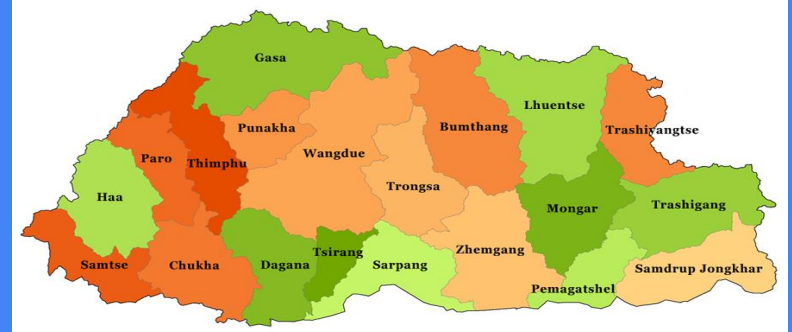




Gender & Waste Management

Sachin Limbu
Environment Officer
Department of Environment and Climate Change
Ministry of Energy and Natural Resources
BHUTAN

Country's Background



Bhutan is recognized as one of the last environmental frontiers in the Eastern Himalayas. The pristine rivers and rich biodiversity of the country have been acclaimed the world over. These achievements are the fruits of tremendous conservation efforts, wise leadership of our monarchs and strategic policies that the country has followed since early times.

The Constitution of Bhutan mandates a forest cover of 60% at all times, showcasing a commitment to environmental sustainability. This legal provision reflects the country's dedication to preserving its natural resources for current and future generations.

Waste management remains an issue of national concern in Bhutan, particularly in the urban areas, due to the increasing quantity of waste generation, its improper disposal, and the associated pollution problems. The National Waste Inventory Survey (NWIS) 2019 reveals that Bhutan generates 172.16 Metric Tonnes (MT) of solid waste per day. Of this, the share of household waste stands the highest with 47.34 % followed by commercial units with 39.09 %. In terms of household waste, the average household waste generated is 0.7 kg per day in urban areas compared to 0.4 kg per day in rural areas.

NWMS



Goal:

The National Waste Management Strategy, 2019 focuses on transitioning from a linear model to a circular economy, emphasizing the importance of preventing waste generation at the source and promoting reuse, recovery, and recycling. The strategic goals aim at achieving a "Zero Waste Bhutan by 2030" through collaborative efforts with various stakeholders.



Objectives of NWMS



- **Inculcate a deeper sense of environmental responsibility by consuming less material**
- **Reduction of waste generation from goods and services by choosing the more natural and less wasteful options**
- **Effectively manage waste following integrated concept to ensure maximum material recovery and minimize quantity of waste to be disposed**
- **To promote participation of all stakeholders in waste management in order to achieve targets set for material recovery**
- **Improve waste management service delivery**
- **Ensure proper treatment of all types of waste**

The short-term targets (2019-2023)

Sustainable Financing Mechanism:

- Design and implement a sustainable financing mechanism for waste management to ensure adequate resources are allocated to support waste management initiatives.

Waste Collection Systems:

- Provide reliable waste collection systems nationwide by establishing waste drop-off centers at strategic locations and exploring technologies for waste recovery and management.

Financial Support for Waste Management:

- Ensure financial support for waste management activities by creating a budget head for all Local Governments (LGs) specifically for waste management. Strengthen implementation by linking activities to Annual Performance Agreements (APA) and Annual Workplans under the overall Five Year Plan (FYP) of the sector.

Operationalize Waste Prevention and Management Act:

- Operationalize the Waste Prevention and Management Act 2009 by strengthening the institutional setup. Enhance coordination between different agencies for strategy implementation, with potential involvement of the Royal Bhutan Police for enforcement.

Implementation Monitoring:

- Implement the Waste Management Strategy through performance benchmarking and regular reporting to oversight agencies, ensuring accountability and progress tracking.

Mandating Good Practices:

- Mandate good practices in waste management, including activities to refuse/reduce the use of packaged goods, total segregation of degradable and non-degradable waste in urban areas, implementation of zero waste events at public functions, and the institution of a National Waste Management Information System.

Awareness Strengthening:

- Strengthen awareness through partnerships with media houses and private waste management entities. Implement education programs on waste for schools and tertiary education systems to foster a culture of responsible waste management.

Capacity Building:

- Develop and implement coordinated capacity building programs on waste management and waste management technologies, including training for private waste management entities.

