

## CLOUD FISHERS TURNING FOG INTO DRINKING WATER IN MANY COUNTRIES

Developed by the German Water Foundation ([WasserStiftung®](#)), the technology of Cloud Fisher is implemented in different countries of the world through [Aqualonis](#), a Munich-based for-profit company headed by industrial designer Peter Trautwein, who is also responsible for the Water Foundation's fog water extraction sector. The CloudFisher's pioneering design, which in the last years has taken the fog-harvesting technology to a new level, is the brainchild of Trautwein with input from researchers at the Technical University in Munich.

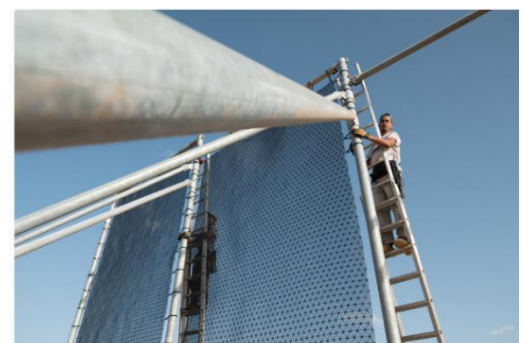
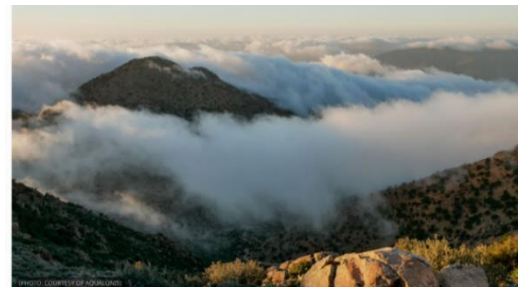


Many arid highland areas in the world face severe water shortages resulting from low rainfall and depleting ground water resources. These regions are prone to multiple challenges ranging from land degradation and rural migration to low levels of nutrition and health. Millions of people worldwide continue to suffer from a lack of water and the phenomena of climate change have further exacerbated the living conditions of populations. Hunger, poverty, disease and forced migration are the consequence. The technology called CloudFisher® –is making it possible to harvest clean drinking water from fog and to deliver it to communities facing severe water shortages in arid highland coastal areas where fog is common. Aqualonis is responsible for commercializing and implementing CloudFisher® technology in the countries where the German Water Foundation ([WasserStiftung®](#)) operates and in collaboration with various interested local actors.

The CloudFisher® consists of a fine-mesh net suspended within a steel frame. The net is held in place by a series of rubber expanders that also attach it to the collector at its base. The expanders keep the supporting grid and fabric taut and serve as a buffer against strong gusts of winds.

The nets are placed in a position that is perpendicular to the wind to blow the fog through the nets for maximum water collection. The water vapor in the air is trapped in the fine mesh of the net, condenses and drips down the mesh into a collector at the base.

The technology is quick and easy to set up and easy to maintain making it an ideal solution for resource-poor locations, where funds and spare parts are limited at best. The technology is low-maintenance, requiring just two simple tools. The only parts of the CloudFisher that are likely to tear in a storm are the rubber expanders, and these are cheap and easy to replace.





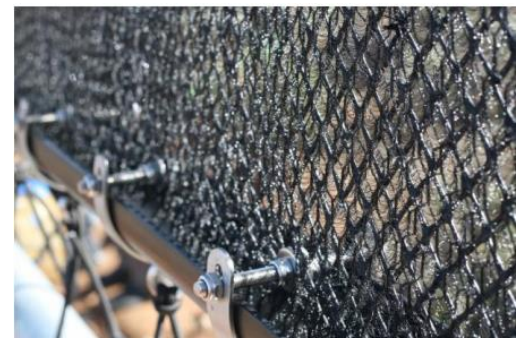
According to Aqualonis, CloudFisher technology makes it possible to harvest between 10 and 22 liters of water per square meter of net, depending on the region and time of year, The CloudFisher design is available in three different sizes to cater to different water harvesting needs.

For many years, the WaterFoundation has been researching the use of fog collectors in the framework of its activities focused on water supply and village development in countries as Bolivia, Burkina Faso, Chile, Eritrea, Ethiopia, Ghana, India, Morocco, Nepal, Palestine, Senegal, Zimbabwe, Uganda, and Uzbekistan. In all these countries, CLOUD Fisher's technologies are promoted to engage local actors in co-design and implementation of the system. So far, the CloudFishers have been implemented in Eritrea, Morocco, Tanzania and Bolivia. The CloudFisher is the result of several years of joint development work with Munich-based Aqualonis company. The website of the [Water Foundation](#) and the [website of the Aqualonis Company](#) offer detailed information on the Cloud Fisher Technology and on the results of the projects realized for their implementation in Eritrea, Morocco, Tanzania and Bolivia.

The initiatives carried out in these countries have made it possible to develop a very efficient fog-harvesting system. For example, it is the only fog-collecting system, to date, that can withstand winds of up to 120 kilometers per hour; its fine food-safe 3D mesh makes it possible to trap more water vapor from the air than other models; and its robust plastic grid helps prevent tearing and also stops the mesh from bulging and draining outside the collector at its base. The rubber expanders used to secure the net and the collector to the steel frame serve as a buffer against strong winds and ensure that the collector follows the movement of the net in the wind. Samples of the water harvested from the CloudFisher in Eritrea, Morocco and the United Republic of Tanzania comply with World Health Organization standards, varying from region to region.

Aqualonis FogCollectors are intended for the use of NGOs, public bodies and corporations and in order to further enhance the development of this technology, and to protect it from the use of commercial mechanisms by private actors, Aqualonis registered the [CloudFisher® as a trademark held by the German Water Foundation](#), and the technology is protected with both [utility models](#) and [patents](#). Transferring the rights to the German Water Foundation, which is a strictly non-profit entity, Aqualonis markets and sells CloudFisher products under license from the Foundation, and this arrangement means that profits from the implementation of projects can be used to support the Water Foundation's social activities. An [article published by the WIPO organization in 2018](#) presents the relevant results achieved by the project of Cloud Fishers implemented on the slopes of the Mount Boutmezguida in Morocco [in collaboration with the Darsihmad NGO](#).

CloudFisher technology makes it possible to deliver clean drinking water to communities facing severe water shortages in arid coastal and highland regions where fog is a regular occurrence. CloudFisher technology offers these communities a user-friendly, low-maintenance and sustainable alternative to give more people access to clean water. Despite the significant progress made in improving the technology, Aqualonis remains committed to finding ways to further perfect it and to supporting its installation in as many places as possible, in collaboration with the activities realized by the Water Foundation in many countries of the world.



## To know more

[Cloudfisher – Wasserstiftung](#)

[Fog harvesting | aqualonis website](#)

[Pioneering fog-harvesting technology helps relieve water shortages in arid regions 2018 \(wipo.int\)](#)

[Harvesting fog to relieve water shortages in arid regions 2021 \(wipo.int\)](#)

[Article in frontiersin.org](#)

[Article in sustainablesolutions.com](#)

[CloudFisher turns fog into drinking water in morocco \(designboom.com\)](#)

[Cloud Fisher in engineerigforchange](#)

[Article in european-business.com](#)

[Article in inhabitat.com](#)

[Article in the New Yorker](#)

[Article in BBC Mundo](#)

[Darsihmad NGO Morocco](#)

[FogCatchersMorocco-ENG.pdf \(ideassonline.org\)](#)

