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DOMESTIC WATER DEMAND FORECASTING UNDER DIFFERENT SOCIO-ECONOMIC SCENARIOS FOR A CENTRAL HIMALAYAN WATERSHED, INDIA

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ABSTRACT

Population increase has important role in future water demand forecasting but the consumption patterns generated by the socio-economic developments also equally important. The study presents water demand forecasting using different socioeconomic scenarios influenced by the population growth and consumption patterns. Even with prevailing use scenario (BAU) the water shortage will be felt in years to come. However, conservative use of water may help in reducing the demand by 19 % of 2010 level in case of rural population and 81% in urban population in next twenty years. The study concludes that water supply condition in the watershed will become more and more critical in future with population increase and changing consumption pattern under different socio-economic scenarios, while water availability stays finite. So, the demand side management will be more important than supply side management and water policies have to be more focused on demand side management.

Key Words: Water demand; Water demand forecasting; Water Policy; Socioeconomic scenarios; Consumption pattern, Population growth rate