Waste Management Infrastructure Improvement:

- Improve waste management processes and infrastructure at all stages, from collection to disposal, with specific targets:
 - Develop a Waste Management Plan for each/all Dzongkhags.
 - Achieve 50% collection of organic biodegradable waste, converted to manure with market mechanisms for sale.
 - Disallow infectious and hazardous waste disposal in landfills.
 - Achieve 100% reduction in illegal dumping of construction and demolition waste.
 - Achieve 100% reduction in sewage outflow in urban areas.
 - Upgrade dump sites to sanitary landfills.

The medium and long term targets (2023-2030)

Comprehensive Waste Management:

- Facilitate the management of each type of waste in all forms across the country through the development of codes of practices and process systems. This ensures a comprehensive and systematic approach to waste management.

Exploration of Disposal Options:

- Explore disposal options, including thermal disposal, and assess the possibility of upgrading to full-scale sanitary landfilling. Identify regional sanitary landfills with a lifespan of 20-25 years and construct them wherever feasible and necessary.

Progressive Service Fees:

- Implement progressive service fees for urban centers, providing a financial incentive for responsible waste management practices.

Community and School Waste Banks:

- Support communities and schools in establishing Waste Banks and markets. This encourages recycling, waste reduction, and community involvement in waste management.

Seamless Coordination:

- Establish seamless coordination on planning, implementation, and monitoring of waste activities across all sectors throughout the country. This integrated approach enhances efficiency and effectiveness.

100% Improvement in Waste Collection and Disposal:

- Achieve 100% improvement in waste collection and friendly disposal methods, ensuring that all waste is managed responsibly and environmentally friendly.

Extended Producer Responsibility (EPR) Agreements:

- Enter into Extended Producer Responsibility (EPR) agreements with industries and companies on waste management. This ensures that producers take responsibility for the entire lifecycle of their products, including proper disposal.

Guidelines for Toxic Waste: Develop guidelines for industries generating toxic wastes, ensuring safe and regulated disposal practices.

Separate Collection of Organic/Biodegradable Waste: Require all areas to have separate collection of organic/biodegradable waste with compost plants and established market mechanisms. This promotes resource recovery and reduces the environmental impact of waste.

100% Resource Recovery:

- Aim for 100% recovery of resources from generated waste, emphasizing the importance of recycling and reusing materials.

Waste Segregation into More Than Two Categories:

- Mandate the segregation of waste into more than two categories. Special focus should be placed on segregating plastics, paper, and other recyclable wastes separately from other waste.

Calculation of GHG Reduction for Carbon Credits:

- Mandate the inventory of all waste diversion data to calculate greenhouse gas (GHG) reduction, enabling the claiming of Carbon Credits. This links waste management practices to broader environmental benefits.

Cost Recovery Mechanisms:

- Set up mechanisms across the country for the cost recovery of waste management services by imposing appropriate service fees. This ensures the financial sustainability of waste management initiatives.

These medium and long-term targets provide a roadmap for Bhutan to further enhance its waste management practices, moving towards a more sustainable and environmentally friendly future.

Strategic Interventions and Tools for Sound Waste Management

Strategic Tools

- Sustainable Financing
- Technology Development
- Capacity Development
- Voluntary Agreement
- Establish Communities and school Waste Banks
- Behavioural change through education & awareness program
- Mandatory budget head creation for all LGs
- Data and Information Management System

Crosscutting Issues and Interlinkages

- Waste management during public gatherings and festivals
- Gender and Waste Management



*Gender and Waste Management

Gender stereotypes are evident in the waste management sector, with men often preferred for physically demanding jobs, while women are more commonly employed as waste pickers and cleaners. Street sweepers in Thimphu Thromde are predominantly female, whereas vehicle collection drivers and most scrap dealers are male.

Government Initiatives:

- Formulation of a Gender Equity Policy aimed at integrating gender issues across policies, programs, and projects.
- NGOs like the Tarayana Foundation and Clean Bhutan, recognize the pivotal role of women in waste management
- The Clean Bhutan project, WOW (Wealth out of Waste), focuses on training unemployed wives of police officers to create utility bags and accessories from plastic waste.

*Role of NEC

The National Environment Commission (NEC) is responsible for monitoring overall progress through Annual Performance Agreements (APA), Annual Work Plans (AWP), and Integrated Waste Plans (IWP) in alignment with the mandates of the Five-Year Plan (FYP).

Gender Integration:

- Integrate gender issues across all waste management actions.
- Conduct a situational analysis of gender issues related to waste management to inform the integration process.
- Collaborate with the National Commission for Women and Children (NCWC) to support gender integration efforts.
- Conduct various capacity building and advocacy programmes for the women in regard to waste recycling in collaboration with NGOs (SJI,Clean Bhutan).



GOOD PRACTICES.....

→ Empowering Women



→ Recycling of Plastic Waste



Thank You