to to locate the school - is part of an effort to make water more available in this community, a village made up of about 20 bomas (groups of huts housing an extended family) spread out over some 10 square kilometers of hills here in the Maasai region [of Northern Tanzania].

We're at the school because - unlike most of the houses here, which are thatched in the traditional way - it has an aluminum roof. Mudi, John and Moses, our team at the site, see this as a huge asset. They've all been trained in permaculture, a sustainable design system that teaches people to see opportunity in every challenging situation. 'A hard roof,' Mudi explains, 'is the perfect place to catch water. One little gutter, one big tank and one big rain - that's all it takes to have a store of clean water that the people can use all through the dry season.'

And we can count on more than one big rain. Unbelievable as it seems now, these desiccated hills melt into sheets of mud for months every year - the rainy season brings an enormous volume of water. No sooner does it hit the ground, though, than it runs off to the valleys below, taking a heavy load of soil with it and leaving the land and its inhabitants parched for the much longer dry season. It's this boom-and-bust cycle that we're hoping to moderate.

The gutter-and-tank system we're installing is known as 'rainwater harvesting.' It's incredibly simple, but for the women of this village it will be a life-changer, saving hours of drudgery a day. One of the most common sights anywhere in the vast expanses of East African and Southern Africa drylands is women carrying water, and it's dizzying to think just how many woman-hours of hard labor would be eliminated if every roof here had a system like this.

It would take two things are needed to make that vision a reality: knowledge and money. In this case, the permaculture training our staff had taken provided the know-how - how to calculate the amount of rain a roof of a given size will catch in a given location, how to install solid plumbing and so on. It's not rocket science, but you need to know that it's possible and learn a few techniques. People are always surprised by how much water a small roof will catch even in a short rainy season, and learning that calculation alone can be enough to motivate communities to figure the rest out.

As for money, the main cost is water storage, and the availability of plastic tanks has reduced that considerably. But it's still way out of reach for most of the populations that need it most. We were lucky to get help from Coco, a British organization who has done other work in the region and was excited by this project. Recognizing the huge bang for your buck that such a simple but powerful technology brings, they were glad to provide the funding, and will be helping us to install on other buildings nearby.

We put this system in at the school right on the cusp of the 'long rains,' the season that dumps a year's worth of water in four months. Our last task there was a meeting with about 20 local women. We gathered under an acacia and discussed the possibilities of rainwater harvesting, and while we talked the air became heavy and still and the sky began to darken: the rains were coming. For us that meant a hasty exit to avoid getting the pick-up stuck in the mud. But the women were all grins - they knew the new tank would be full by the next day, and the next dry season would be a little easier.