



Department of Environment and Climate Change
Ministry of Energy and Natural Resources
Royal Government of Bhutan
Thimphu

BHUTAN
Believe

**LLDCs (Landlocked Developing Countries) Consulting Meeting on the Pre-Zero Draft
of New Declaration on 3R and Circular Economy**

~ Sustainable 3R and Circular Economy Goals for Achieving Resource Efficient, Clean,
Resilient, Sound Material Cycle and Low-Carbon Society in Asia and the Pacific (2024-2034)


6 - 7 August 2024

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3R and Waste Management Activities in Bhutan



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Article 5. Environment

Constitution of the Kingdom of Bhutan

Section 5.1: "Every Bhutanese is a trustee of the Kingdom's natural resources and environment for the benefit of the present and future generations."

Overview of Bhutan's Waste Management Policies

- National Environment Protection Act 2007
- Environment Assessment Act 2000
- Waste Prevention and Management Act 2009
- Waste Prevention and Management Regulation 2012
- Waste Prevention and Management (Amendment) Regulation 2016
- National Waste Management Strategy 2019

Goal

The strategic goal is to achieve "Zero Waste Bhutan by 2030" through collaboration with the public, industry, civil society, government authorities, municipalities, and development partners.

The overall aim of the strategy is to prevent and minimize the generation of waste at source, and to divert materials to be refused, re-used, recovered, and recycled, in order to minimize the amount of waste going to the landfill.

The traditional development model of "take, make, consume, and dispose" relies on abundant and cheap resources, leading to significant waste. This approach is now inappropriate due to resource limitations and the environmental damage it causes, jeopardizing future generations.



Objectives

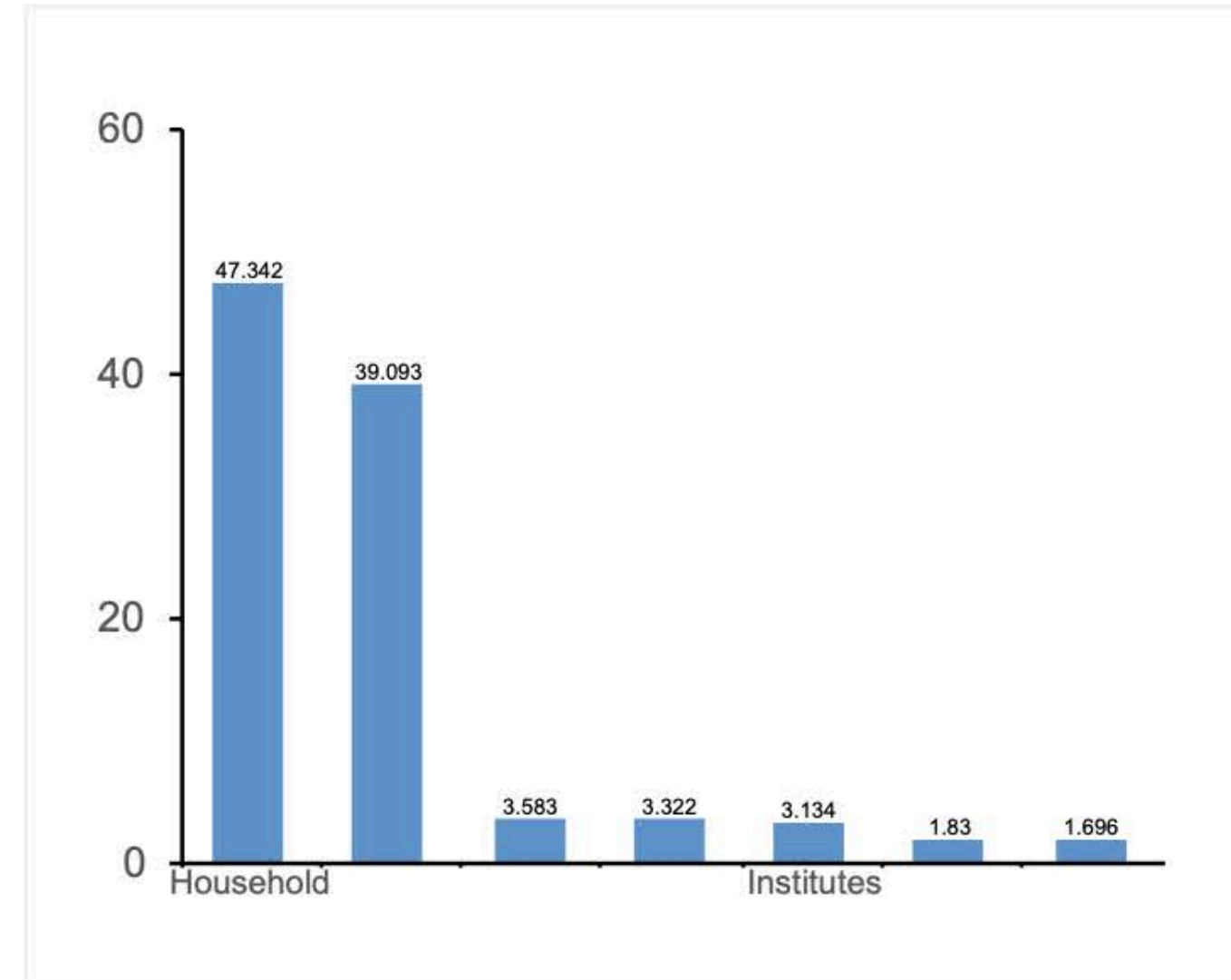
- **Emphasize appropriate management to address waste as a significant environmental issue.**
- **Inculcate a deeper sense of environmental responsibility by consuming less material.**
- **Reduce waste generation from goods and services by choosing more natural and less wasteful options.**
- **Effectively manage waste to ensure maximum material recovery and minimize waste disposal.**
- **Promote participation of all stakeholders in waste management to achieve material recovery targets.**
- **Improve waste management service delivery.**
- **Ensure proper treatment of all types of waste.**

