

Iran sees 'revival' of imperilled Lake Urmia

December 30 2018, by Amir Havasi



Lake Urmia, pictured on December 8, 2018, has been shrinking since 1995

It is one of the worst ecological disasters of recent decades, but the shrinking of Iran's great Lake Urmia finally appears to be stabilising and officials see the start of a revival.

A rusty cargo ship and a row of colourful pedal boats lying untouched on the bone-dry basin are a sign of the devastating loss of water in what was

once the largest [lake](#) in the Middle East.

Situated in the mountains of northwest Iran, Lake Urmia is fed by 13 rivers and designated as a site of international importance under the UN Convention on Wetlands that was signed in the Iranian city of Ramsar in 1971.

The lake has been shrinking since 1995, according to the UN Environment Programme, due to a combination of prolonged drought, over-farming and dams.

By August 2011 the lake's surface was 2,366 square kilometres (914 square miles) and shrank drastically to just 700 km² in 2013, according to the United Nations.

The catastrophe has threatened the habitat of shrimp, flamingos, deers and wild sheep and caused salt storms that pollute nearby cities and farms.

That finally triggered a coordinated effort to save the lake in 2013—with a joint programme between Iran and the UN Development Programme funded by the Japanese government.



President Hassan Rouhani has vowed to revive Lake Urmia, which was once the largest lake in the Middle East

The project became a priority for the incoming administration of President Hassan Rouhani.

"One of my promises was to revive Urmia lake, and I am still committed to that promise," Rouhani said during a recent visit to the region.

Some positive results are finally emerging and the lake's surface area reached 2,300 km² last year, according to UN Development Programme figures.

"This is the beginning of the lake's revival," said Abolfazl Abesht, who heads the wetlands unit of Iran's environment department.

He warned it would take "decades" to return to the 5,000 km² it once covered, but at least "now the trend has stopped".

Sustainable farming

Rising temperatures and reduced rainfall have been a major factor in the lake's decline, experts say.



Rising temperatures and reduced rainfall have been a major factor in Lake Urmia's decline, experts say

So, too, was the construction of a causeway in 2008 to shorten driving times between Urmia and the nearby city of Tabriz that cut the lake in

two.

But people were also a major part of the problem due to a rapid rise in the population and farming around the lake, which provides a livelihood to some six million people.

The rejuvenation effort therefore focused on redirecting rivers to irrigate farmland, thus avoiding use of water from the lake, and the promotion of more sustainable farming methods.

"Almost 85 percent of the water is used for agriculture, and we are trying to help farmers reduce usage through cheap and effective techniques," said Abesht.

Measures such as using natural instead of chemical fertilisers, or levelling the land to avoid run-off, have shown major improvements for local farmer Afshin Medadi.

The 47-year-old had to invest in new equipment, but says "things are more cost-effective now", with his farm using a tenth of the water.

There has also been a noticeable reduction in the salt and dust pollution whipped up from the desiccated lake floor during storms, he added.



Green initiatives have been launched as parts of efforts to save Lake Urmia

Others have launched their own green initiatives.

One group of 20 women set up a collective to raise awareness among lakeside communities about water waste, and encourage the production of handicrafts to boost sustainable employment.

One of the organisers, 39-year-old Kobra Asghari from the village of Gharehgozlou, hopes industries such as carpet and doll-making can gradually overtake traditional farming.

They are also encouraging women to plant less thirsty crops such as

saffron and olives.

"We gradually managed to encourage the men to do the same," she said.

"People are paying more attention to their environment and the dying ecosystem."

© 2018 AFP

Citation: Iran sees 'revival' of imperilled Lake Urmia (2018, December 30) retrieved 15 May 2024 from <https://phys.org/news/2018-12-iran-revival-imperilled-lake-urmia.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.