Everything begins with clean water

An idea that keeps growing. Trunz Water Systems AG is ensuring more and more people in remote regions have access to drinking water. Clean water is the key to growth.

Text: Ursula Trunz

The TWS 200 mobile water treatment plant in use at a waterhole in Kenya.

It is simple curiosity: no matter where you are in the world, people just seem to gather when a technician from Trunz Water Systems turns up. Whether in Ethiopia, Italy, Pakistan or Venezuela, the pre-assembled water treatment system he unloads from his van attracts young and old alike.

He installs a solid combination of proven components – a complete filtration system with pumps and a photovoltaic system or a wind turbine to deliver energy. Together, they point the way to a great vision: clean drinking water for people in remote regions.

The technician then turns on the tap and pure, clear water flows from the pipe for the first time. All the components are working like a dream. He passes the first glass to one of those standing nearby. But this man refuses it, unable to believe his eyes. You mean we can actually drink this water? The technician himself swallows the first mouthful. Relief all round, followed by joy, laughter and excitement. Now they all want to drink.

This is the moment when the vision of Trunz Water Systems becomes reality. Water, the most valuable asset on planet Earth, clean water, the essential ingredient for growth and progress, is once again being made available to a few more hundred or thousand people.

The chance to develop

Chief Operating Officer Lars Willi looks after the markets for South-East Asia and Africa. Just recently, he found himself driving along dry and dusty tracks in searing heat. Conditions in Steinach (in the canton of St. Gallen) were somewhat cooler when Lars Willi returned from Kenya. The contrast with the company's headquarters near Lake Constance could hardly be greater. Once again, he has just been through the full range of emotions, from curiosity and scepticism through to joy and gratitude. And this is the experience which comes with every trip: "Women no longer have to walk miles to the next water source and the children have the chance to develop into healthy adults. People no longer fall ill because of drinking polluted water."

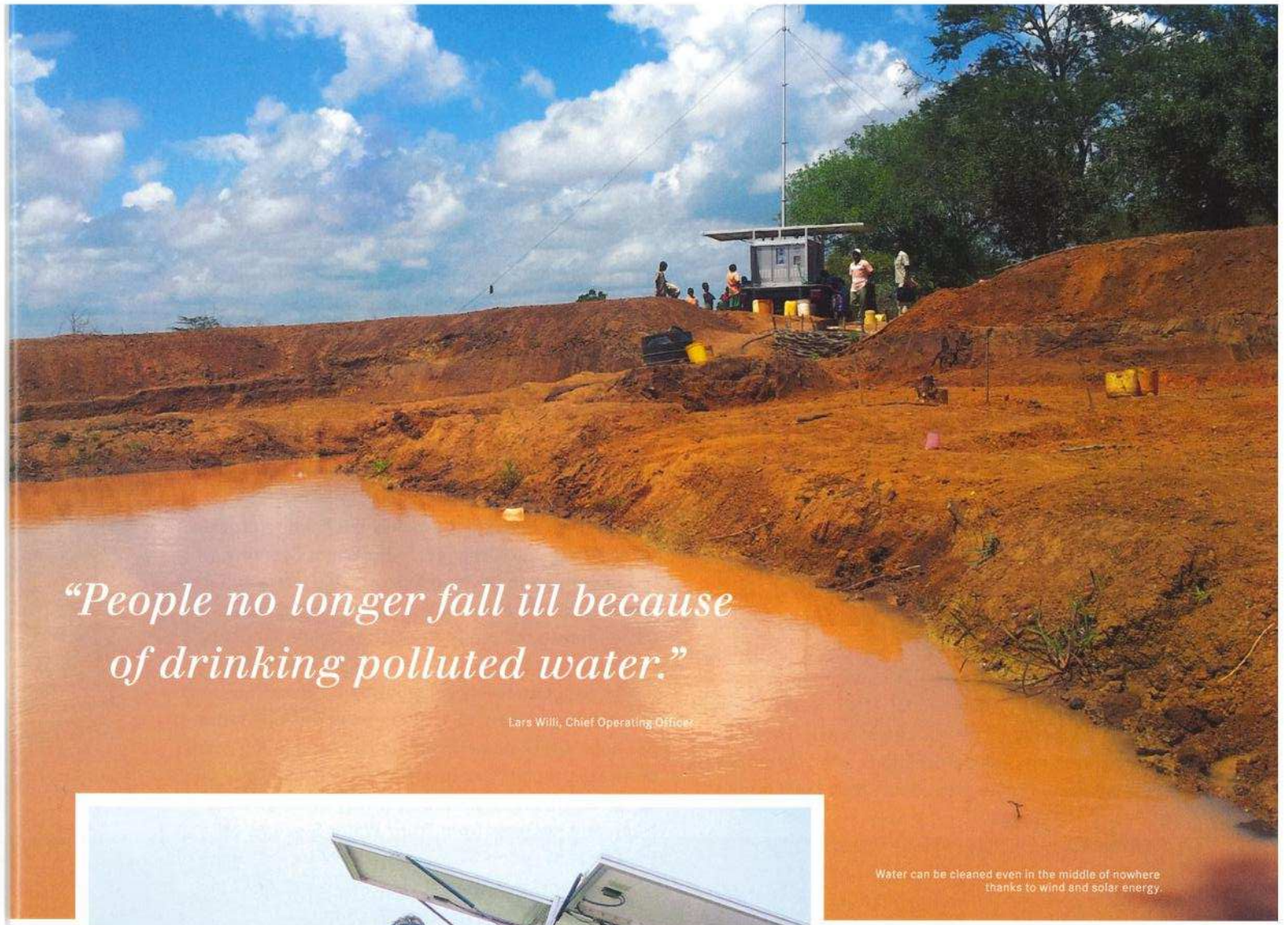
Head of Marketing Andrea Trunz cannot help but laugh: "We could write books and fill photo albums to bursting. My colleagues only ever sound this enthusiastic when they have just returned from an installation trip. The emotional payback from our work is massive." Her credo pops up in black and white on her screen saver throughout her working day: "Give and you will receive. Help others succeed and you will succeed yourself."

