

On the Heritage Trail

By Aftab H. Kola



Once upon a star...



OF YORE: Iron Age falaj at Hili in Al Ayn

AN exhibition on the falaj at Bait Al Baranda Museum in Muttrah recently proved to be of immense educational value. It was organised by Dr Abdullah Al Ghafri, assistant professor at Nizwa University, Ministry of Regional Municipalities and Water Resources, and Dr Harriet Nash from the United Kingdom, who has recently completed a PhD from the University of Exeter on the use of stars for timing of falaj water release.

The ancient aflaj (singular: falaj) systems still course like arteries beneath the hills and plains of Oman, twisting along precipitous cliffs and threading through villages and date-palm groves, bringing to the parched land water, coolness and life itself.

Two rooms in the museum showcased interesting falaj pictures, sundials, a model of the working of a falaj system and informative text.

An interesting picture of an Iron Age falaj at Hili, Al Ayn, testifies to the fact that

The allocation of falaj water among farmers once depended on tracking the passage of time using the sun and the stars. A recent exhibition in Muttrah beautifully narrated the story of Oman's aflaj,



FALAJ EXPERT: Dr Harriet Nash

aflaj were used in Oman thousands of years ago. It is said that one falaj in Bahla is dated back to circa 3000 BC. According to Dr Abdulla Al Ghafri, the exhibition is an endeavour to raise awareness of the importance of the falaj system in Oman's cultural heritage. He said that the aflaj constitute an elegant and relatively efficient system for tapping underground water in the wet mountain areas and delivering it to flat areas where agriculture is possible.

Dr Harriet Nash noted that the allocation of falaj water among farmers once depended almost everywhere on the use of the sun and the stars to track the passage of time. "But sad to say," she adds, "this traditional practice is fast disappearing, together with the knowledge of the stars and how they are used. Of the approximately 15 falaj systems I have visited, stars were used only for one."

The easy availability of watches and time pieces means there is little technical reason to use the stars any longer, she adds.

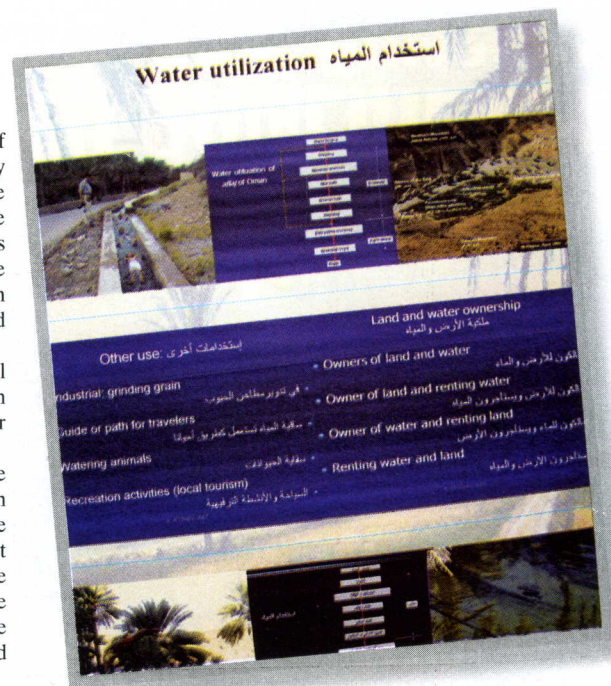
Falaj water, unlike water from wells, flows continuously and the distribution network is designed to use the water 24 hours a day.

Another important method of timing the use of water is by employing sundials, which comprise of a vertical pole and lines on the ground demarcating time intervals defined by the movement of the shadow of the tip of the pole. Then there are water clocks and sand timers.

According to Dr Abdullah Al Ghafri, water clocks were used in places like Nizwa, Saiq and other villages in the mountains.

Dr Harriet Nash wants the knowledge of using stars in determining the falaj time to be passed on to the next generation lest it die out. She says that stars may be identified by their position relative to other stars, their location in the sky, their brightness, variability and colour.

One of the great legacies of the Arabs to the world, this system of irrigation made agriculture and urban life possible in areas that would otherwise have been too arid. During what is clearly a time of reckoning for the remaining aflaj of Oman, experts and officials are now engaged in a broad effort to preserve this venerable institution, along with the way of life it has so long made possible.



Of the approximately 15 falaj systems that Dr Harriet Nash visited, only one used stars to time the flow of water. Other devices used in the past include sundials, water clocks and sand timers

