

11th Regional 3R and Circular Economy Forum in Asia and the Pacific

“Integrating Circular Economy in Major Development Sectors towards Achieving Zero Waste Societies and the SDGs”

8-10 February 2023, Siem Reap, Kingdom of Cambodia

Country Report

(Draft)

<Nepal>

This country report was prepared by the Government of Nepal as an input for the 11th Regional 3R and Circular Economy Forum in Asia and the Pacific. The views expressed herein do not necessarily reflect the views of the United Nations.

Country 3R Progress Report

Name of the Country: Nepal

Name, Designation and Organization Respondent:

Ministry of Urban Development

Other Ministries, Organizations, Agencies contributing to
Country Report: Ministry of Forest and Environment

Ministry of Health, Municipalities

Timeline of Submission: **5 February 2023**

(Email: 3R@uncrd.or.jp)

Progress and achievements towards implementation of the Ha Noi 3R Declaration

-Sustainable 3R Goals for Asia and the Pacific (2013-2023)-

With the objective of demonstrating renewed interests and commitments of Asia-Pacific countries towards realizing a resource efficient society, the Fourth Regional 3R Forum in Asia-Pacific in 2013 adopted the good-will and legally non-binding “*Ha Noi 3R Declaration – Sustainable 3R Goals for Asia and the Pacific 2013-23.*” The objective of the Country Reporting is to share among international community with various initiatives launched and efforts made (such as new policy instruments, legislations, regulations, institutional arrangements, investments or financing, technological innovation or intervention, partnership mechanisms, such as PPPs, etc.) by the member countries of the Forum in addressing each of the underlined goals of the Ha Noi 3R Declaration. This would help the member countries to share various best practices in 3R and resource efficiency areas across the region. In addition, it would also help bi-lateral and multi-lateral development agencies, donors, development banks in assessing the sustainable needs and challenges of those countries to better plan their existing as well as future capacity building programmes and technical assistance in the areas of 3Rs and sustainable waste management.

With the cooperation of other related ministries, organization and agencies, we request you to kindly fill in the below table as much as possible with relevant data/information. If additional spaces are required, separate sheets could be attached.

Thank you very much for your kind cooperation.

Secretariat of the Regional 3R and Circular Economy Forum in Asia and the Pacific
United Nations Centre for Regional Development (UNCRD)

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

| | |
|--------------|-------|
| Country Name | Nepal |
|--------------|-------|

Email: 3R@uncrd.or.jp

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 1 Significant **reduction** in the quantity of **municipal solid waste** generated, by instituting policies, programmes, and projects at national and local levels, encouraging both producers and consumers to reduce the waste through greening production, greening lifestyle, and sustainable consumption.

Q-1 What specific 3R policies, programmes and projects, are implemented to reduce the quantity of municipal solid waste?

Municipalities like Kathmandu Metropolitan City(Bancharee Danda Landfill Site), Lalitpur Metropolitan City, Bhaktapur Municipality, Dhankuta Municipality, Dharan Sub metropolitan City, Birgunj has drafted actions plans with time frame of 5 years and has started to implement to reduce the quantity of municipal solid waste.

Q-2 What is the level of participation of households in “source” segregation of municipal waste streams? (Please check the appropriate box)

- Very High (> 90%)
- High (>70%)
- Average (50~70%)
- Low or not satisfactory (< 50%)
- Does not exist

Q-3 Total annual government expenditure per capita (US\$ per capita) in municipal solid waste management in 2014-2015

1-2 US \$ per capita

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Unwillingness to pay
Not aware
No Clear Policy
Insufficient technology

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Birgunj/ Nepalgunj/ Kathmandu/ Dharan Sanitary Landfill sites

Important policies/programmes/projects/master plans the government plans to undertake within next five years

Godawari, Shuklaphanta, Dhangadi, Bheemdatta Solid Waste Management Project
Solid Waste Technical Center for Municipalities
Solid Waste Management Project (of approx. 200 M USD)
Segregation Method and Pilot Project

