



Virtual Workshop-Achieving Sustainable and Healthy Water through Efficient Systems in Orchha

A virtual workshop was organised by Development Alternatives Group on 10 October 2020 for the town of Orchha, a culturally rich and historic tourist place in Madhya Pradesh. This is part of six-city dialogue series, supported by the National Institute of Urban Affairs (NIUA) and Heinrich Boell Stiftung.

The workshop was aimed at bringing solution providers and experts in dialogue with city officials to brainstorm on various challenges the city is facing such as space crunch, finance, access to new age smart and effective solutions, infrastructure for treatment and opportunities for reuse, procurement, citizen awareness, and participation and how these issues can be addressed. An attempt was made to understand the aspirations of Orchha and that of solution providers, and how their collaborations can be leveraged to meet the challenges in achieving sustainable and healthy water through efficient water systems.

During the discussion, it was understood that the town faces challenges of limited revenue, inadequate wastewater treatment and reuse, need for individual and institutional capacity building of line departments and lack of community participation. The subject matter experts and solution providers put forth their recommendations and solutions which can be feasibly integrated to the city systems. Several new age innovative and cost-effective technologies, nature-based solutions, business models, best municipal practices, and resource circularity interventions were also discussed which could enable the city to have an efficient water management system.

Orchha, is a small town facing immense land scarcity and so most of the technologies discussed were decentralised, compact, containerised, mobile, and plug-and-play systems and use various technologies such as vermiculture, electro-coagulation, electro-oxidation, bio mimicry, and tethered sensors among others. These potential solutions have minimum energy consumption as they run on solar power or gravitational flow.

Solution providers also suggested a new business model of “use and pay” wherein the city could pay per litres of water treated. Such models could go a long way for cities like Orchha which faces financial constraints. Orchha is a touristic city with utmost importance given to aesthetics, solutions that enable landscaping over the treatment system were also discussed. The importance of adopting a circular consumption model and capacity building of the municipal officials were further emphasised during the discussion.

The workshop conducted for Orchha was a knowledge enriching session for all the participants. The city officials were enthusiastic to take a leap further for adopting a feasible solution and achieve its goals as laid out in the City Development Plan through:

- Continued engagement with the DA team, for the facilitation of integration of efficient solutions into their system.
- A possible collaboration with solution providers to pilot a solution.
- Capacity building programme including training of officers on resource flow life cycle analysis and environmental footprint analysis in terms of energy consumption and GHG emissions.
- Awareness generation among the community through social media campaigns, radio, and workshops for bringing in behavioural change towards sustainable consumption of water and reuse of treated water.