

Your theme: Water

For a world without hunger

welt hunger hilfe

2016 REPORT

Dear friends of Welthungerhilfe,



Ever more people are getting access to clean drinking water, toilets and washing facilities all

over the world. This success can be attributed to the building of a large number of new wells and sanitation systems. But their mere existence does not in itself guarantee such solutions are sustainable, unless they are also used and considered to be meaningful improvements by local people.

Welthungerhilfe's approach naturally recognises these needs and addresses them by involving residents in projects right from the planning stage and supporting them by providing training on the topic of hygiene. We also continually monitor whether our measures bring the intended benefits. In this report we present an assessment of the sustainability of water, sanitation and hygiene measures (WASH) in Congo, including lasting impacts after the formal completion of the project.

We consider such studies to be particularly important to enable us to align our activities with the real needs of beneficiaries. Clean water reduces the spread of diseases and, as people become healthier, enables individuals to better meet their other needs such as improving their nutrition. These steps take us closer to our goal of eradicating hunger everywhere we work.

I am very pleased to present our new report on water to you. It illustrates how important your support is and how your contributions help change people's lives for the better.

Warmest regards,

Musque

Mathias Mogge Executive Director Programmes

Publication details

Responsibility for content: Alexandra Shahabeddin, +49 (0)228 2288-419, alexandra.shahabeddin@welthungerhilfe.de
Design: MediaCompany – Agentur für Kommunikation GmbH
Photos: Grossmann (p. 1, 3), Rosenthal (p. 3), Welthungerhilfe (p. 2, 3, 4, 5, 6, 7)
Title photo: Clean water from wells, such as this one in Kot Adu in Pakistan, protects people from diseases.

Haiti/Jean Rabel

Irrigation canals make it possible for farmers to irrigate their fields regularly and achieve good harvests. New vegetable varieties such as tomatoes and aubergines are now thriving in this region.

Sierra Leone/Kenema

Local craftsmen who received training from our project improve water quality and sanitation in often neglected rural areas using their specialist knowledge.



Access to clean water, sanitation facilities and hygiene is a human right. We help people all over the world to attain this right as part of our fight against hunger and poverty.



Afghanistan/ Nangarhar

Alongside the building and repair of drinking water facilities, we are also implementing measures for civil protection such as securing irrigation canals against floodwater.

Pakistan/Muzaffaragarh

People are modifying their behaviour as a consequence of hygiene training. Children learn to wash their hands regularly, not to bathe in dirty river water and to use toilets instead of open spaces.



Nepal/Chitwan

Water, sanitation and hygiene (WASH) clubs in schools create opportunities for girls to discuss sensitive topics such as menstruation. We support the building of sanitation facilities so young women do not have to miss school during their periods.





Ethiopia/Becho district

Training water and health committees helps us to ensure our work is sustainable. Residents gain important knowledge about hygiene, the maintenance of water pumps and requirements for effective irrigation.

Burkina Faso/Hauts-Bassin

an L

Installing new toilets and septic tanks, as well as providing training in hygiene, support disease prevention. Once their health and hygiene are improved, residents can also focus on improving their nutrition more effectively.



India: A 'filling station' for groundwater



If the hard work of laying storage tanks pays off, the groundwater level will rise and hand pumps will become usable again.

The people in the north of the Indian state of Madhya Pradesh have been disappointed over and over again as the rains have failed to fall there. They became desperate as the long drought led to hunger and threatened their lives. Hope has returned due to an innovative concept providing water at 'filling stations' – dried-up wells that have been brought back into use.

The farmers have been pushed to their limits as their land has dried up and their harvests are failing. All too often debts add to their problems, as they rely on credit to see them through bad years. Many families flee to the cities to escape hunger, but a shockingly high number of farmers see no way out other than taking their own lives.

Droughts are not a new phenomenon in south Asia. But traditional and sustainable methods of agriculture used to enable people to deal with their effects. Rainwater was collected and stored in irrigation systems that are thousands of years old. Seeds were retained from the previous season's harvest, soil moisture and nutrients were preserved and pests were controlled in natural ways. Today, the promotion of large-scale monocultures of crops like maize, sugar cane and soya are accompanied by the intensive use of hybrid seeds or artificial fertilisers.

