

'Jakkur Model Key to Sustainability'

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Experts are pushing for adoption of a model that is being used in the city — treating sewage water using a combination of mechanical and natural processes — to mitigate the water crisis.

They cite the Sewage Treatment Plant near Jakkur Lake which lets out partially treated effluents into wetlands where they are filtered before being let into the lake. Sunlight takes care of the remaining contaminants and the water is fit for domestic and industrial use.

Jakkur lake and its wetlands were created about 200 years ago to meet the domestic and irrigation water requirements of Jakkur village.

“Our earlier experiments have shown the vital role of wetlands in recharging groundwater resources. This implies that the Jakkur Lake system is helping in recharging groundwater,” IISc ecologist Prof T V Ramachandra said.

He stresses the need for a regulation on the exploitation of groundwater in Bangalore. “Local residents who are dependent on borewells suffer as over-exploitation of groundwater through borewells by commercial private agencies harms sustainability”, he said.

The Potential of the Model

Prof Ramachandra is confident that replicating the Jakkur wetland ecosystem will help in the treatment of water and its reuse. The model will also maintain groundwater quality, he said.

“Bangalore is facing severe water shortage today due to insufficient piped supply coupled with the fast decline of groundwater table. Cauvery river caters to only 55 per cent of the needs of the population and the balance is met through groundwater. Plummeting groundwater table is due to poor infiltration because of increasing paved surface and also over-exploitation,” Prof Ramachandra said.

T Venkataraju, BWSSB engineer-in-chief, said a similar model is being followed at KR Puram Lake. “There have been good results and we will take this up in a phased manner,” he added.