

Referring to specific case studies at different scales, examine the extent to which there are common issues associated with water utilization

Water is an important resource and it is distributed unevenly across the globe such as the Sahara desert where water supply is very limited whereas Bangladesh suffers from surplus of water. This is why an increase in demand due to increased in population could leads to severe water shortage.

The conflict associated with water utilization can be seen on an international scale in the Middle East where the climate is particularly hot and dry and evapotranspiration is high. The conflict between Jordan and Israel occurred in 1967 because Jordan has built a dam on River Yarmouk to satisfy the growing demand of water. This limits the supply of water for Israel, reducing at least 2/3 of the total runoff and water that sustains Lake Tiberias which has been a vital source of water for Israel's national water grid and irrigated agriculture of coastal districts. On top of this, Syria also control the Jordan headstreams in the Golan Heights that feed Lake Tiberias leaving Israel threatened by severely limited water supply. The lack of international cooperation and uneven distribution of water supply along with increasing demand of water had led to over extraction of underground water or aquifer. It is forecasted Jordan's aquifer will be exhausted by 2020.

On a national scale, Spain also faces problems of water utilization. The natural causes of this are that there is a low average precipitation and high temperature during the summer months. This also causes high evapotranspiration rate. Rainfall is also season and unreliable. The human cause is because of increasing demand in agriculture and tourist industry such as water for hotels and golf courses in Costa del Sol. The farmers use 80% if available water and the way it is being utilized are inefficient and large amount of water is lost through leakage especially in poorer parts of Spain. In addition, water conservation measures are unpopular and seen as unnecessary to most of the population because cost of water is very cheap.

Both the Middle East and Spain suffers from lack of water supply because of the climate, high evapotranspiration rate, and unevenly distributed rainfall. However, the issues of water utilization in Spain are due to mainly an increased in water demand from tourist industry. The increasing number of tourists further puts on great strain on water resource and also the poor management of water utilization. However, the conflict of water use in Middle East occurs as there is lack of international cooperation and countries built dams to satisfy their population demand of water without considering the effects downstream.

In both regions, people turns to alternative water resource of underground water leading to exploitation of underground water. The water table is lowered and so salt water from the soil seeps in and contaminates drinking water and other problems associated with salinisation.

In conclusion, every drainage basin have a maximum capacity in supplying water for multipurpose with effective water utilization management schemes a balance can be achieve between supply and demand of water. Issues of water utilization occur primary because of natural factors such as high temperature and uneven distribution of rainfall and are intensified by increase in demand of water.