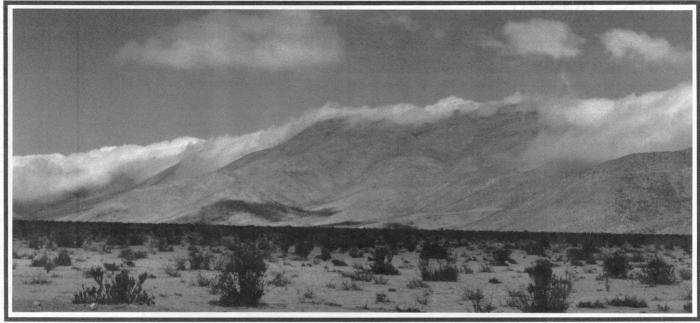


CLOUDS IN THE DESERT



Cloud-harvesting technology could bring water to many arid regions of the developing world.

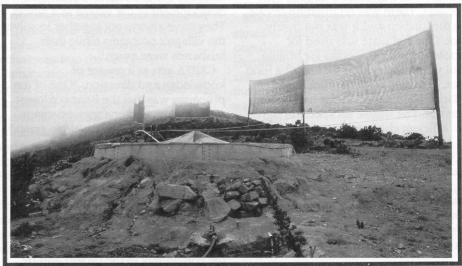
Although the Atacama Desert in northern Chile is one of the world's most arid regions, the coastal clouds that brush the peaks of the Andes on the Pacific Coast — the "camanchacas" — are laden with moisture just waiting to be collected.

Since 1984, this challenge has captured the attention of Pilar Cereceda of the Institute of Geography at the Pontificia Universidad Católica de Chile and Waldo Canto of the Corporación Nacional Forestal. They have worked in collaboration with Robert Schemenauer of Canada's Department of the Environment.

Fifty captors that look like volleyball nets intercept the drops of water from the clouds. Gutters suspended a metre off the ground underneath the 4 x 12 metre nets recover the water before channelling it into a 100,000 litre tank; from there it flows through an aqueduct, currently under construction, to the seaside village of Caleta Chungungo.

Pilar Cereceda, the project coordinator at the Chilean university, and Robert Schemenauer of Environment Canada's Cloud Physics Research Division cannot conceal their enthusiasm when they describe the impact of this type of project on development. The availability of potable fresh water will soon radically change the development parameters of this village and its 330 inhabitants

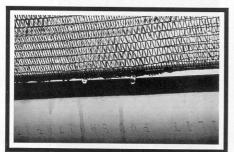
whose water supply up to now has been delivered once a week by tanker truck — with the empty tank being used to transport villagers on the return journey. Thanks to the water, a tree plantation has flourished on 3 ha of desert for the past several years, and a new plantation of exotic tree species adapted to arid regions is scheduled to take root this year.



Like volleyball nets, the captors intercept the drops of water from the clouds.

As part of the project, the captors in use will be optimized to generate increased output at lower cost. Pilar Cereceda is also studying potential sites for an additional 25 captors.

The advent of the water will transform this little village from dependence on the outside world into a centre of self-sufficient activity. The existing 50 nets produce 7,200 litres of fresh water daily. The villagers have planted 70 lemon trees (one for each family) and plan to irrigate small vegetable gardens. They are eagerly looking forward to the time when fresh water will be available in sufficient quantities to establish a small artisanal fish and seafood processing plant where they can wash and freeze their catch.



The existing 50 nets produce 7,200 litres of fresh water daily.

International Workshop

For the moment, the El Tofo site, where the captors are located, and the village of Chungungo, 70 km north of La Serena, are only pilot projects. Additional sites are needed, both on the Chilean coast and in other countries with similar climatic conditions. IDRC is particularly interested in disseminating this simple, low-maintenance technology more widely in several areas of the developing world. It is especially appropriate for countries such as Cape Verde, China, Ecuador, Haiti, Peru, Namibia, Yemen, and Oman. The Sultanate of Oman has shown the

way: for centuries, water from the coastal clouds in this desert region has been captured by the leaves of olive trees, where it drips into little tanks built at the foot.

Pilar Cereceda and Robert Schemenauer are at work on a program for an international workshop including a visit to the El Tofo site and technical presentations on the technology involved. Some 50 participants are expected at El Tofo, a score of them from South America.

This international workshop, scheduled for 1992, is intended primarily for representatives of countries involved in water management, nongovernmental organizations working in developing countries, and representatives of the private sector with a potential interest in this technology. In addition to the technical aspect (water supplies), the workshop will focus on the socioeconomic aspects (the range of potential uses). Further information on the workshop and brochures on the project can be obtained from the researchers at the addresses below. Robert Charbonneau in Chile



IN BRIEF

New President for IDRC



Dr Keith A. Bezanson brings to IDRC a wealth of experience in the field of international development, both with nongovernmental organizations and within the federal public service.

A graduate of the International Development Education Centre of Stanford University, Dr Bezanson joined the Canadian International Development Agency (CIDA) in 1973. He was appointed Vice-President of the Americas Branch in 1981. In 1985, he served as Canada's Ambassador to Peru and Bolivia. Since 1988, he has been on a tour of duty with the Inter-American Development Bank in Washington as Administrative Manager responsible for the Bank's human and physical resources. Dr Bezanson assumed his new position as president on 29 April 1991.

Prize Winning Pumps

Professor Goh Sing Yau of the Engineering Faculty of the University of Malaya was chosen as one of the two recipients of the Tun Abdul Razak Award for his contributions to developing communities through research and development.

The award, named after the second prime minister of Malaysia, is granted once every 2 years to Malaysians who have made valuable contributions to their country.

Prof. Goh was recognized for his contribution to the development of the unique UNIMADE-IDRC Handpump. The PVC handpump, which is relatively inexpensive, is easily built using locally available material and is repairable by the community without outside assistance.



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