



## 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.
2. 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 three plants are expected to provide direct employment in the composting facilities (since the plants are semi-mechanized) as well as 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, vegetable production and crop farming in and around the neighbouring states.
3. Improving economic viability of the project: Since the cost of production of compost will be subsidised using revenue from carbon credits, 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, 2000'<sup>1</sup> (with an implementation schedule in 2003) recommends the pre-treatment of wastes prior to land filling. The increased need for professional waste management has made solid waste management a top 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 fertilizers<sup>2</sup>.

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.