P. O. College Nagar, Guwahati-781031



Ref. No.

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Phone No. (0361)2690055 Date: 03-05-2022

http://www.northgauhaticollege.in/bestpractices.php

Two Best Practices of the institution (2021-2022)

BEST PRACTICE-1

1. Title of the Practice:

"VERMICOMPOSTING"

- 2. Objectives of the Practice: The college has embraced Vermicomposting as a leading sustainable practice with the goal of converting organic waste into compost. This approach not only achieves effective organic waste management but also produces valuable organic compost and soil conditioner. Vermicompost, the end product of organic compound breakdown by earthworms, is rich in saturated nutrients, offering a swift and eco-friendly method for recycling organic waste.
 - > For Sustainable Organic Waste Management by converting organic waste generated within the college premises into valuable compost.
 - > To achieve the production of nutrient-rich vermicompost, a humus-like material resulting from the breakdown of organic compounds by earthworms, which can serve as an organic fertilizer and soil conditioner.
 - > For Utilization of Organic Waste Resources
 - > To provide educational and Skill Development to students with hands-on experience and skills in managing organic waste effectively, fostering an understanding of sustainable practices and environmental stewardship.
 - > For Promotion of Eco-Friendly Practices
 - > To integrate the use of vermicompost into organic farming practices within the college, enriching the soil with essential nutrients, plant hormones (auxins and gibberellins), and promoting overall soil health.
 - > To improve the fertility, water resistance, and physical structure of the soil.
 - ➤ Revenue Generation: To generate revenue for the college by making surplus vermicompost available to the public at a subsidized rate, contributing to the financial sustainability of the vermicomposting initiative.



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➤ Community Outreach: To raise awareness about the benefits of vermicomposting and encourage community involvement in sustainable waste management practices beyond the college campus.

> To regularly assess and refine the vermicomposting process, incorporating innovative techniques and technologies for continuous improvement and optimization of organic waste conversion.

3. The Context:

In a collegiate context, the implementation of vermicomposting is contextualized by the unique circumstances that underscore its relevance in addressing organic waste management challenges. The college campus grapples with a substantial influx of diverse organic waste, encompassing garden waste, kitchen refuse, and other biodegradable materials, necessitating effective waste disposal and management strategies.

Aligned with a steadfast commitment to environmental sustainability, the college recognizes the significance of adopting eco-friendly practices. Vermicomposting emerges as a solution that resonates with the institution's values, offering an environmentally responsible alternative to traditional waste disposal methods that may have detrimental impacts on the environment.

Beyond waste management, vermicomposting is perceived as an educational opportunity for students, aligning with the institution's goals of instilling environmental responsibility and sustainable living. This hands-on practice provides students interested in environmental science, agriculture, or sustainability with practical knowledge, seamlessly integrating theoretical concepts into real-world application.

The vermicomposting initiative is not confined to practical application; it is seamlessly integrated into the academic curriculum. This interdisciplinary approach allows students to delve into the science of composting, soil health, and the symbiotic role of earthworms in decomposition, connecting theoretical knowledge with hands-on experience.

Recognizing the interconnectedness between the college and the broader community, vermicomposting becomes a conduit for community engagement and outreach. The institution aspires to involve the local community in sustainable practices, whether through sharing surplus compost or conducting awareness programs to elucidate the benefits of vermicomposting.



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4. The Practice:

a) Vermicomposting Infrastructure: Four PVC drums, each with a capacity of 160 liters, were designated for the vermicomposting process.

Additionally, two compost pits were employed as part of the infrastructure for organic waste management.

b) Waste Filling Procedure: The PVC drums and compost pits were regularly filled with cowdungs and organic waste, comprising materials such as kitchen waste and garden refuse.

This consistent organic waste filling serves as the raw material for the vermicomposting process.

c) **Introduction of Earthworms:** Earthworms, crucial for the decomposition process, were sourced from a nearby venture.

These earthworms were strategically introduced into the drums and pits at an appropriate time to initiate the composting cycle.

d) Composting Timeframe: The vermicomposting process typically spans a duration of 45 to 50 days.

During this period, the earthworms actively break down the organic compounds, transforming them into nutrient-rich humus.

e) Compost Utilization: Once the composting cycle is complete, and the vermicompost is deemed ready, it is made available for various applications.

The mature vermicompost, enriched with essential nutrients, is utilized within the college premises for gardening, farming, or other relevant purposes.