Waste in Numbers

Total waste generation = 172,160 kg/day

Per capita waste generation – 0.23 Kg

Commercial units	67,299 kg/day
Institutes	5,400 kg/day
Industries	5,719 kg/day
Health care facilities	1,984 kg/day
Vegetable vendors	6,168 kg/day
Government offices	3,072 kg/day



Proportion of waste from different sources (%)

**GHG from waste – 0.047 million tons of CO₂e (2000)
to 0.16 million tons of CO₂e (2013) = 247.5 % ↑**

Figure 1 Proportion of wastes from different sectors in percentage

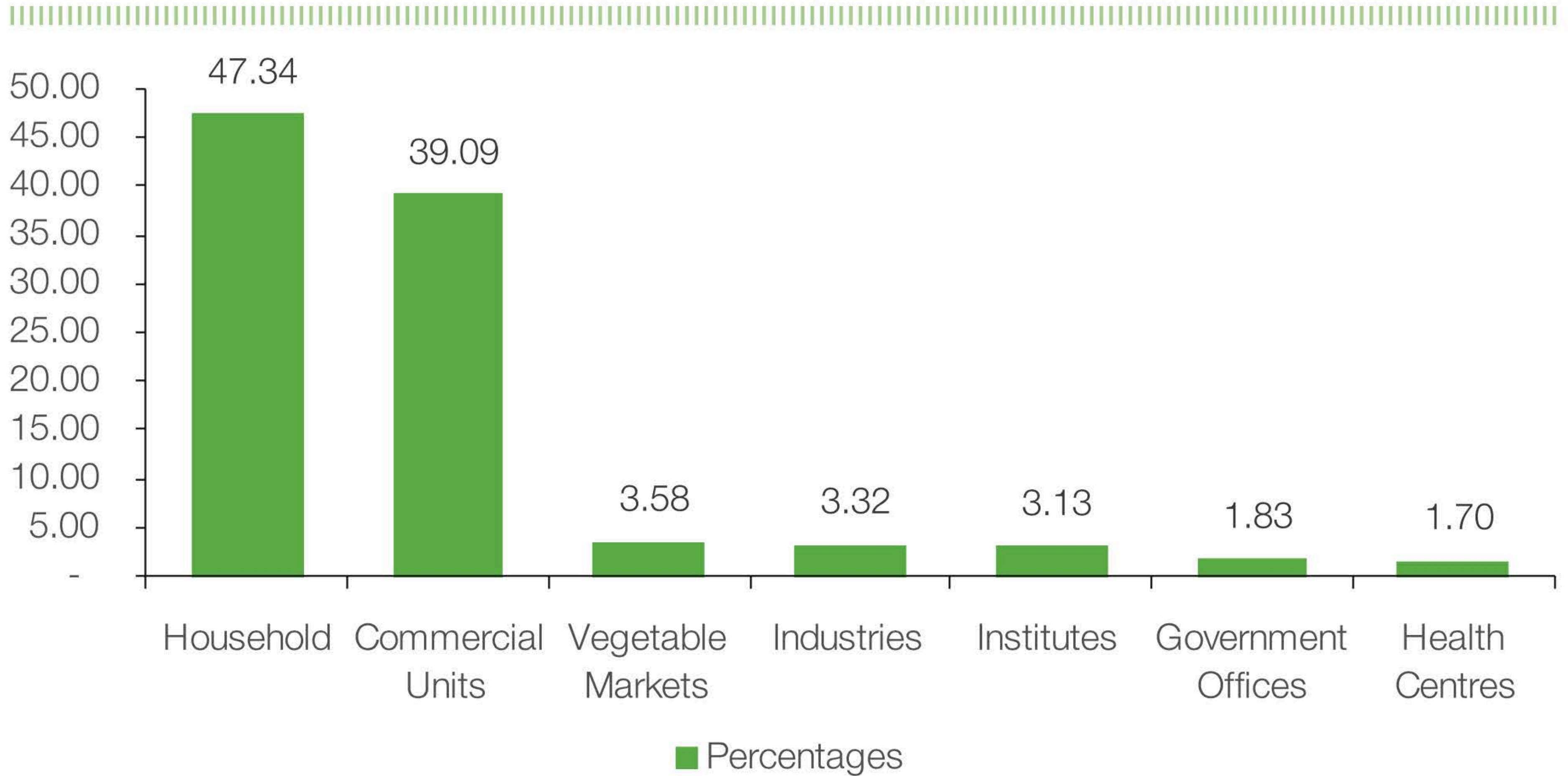
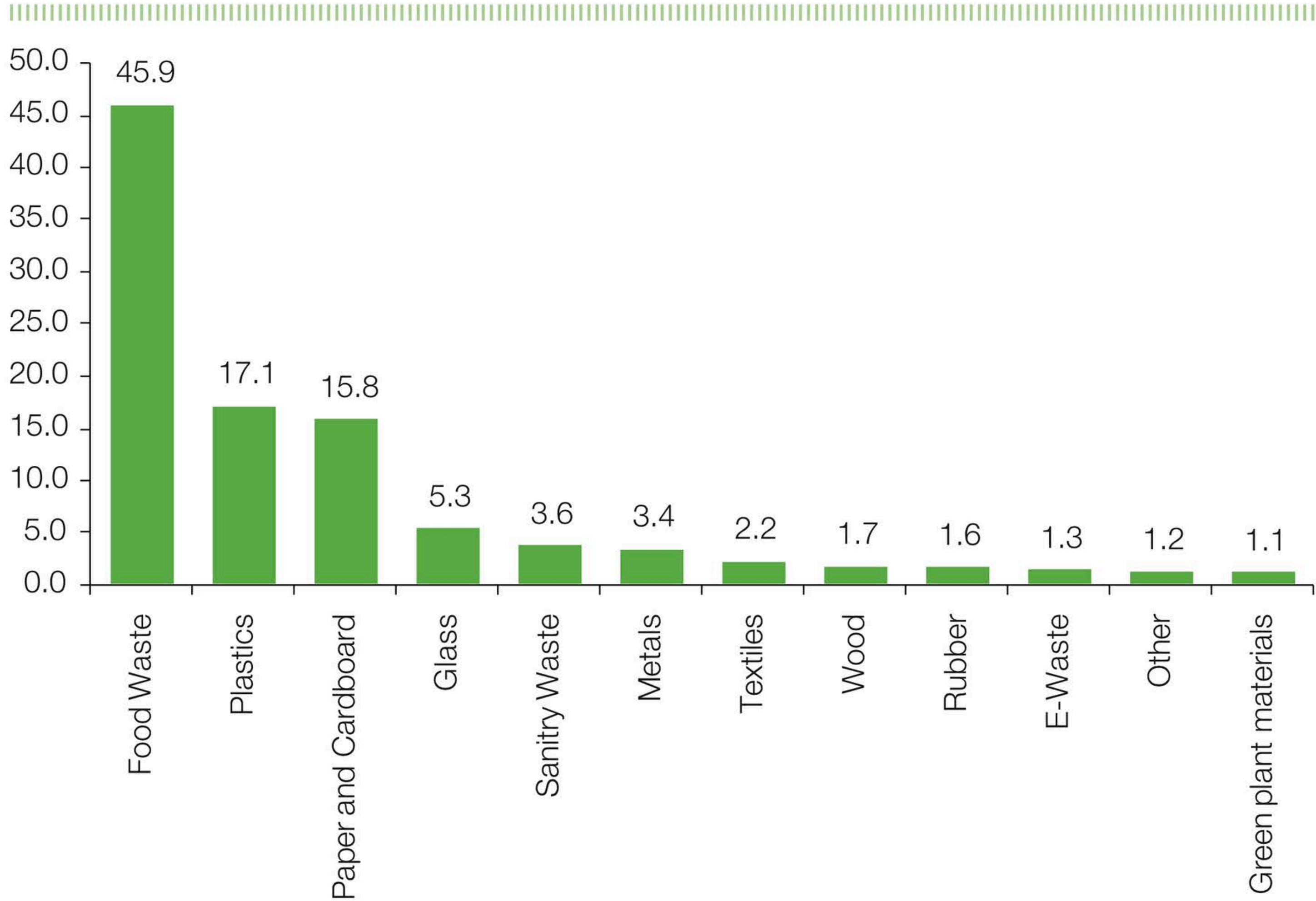


