

Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

Report on a Workshop on "Biogas Waste Management through Vermicomposte

Conducted by Dept. of Rural Technology, Dept. of Forestry, Wildlife & Environmental Sciences and Skill Development Cell, GGV, Bilaspur

Date of Event: December 14, 2023

Venue : Department of Forestry, Wildlife & Environmental Science and

Mushroom Centre



GURU GHASIDAS VISHWAVIDYALAYA

Bilaspur-495009, Chhattisgarh





Prof. Alok Kumar Chakrawal Hon'ble Vice Chancellor G.G.V., Bliaspur (C.G.)

Department of Forestry, Wildlife & Environmental Science & Skill Development Cell

A Workshop on

"Biogas Waste Management through Vermicomposting"

Date : 14th December 2023

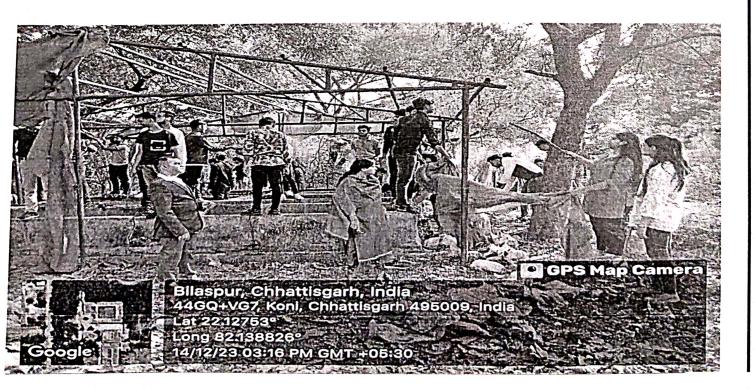
Venue: Department of Forestry, Wildlife & Environmental Science

Dean
Prof. S.C. Tiwari
SoS, Natural Resources

Dean Prof. R. Mehta SoS, IER Nodal Officer Dr. Rohit Raja Skill Development Cell GGV, Bilaspur

Prof. K.K. Chandra
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Convener Prof. P.R. Singh Dept. of Rural Tech. Organizing Secretaries
Dr. Dilip Kumar
Dept. of Rural Tech.
Dr. Ajay Singh
Dr. Bhavna Dixit
Dr. Chowlani Manpoong
Dept. of Forestry





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Details of Event Proceedings

Date	Details of the	Details of Resource	Number of
(DD-MM-YYYY)	Session	Person	Participants
14-12-2023	Biogas Waste Management Through Vermicompost	Dr. Dilip Kumar (Assistant Professor) Dept. of Rural Technology	76

A Brief Abstract of the Event (Maximum 500 Words):

Introduction:

On 14-12-2023, a workshop titled 'Biogas Waste Management through Vermicomposting' was conducted at Department of forestry, wildlife & environmental sciences The workshop aimed to educate participants about the effective utilization of biogas waste as a substrate for vermicomposting, thereby promoting sustainable waste management practices. This report outlines the key discussions, presentations, and outcomes of the workshop under the supervision of Dr. Dilip Kumar

Objectives:

- 1. To introduce participants to the concept of vermicomposting and its role in organic waste management.
- 2. To demonstrate the process of vermicomposting using biogas waste as a feedstock.
- 3. To provide practical training on setting up and maintaining vermicomposting systems for biogas waste management.
- 4. To discuss the environmental and agricultural benefits of vermicompost produced from biogas waste.

Workshop Content:

1. **Introduction to Vermicomposting:**

- Overview of vermicomposting as a biological process involving the decomposition of organic waste by earthworms.
- Explanation of the benefits of vermicompost, including improved soil fertility, moisture retention, and nutrient availability for plants.



2. **Biogas Waste as a Substrate:**

- Discussion on the characteristics of biogas waste generated from anaerobic digestion systems and its suitability for vermicomposting.
- Presentation on the nutrient content and decomposition rates of biogas waste, highlighting its potential as a valuable substrate for earthworms.

3. **Vermicomposting Techniques:**

- Step-by-step guidance on setting up vermicomposting bins or beds, including selection of containers, bedding materials, and earthworm species.
- Practical demonstration of vermicomposting process, including feeding, moisture management, and temperature control for optimal worm activity.

