

HYDRO SOLUTION

Contributing to the mitigation of the global water crisis with a water filter tailor-made for developing countries.

PROBLEM & TARGET GROUP

Worldwide about 884 million people don't have access to clean drinking water. 59 million of them draw their water from surface waters, e.g. rivers or streams.

Contaminated water carries diseases such as diarrhea, cholera, dysentery, typhoid and polio. Each year, this causes approximately 502,000 people to die, particularly children.

VISION & CONCEPT

We believe the key to a sustainable improvement in the living conditions of our target group lies in the safeguarding of clean drinking water. Our concept provides a suitable solution for the parameters the population in our target regions is exposed to.

In order to meet our aspirations regarding sustainability, we want to support economic growth in Kenya in the long run.

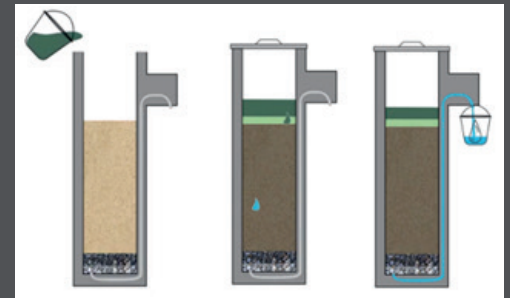
This can only be achieved if the locals themselves are able to develop distribution channels for the filters. This way, they can not only secure their existence, but also support their fellow human beings in the area.



THE PRODUCT

The figure on the right illustrates the manner of functioning of the filter. The principle of the so-called „biosand filter“ was adapted to local conditions by the project team. 50 liters of clean drinking water can be generated daily by only one filter. When used properly, the filter extracts up to 99% of the germs from the water – entirely without electricity and chemicals and with an operating life of at least 10 years.

Hydro Solution made the establishment of the filter in developing countries quite simple by using solely locally available materials, keeping the maintenance very simple and applying a nature bound principle.



PILOT PROJECT

The first destination of the project “Hydro Solution” is the Kajiado County in Loitoktok, Kenya, where nearly 266,000 people live without access to clean drinking water. The majority of the population there derives their drinking water from contaminated surface waters. The lasting drought aggravates the situation even more. At the same time, the unemployment rate in this area has peaked. In cooperation with our German-Kenyan partner organizations YISOG and Ambatana, we were able to instruct three local entrepreneurs in March. This way, we were able to build 12 filters at two schools and an orphanage, supplying about 560 kids and 15 adults with clean drinking water.

A GLANCE INTO THE FUTURE

- » Installation costs of a project: 7,300 €
- » Cost of manufacturing: 25 € (supplies 50 people with clean drinking water on a daily basis)
- » Above average income of 6 € per filter
- » Award winning concept (Enactus Startup-Accelerator, Enactus Germany National Champion, top four of the ongoing Waterrace-Cup)
- » Next steps: setup of a manufacturing facility in Loitoktok, additional projects in Burkina Faso, Zambia, Tanzania and Senegal