



Sustainable Waste Management through Vermicomposting



**CHENNAI
INSTITUTE OF TECHNOLOGY**
(Autonomous)

SDG focus

- Goal 6 - Clean water and sanitation
- Goal 7 - Affordable and clean energy
- Goal 12 - Responsible consumption and production

What did you do?

The Chennai Institute of Technology, in collaboration with the NGO ExNoRa, has launched a rural initiative focused on vermicomposting and the production of organic manure. This project involves 62 students along with 42 members of the local community, working together to manage and convert organic waste into valuable compost. Organic waste collected from the village is composted once a month with the support of ExNoRa using vermicomposting methods. The initiative not only transforms waste into useful manure but also promotes its use in local community lands and gardens. As part of the effort, awareness programs are conducted to educate people on how to carry out vermicomposting and understand its environmental and agricultural benefits.

What were the benefits and outcomes?

1. Organic waste from the village is regularly collected and processed, reducing waste accumulation and promoting a cleaner environment.
2. The vermicomposting process converts waste into nutrient-rich manure, which is then used to improve soil health in local lands and gardens.
3. The initiative educates local residents on vermicomposting techniques and benefits, encouraging sustainable practices and active community involvement in environmental conservation.

What barriers or challenges did you encounter in embedding sustainability into your learning and teaching practice and how did you overcome them?

1. Insufficient sustainability training and support from the wider sector
2. Weak sustainability culture
3. Sustainability is not integrated into national curricula, assessment criteria or teaching standards.

Enhanced teacher training programs that focus on Education for Sustainable Development (ESD). Involved local communities and parents in sustainability initiatives to broaden the cultural impact beyond the classroom.

What are your conclusions and recommendations for others?

Conclusions: The vermicomposting initiative by the Chennai Institute of Technology, in partnership with the NGO ExNoRa, demonstrates a successful model of sustainable waste management in rural areas. By actively involving students and local community members, the project has not only reduced organic waste but also created a valuable resource in the form of organic manure.

Recommendation: Involve local residents and NGOs to ensure active participation and long-term sustainability of the project.