D. S. GOVERNMENT DEGREE COLLEGE FOR WOMEN, ONGOLE. 523001. PRAKASAM DISTRICT. A.P.

TITLE OF THE PRACTICE:

SOLID WASTE MANAGEMENT FOR SUSTAINABLE DEVELOPMENT – VERMICOMPOSTING

1. OBJECTIVES:

- To make the campus as a living laboratory for building culture of sustainability.
- To take advantage of the academic community potential to engage themselves and improve the scenario through teaching, research and outreach in several fields of study .
- To form linkages between knowledge and dissemination in the Community.
- To elevate the critical role of the lecturer in sustainable development by educating professionals not only to get a good job but also for the better society.
- To teach the students the suitable way to manage waste by giving example.
- To make campaigns aimed at meeting the 3R's (reduce, reuse and recycle) in waste management initiatives on campus.
- To promote 3R's practices to have a positive effect on a students attitudes about resources, it means that simple initiative can bring positive impact on student's behaviour.

2. THE CONTEXT:

Society has been increasingly concerned about waste production and consumption growth. Currently, the consumption model adopts a liner process - extraction, production, consumption, and disposal - that there is an increase in resource usage rate and raw material depletion. The more technological

development and social progress happen, the higher demand for resources, and consequently, the damage is going to be greater to the environment and society. Waste management in Higher Education Institutions (HEI) there is an incipient study on the context of environmental sustainability. HEIs have an essential role in innovation and knowledge diffusion they are agents of improvement in society. They have a critical role in sustainable development because they have to prepare professionals not only for the market but also for society. Thus, it is important that teach by giving example and awareness of a suitable way to manage waste. There is a wide diversity of waste produced by HEIs, including construction and demolition waste, electronic waste, office waste, lamp, furniture, metal, hostel waste. It is considered as sustainability is the balance between environmental, economic and social factors, a term known as Triple Bottom Line. Equally important is the definition of sustainable development as "…development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Sustainable waste management is a central subject for circular economy, which has received global attention due to dealing with the transition from the linear consumption model to a circular economy model by increasing resource efficiency and harmonizing the relationship between society, environment, and economy. When the student community awareness about waste management, conscious consuming, correct disposal of garbage, etc., it disseminates knowledge everywhere, including acting as a good influencer in where it lives. Solid waste management is a healthy and clean way to eliminate wastes going into our landfills, which improves the environment. It is the Eco friendly method of converting organic waste into nutrient rich fertilizer. Vermicompost is the product of the composting process by various species of Earthworms. The beneficiaries can understand the recycling process. Vermicomposting is a method of using worms to produce organic waste into a nutrient-rich chemical free fertilizer. The main objective of Vermicomposting is to produce organic manure of good quality. Vermicomposting is a method of using earth worms to transform organic waste into a nutrient-rich fertilizer. The main objective of Vermicomposting is to

produce organic manure of exceptional quality for the organically starved soil by using house hold wastes, garden wastes and hostel kitchen waste are usually dumped into at places resulting in a foul mess.

3. THE PRACTICE :

College has established solid management vermicomposting units in college campus with 2vermicompost beds having size 2m X 1m X0.75m which is constructed by bricks and cement. The Vermicompost beds were ready which is made up of leaves, small twigs ,garden waste , hostel kitchen waste and were maintained properly with perfect management. It generates rich compost which the college uses for its own garden.

4. EVIDENCE OF SUCCESS:

Implementing a vermicomposting program in a college campus can have many benefits, including reducing waste, producing fertilizer for campus garden and educating students and staff about sustainable practices.This practice has helped the institute to train students to recycle organic waste in a productive way. This practice has solved a problem of disposal of organic waste and the institute is getting good quality compost for its own garden.