4. **Monitoring and Maintenance:**

- Training on monitoring key parameters such as temperature, moisture content, pH, and worm population density in vermicomposting systems.
- Guidance on troubleshooting common issues such as odor, pest infestation, and excessive moisture accumulation in vermicompost bins.

5. **Quality Assurance and Application:**

- Discussion on quality standards for vermicompost, including maturity, odor, and microbial activity indicators.
- Examples of agricultural and horticultural applications of vermicompost, emphasizing its role in soil amendment, organic fertilizer, and plant growth promoter.

6. **Case Studies and Success Stories:**

- Sharing of case studies and success stories from farms, community projects, and institutions implementing vermicomposting for biogas waste management.
- Insights into the economic, environmental, and social benefits derived from integrating vermicomposting into biogas waste management systems.

Conclusion:

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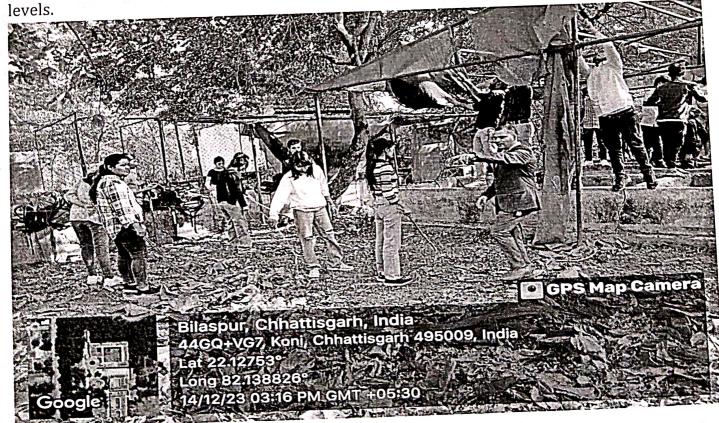


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The workshop on 'Biogas Waste Management through Vermicomposting' provided participants with practical knowledge and skills essential for implementing sustainable waste management practices. By utilizing biogas waste as a substrate for vermicomposting, participants can effectively convert organic waste into valuable vermicompost, contributing to soil health improvement and environmental sustainability.

Recommendations for Future Action:

- 1. Encourage participants to apply the vermicomposting techniques learned during the workshop in their waste management practices.
- 2. Provide ongoing support and technical assistance to help participants overcome challenges and optimize vermicomposting systems.
- 3. Organize follow-up sessions or field visits to monitor the progress and outcomes of vermicomposting initiatives implemented by participants.
- 4. Advocate for policy support and incentives to promote the adoption of vermicomposting for biogas waste management at the community and institutional levels.

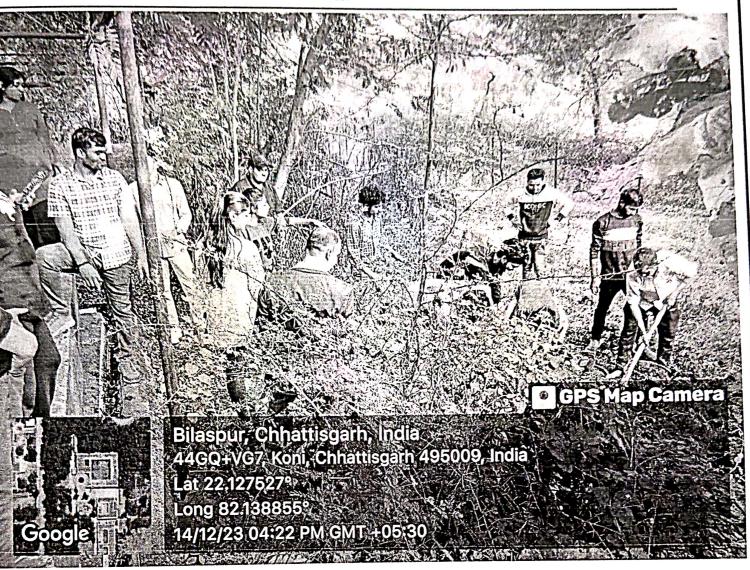


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