

'India-Australia Research and Industrial Collaboration for Reducing Plastic Waste' Programme Researcher's Field Visit to India

In response to rising global plastic pollution, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Australian government scientific research organisation, is coordinating an 'India-Australia Industry and Research Collaboration' to achieve a zero plastic waste economy in India. It partners with Development Alternatives, TERI, and CSIR_NEERI in India and the University of Technology Sydney and the University of New South Wales in Australia. This effort to address plastic waste management began with a dialogue between the Prime Ministers of Australia and India, which led to an ambitious international collaboration. The programme's goal is to develop long-term plastic waste management strategies as well as new technology and business models to help plastic supply chains innovate. The collaboration aims to develop a roadmap for a circular economy for plastics in India, set to release in April 2023. The researchers involved in the programme visited India recently between 18 and 25 February, 2023 to learn about the on-ground waste management situation. The team visited Jaipur, Agra, and Delhi, and interacted with stakeholders of the plastic waste value chain.

In Jaipur, the team visited Gravita India Ltd, which is one of the leading scrap recyclers in India. Mr Sanjay Singh Baid, Head of Plastic Division, Gravita India Ltd discussed the organisation's circular business model and overarching challenges and opportunities in recycling plastic wastes, lead, and aluminium.



Meeting with Agra Nagar Nigam

In Agra, the team visited Agra Nagar Nigam to deliberate on challenges, opportunities, and steps for the transition to a circular economy for plastics in the city. The researchers visited the Integrated Command Control Centre of Agra Nagar Nigam, which is institutionalised under the Agra Smart City Limited. The researchers were introduced to Information and Communications Technologies that the city has adopted to monitor and operate its different systems such as municipal waste management, traffic management and so on.



A visit to Material Recovery Facility in Agra

The team visited the Kuberpur landfill, which is spread over 75 acres, where legacy waste and daily waste, including organic and inorganic waste collected by the Agra Nagar Nigam, are managed. Further, the researchers ventured on an exposure visit to observe a door-to-door waste collection drive and Material Recovery Facility in Sikandra ward.

In Delhi, the project was positioned at the World Sustainable Development Summit (WSDS), 2023, hosted by TERI through a panel discussion titled 'Transition Towards Circular Economy in the Plastic Sector'. The panel discussion was followed by a roundtable at the India Habitat Centre, New Delhi. Both discussions focused on current challenges and opportunities in achieving a circular plastic economy in India, identified as a part of the research.



India-Australia Collaboration Project panel discussion at the WSDS 2023



Roundtable discussion on Effective Management of Plastic Wastes at Development Alternatives headquarters, New Delhi

Further, a roundtable was held at the Development Alternatives headquarters in New Delhi to explore the opportunities for managing plastics waste and introducing circular economy measures to enable India to meet its commitments towards signing a legally binding treaty to end plastics pollution by 2024. The experts deliberated on the lack of accountable plastic waste-related data and an integrated data portal. Also, they emphasised that in a country like India, with a large rural population, it is crucial to have cost-effective alternatives to

enable the phasing out of single-use plastics. They also suggested that science-based solutions are required for technologies, circular business models, and policy in a more inclusive way. The discussion arrived at a consensus that technology innovation and tailored interventions at the local level are the best way forward.