

THE TRADITIONAL AFLAJ IRRIGATION SYSTEMS PRESENTED BY THE OMAN PAVILION AT EXPO 2015

The Sultanate of Oman has chosen the theme of *Heritage in Harvest* for its Pavilion at Expo 2015 to show the country has turned its strengths into sustainability and respect for nature, emphasizing the link between food and territory.

Oman is situated in one of the driest areas of the planet. The Sultanate of Oman has to face enormous difficulties in order to ensure that food production was sustainable and safe. In particular, the proper management and distribution of water resources has become a vital priority for agricultural system and stock farming. Considering the low precipitation and modest underground reserves, the country has chosen to highlight the ancient irrigation system, the *aflaj*, canals that use the Earth's gravity to distribute water.

In 2006, UNESCO has recognized five of these canals - Falaj Al-Khatmeen, Falaj Al-Malki, Falaj Daris, Falaj Al-Mayassar and Falaj Al-Jeela - as part of the [World Heritage List](#).

The Aflaj irrigation system represents some 3,000 *aflaj* still functioning in Oman. Ancient engineering technologies demonstrate long standing, sustainable use of water resources for the cultivation in extremely arid desert lands.

The origins of this system of irrigation may date back to AD 500, but archaeological evidence suggests that irrigation systems existed in this extremely arid area as early as 2500 BC. Aflaj in the Arabic language is the plural of falaj, indicating a fair division between services and limited resources, to allow sustainability.

Using gravity, water is channeled from underground sources or springs to villages through tunnels built over several kilometers (the longest is 17 kilometers), to support agriculture and domestic use. The fair and effective management and sharing of water in villages and towns is still underpinned by mutual dependence and communal values and guided by astronomical observations.

Numerous watchtowers built to defend the water systems form part of the site reflecting the historic



dependence of communities on the *aflaj* system. Threatened by falling level of the underground water table, the *aflaj* represent an exceptionally well-preserved form of land use.

Today, of Oman's about 5000 *aflaj*, about 3000 are in a healthy state, while about 2000 are in poor states because of a lack of maintenance and low water level of groundwater aquifers.

The importance the Sultanate of Oman has attached to these traditional and sustainable water management systems which are presented at Expo 2015, shows high interest in recovering these systems and taking them towards a new sustainable modernity of future.



To know more

[UNESCO World List](#)

[Aflaj UNESCO Nomination](#)

<http://www.expo2015.org/en/participants/countries/oman>