This systematic approach to vermicomposting involving proper infrastructure, waste management, introduction of earthworms, and a well-defined composting timeframe ensures an efficient and sustainable process, yielding valuable compost for diverse applications.

5. Evidence of Success:

Campus Garden Soil Enrichment: The compost produced is applied to the college campus garden which enhances the soil quality and fertility.

Compost Quantity: An approximate yield of 200-250 kilograms of compost was generated through the vermicomposting process.



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Revenue Generation for the College: The sale of compost to the public at subsidized rates serves as a revenue stream for the college, supporting the sustainability of the vermicomposting initiative.

Student Skill Development: Engaging in vermicomposting imparts valuable skills to students, equipping them with the know-how to effectively manage organic waste and engage in productive recycling practices.

This integrated approach not only benefits the college by enhancing its revenue streams and the campus garden's soil quality but also serves as an educational platform for students to develop practical skills in sustainable waste management.







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6. Problems Encountered and Resources Required:

Ongoing availability of depleted materials from oyster mushroom harvest, cow dung, organic waste, and garden refuse ensures a steady supply for vermicomposting.

Earthworms, a crucial component, naturally multiply every 45-50 days, ensuring a sustainable resource base for the practice.

Resource Abundance: The consistent presence of these resources ensures that the vermicomposting initiative has a reliable and continuous supply for its operations.

Key Challenge: The primary challenge faced pertains to the maintenance and protection of earthworms, particularly during the rainy and summer seasons.

This dual aspect of abundant resources and a singular challenge underscores the overall viability of the vermicomposting endeavour, portraying a well-supported initiative with a specific focus on addressing and overcoming identified challenges.

BEST PRACTICE-2

1. Title of the practice:

EMPOWERING COMMUNITIES THROUGH ADOPTED VILLAGE INITIATIVES

2. Objectives of the Practice:

- > To promote sustainable development and empower local communities.
- > To provide students with practical experience, exposing them to real-world societal challenges.
- > To make a positive contribution to the socio-economic well-being of the adopted village.
- > To contribute positively to the environmental well-being of the adopted village.
- > To have a holistic impact on the adopted community, addressing both social and environmental aspects.



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➤ To foster the well-being of the adopted village in various dimensions, creating a symbiotic relationship between the academic institution and the community.

3. The Context:

In contemporary education, numerous colleges acknowledge the imperative for a holistic learning experience extending beyond conventional classroom boundaries. The adoption of a village emerges as a tangible and pragmatic avenue for students to translate theoretical knowledge into real-world applications. This initiative not only facilitates a dynamic learning environment but also serves as a manifestation of colleges actively embracing their social responsibility. By engaging in the adoption of marginalized or underserved communities, colleges can play a pivotal role in community development. This approach transcends theoretical discourse, offering students a firsthand understanding of societal complexities and challenges. The practical platform afforded by adopting a village reinforces the college's commitment to cultivating socially responsible individuals equipped to address real-world issues, thereby bridging the gap between academic learning and practical, community-oriented application.

4. The Practice:

The adopted village practice involves forming a collaborative partnership between the college and the local community.

Name of the Adopted Villages:



- I. Barbaka
- II. Sarubaka
- III. Rajaali
- IV. Manik Nagar
- V. Bar Nijarapar

Key components of this practice include:

- Conducting needs assessments to identify the specific requirements of the community.
- Developing and implementing sustainable projects in areas such as education, healthcare, sanitation, and skill development.
- Involving students in the planning, execution, and evaluation of projects to enhance their leadership and problem-solving skills.

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- Establishing regular communication channels between the college and the village to ensure ongoing support and adaptability to changing needs.
- > Involvement of the NSS Unit of North Gauhati in various activities of the villages.









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5. Evidence of Success: Success in adopted village initiatives can be measured through various metrics, including:

- > Improved literacy rates or educational outcomes.
- > Enhanced healthcare access and improved health indicators.
- > Increased economic opportunities for the community through skill development and entrepreneurship.
- Positive environmental impact, such as improved waste management or conservation efforts.
- > Community testimonials and feedback showcasing the perceived benefits of the adopted village program.

6. Problems Encountered and Resources Required:

While adopted village initiatives are commendable, challenges may arise, including:

- > Resistance or skepticism from the local community.
- > Limited resources, both financial and human.
- > Cultural differences that may affect the effectiveness of certain interventions.
- > To overcome these challenges, colleges need to allocate dedicated resources, build strong community partnerships, and implement thorough training programs for students and faculty involved in the initiatives.

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