

Project scenario: construction

Compost

Plant unde



Project Scenario: Windrows formation and turning by JCBs



Project scenario: Coarse Segregation section



Project scenario: Refinement section

Contribution to reduction in GHG emissions by the Proposed Project Activity

Project activity leads to reduction in GHG emissions by avoiding methane emissions from anaerobic decomposition in a solid waste disposal site through controlled aerobic decomposition in a windrow composting process.

Contribution to sustainable development by the project activity

Environmental benefits:

Composting of Municipal Solid Waste (MSW) is an attractive option for:

- 1. Resource recovery and environmental improvement: Local benefits would be the recycling of resources, and better management of solid waste. Open disposal of given waste is prevented resulting in reduction in land requirement for waste disposal, leading to improved environmental conditions and a replicable model.
- In contrast to the anaerobic decay of biodegradable waste that occurs in the SWDS, which
 results in methane generation among other landfill gases, the composting project will
 contribute to mitigation of greenhouse gas (GHG) emissions through aerobic decomposition
 of the organic waste.
- 3. The end product of the project activity is compost that will be used as organic manure and combat soil degradation, since its application will lead to recycling humus, the organic matter, back to soil thus improving soil productivity.

Social and economic benefits:

- 1. Employment generation: The six plants are expected to provide direct employment to more than 150 employees in the composting facilities (since the plants are semi-mechanized) and many more indirect employments during supply of compost to farmers.
- 2. Compost as a means of a resource: This project will suitably assist in providing compost supply for urban agriculture, horticulture, floriculture and vegetable production in and around the neighbouring regions.
- 3. Improving economic viability of the project: Since the cost of production of compost will be subsidised using revenue from carbon credit, marketing of compost will become easier, thus ensuring the sustainability of the project.

Consistency with sustainable development policies of the host country:

The 'Municipal Solid Waste, Management and Handling, Rules, 20001² (with an implementation schedule in 2003) recommends the pre-treatment of wastes prior to sanitary land filling. The increased need for professional waste management has made solid waste management a top

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² http://envfor.nic.in/legis/hsm/mswmhr.html

priority for most urban local bodies. This project will serve as a model of financially sustainable waste management project. Appropriate waste management is gaining priority of the Government. The Government of India is also supporting balanced nutrient management for agricultural soil in order to ensure that the productivity of agricultural land does not keep declining due to over use of chemical fertilizers³.

The Project will also contribute towards achieving sustainable waste management in the cities. The design and operation of this project, in conjunction with the avoidance of methane emissions and production of compost as a soil amendment, will serve as an example to many other urban areas in the country that are facing similar waste management challenges.

A.2. Location of project activity

A.2.1. Host Party

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India

A.2.2. Region/State/Province etc.

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Six Plants disseminated over the state of Tamil Nadu in and around Coimbatore

A.2.3. City/Town/Community etc.

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Coonoor, Mettupalayam, Erode, Udumalpet, Trichy, Pollachi

A.2.4. Physical/Geographical location

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	Erode	Udumalpet⁴	Mettupalayam
Location	Geographic Location 11° 18′ 54″ N 77° 45′ 14″ E	Geographic Location 10° 35′ 40″ N 77° 13′ 03″ E	Geographic Location 11° 18′ 31″ N 76° 57′ 34″ E
Distance from Coimbatore	90 km	56 km	58 km
Connectivity	Central Bus terminus of the city is one of the biggest in the state. Nearest airport is Coimbatore.	7 kms away from Municipal office. Lies between the famous temple town of Palani (35km) and Pollachi (28km) in the National Highway No.209. Nearest Airport is Coimbatore.	Rail head is on Mettupalayam- Udhagamandalam Railway Line Nearest Airport is Coimbatore.

	Coonoor	Trichy	Pollachi
Location	Geographic Location	Geographic Location ⁵	Geographic Location
	11° 20′ 57″ N	10° 48′ 22″ N	10° 40′ 35″ N
	76° 47′ 34″ E	78° 43' 19" E	76° 58′ 58″ E

³ Waste to Wealth- A report by Inter Ministerial Task Force on Integrated Plant Nutrient Management, May 2005, constituted by Ministry of Urban Development, Govt. of India

⁴ From 1st January 2015 the Udumalpet plant has been excluded from the project activity. Since the project has already claimed emission reductions from 2010-2014 the plant is still being discussed in the PDD

⁵ The land under old coordinates as mentioned in the registered PDD was taken up by National Highway Authority of India (NHAI) which was out of PP control. Therefore, the composting plant was relocated to Ariyamangalam landfill site with approval from the City municipal Corporation of Tiruchirappalli (Trichy).