A different kind of marketing

This is not just a pure marketing exercise involving the hard-nosed selling of water treatment systems. It is more a case of ensuring the self-sufficient, energy-efficient and environmentally friendly systems from Trunz Water Systems supply water on a sustainable basis and ensuring that this water is available at a price people can afford. As Andrea Trunz puts it: "We represent a complete business model."

If a water treatment system is to work over the long term and help people to develop, there has to be a certain amount of organisation. First of all, there has to be a lender bank, a supportive development agency or a national government to start the process off. You also need some kind of corporation, this may be the state water company in some countries for example, to be responsible for the system and ultimately an operator to sell the water on behalf of the corporation at an affordable price so it can repay the loan or increase the financial resources available for further projects.

"We call this business model the 'Water Shop Concept'," explains Andrea Trunz. "In order to raise its profile and expand the use of the model, our sales partners in the individual countries tend to operate as project developers rather than just as a sales force. They know the important partners on the ground and are familiar with the needs of the groups within the local population."



Water can be cleaned even in the middle of nowhere thanks to wind and solar energy.

Around 3 million people have been left homeless and without functioning infrastructure following a major earthquake in Pakistan. Illnesses and epidemics break out quickly due to a lack of clean water.

Curious villagers marvel at the state-of-the-art equipment. The children drink clean water for the first time. Solar-powered desalination equipment was installed in their village of Beheloke in Madagascar.

Social entrepreneurship

Andrea Trunz goes on to explain how the 'Water Shop Concept' promotes social entrepreneurship. Social entrepreneurship ensures developments are sustainable by building expertise on the ground and thereby creating opportunities for people to find employment and earn an income. These opportunities can then help spur further developments. The idea has been gaining ever more momentum in the world of collaborative developments and leads Andrea Trunz to an important statement: "As a for-profit company, we only make any money on our water treatment systems themselves – we do not make anything on the sale of water." Trunz Water Systems only lays the foundations and passes on its expertise. The financial backers and the corporations and operators with responsibility on the ground can then build on this.