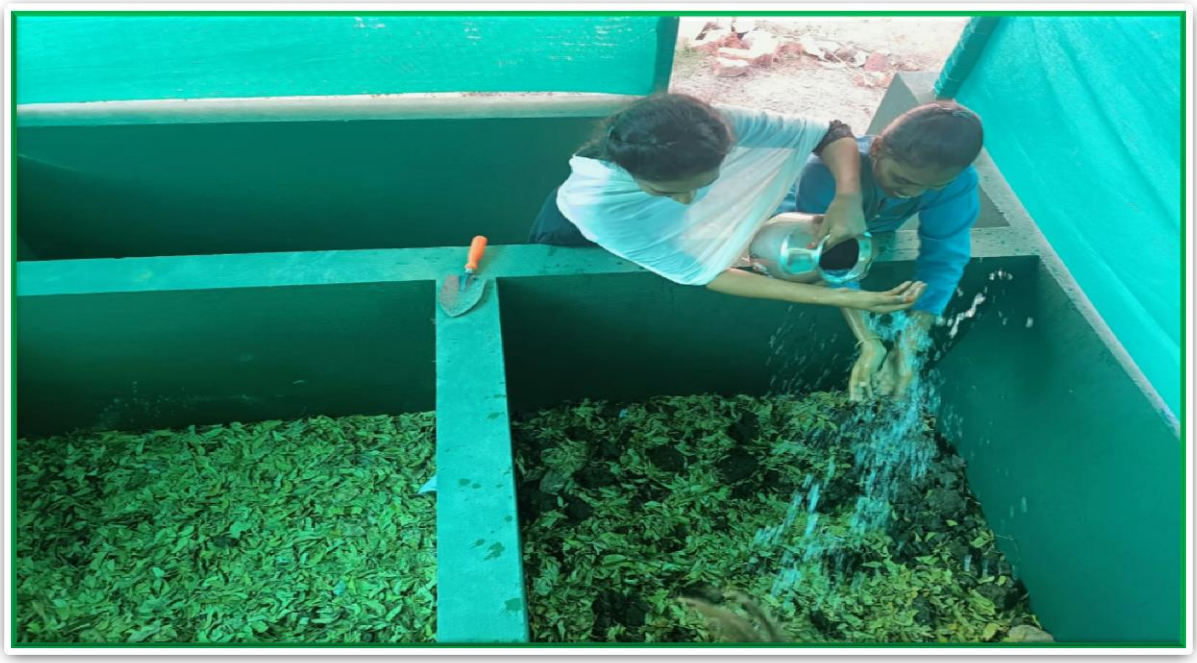
5. PROBLEMS ENCOUNTERED AND RESOURCES REQUIRED:

Face difficulty for the collection of cattle dung, which is an important requirement for the Vermicompost bed preparation. It is difficult for the maintenance of vermicompost beds during summer vacation.

