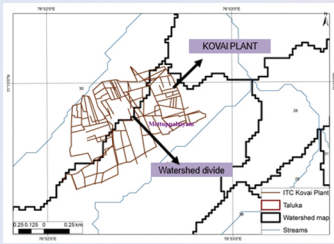# Water Resource Evaluation and Planning Using WATSCAN Tool - Coimbatore District Tamil Nadu


Coimbatore is one of the most industrialized districts in the state of Tamil Nadu with more than 25,000 small, medium and large-scale industries operating within the district. The rich black soil of the region has contributed to Coimbatore's flourishing agriculture industry. It is in fact the successful growth of cotton that has served as a foundation for the establishment of its famous textile industry.

Falling in the rain shadow region of the Western Ghats, Coimbatore receives an annual average rainfall of about 650-750mm, with a high coefficient of variation (CoV). Coimbatore district experienced recurrent droughts in 2016 and 2017 which reduced the water availability in major rivers. Hence the government of Tamil Nadu restrained the industries from drawing surface water during these years and also hiked the water charges for industrial use resulting in several industries losing production.

ITC - Paperboards and Specialty Papers Division which operates at Mettupalayam taluk in Coimbatore, partnered with CII – Triveni Water Institute to apply the patented WATSCAN tool for their plant watershed to identify appropriate interventions for creating buffer water storages to ensure sustainability of plant operations during drought years.

CII-TWI undertook a comprehensive hydrological analysis for the plant at both watershed and the micro watershed level to develop a complete range of solutions for both surface and groundwater harvesting to create additional buffers. Strategies were formulated in a holistic manner with identification of water harvesting possibilities at a watershed level and water reduction potential within the plant.

Plant is located at a relatively higher elevation with a watershed divide passing through it. Water moving in two different directions on either side of plant but not towards it. Not leading to appreciable concentration of flows on any one side.(Image above)
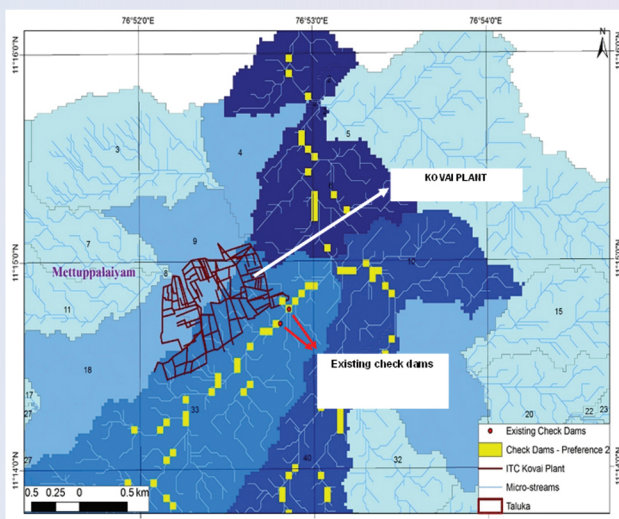
Potential Locations for Check dams