

Donations

Your donation helps with the production of water backpacks for use in disaster areas.

Donation to: World University Service

Keyword: Paul

Bank: Bank für Sozialwirtschaft

IBAN: DE95 3702 0500 0007 2321 00

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Please indicate the address for the donation receipt!

Contact

The device can be ordered directly from Prof. Dr.-Ing. F.-B. Frechen at the Urban Water Management Department of Kassel University. The water backpacks are assembled for use in the department and sold through the The WaterBackpack Company GmbH, a company that was specially founded for this purpose in Kassel. All of the donations collected for **paul** in cooperation with the non-profit-making organisation WUS (World University Service) go into the production of the device.

Contact person:

Prof. Dr.-Ing. F.-B. Frechen
Urban Water Management Dept.
Kurt-Wolters-Str. 3, 34125 Kassel
phone 0561/804-2869
eMail siwawi@uni-kassel.de



www.waterbackpack.org

paul around the world

paul has been in continuous service since September 2010 and has been working very successfully.

Almost 1,300 devices have been dispatched to date around the world. Apart from national and international organisations, it is very often private individuals who want to help families and friends abroad. **paul** is helpful for not only water purification but also for educational purposes on the topic of water.

- 2010**
 - > **paul** in Pakistan after flooding
 - > a major earthquake shocks Haiti - **paul** helps
- 2011**
 - > **paul** in schools in Indonesia and Haiti
 - > **paul** helps the victims of flooding in Thailand
- 2012**
 - > the first **paul** is sent to Myanmar
 - > the **paul** research project in Columbia
- 2013**
 - > **paul** for schools and a hospital in Cameroun
 - > **paul** helps after the typhoon on the Philippines

A quick calculation

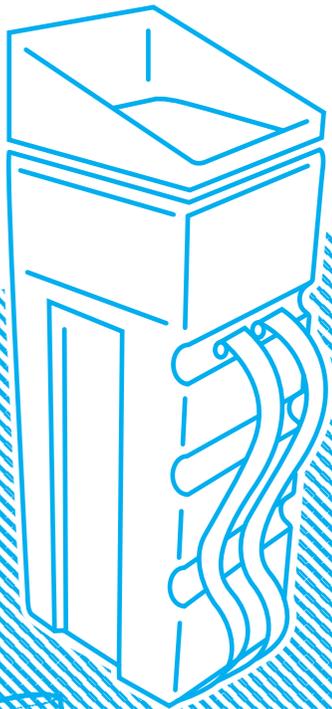
The water backpack weighs 20 kg and can filter up to 1,200 litres of water every day; it only has to be transported once. By comparison: the same amount of water in bottles or water cans means 1.2 tons that would have to be transported every day, or around 200 tons in 6 months. This involves huge costs for transport, bottles (cans) and water. What's more, transporting one **paul** leaves room for 1,180 kg of other foods or relief supplies.

What makes more sense:

Transporting 1,200 kg of water for 400 people every day, or transporting one **paul** of 20 kg only once? Transporting 60 **pauls** (corresponding to 1,200 kg) on one day instead of water means that 24,000 people can filter their own water on the following day!

Portable Aqua Unit for Lifesaving

Easy to use.
Ready to drink.



paul water backpack



Why paul?

Supplying the population with clean water in rural, impassable areas is one of the biggest problems after a disaster.

The high-tech, mobile water works used in disaster areas need trained personnel, power and additives and supply tens of thousands of people. They can only be used centrally in towns and cities on account of their performance, costs and availability. The water backpack **paul** has been developed to supply smaller groups locally in rural areas.

What is paul?

A water filter in a backpack!

paul is a water filter that ensures a fast supply of drinking water in disaster areas. The device filters pathogens out of the water, making it drinkable and offering effective protection against cholera, typhus and other infectious diseases. **paul** can be carried by only one person as a backpack to remote areas since it weighs only 20 kg.



paul - simple, light-weight and efficient!

paul filters up to 1,200 litres of water each day and can thus supply 200 people.

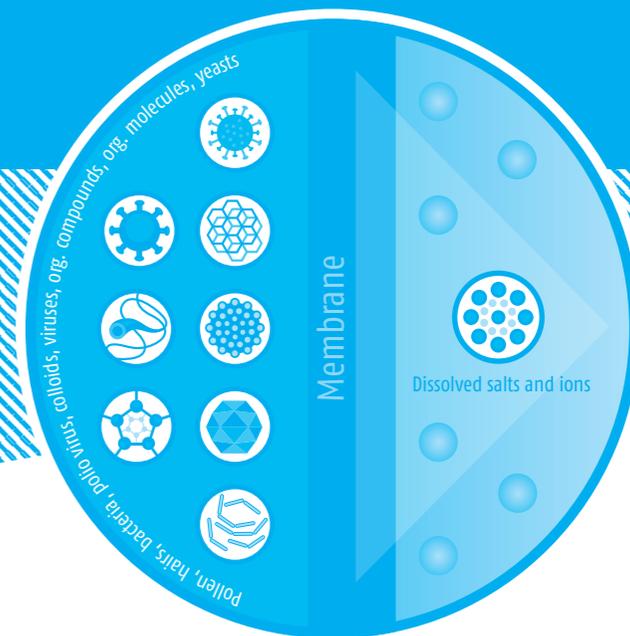
The filter is easy to use. Pour the dirty water in at the top, and draw off clean drinking water from the tap after only a few minutes. The device works reliably for years without any energy consumption, chemicals or additives. It is extremely robust and has no moving parts. The manual consists of simple pictograms that can also be understood by illiterates. Anyone can therefore use the device. It helps people to help themselves.



What's in paul?

The ultra-filtration membrane!

paul filters more than 99.99 % of bacteria and pathogens out of contaminated water by means of a membrane filter with a pore width of approx. 40 nm (0.04 µm) and a service life of 10 years. Around 1,200 litres of water can be filtered every day for months - enough for 400 people to survive.



- > Fast supply with drinkable water
- > Protection against viruses and bacteria
- > Easy transport and operation
- > No energy or chemicals needed

Around 750 million people

cannot access to clean water.

In many parts of the world, people get their water from wells, streams, rivers and canals. These are contaminated by bacteria and other pathogens. The people suffer from diarrhoea, typhus, cholera etc. Many of them die, above all the children.