Figure 2 Waste composition in percentage



Circular Economy in Bhutan



Good Practices in Waste Management in Bhutan



Waste Collection Facilities



Drop-off Centers





Made of bamboo



Made of Tetrapac



WASTE BAG FOR VEHICLES



BOYCOTT SINGLE USE PLASTIC



...graciously refuse plastic bags
from shops as carry bags. **Always carry your own shopping bags.**

HELP REDUCE PLASTICS
BRING YOUR OWN BAG

**Make a point to
carry your own
shopping bags.**

Gender and Waste Management

- Women are primarily responsible for managing household waste.
- They ensure cleanliness, timely emptying of dustbins, and proper waste segregation.
- Women are the main target for waste management activities at the community and household levels.
- NGOs like Tarayana Foundation provide training for women in waste management, including weaving and other activities using waste.
- Clean Bhutan's WOW (Wealth out of Waste) project trains unemployed wives of police officers to make utility bags and accessories from plastic waste.
- 95% of street sweepers in Thimphu Thromde are female.
- Vehicle collection drivers and most scrap dealers are male.
- Gender stereotypes are prevalent, with men preferred for physically demanding jobs and women for waste picking and cleaning.
- Substantial initiatives have been taken to promote gender equality.
- A Gender Equity Policy is being formulated to integrate gender issues across all policies, programs, and projects.
- Including women in decision-making related to waste management is crucial.
- Gender perspectives should be incorporated from the planning phase through implementation.
- Gender-disaggregated analysis is needed for studies on waste recycling, reuse, and value addition.



Plastic Ban in Bhutan

- June 2, 1999
- The Ministry of Trade and Industry in consultation with the Ministry of Health, Ministry of Communication, National Environment Commission and Bhutan Chamber of Commerce and Industry banned the use/sale of Plastic carry bags, Doma Wrappers and home made ice cream pouches.

Penalty

1. A fine of Nu. 500 for the first offence
2. A fine of Nu. 1000 for the second offence
3. Subsequent violation shall result in cancellation of trade license.

