Sector Profile: Water Resources

Water has defined the survival and growth of the Indian civilization. The civilization came up on the banks of rivers and our existence and progress has been impacted by the availability, use, misuse and governance of water. The total water available annually in form of precipitation amounts to 4000 km^3. The total water resources in the country have been estimated as 1,953 km^3. Of this nearly 1,202 km^3 (62%) of the total water resources is available in the Ganga-Brahmaputra basin. The remaining 23 basins have 751 km^3 of the total water resources.

Of this available water, only 28 per cent (1123 km^3) is available as utilizable water in form of surface (690 km^3) and groundwater (433km^3). There are wide variations in the availability of water across the country with the drier regions having greater fluctuations in rainfall thus increasing the vulnerability of people to water scarcity.

Various estimates for per capita water availability indicate a declining trend with a projection that India will move into the category of water stressed state by 2050. (Water stress state is defined when the per capita availability of water declines to less than 1,700 cu m). A study by the Water Resources Group has predicted that in 2030, the gap between demand and availability in India will be 50 percent, with the demand touching 1,498 km^3 and availability at mere 744 km^3. It also states a 58 per cent rise in demand from 2005 baseline in 2030, with demand almost doubling for the three sectors of agriculture, domestic and industry. The report cautions that the impact of the water crisis will be severe in the water rich basins and measures for water security will have to factor impacts of climate change into any planning for future.

The International Monetary Fund has reported India to be as the world's 11th largest economy. The industrial sector while contributing to 14.6 per cent of the country's GDP accounts for 14 per cent of the employment. The contribution of the industrial sector to India's economy is bound to increase and so would be the water demand. This is validated by the findings of the National Commission for Integrated Water Resources Development Plan, Ministry of Water Resources which enumerates that the water demand of the industry (including the thermal power plants) will account for 8.5 per cent and 10.1 of the total freshwater abstraction in 2025 and 2050 respectively. This is a 4 per cent rise from the level of 6 per cent of total freshwater abstraction by the industries in 2010. According to the World Bank, the water demand for industrial uses and energy production will grow at a rate of 4.2 per cent per year, rising from 67 km^3 in 1999 to 228 km^3 in 2025.

FICCI through its Water Mission is engaged in developing programmes of research and advocacy to advocate the cause of water conservation, attaining water efficiency and promoting water recycling and reuse practices.