



**APSHISHT MANAGEMENT  
AND ENVIRONMENTAL RESEARCH  
PRIVATE LIMITED**



*#Make a Green Step for Sustainability#*



The Biggest challenge in India nowadays is Waste Management. Excessive uses of Chemicals and Fertilizers on Agriculture, Tea Gardens, Farms etc. which causes serious soil degradation. Our Motive is to make the environment clean and green and to build a healthy product for healthy environments. Vermi-Compost and Organic Compost is the solution to make the environment sustainable.

Solid waste management systems currently receive wide attention, from both economic and environmental planners, because of their complexity during coordination of various management strategies. The efficiency and cost effectiveness of route optimization and disposal site selection depend largely upon the appropriate placement of storage bins and their corresponding command area for waste contribution.

*Continuous feeding type Rotary Drum Composter(electrically operated)*



## **ROTARY DRUM COMPOSTING**

Rotary drum composters are one of the first types of In-vessel composting systems where a large amount of waste material can be decomposed within an enclosed space in shorter time under controlled process. It is an efficient and promising technique with its decentralized processing of the material, as it provides agitation, aeration and uniform mixing of the compost material by various forced aeration and mechanical turning devices to produce a stabilized end product with high quality.

*Batch feeding type Rotary Drum Composter (manually operated)*







*Vermi-bag for mobile vermicomposting*

## VERMI COMPOSTING

Vermicomposting is the process by which worms are used to convert organic waste materials into a humus-like material known as vermicompost. Vermicomposts have been shown to contain reduced levels of contaminants and a higher saturation of nutrients than the organic materials before vermicomposting



*Permanent vermicomposting beds*

*Biogas digester (gas lift type)*

## BIOMETHANATION

Under anaerobic conditions organic matter rots with the help of microorganisms to produce biogas. It is a mixture of methane  $\text{CH}_4$  (75-50%) and carbon dioxide  $\text{CO}_2$  (25-50%) and can be burned to carbon dioxide and thereby energy is produced.

Biogas is produced from organic waste. Thus it reduces the amount of waste in our landfills. Biogas is also a powerful fuel, which can help to satisfy our energy needs in a sustainable and  $\text{CO}_2$  neutral way.



*Balloon for Biogas storage and transportation*



## Products:

- ☐ Compost:
  - a. Vermi Compost: 100% natural vermicompost with high NPK values and other micro nutrients.
  - b. Organic Compost; 100% Organic and high NPK values with other micro nutrients. The highest quality compost is IIT Guwahati Tested and Certified.
- ☐ Rotary Drum Composter (Batch and Continuous)
- ☐ Biogas Digester (Small and Large Scale)
- ☐ Vermi bag for mobile vermi-composting.
- ☐ Additional machineries like
  - a. Shredder
  - b. Compresor
  - c. D.C. generator
  - d. Balloon(for biogas collection)

## Services Provided:

- ☐ Planning, Execution and Commissioning of Vermi-compost and Organic Compost Plants.
- ☐ Planning and Implementation of Integrated Solid Waste Management for Town and Cities.
- ☐ Designing and Operation of Biogas Plant (Small and Large Scales).
- ☐ Preparing DPR For Corporation, ULB'S, Panchayat, and District Administration for implementation of ISWM.
- ☐ Providing Training to Govt. Authority, Private Companies, NGO'S, Students, Community person etc. regarding ISWM.
- ☐ Collaborative work with Municipal Corporation and Panchayat for Community Development related to Solid Waste Management.

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