VERMICOMPOSTING BED PREPARATION

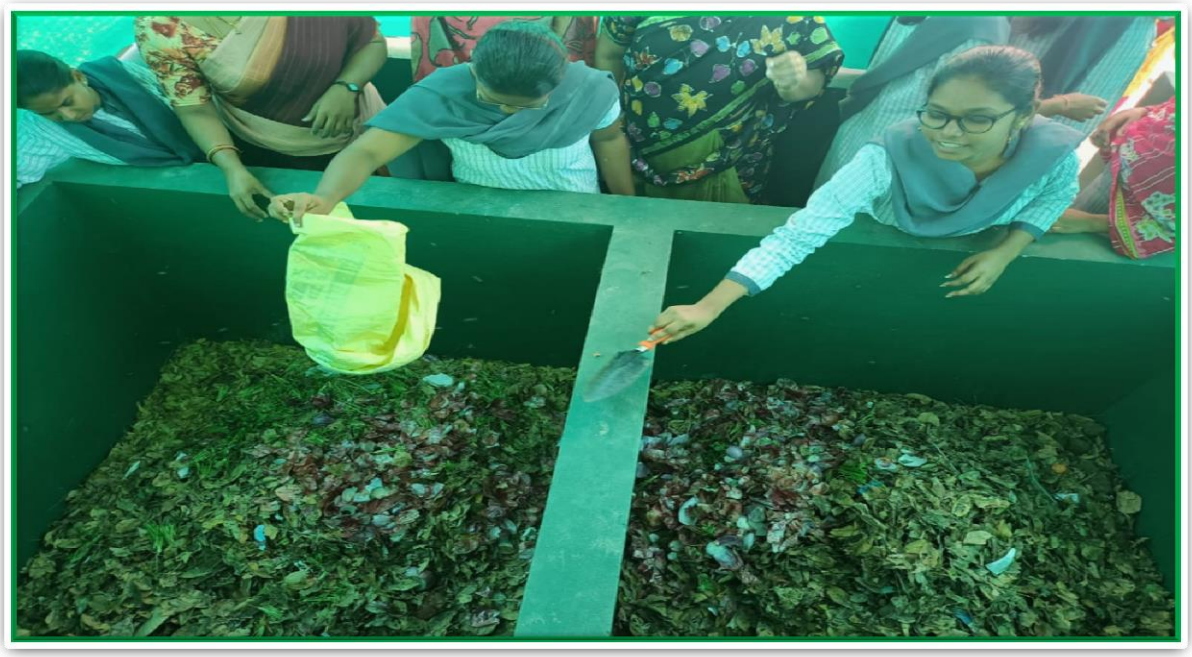
DUMPING OF ORGANIC WASTE

FILLING UP OF BEDS



SPRINKLING OF WATER ON THE BEDS

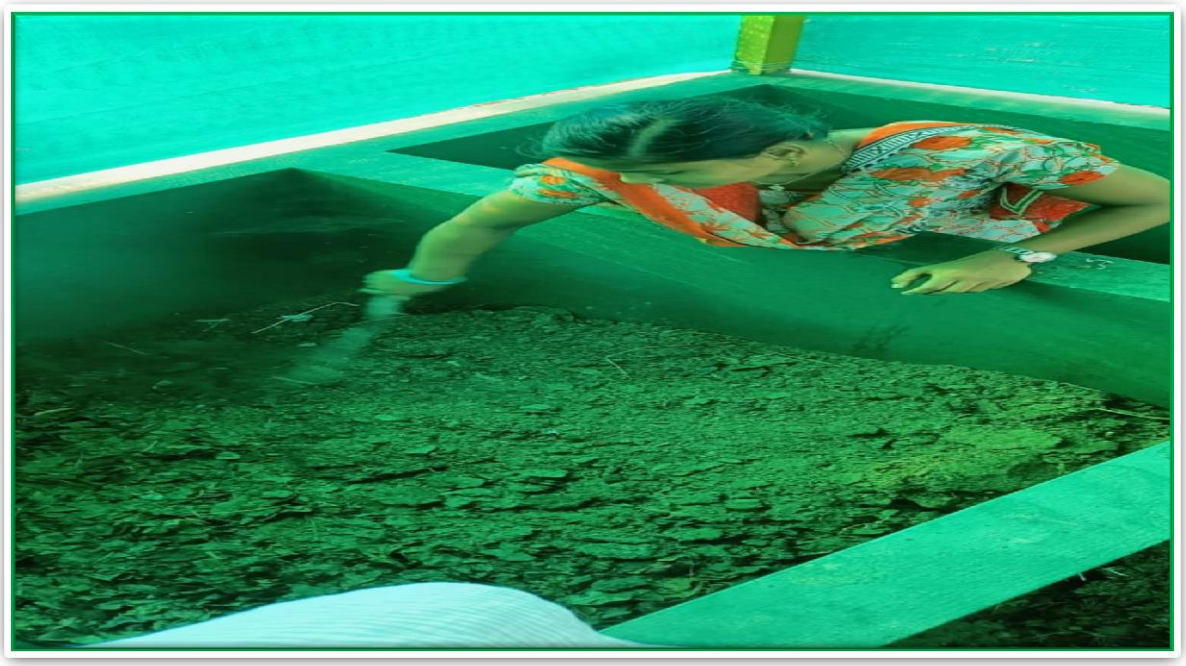
DUMPING OF KITCHEN WASTE



DUMPING OF KITCHEN WASTE

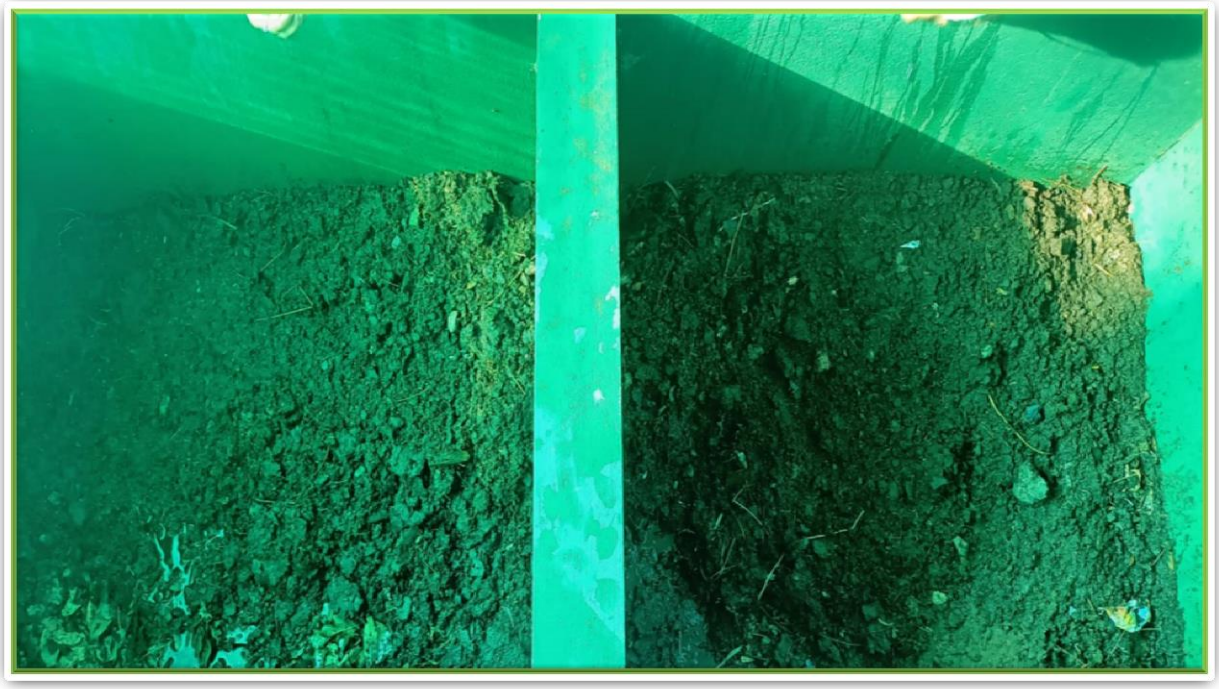
DUMPING OF COW DUNG

DUMPING OF COW DUNG



FILLING UP OF COW DUNG

SPRINKLING OF WATER



VERMICOMPOST