### Solid Waste Management, 3R and Circular Economy Initiatives in Nepal





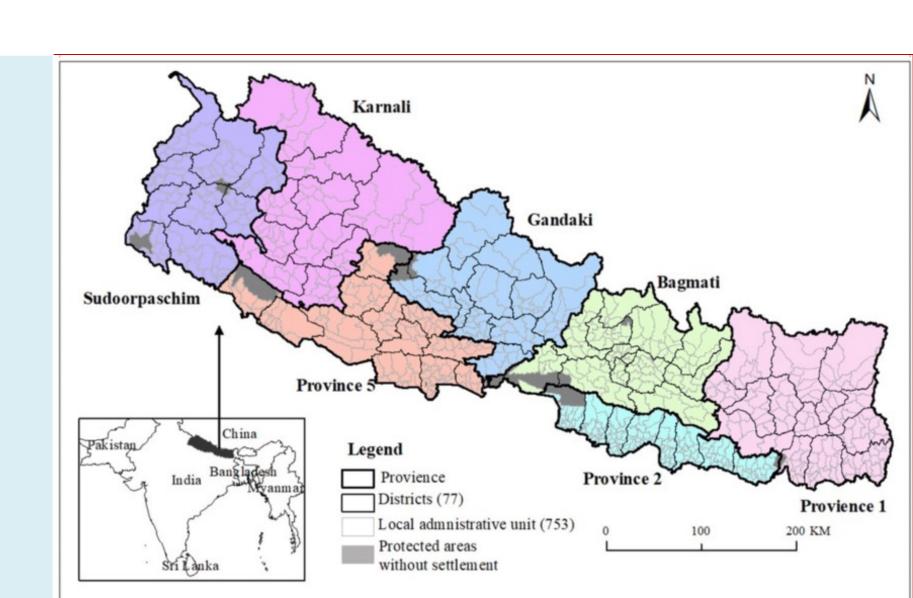
### Background

Federal setup
7 Provinces and 753
Municipalities

Role of Municipalities in Implementing Policies and service Delivery

Provinces to support for infrastructure and capacity Building

Federal Units to Invest and policy coordination



### **Institutional Coordination**

### **Institutions**

Administration Coordination
Ministry of Federal Affairs and
General Administration

**Policy coordination** 

**Ministry of Urban Development** 

Regulation

Ministry of Forest and Environment

Funding and Financing Ministry of Finance



### Issues

Scaling up and cluster approach

Technology, Method, awareness and community mobilization

Private sectors – recording best practices

Strategic Funding – Performance based grants, covenant funding or loan mobilization

**Innovation on practice** 

### Existing Policy and Act for 3R in Nepal

#### A) Policies and strategies

- National Forest Policy, 2018
- National Climate Change Policy 2019
- National Environment Policy 2019
- Solid Waste Management National Policy 2022 Focused on 3R approach
- National Urban Policy 2025

#### B) Laws

- Local Government Operational Act, 2017 and Regulation 2018
- Solid Waste Management Act 2011 Mandatory act for source segregation and Regulation 2016
- Public Health Act, 2018
- Environment Protection Act 1996 and regulation 1997
- Radioactive Material (Use and Regulation) Act 2020

#### C) Guidelines and actions plans

- Guidelines for Research grant mobilization 2021
- Procedural Guidelines for coordinating and monitoring athletes, artists and volunteers for environmental and sanitation awareness 2019
- Action Plan for Air Quality Management for the Kathmandu Valley 2020
- National Framework Plan of action for resiliency 2019
- Action Plan on Plastic Ban 2020
- National Adaptation Action Plan 2021 2050
- National Implementation plan for Climate Change Mitigation and Adaptation 2024-2030
- Urban Environment Management Guidelines 2016

# Best practices 1: Dharan Municipality





Figure 22: Venture WtE plant Pvt. Ltd.

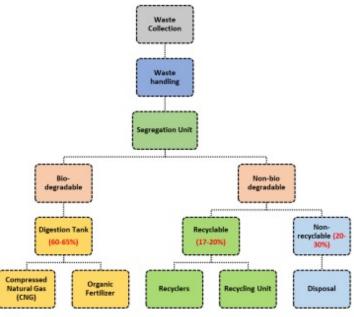


Figure 23: Waste Treatment Process, Venture WTE Pvt. Ltd



Figure 24: Waste Segregation and Treatment Process, Source: Venture WTE Pvt. Ltd

### Best practices 2: Ghorahi Municipality

One of 5 municipalities receiving Global Partnership for Output Based Aid GPOBA

Improved collection system

Recycling – Composting – and – segregation

Sanitary land fill site approach – with community mobilization

Municipality buy and sell waste Basically plastic at start



# Best practices 3: Panauti Municipality

**Community mobilized** 

Citizen engagement strategy at Household level for organic waste
Reviving rural composting method for bio-degradable waste



## Best practices 4: Ilam Municipality

**Plastic Segregated** 

Paper and metal separated

**Hazardous treated and disposed** 



# Best practices 5: Waling Municipality

Municipal sanitation center in small scale

Dry and wet separated at source

Student mobilization for awareness

High media coverage



## Best practices 6: Bhaktapur Municipality

**70% Organic and 21% Plastic** and Paper

9% to be treated by the producer

Community mobilization and regulated by the Municipality

#### Waste composition @

- About 70% of Bhaktapur's waste is organic.
- About 18% of Bhaktapur's waste is plastic.
- About 3% of Bhaktapur's waste is paper.
- The waste from schools is mainly organic.
- The waste from government offices is mainly paper.
- The waste from shops and restaurants is mainly organic.

### Best practices 7: Kathmandu Valley – 18 Municipality

Regional waste disposal site 30 KM away

Mixed waste – the site is good for 20 Years
However, it is good for 100
Years if it is used for segregated waste

Municipality and federal government trying for private sector to involve



# Best practices 8: Infrastructure support at Municipality

Federal Government is supporting for building infrastructure in

Biratnagar

Birgunj

Nepalgunj

Dhangadhi

**Bhimdatta** 

Godawari

Shuklaphata etc

# Recycles available in small scale

- Plastic
- Paper
- Metal



## Policy Question towards circular economy

Institutional coordination – one door or maximum by two doors

Technological support to municipality

Citizen engagement and community mobilization

Behavioral change

Dissemination of Best practices

Private sector involvement

Grant, covenant and Loan support to municipality – resource pooling to municipality

## Thank you