Is this Goal relevant for your country? Highly Partially Not at all

| | |
|---|--|
| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
| Goal 2 | Full-scale utilization of the organic component of municipal waste, including food waste, as a valuable resource, thereby achieving multiple benefits such as the reduction of waste flows to final disposal sites, reduction of GHG emission, improvement in resource efficiency, energy recovery, and employment creation. |
| Q-1 Does the central government have policies or support to utilize or reduce the organic waste such as composting, energy recovery and improving efficiency in food processing? | |
| <p>Solid Waste Management Act 2011 Environment Protection Act 2019 Environment Protection Regulation Solid Waste Management Rule 2013 Solid Waste and Resource Mobilization Act 1986 Local Government Operation Act 2017</p> | |
| Q-2 What is happening to country's organic waste? (Please check the appropriate box) | |
| <p><input type="checkbox"/> mostly landfilled <input type="checkbox"/> mostly incinerated <input checked="" type="checkbox"/> both landfilled and incinerated <input type="checkbox"/> mostly open dumped or open burned</p> | |
| Challenges (policy/ institutional/ technological/ financial) faced in implementation: | |
| <p>Lack of skilled staff to operate Unwillingness by private sector Difficulty in marketing manure</p> | |
| Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant | |
| <p>Kathmandu Metropolitan City (Banchara Danda Landfill Site) Dharan Sub Metropolitan City- Biogas Plant installation, It has produced bio gas by processing waste and has put in operation vehicles(autos) , Produces Organic Manure Dhankuta Municipality Walling Municipality</p> | |
| Important policies/programmes/projects/master plans the government plans to undertake within next five years | |
| <p>GRID-SAP, Developing Green, Resilient and Inclusive Development (GRID) Strategy and Action Plan (SAP) Plan</p> | |
| Is this Goal relevant for your country? <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 3 Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Q-1 What is the recycling rate of various recyclables? (Please check the appropriate cell & add more waste streams as relevant for the country)

| Rate Type | Very High (>90%) | High (>70%) | Average (50~60%) | Poor (<50%) | Recycling does not exist | Definition of recycling rate* |
|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------|-------------------------------------|
| Paper | | <input checked="" type="checkbox"/> | | | | |
| Plastic | | | | <input checked="" type="checkbox"/> | | |
| Metal | <input checked="" type="checkbox"/> | | | | | |
| Construction waste | | | | <input checked="" type="checkbox"/> | | |
| e-waste | | | <input checked="" type="checkbox"/> | | | |
| others | | | | <input checked="" type="checkbox"/> | | |

*Note: Please specify in the cell which of the following definitions (ie., 1 or 2 or 3) is followed for recycling rate

Definition 1: (collected recyclable waste)/(estimated generation of waste)

Definition 2: (volume of utilized recyclable waste)/(volume of raw material)

Definition 3: (volume of utilized recyclable waste)/(volume of collected waste for recycling)

Q-2 What specific policies are introduced at local and national level for prevention or reduction of waste streams – paper, plastic, metal, construction waste, e-waste?

National Urban Policy

Solid Waste and Resource Mobilization Act 1986

Solid Waste Management Act , 2011

Solid Waste Management Rules 2013

Q-3 What is the rate of resource recovery from various waste streams?

| Rate Type | Very High (>90%) | High (>70%) | Average (50~60%) | Poor (<50%) | Recycling does not exist |
|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|----------------|-----------------------------|
| Paper | | <input checked="" type="checkbox"/> | | | |
| Plastic | | | <input checked="" type="checkbox"/> | | |
| Metal | <input checked="" type="checkbox"/> | | | | |
| Construction waste | | | <input checked="" type="checkbox"/> | | |
| e-waste | | <input checked="" type="checkbox"/> | | | |

(Please check the appropriate cell & add more waste streams as relevant for the country)

Q-4 What is the level of existence of resource recovery facilities/ infrastructures in cities?

| Level Type | Every Major City | Few Major Cities only | Does not exist | Supportive policy or programmes exists | No supportive policy or programmes |
|-----------------------|---------------------|-------------------------------------|-------------------------------------|---|--|
| Paper | | <input checked="" type="checkbox"/> | | | |
| Plastic | | <input checked="" type="checkbox"/> | | | |
| Metal | | <input checked="" type="checkbox"/> | | | |
| Construction waste | | | <input checked="" type="checkbox"/> | | |
| e-waste | | | <input checked="" type="checkbox"/> | | |

I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste)

Goal 3 Achieve significant **increase in recycling rate** of recyclables (e.g., plastic, paper, metal, etc.), by introducing policies and measures, and by setting up financial mechanisms and institutional frameworks involving relevant stakeholders (e.g., producers, consumers, recycling industry, users of recycled materials, etc.) and development of modern recycling industry.