Alongside these changes millions of smallholders have lost their livelihoods. The ecological consequences of these agricultural shifts are also visible



everywhere. Fertile soil surfaces have been eroded and the groundwater level has fallen dramatically. These problems are only made worse by the effects of climate change. The state of Madhya Pradesh is one of the regions worst affected by drought in India. Many wells here have dried up and most of the water pumps no longer function due to the low groundwater level. As a result fields lie fallow while hunger and malnutrition are spreading. The experts of Welthungerhilfe and its local partner organisation, PARMARTH, worked hard to find a solution. They designed a system that improves the situation in the longterm and is so simple, residents can build it themselves. Rather than undertaking the laborious process of sinking new wells, existing ones can be brought back into use. This is how it works: Village residents dig a shaft right next to the existing well and at the bottom connect the old and the new shaft through a pipe. Above this construction, layers of pebbles, sand and boulders filter any incoming water.

Diverting and storing rainwater

Although it rarely rains, when it does so it pours very heavily and a lot of the water just runs off parched soil without being captured or used. The new system collects rainwater channelled from rivers, waterways, pools and lakes from a 6,000-square-metre-wide area and channels it into storage tanks via concrete or clay canals. From there, the filtered rainwater flows into the well through the connecting pipe and seeps down to groundwater level. In this way the groundwater is gradually 'replenished'. Its level rises until the quantity of groundwater is sufficient once again to supply the hand pumps in the surrounding area, providing local families with drinking water. In order to ensure farmers do not use up precious drinking water for irrigation and to preserve the groundwater level, Welthungerhilfe is also promoting the building of new rainwater tanks and the revival of existing ones close to fields.

The location selected for the pilot project served two particularly badly drought-affected villages: Nadia and Pania. Welthungerhilfe project manager Sanjib Dey recalls: "Many residents were sceptical to begin with, because the concept of storing rainwater in this way was new to them. But after we had explained the idea at several meetings they were enthusiastic." Filling-up stations like these have already been installed at twelve wells with a capacity of up to 153,000 litres per day. Nearly 1,000 women, men and children profit from these revived water sources. Sanjib Dey adds: "If the groundwater level recovers, every household in the region will feel the benefits. And we really hope that this will prompt the government to also take up this innovative idea."

After thousands of desperate landless and indigenous people, smallholders and agricultural workers demonstrated to draw attention to the water emergency in the spring, the Indian government agreed to take measures for groundwater regeneration, rainwater storage and reforestation. Welthungerhilfe and its partners will gladly contribute their experience to support this effort. We have a long and successful record of work on integrated water management to support sustainable agriculture and traditional systems.



When the wells in the village dry up, women and girls have to walk a long way to get to functioning water facilities.



Raising groundwater levels: filtered rainwater flows from the storage tank into the dry well.

A study showed that with a reduction of 15 minutes in the time needed to collect water, 12%

more girls would attend school.

76 million people in India do not have access to clean drinking water.

Congo: Success in difficult conditions



After the end of the project, storage reservoirs and water tanks remained intact and continue to reliably supply water to the people in Goma.

There is scarcely a region in the world as unstable as the Democratic Republic of Congo. After years of violence there are still tens of thousands of refugees and displaced people living in camps or with host families in the province of North Kivu alone. Their everyday lives are made easier and their health is protected by three water, sanitation and hygiene (WASH) projects in the region. We wanted to find out whether the improvements were sustained after the completion of our projects. A current study reports: Yes they were! In addition it gives advice on what more we can do to adapt our projects to conditions in crisis states such as Congo.

Maintaining water and sanitation facilities in rural parts of Africa, and keeping them in functioning order in the long term, is currently very difficult. This is an even bigger problem in fragile states, whose governments are neither willing nor able to provide basic services such as supplying water. These conditions are taken into account by Welthungerhilfe when developing its work in Congo. Through the implementation of three projects, a total of 763 WASH systems have been installed in the last two years, ranging from wells and water pipes to toilets.

"It was important for us to find out how sustainable our systems are in an unstable country like Congo, what we can do to improve them in the future, and how transferable these results are to similar countries," explains Welthungerhilfe WASH expert Stephan Simon. A study was therefore carried out to evaluate all three completed projects. We did this through local assessments of water systems, and by interviewing users and water committees.

