Geophysical Research Abstracts Vol. 21, EGU2019-5739, 2019 EGU General Assembly 2019 © Author(s) 2019. CC Attribution 4.0 license.



## A looped water economy? A model of Bangalore's water and wastewater system

Veena Srinivasan and Sayan Roy ATREE, Bangalore, India (veena.srinivasan@gmail.com)

India's urban population 290 million in 2001 and is expected to surge to 590 million by 2030. Supplying water equitably and sustainably, and managing the wastewater generated is one of the biggest challenges urbanisation and climate change pose.

The problem is that our imagination of urban water infrastructure, has not changed much in the last two centuries. Cities import water, pumped from increasing distances via inter-basin projects and the vast majority of the wastewater generated by cities in India remains untreated and is released downstream, the so called "linear water economy".

We present a model of the water and wastewater system in Bangalore, a city of 11 million people in South India. The model, based on extensive primary and secondary data, shows that Bangalore's water system is really a "looped water economy". However, the complexity of the flows, suggests that transitioning to a sustainable future entails addressing regulatory, technical and economic challenges at multiple scales.