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The scarcity of fresh water in localized areas has been ranked as the world's second most pressing concern in the next century. To face this challenge, it is necessary to study the current situation of water related activist in Sri Lanka. A case study was conducted in the Walawe Ganga Basin to compile a water resource balance and to estimate the water use efficiency in different sectors.

A literature survey and a questionnaire survey using stratified random samples covering the entire basin were conducted. At present the total water demand and the gross basin yield are estimated at 738.4 and 941.8 million cubic meters (MCM) per year respectively. Therefore, there is a 203.4 MCM of net basin surplus of water.

Agriculture sector accounts for ninety five percent of all water uses in the basin and is the most inefficient in water use. Its water use efficiency is only 20-35% of the potential. Domestic and industrial sectors use one and four percent of the total demand respectively. Unaccounted for water (UFW) in the domestic sector is about fity percent in urban areas. Leakage in service pipes, illegal tapping of pipe born water sources, leakage in domestic taps, water in stand pipes are the main reasons for UFW. Spilling away of water while filling the pitchers are tube wells in the Walawe Ganga Basin ranges from 325-490 m3 per day. This also creates lot of environmental problems such as mosquito breeding and groundwater contamination.

While the amount of water available is constant or decreasing demand for water increases steadily. Therefore demand management tools such as improvement of water use efficiency in agricultural and domestic sectors, promotion of non-consumptive water use activities and recycling in industrial sector should be introduced to mitigate above mentioned environmental economic problems.