

# Water in Everyday Life - Turkey

## **Current Situation**

Turkey is one of the most water rich countries of the Mediterranean, but due to an enormous population increase from 28 million in the 1960's to 68 million in 2000 the availability of water resources has already decreased from around 4000 m<sup>3</sup> to 1500 m<sup>3</sup> per capita/year today. Water demand in Turkey approximately has doubled in the second half of the last century. The overall water demand in Turkey continues to increase, even more in the light of the effects of drought (or climate change). Turkey will suffer from water scarcity in the next years.

## **Vulnerability**

Studies indicate that Turkey has some of the highest levels of water security threat of the countries in Europe. It is densely populated and most areas of the country face high or very high levels of water stress. This problem is likely to increase with the rapidly rising population and the potential drying associated with rising temperatures. Estimates of changes in runoff of between -52% and -61%, and reductions of surface waters in the Turkish basins of 20%, 35% and 50% for 2030, 2050 and 2100 have been reported. By 2100 Turkey could experience an expansion of arid areas that could lead to increased water stress around the southern Mediterranean areas.

## **Headwaters of Euphrates and Tigris**

The Euphrates–Tigris Basin hosts the two important snow-fed rivers of the Middle East, and its water resources are critical for the hydroelectric power generation, irrigation and domestic use in the basin countries, namely Turkey, Syria, Iraq and Iran. Approximately 90% of the Euphrates flow and 46% of the Tigris flow originate in Turkey . Based on different model and scenario simulations, projections were made of future changes in temperature, precipitation, snow cover and river discharge in the Euphrates–Tigris basin countries.

## **Water in History**

During the Ottoman Empire, before Turkey was a modern country and before urbanistic water-line engineers, members of the royal Sultan family (mostly women) built water fountains for commoners living outside of the palace walls. This was one of the ways they gave charity. On the fountain, they usually wrote their names and opened it to the public. Here, you see a photograph of the Hurrem Sultan water fountain built between 1556-57 by the famous Ottoman architect Mimar Sinan.

