Water in the Middle East

Photo: An Oasis in the Libyan part of the Sahara.

Water is a precious resource throughout the Middle East. Not only is water necessary for life, but it aids in the advancement of civilization. Many Middle Eastern countries have historically depended on oases for their water. Oases are isolated regions of vegetation in the desert accompanied by a natural spring or water sources. The locations of oases have been strategically important, influencing camel caravan routes and giving rise to towns and cities. Al-Hasa in Saudia Arabia is the largest oasis in the world.

The Middle East is a part of the world geographically composed of deserts and arid regions. Many countries must deal with the fierce sun and dust storms. Rainfall can be sparse, and droughts are common. Egypt, for instance, is the driest country in the world in terms of average rainfall. The area south of Cairo averages 0.1 to 0.2 inches of precipitation per year. Meanwhile, Saudi Arabia's annual precipitation is 4 inches**.**

Photo: A Bedouin in Wadi Rum, Jordan, boils water for tea.

Photo: The Jordan River is shared by Israel, Jordan, Palestine Syria, and Lebanon.

Civilizations arise in proximity to water. For example, riparian settlements (built along river streams) grew into cities along such historical waterways as the Nile and Tigris-Euphrates rivers. Similarly, major port cities like Abu Dhabi (United Arab Emirates) have arisen on the Persian Gulf and Aqaba (Jordan) on the Red Sea.

Photo: Atatürk Dam in Turkey played a strategic role in an important water struggle between Iraq, Syria and Turkey.

In 1985, Boutros Boutros Ghali, former United Nations Secretary General famously said that "the next war in the Middle East will be fought over water, not politics." As an Egyptian from Cairo, Ghali was cognizant that water is a precious commodity in the Middle East. Historically, two major Middle Eastern water conflicts are the Israeli National Water Carrier situation with Israel and Palestinians and Syria (1965-1966); and the conflict over Atatürk Dam among Iraq, Syria and Turkey (1990).

Photo: A double waterwheel used for irrigation at the Fayûm oasis, Egypt.

Middle Easterners are ingenious in finding water in the desert. Once, the ancient Egyptians and Sumerians constructed intricate irrigation systems around the Nile and the Tigris-Euphrates. Today, underground aquifers are detected and tapped into, and irrigation canals are still utilized. Using science and technology, many areas of desert have bloomed into gardens.

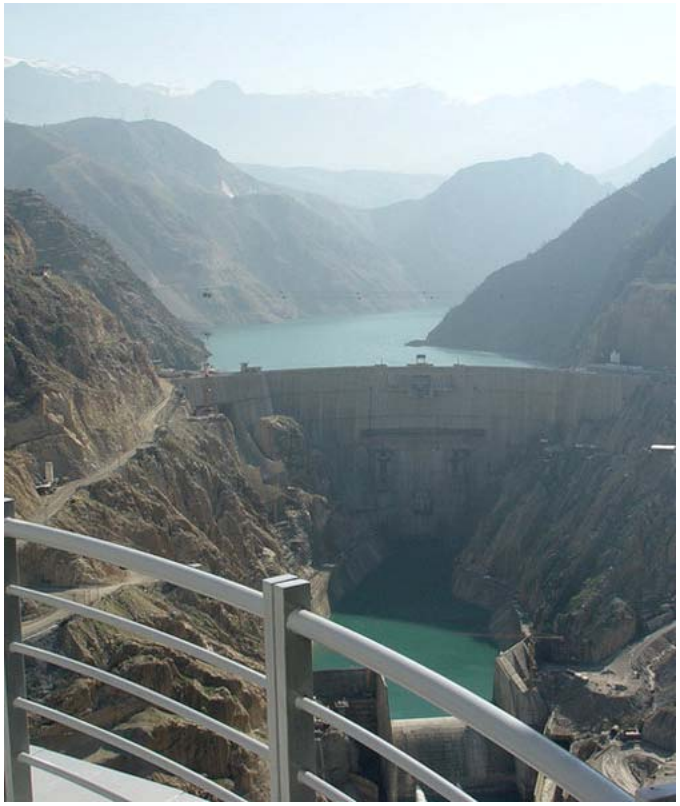

Photo: The Karun-3 Dam on the Karun River provides hydroelectric power for Iran.

In modern times, Middle Eastern countries have harnessed the power of hydroelectricity. This part of the world has also made technologic advances in water desalination. Desalination is process which converts saline water (like ocean water) to fresh water. Although desalination processes are expensive, they are employed by arid, desert countries with monetary investment. The most extensive water desalination is in the Persian Gulf. The world's largest desalination plant is Jebel Ali plant in the United Arab Emirates, producing 300 million cubic meters of water per year.