

Southwest Asia (Middle East) Environmental Issues

Water needs have caused many conflicts between countries in the Middle East. Who owns the scarce water? Who should be allowed to divert water for irrigation? There are no enforceable laws to govern the use of water between countries. Below are some of the main problems caused by unequal distribution of scarce water resources in Southwest Asia.

Turkey- In the highlands of Turkey, snow melts to form the Tigris and Euphrates Rivers. Turkey is better off than its neighbors because of these rivers, but pollution from industry and agriculture is a growing problem. The pollution flows downstream to the countries of Syria and Iraq.

Turkey, Syria, and Iraq: Turkey built dams along the Euphrates River to use the water for hydroelectric power and irrigation. This water usage has reduced the flow of water reaching Syria. In turn, Syria built a dam and reduced the river's flow into Iraq. In 1975, Syria and Iraq came close to war over water issues! Iraq faces polluted waters from industry, and war damage to water treatment facilities and oil drilling equipment.

Israel: water usage is up, and rainfall is down, leading Israel to draw more water from its aquifers. More water is being taken out than is being replenished by rain, and salt is able to enter the aquifers which ruins the remaining water. Israel has been in military conflicts with Jordan over rights to the Jordan River.

Iran: Iran is also depleting the water in its aquifers for irrigation and drinking water. One of Iran's most important crops, pistachios, is being severely hurt by water shortages in the southern areas of the country.

Afghanistan: Open sewers, failed septic systems, fertilizers, drought and pesticides are contaminating Afghanistan's shrinking water supply.



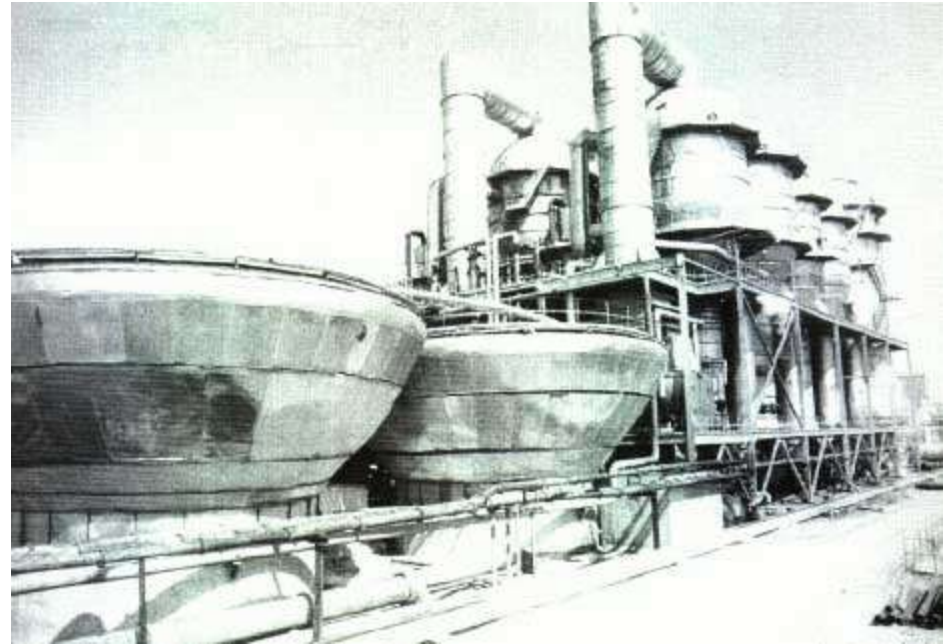
Aquifer- an underground layer of rock and sand that contains water.

Saudi Arabia: Saudi Arabia faces severe problems in its desert climate, including water scarcity and poor quality of ground water from its aquifers. One solution is desalination, which is the process of taking salt out of sea water. Saudi Arabia has used income from its sales of oil to invest in desalination plants. This has made water more available yet expensive . About 30 desalination plants provide most of the country's drinking water.

Life in the Middle East

Climate:

What is it like to live in the Middle East? The climate varies, but it is mostly arid with hot dry summers and cool winters. If you live along the Caspian Sea coast of northern Iran , you might have 80 inches of rain a year. However, in the deserts of Iran , rain might not fall for several years! Throughout Saudi Arabia, the most rainfall you could expect in a year would be nine inches. In Riyadh, Saudi Arabia's capital, the average yearly temperature is 79°F. Ankara, the capital of Turkey, gets as cold as 32°F in January.



Desalination plant on the Caspian Sea

Oil Brings Employment

In the Middle East you will find dense populations around areas where oil is found. Some of the people are natives of that country while many others have come from other nearby nations to work in the oil industry. The face of the Middle East began to change in the 1930s when huge oil reserves were found in Saudi Arabia, Iran, and Iraq. The world's attention has turned more towards the Middle East as its need for oil has grown. The industrialized nations saw the Middle East as a source of oil to fuel its factories and cars. Before the discovery of oil, the Middle East was not considered an important area for trade in the world. That picture has certainly changed!



There is an **uneven distribution** of oil in the Middle East. The sale of oil has earned phenomenal amounts of money for oil-rich countries. Oil-rich Iran and Iraq are the most populated countries of the Middle East, but their countries have suffered from war and the mismanagement of oil money. Money from oil transformed Saudi Arabia from a poor society to a very wealthy one. Turkey has benefited from the oil industry as a transportation hub for oil-rich countries moving their product to Europe. Afghanistan looks to profit as a transportation link of oil from Central Asia to the Arabian Sea. Geologists and oil companies have recently uncovered a small reserve of oil in Israel.

Traditional ways of life are disappearing as the oil industry grows and modernizes the Middle East. In Saudi Arabia, most of the population was **nomadic** or semi-nomadic until the 1960s. Because of the oil industry, more than 95% of the population now lives in cities.



oil production plant near Dammam in Saudi Arabia.



Quick Quiz: Match the country with the correct water issue.

- _____ 1. Afghanistan
- _____ 2. Iraq
- _____ 3. Turkey
- _____ 4. Israel
- _____ 5. Saudi Arabia
- _____ 6. Iran

- A. Less water to irrigate pistachio trees
- B. Battles over water rights to the Jordan River
- C. Harsh climate has led to desalinization of seawater
- D. Oil spills from ships pollute the Black Sea
- E. War has damaged water treatment plants
- F. Open sewers, failed septic systems

7. Which country has the largest oil reserves in the Middle East? _____

8. How does Turkey profit from oil? _____

9. How has life changed in the Middle East since the discovery of oil? _____

