



Iran honors top books of the year

The 40th Iran's Book of the Year Awards celebrated the top publications in various categories during a special ceremony held at Tehran's Culture and Islamic Guidance Ministry on Saturday. In the Encyclopedias and Dictionaries Section, the prestigious award went to 'Imam Khomeini Encyclopedia,' authored by a group of writers under the guidance of Seyyed Zia Mortazavi.

Shushtar Historical Hydraulic Systems, an engineering marvel

Shushtar Historical Hydraulic System is one of Iran's most amazing UNESCO World Heritage Sites. Located in the southwest of Iran, near the city of Ahvaz, it's an ensemble of dams, manmade rivers, bridges, mills, and even a castle, built 2,500 years ago, on the Karun River, Iran's largest river. Not only is it a masterpiece of engineering, but it creates a stunning scenery.

An incredible complex

Shushtar Historical Hydraulic System is an incredible complex, dating back to the era of Darius the Great, in the fifth century BCE. The Achaemenids had found a way to control the water flow to irrigate the semi-arid lands of the region and provide water to the popu-

lation, surfiran.com wrote. It is not just a dam, but a vast network of bridges, canals, dams, basins, cascades, watermills, natural and manmade rivers, diversion and irrigation systems. It also has defensive structures and a place called "sika", dedicated to rest and recreation. At the center of the whole system was the Salasel Castel, functioning as an operation center of the hydraulic system.

To picture the Shushtar Historical Hydraulic System in a simple way, we have to start with the Karun River. Two canals derive from the river, among which the Gargar canal is still in use. The Achaemenids first built the Gargar Dam to contain the water flow. From this dam, three tunnels lead the water into the complex, which is then



dispatched among the various canals to serve different purposes. The water then pours out like a waterfall into basins and continues its way to irrigate other areas.

What was the complex made for?

Evidently, the Shushtar Historical Hydraulic System was built with a precise goal, not a simple display of know-how or

power. Every single structure of the complex has a specific function and application, all being interconnected. The main function of the system is to provide water

equally to the city, and to protect it by preventing the Karun River from overflowing.

It allowed the irrigation of semi-arid lands and mills, playing a crucial role in the development of agriculture and industry. The complex made possible the construction of a new town, as well as planting of orchards and farming over an area of 40,000 hectares.

Eventually, Shushtar Historical Hydraulic System was also a means of transportation, communication and trade.

A UNESCO masterpiece of creative genius

This interconnected ensemble is recognized by UNESCO as an amazing example of human interaction with the environ-

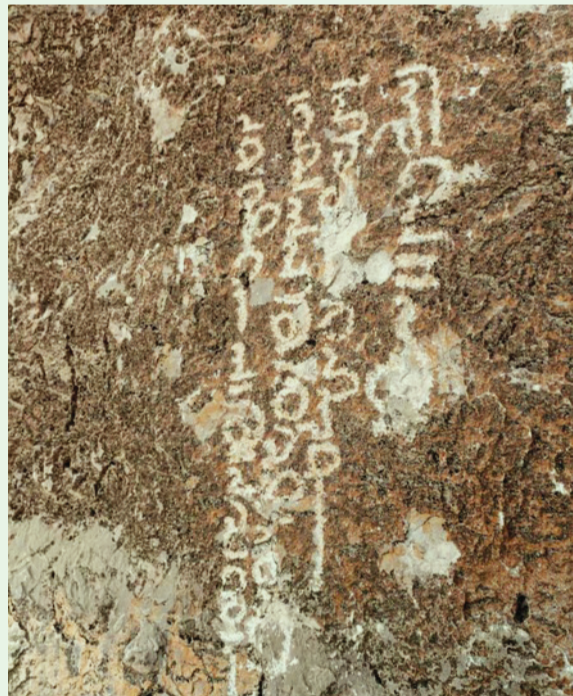
ment. It was registered as a World Heritage Site in 2009 and is inscribed as a "masterpiece of creative genius". The site indeed reflects the knowledge of the Elamites and Mesopotamians, among the world's oldest civilizations.

The site is exceptional because of the diversity of its civil engineering structures and their use. The Shushtar Historical Hydraulic System would indeed provide urban water supply, irrigate lands and power mills among other functions.

Most of the complex is built with stone, brick and mortar. Part of the structures have been damaged and disappeared over time, but many have remained, a few still functioning.

Among the oldest parts dating back from the Achaemenid era (550-330 BCE) is the dam "Band Mizan", a true masterpiece of ancient engineering. This dam divides the Karun River into two branches to regulate its flow. The Salasel also dates back to the Achaemenid era.