Madagascar is a case in point, where the coastal town of Beheloke was a sea of beaming faces on 4 October 2012. This was the date of the official opening of Trunz's Brackish Box water treatment system. It cleans and desalinates brackish water from a well near the sea. Since then, the 2,200 inhabitants of Beheloke have had access to up to 5,000 litres of drinking water a day. WWF Switzerland, WWF Madagascar and the Swiss Solarspar association are behind the project. The commune of Beheloke entrusted the operation of the equipment to a cooperative. This duly formed a committee for this purpose, which WWF specifically trained in its duties and is now responsible for ensuring the project remains sustainable. Specially trained local technicians maintain the system, while members of the cooperative support the village population with hygiene matters.

Lars Willi knows just how complex these projects can be: "It can take time to bring the right people together." But it is the social dimension which continues to drive the company on with each new project. By passing on expertise and developing networks, Trunz Water Systems is able to create jobs in both the local economy and in eastern Switzerland where the company is based and the systems are developed, manufactured and assembled.

Two water bottles in Afghanistan

Lars Willi is particularly fond of showing people a certain picture: two PET bottles full of water, one brown, the other clear as crystal. "The picture was taken near the border between Afghanistan and Tajikistan. We set up a system in this area in a park for long-distance lorry drivers to clean the heavily polluted water from the Panj River, which forms the border." Lars Willi goes on to explain how Trunz Water Systems also fitted out the British Embassy building with water treatment systems in the Afghan capital of Kabul.

The first model was once mainly intended to provide relief during catastrophes. Trunz Water Systems has continued to develop this over the years and it remains part of the product range. An ordinary trailer makes the ready-to-operate system mobile, turning it into a kind of water trailer. Depending on the pollution level of the untreated water, the system can produce up to 1,200 litres of drinking water per hour. Other models can also be used in the event of a catastrophe: shortly after the earthquake of 12 January 2010, Haiti took delivery of seven water treatment systems from Trunz Water Systems on the initiative of the Venezuelan government. Since these were in storage in Venezuela, it was easy to ship them to Haiti without delay.

The team at Trunz Water Systems is buzzing with further technical and marketing ideas to help better establish water treatment systems around the world. Indulging in a bit of management speak, you might say this start-up company is keen to become a global player.

But the real fascination and motivation go beyond mere performance figures and technology issues. It is more about improving the prospects of others: prospects of development and growth and prospects of a better life. All thanks to clean water.

"Our water treatment systems need neither chemicals nor a diesel generator."

Remo Trunz, owner of the Trunz Group

Water from the Panj River, which forms much of the border between Afghanistan and Tajikistan, before and after treatment.

Company founder shows courage

Economists might describe Trunz Water Systems as still being in the start-up phase – it is not yet ten years old. CEO Ralph Hangartner came to Remo Trunz, the founder and owner of the Trunz Group, in the mid-2000s with the idea of a stand-alone system for generating power and treating water independently of the network. Remo Trunz had, for his part, founded a company for the assembly of ventilation and air conditioning systems in 1972, and has since built this up into a business with 180 employees. Under its holding company, the Group now comprises Trunz Luftkanalsysteme AG, Trunz Metalltechnik AG, Trunz Fahrzeugtechnik AG and Trunz Water Systems AG. Production is split between Steinach, Wittenbach and Langenthal. The development, sales and administration teams are based at the technology centre at company headquarters in Steinach. This was opened in 2009.

As Remo Trunz reminisces: "It took courage as a regional company and supplier to various industrial sectors to launch the water treatment systems as our own end product for the global market." But he has never been afraid to take on new challenges and believed in the long-term potential of the idea right from the start. A small team continued to develop the existing prototype until it was ready for the market.

These days the product range covers a wide variety of possible needs. "As a system integrator, we have the expertise and the right components and are able to put these together to make a system which functions reliably and is environmentally friendly in every respect. Depending on the model, fresh water, brackish water or salt water can be turned into drinking water, and always without adding chemicals. Because they are operated with energy-efficient solar or wind power, our systems do not require a diesel generator either. This would only consume fuel, incur ongoing costs and emit CO_2," sums up Remo Trunz.