

■ **Scientists say same type of filtration can be done in other wetlands**

Algae to Jakkur lake's rescue

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Even as the government is ready to spend thousands of crore of rupees to get drinking water to Bengaluru from the far-off Ghats, the premier science institute in the city has suggested a more cost effective way of fighting the water crisis.

A pilot project begun by the Indian Institute of Science (IISc) a few months ago will soon supply water from the Jakkur Lake to Yelahanka town after cleansing the water of impurities and making it potable.

A 10 MLD sewage treatment plant at the Jakkur Lake partly treats the water that flows into the lake. The water then passes through wetlands surrounding the lake consisting of emergent macrophytes and algae, which filter out the remaining nutrients impurities from the water making the water potable.

Researchers working on



the project say it could provide additional drinking water to Bengaluru.

Jakkur Lake with wetlands is man-made and was constructed about 200 years ago to meet the domestic and irrigation water requirement of Jakkur village located about hundred meters south-west and down-

stream of the lake. The lake used to have water all year round due to vegetation cover in its catchment. However, rapid urbanisation has led to large scale changes in land use and now there is water in the lake for just eight or nine months.

Dr T V Ramachandra, head of the Energy and

Wetland Research Group, IISc, said that the same type of natural filtration of lake water can be implemented in major wetlands in Bengaluru so that there is no dearth of water during the summer months, and the government can abandon its diversion projects which threaten the flora and

fauna of the eco-sensitive Western Ghats.

“Water is currently being pumped from the Cauvery River 100 km from the city with an electricity requirement of 75-100 MW. Bengaluru is located at a higher elevation (900 m above mean sea level) and Cauvery river courses are at 500 m above mean sea level. This water is sufficient for approximately 55 per cent of Bengaluru city dwellers, while the rest are dependent on ground water and unauthorised drinking water supplies. Water demand in Bengaluru is roughly about 150 litres per day (lpd) per person. The total water requirement for domestic purposes is about 1,400 million litres per day (MLD) but only 1,000 MLD is available from all possible sources. Hence we are stressing on using the lake waters in Bengaluru so that these last surviving wetlands are preserved,” Dr Ramachandra said.