Zoroastrian Sassanian inscription discovered in Fars



Arts & Culture Desk

A group of researchers, during an expedition in Marvdasht, Iran, successfully discovered one of the largest inscriptions from Sassanian headstones related to a Zoroastrian devotee. Zoroastrian burials during the Sassanian period had remarkable diversity, depending on the social status and financial capabilities of individuals. During the period, burials took place in a number of different locations such as vault tombs, dolmens, rock-cut tombs, and chamber tombs. It is worth noting that rock-cut chambers, pit tombs, brick graves, and ossuaries were reserved for burying members of the higher classes of society. From some of these

burials, inscriptions that introduce the deceased individuals are still being discovered to this day. In this regard, Abolhasan Atabaki, an ancient languages and history researcher, reported the discovery of a large inscription alongside a carved brick ossuaries dating back to the late Sassanian period in an interview with ILNA. He pointed out that a description of the inscription has been previously published in Iranian scientific journals in collaboration with Najmeh Ebrahimi. Ebrahimi, a fellow researcher specialized in history, noted that the inscription was first discovered and examined during a mountain expedition by Atabaki and is attributed to an ossuary from the late Sassanian pe-

riod. In the base section of the ossuary, a small grooved line is engraved in a heptagonal shape, which served as a rainwater outlet for the ossuary. "The reason for this groove might be to ensure that rainwater does not penetrate into the tomb," she predicted. Ebrahimi said, "In the lower section of this ossuary, there is a large stone inscription written in Pahlavi script, in four lines, in a lying position. It is related to this ossuary and an individual from the past." She continued, "The translation that we presented for the first time indicates that 'this tomb' (ossuary) was 'self-made' by a person named 'Hördād-gōšnasp'. In the last two lines of the stone inscription, it states, 'May eternal

paradise be for him.' In addition to this inscription, there is another unfinished and older inscription reading 'ZNH dhmkhy,' written vertically in the upper part of the mentioned inscription, which is probably related to this ossuary. However, due to the erosion and unevenness of the rock wall, the continuation of writing on this inscription was discontinued, and intentionally, it was slightly blurred at the time. A newer and clearer inscription was written in its place, which is, in fact, the mentioned inscription". Atabaki explained that ossuaries are referred to cubic-shaped cavities created in the walls of rocks or cliff-side formations, serving as repositories for the bones of deceased individuals in

the Zoroastrian religion. After the passing of a person, according to Zoroastrian beliefs, for the "purification" of sacred elements, especially the soil, the body was ceremoniously placed in a sun tomb after undergoing the "sagdid" ritual (i.e. removal of the flesh from the bones by birds and scavenging animals). The remains, which mostly includes the bones, were then collected and buried in various tombs. Even after death, diverse rituals were performed at different times, a prominent example of which is the "commemoration of the Farvahr of the deceased people" (i.e. burying the ashes of the deceased). Despite religious pressures from Safavid rulers, some remnants of the ritual are still being practiced by residents of Marvdasht.

Iran tops global, regional rankings for access to drinking water

Social Desk

In a recent report released by the World Bank, Iran has emerged as the leader in global and West Asian access to drinking water, both in urban and rural areas.

According to the report, an astonishing 99.83 percent of Iranians living in urban areas and 82 percent in rural areas have easy access to clean drinking water. These figures exceed the

global averages of 85.7 percent in urban regions and 59.6 percent in rural areas, as well as the West Asian averages of 83.2 percent and 69.5 percent respectively, Press TV reported. Iran's achievement can be attributed to its exceptional localization and production capabilities in the water industry. The report highlights Iran's domestic production of 80 percent of the necessary equipment for water

treatment plants, 65 percent for sewage treatment plants, and an impressive 90 percent for water and sewage networks. Moreover, the country ensures water supply for almost 100 percent of its urban population, surpassing the global average.

The report sheds light on various indicators of Iran's thriving water industry. Iran's commitment to localizing production and optimizing efficiency

has yielded exceptional results. Not only does Iran excel in equipment production, but it has also implemented efficient management practices, including the establishment of collaborative mechanisms for watershed management, water productivity enhancement, proper allocation of water resources, bulk delivery of agricultural water, installation of gauging tools, and the prevention of unau-

thorized water extraction. Iran has also made significant strides in infrastructure development, such as the construction of dams, irrigation and drainage networks, and the creation of sewage facilities. These initiatives, coupled with comprehensive water stress management strategies, reinforce Iran's commitment to securing reliable and accessible drinking water for its population.

