

Best Practice : 1 **Waste Management Report**

1. Title of Practice: -

Waste Management through Eco-Friendly and Sustainable way.

2. Target: -

Target of the waste management practice is to convert organic waste coming from college campus and surroundings and gardens of N.H. College into compost by using Vermicomposting technique thereby achieving dual outcomes of sustainable waste management and its use as organic compost.

N.H. College has lushed with central garden and many trees in and around the college campus. As the vegetation in this region are mainly of deciduous type because of which senescence of leaves are very common particularly from the months of Late January to June. As much number of dried leaves and plant clippings dispersed throughout the ground and are only meant to be collected and burnt out. Instead to vein all these natural elements department of zoology and N.H. college decided to utilize it in proper way by setting up a vermicomposting unit, the product which can be utilized for the development and enhancement of green campus. Intended outcomes of vermicomposting practice would not only a sustainable organic waste management but also produced compost of superior value with very high nutritional value. The vermicompost is not only used on campus gardens but is proposed to make it available to public at very affordable rate.

3. The Context: -

Lot of waste is generated from senescent leaves of trees and plants which is wiped and collected by cleaning and garden maintenance staff of the college every day. Organic waste from college campus includesleaves, wood sticks, gardenwaste such as flowers, branches, remnants from garlandsetc. It also includes non-degradable items such as, plastics, polythene etc. Though the waste is segregated at the source itself, it still consists of plastics etc.Major contextual features for making sustainable waste management successful is to ensure waste is segregated at the sourceitself. Later this non-degradable waste was sent to the Nagarparishad of Bramahpuri. After this Institute has applied the NO PLASTIC POLICY for the minimize the plastic waste.

Rather liquid waste of collegeis treated differently. All toilets blocks and laboratory waste of the campus are connected to sewage line network of the campus. And these sewage line

connected to the main sewage line. And Hazardous chemicals are dump in the soak pits.

4. The Practice

According to plan compost pits (two outer pits for initial decomposing of waste without worms, one pit for cow dung, and four pits inside the unit for vermicompost) are formed for the purpose of vermicomposting at north site of college. The pits are filled with organic waste every day. Each pit has capacity of 300-400 kg. The organic waste is thoroughly mixed with cow dung. This is to ensure proper mixing and faster decomposition. It also improves the quality of compost. The composting is done on a phased manner.

5. Implementation: -

We are converting 50-60% of waste into compost using Vermicomposting in more than 06 pits, where each pit has capacity of 300-400 kg. The compost is of good quality. The compost is used in college gardens for enriching the soil it also utilized for the development of green campus. This has eliminated the need for chemical fertilizers for the same.

We also have future plans to provide skill training to other institutes and individuals like farmers, gardeners and students who wish to learn this skill of composting. This enhances their job potential and provides a sustainable source of income to them. We also encourage Schools teachers and students to visit our department and learn about practices of Sustainable Organic Waste Management. Active involvement of faculty, non-teaching staff, students, of the department enhance their waste management skills and inculcate green habits in them.

6. Evidence of Successes :

Here biodegradable waste can be utilized to make vermicompost. plastic and Styrofoam can be segregate from the waste and after this it will be collected by the municipal corporation garbage van. Tree leaves can also be utilized to make vermicompost. which is a very good substitute for synthetic fertilizer.

Following objective are achieved: -

1. Zero waste Generation
2. No pollution of nearby natural water body
3. Minimum plastic waste by No Plastic Policy

7. Problems Faced and Resources Required:

We encounter a various problem during this program. One of the most common problems was the peoples don't have awareness about how to manage waste material. They don't know how to segregate the waste material into degradable, non-degradable and Hazardous waste material. Due to this it is very difficult to segregate waste material like plastic to separate from the biodegradable waste which will be used for vermicompost and that why the it makes this process more tedious and labor consuming work. And nearby there is no such facilities who can recycle the non-biodegradable waste.

Waste Management Facilities



Vermicompost Unit



Garbage Trolley for Hazardous waste Collection



Sewage Line for Laboratory Waste



Soak pit for Hazardous Chemicals



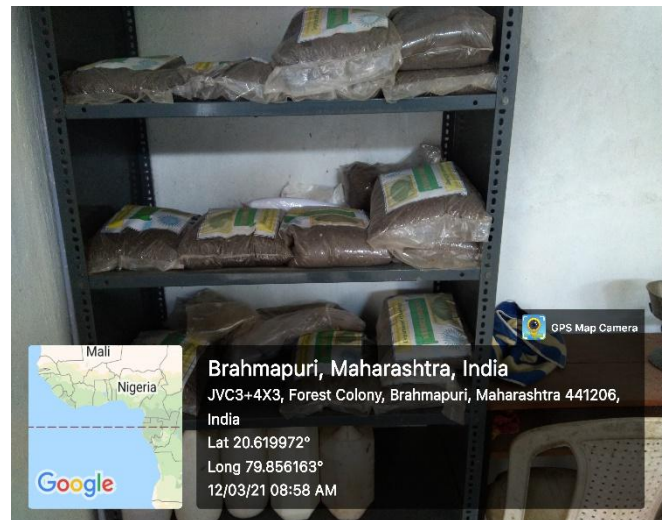
Dustbin for Non-Degradable waste



Dustbin for organic and Degradable waste



Vermicompost Unit



Processed Vermicompost