



QUICK WIN PROJECT – COIMBATORE SUNYA - TOWARDS ZERO WASTE

About Coimbatore

Coimbatore is the second largest city in Tamil Nadu, situated on the banks of the river Noyyal surrounded by the Western Ghats. Often referred to as the Manchester of South India, it is one of the fastest growing cities in India and is a major hub for textiles, industries, commerce, education, information technology, healthcare, and manufacturing.



CapaCITIES Project

Cities account for approximately two-thirds of global energy use and over 70 percent of energy-related greenhouse gas (GHG) emissions that drive global climate change. In India, increased demand for energy, infrastructure and services is putting city systems under pressure. This will be accentuated further by growing risks caused by climate variability. Poor and vulnerable segments of the city populations will be affected most. Through the Capacity Building for Low Carbon and Climate Resilient City Development project (CapaCITIES), SDC's Global Programme Climate Change will support and accelerate the Government of India's efforts for sustainable urbanization.

SUNYA-Towards Zero Waste

Solid waste management system has been identified as a fragile urban system in Coimbatore that is likely to be impacted adversely by the changing climate. Currently the waste management system in Coimbatore consists of door to door collection of waste and final disposal in the treatment and disposal plant at Vellalore. However, the waste collection is not segregated to the fullest extent, although the city has been trying to encourage segregation at source. The Vellalore plant is not functioning to the fullest extent possible, and there is a large open dump in and around the plant resulting from the period when the plant was not functioning due to financial issues. A large amount of mixed waste is dumped in the disposal site that needs to be moved to an old dumpsite and the dumpsite needs to be capped scientifically.



While a lot of work needs to be done at the central processing and treatment level for the system, the city also recognizes that decentralized systems of solid waste management that help to reduce, reuse and recycle waste can be a big support to the system as a whole. One such initiative was undertaken very successfully already in the city in ward number 23, where 100% segregated waste collection had been achieved and dry waste was recycled while the segregated wet waste was treated in the Vellalore plant. This successful pilot has been extended to two more wards - Ward 22 and 24, under CapaCITIES.



GHG Emission Reduction / Adaptation Impact

The project demonstrated the potential for reducing the climate change impact of existing waste practices in the city through the following means:

1. Promoting door-step collection of segregated waste through intensive community awareness generation and training of municipal staff. Biodegradable and dry waste including recyclables and inerts were collected in two separate containers and transported as separate fractions.

- GHG emission mitigation potential: Increases efficiencies of waste processing plants that process only biodegradable waste. This would result in reducing the quantum of mixed waste containing biodegradable waste that is thrown out as reject from the plant. This mixed waste when dumped also results in uncontrolled methane emissions.



2. Designing and implementing a biomethanation facility in the City which will cater to the biodegradable waste generated in wards 22 and 24.

- GHG emission mitigation potential: 1771 tonnes of CO₂e per annum is the GHG mitigation potential of the 1.5 tonne biomethanation plant.

3. Defining and implementing a recyclables management system by integrating the informal sector

- GHG emission mitigation potential: Life cycle carbon emissions that would otherwise result during the production and consumption of virgin material are reduced



Beneficiaries

Project beneficiaries include Coimbatore Municipal Corporation, Public Works Department (Government of Tamil Nadu), Public Health Engineering Department (Government of Tamil Nadu), waste workers and the citizens of Coimbatore.

Potential for Replication

The project has good potential for scaling-up to the remaining wards. Finances for scaling up can be mobilized under various National and State level programmes such as Swachh Bharat Mission, Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Mission.

Project Investment

The total project investment was CHF 118'500

For more information, please contact:

ICLEI- Local Governments for Sustainability, South Asia
C-3 Lower Ground Floor, Green Park Extension, New Delhi 110 016, Tel: +91-11-4974 7200, Fax: +91-11-4974 7201
Email: iclei-southasia@iclei.org, Coimbatore Contact: +91-8940504004