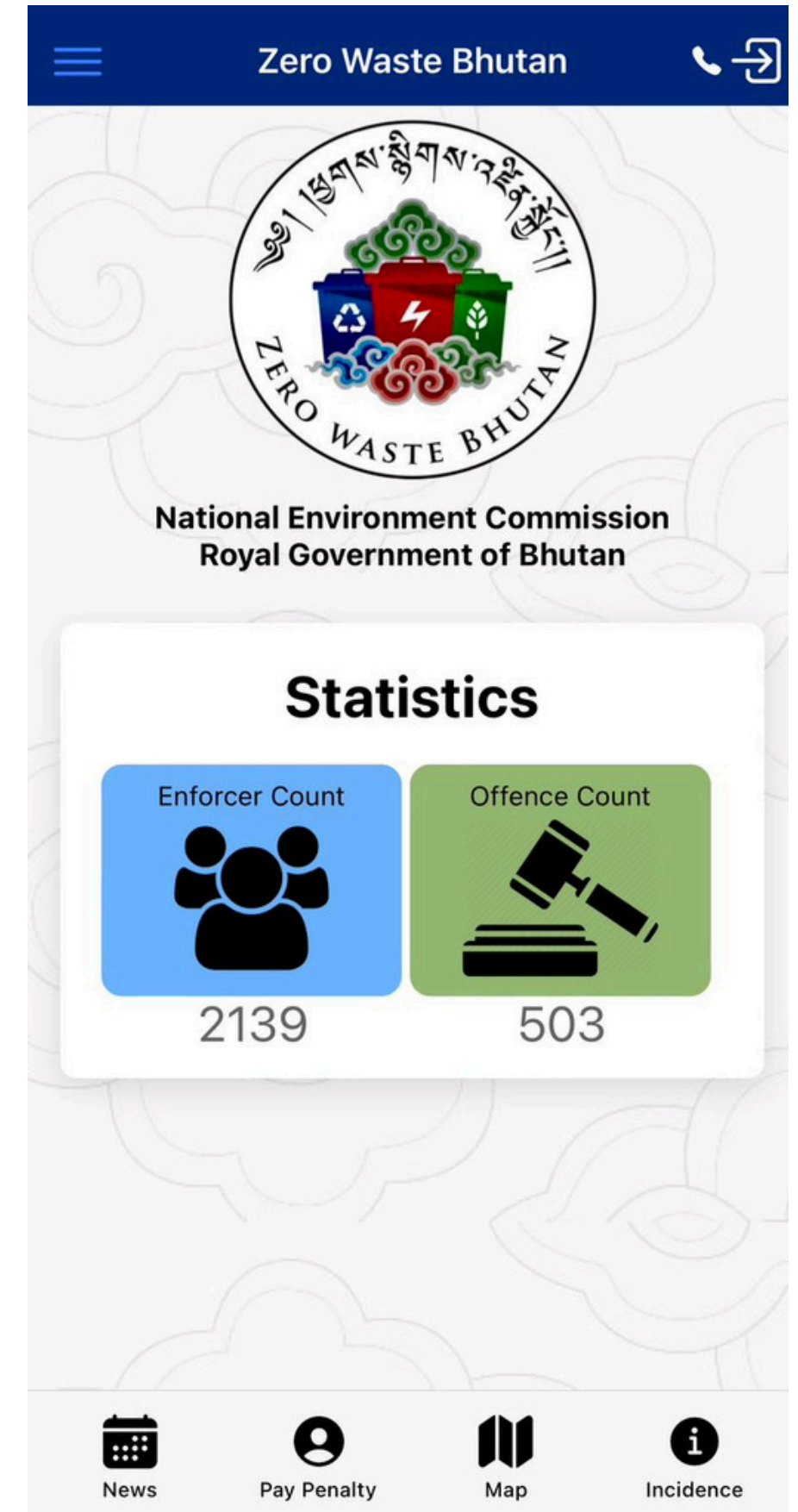
Reinforcement of ban - 2004/2005 and once in 2009 (MoEA)



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ZERO WASTE BHUTAN

Zero Waste Bhutan App

- A digitalized system for the enforcement of waste related offences in the Dzongkhag and other agency.
- The app tracks, records and penalizes waste offenders and incentivizes reporters.
- It is used for education, awareness and enforcement purposes.
- All defaulters regardless of race, nationality and gender will be held accountable and penalized according to their offenses following the specifics and details of the offenses and penalties of the WPMA 2009 and its Regulation of 2012 & 2016.





Extended Producer Responsibility



- **The Extended Producer Responsibility (EPR) approach creates sustainable funding for waste management and helps shift from linear to a circular system.**
- **Based on polluter-pay-principle, it focuses on products and producers to improve product design and sustainability.**
- **EPR effectively diverts waste from landfills, increases recycling and recovery rates and generated investment and jobs.**

Germany: EPR programs have significantly increased recycling rates and reduced landfill waste. The packaging waste, leading to a recycling rate of over 70%

Japan: The Home Appliance Recycling Law hold manufacturers responsible for recycling televisions, refrigerators, air conditioners, and washing machines.

South Korea: EPR has led to the recycling of electronic waste and packaging, resulting in a circular economy approach



Her Majesty The Gyaltshen Graces the Launch of Waste Management Initiatives on June 2, 2019



- Waste Management Flagship Program
- National Waste Management Strategy 2019
- Stray Dog Population Control
- Zero Waste Hour Initiatives

Zero Waste Hour

Theme: “My Waste, My Responsibility”

Vision:

- To achieve Zero Waste Society by 2030
- To inculcate a sense of social responsibility towards managing our own waste through behavioral changes.



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ZERO WASTE BHUTAN



Thank You



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ZERO WASTE BHUTAN

“Where we live must be clean, safe, well-organized and beautiful; for national integrity, national pride and for our bright future. This too is nation building.”

-His Majesty King Jigme Khesar Namgyel Wangchuck