One of the projects lies in the Rutshuru region where thousands of people found refuge, both in camps and with host families in villages, after fleeing or being displaced by armed conflicts. Water is now channelled down from sources at higher altitudes via pipelines. Large tanks store this precious commodity for families who can then fill their containers at central collection points. A total of 65,000 men, women and children have benefitted from this enormous improvement in water provision.

Addressing problems and finding solutions

Welthungerhilfe is also providing sanitation facilities in the form of new toilet blocks with lockable doors and adjacent washing facilities. A fifth of all installations are accessible for people with disabilities – providing an entirely new experience for a group whose needs are rarely met in Congo. Water committees have been established to ensure the systems continue to function in the long-term. The committees take care of maintenance, cleaning and user fees to cover any potential repairs.

The positive findings of the study conclude that all systems continue to function, water quality has improved significantly, the people are much healthier as well as grateful for I was particularly pleased that the study found several water committees were so engaged and motivated that they had voluntarily extended their new drinking water system paying all the costs and providing the labour themselves.

Stephan Simon, Welthungerhilfe Expert for Water, Sanitation and Hygiene (WASH)



A fence protects the water point from free-roaming animals. The animals have access to other water sources.

the improvements in their living conditions. The study also highlights some problem areas. It transpired that the longevity of some of the materials and levels of workmanship did not meet the requirements specified by Welthungerhilfe. At some locations it was also found that maintenance staff lacked the necessary skills.

Stephan Simon explains: "In countries like Congo, the level of investment in education and training is very low, resulting in a shortage of skills required for crucial occupations. We have committed ourselves to increasing our efforts to train water committees and communities, to ensure they really are able to repair and maintain sanitation systems themselves. We will also intensify training in the skills required for administration and financial management. Contracts with local firms that supply materials and participate in construction will be more precisely formulated to ensure nothing goes wrong."

A more prominent role for village authorities

When it comes to planning new projects in similar crisis countries, Stephan Simon has noted a number of other lessons: The study showed that up to one-third of users do not pay any fees for the water provided, because they simply cannot afford to. In future, solutions will be considered for particularly poor families while also designing safeguards to avoid conflicts arising among people. Traditional village authorities will be more closely involved in finding solutions right from the start. They might, for example, find ways to motivate users who could afford to pay but do not do so, to start making contributions. They can also explain how important it is for the whole community to take responsibility to ensure everything is kept in good condition.



The Beni water committee ensures that there are sufficient reserves to pay for any necessary repairs to water points.

Did you know?

The many facets of water



Access to clean water is a human right, but millions of people are still waiting for it to become available to them.

1,000 litres of water are needed to produce one kilo of bread.

15,000 litres of water are needed to grow enough feed grain to produce one kilo of beef.

100 percent more food will be needed in developing countries by 2050. This means more water will be needed for agricultural activities.

70 percent of global water consumption is used for irrigating farmland. This figure is rising.

1,400 children under the age of five die every day from diarrhoea caused by contaminated drinking water, a lack of toilet facilities and inadequate hygiene.

In sub-Saharan Africa women and girls spend 40 billion hours a year collecting water.

A 40 percent reduction in diarrhoeal diseases could be achieved by regular hand washing.

These facts speak for themselves and make it obvious that water is essential for every aspect of life. Its usage is inextricably linked with the pattern of global development. Wells are of limited value in the absence of good hygiene.

We are campaigning with our international partners for sustainable supplies of drinking water and sanitation facilities to be made available to everyone, on an equal and permanent basis. We are also helping people protect their health through better hygiene practices.

Welthungerhilfe approves about 20 new projects targeting these issues every year. Each project benefits an average of about 50,000 people. Our geographic focus is on rural areas in sub-Saharan Africa and Southeast Asia. We also support the political campaigns of partner organisations to claim more rights for people to have access to water.

Welthungerhilfe, IBAN DE15 3705 0198 0000 0011 15, BIC COLSDE33

Deutsche Welthungerhilfe e. V., Friedrich-Ebert-Straße 1, 53173 Bonn, Germany, Tel. +49 (0)228 2288-0, Fax +49 (0)228 2288-333, www.welthungerhilfe.de