



Awareness on Waste Management and Segregation at Village Jamgaon (M), District Durg, Chhattisgarh

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Solid waste management has emerged as one of the most significant environmental challenges in developing countries due to rapid population growth, urbanization, and changing lifestyles. In rural areas, inadequate waste collection, open dumping, and the absence of segregation practices contribute to environmental degradation and public health risks. The present study was conducted under the National Service Scheme (NSS) at Village Jamgaon (M), District Durg, Chhattisgarh, with the objective of creating awareness among rural households regarding scientific waste management and source segregation. Activities included demonstrations on waste segregation, village cleanliness drives, group discussions, composting demonstrations, and distribution of awareness pamphlets. The programme significantly improved awareness regarding recycling, composting, and environmental sanitation.

Keywords: Solid waste management, Waste segregation, Composting, Recycling, Rural sanitation, NSS, Sustainable development.

Introduction

Waste management is an important component of environmental protection and sustainable development. Every household, institution, market, and agricultural activity generates waste in different forms. With increasing population and changing lifestyles, the quantity of municipal solid waste has increased considerably. Improper disposal of waste has become a major environmental concern because it contaminates soil, water, and air, besides affecting human health. Segregation of waste at the source into biodegradable and non-biodegradable categories is considered the first step towards effective waste management. The Government of India has launched several programmes, including the Swachh Bharat Mission, to improve sanitation and waste management. The National Service Scheme (NSS) provides an excellent opportunity for students to work directly with rural communities and create awareness regarding environmental protection. Therefore, the present study was undertaken at Village Jamgaon (M), District Durg, Chhattisgarh, to educate villagers about scientific waste management and segregation practices.

Objectives

- To assess existing waste management practices among rural households.
- To create awareness regarding proper waste segregation.
- To educate villagers about biodegradable and non-biodegradable waste.
- To encourage composting and recycling.
- To promote cleanliness and environmental sustainability.
- To evaluate the impact of the awareness programme on villagers.

Materials and Methods

The study was conducted during the NSS Special Camp organized at Village Jamgaon (M), District Durg, Chhattisgarh.

Study Area

Jamgaon (M) is located in Patan Block of Durg district. The village consists mainly of agricultural households and generates domestic, agricultural, and plastic waste.

Awareness Activities

- Demonstration of waste segregation
- Village cleanliness drive
- Compost pit demonstration
- Awareness rally
- Group discussion with villagers
- Plastic-free village campaign

Importance of Waste Segregation

- Easier recycling of paper, plastic, glass, and metal.
- Production of compost from biodegradable waste.
- Reduction in landfill waste.
- Prevention of environmental pollution.
- Conservation of natural resources.
- Reduction of greenhouse gas emissions.

Challenges Observed

- Lack of awareness among villagers.
- Limited availability of separate waste bins.
- Open dumping of household waste.
- Burning of plastic waste.
- Low adoption of composting techniques.
- Poor waste collection infrastructure.

Recommendations

- Promote household-level waste segregation.
- Provide separate colour-coded bins.
- Encourage compost pit construction.
- Strengthen Gram Panchayat waste collection systems.
- Promote recycling of plastic and paper waste.
- Ban open burning of waste.
- Involve schools, NSS volunteers, and self-help groups in awareness activities.

Conclusion

The NSS awareness programme successfully improved villagers' understanding of waste management and segregation practices. The programme motivated villagers to separate biodegradable and non-biodegradable waste, use covered waste containers, adopt safe disposal practices, and participate in village cleanliness activities. Community participation proved to be the key factor in achieving positive behavioural change. Proper implementation of source segregation, composting, and recycling will contribute significantly to environmental protection, improved public health.

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