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Need incentives for informal sectors

**Voluntary Progress/Achievements/Initiatives in
Implementing Ha Noi 3R Declaration (2013~2023)**

Country Name Nepal

| |
|--|
| Challenge on recovery and recycle |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all |

| I. 3R Goals in Urban/Industrial Areas (3Rs in municipal solid waste) | |
|---|---|
| Goal 4 | Build sustainable cities /green cities by encouraging “ zero waste ” through sound policies, strategies, institutional mechanisms, and multi - stakeholder partnerships (giving specific importance to private sector involvement) with a primary goal of waste minimization |
| <i>Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management?</i> | |
| Environment Act and Regulations 2019 Solid Waste Management Acts and Regulations | |
| <i>Q-2 What are the major waste management areas that have strong involvement of private and business sector?</i> (Please check appropriate boxes and add other areas if not listed below) | |
| <input checked="" type="checkbox"/> waste collection <input checked="" type="checkbox"/> resource recovery <input checked="" type="checkbox"/> waste recycling <input type="checkbox"/> waste to energy, composting, etc. <input type="checkbox"/> PPP projects in waste sector | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| | |
|---|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 5 | Encourage the private sector , including small-and medium-sized enterprises (SMEs) to implement measures to increase resource efficiency and productivity , creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production. |
| <i>Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs?</i> | |
| NA | |
| <i>Q-2 What are the capacity building programmes currently in place to build the technical capacity of SMEs in 3R areas?</i> | |
| Solid Waste Management Technical Center at Department of Urban Development and Building Construction | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| Awareness Private Sector Encouragement | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| Alternative Energy Promotion Centre (AEPC) Ministry of Energy, Water Resources and Irrigation | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| Solid Waste Technical Center for Municipalities Solid Waste Management Project (of approx. 200 M USD) Segregation Method and Pilot Project | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
|---|---|
| Goal 6 | Promote the greening of the value chain by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways. |
| <i>Q-1 What percent of companies and industries have introduced green accounting and voluntary environmental performance evaluation (Ref: ISO 14000)?</i> | |
| <input type="checkbox"/> Very High (> 90%) <input type="checkbox"/> High (>70%) <input type="checkbox"/> Average (50~70%) <input checked="" type="checkbox"/> Low or not satisfactory (< 50%) <input type="checkbox"/> None | |
| <i>Q-2 What percent of companies and industries have introduced social accounting (Ref: SA 8000) in consultation with their workers?</i> | |
| <input type="checkbox"/> Very High (> 90%) <input type="checkbox"/> High (>70%) <input type="checkbox"/> Average (50~70%) <input checked="" type="checkbox"/> Low or not satisfactory (< 50%) <input type="checkbox"/> None | |
| <i>Q 3 Does government have a programme for promoting greening of the value chain? What specific policies, programmes and incentives are introduced to promote greening of value chain?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
|---|---|
| Goal 7 | Promote industrial symbiosis (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support. |
| <i>Q-1 Does your government have policies and programmes promoting industrial symbiosis in industrial parks or zones? What specific policies, programmes and incentives are introduced to promote industrial symbiosis?</i> | |
| National Industrial Enterprises Act 2017 | |
| <i>Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
|--|---|
| Goal 8 | Build local capacity of both current and future practitioners, to enable the private sector (including SMEs) to obtain the necessary knowledge and technical skills to foster green industry and create decent, productive work. |
| <p><i>Q-1 How many dedicated training facilities or centers are there to cater the needs of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?</i></p> <p>Solid Waste Management Assistance Center under Department of Urban Development and Building Construction, University- Environment Science.</p> | |
| <p><i>Q-2 Please provide an indicative figure on annual government (US \$) expenditure on building technical capacity of SMEs and practitioners in the areas of cleaner production, resource efficiency and environment-friendly technologies, etc.?</i></p> | |
| <p><i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i></p> | |
| <p><i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i></p> | |
| <p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i></p> | |
| <p><i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

| | |
|--|---|
| I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste) | |
| Goal 9 | Develop proper classification and inventory of hazardous waste as a prerequisite towards sound management of such waste. |
| <i>Q-1 Is there a systematic classification of hazardous waste? If so, please attach.</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| <i>Q-2 What specific rules and regulations are introduced to separate, store, treat, transportation and disposal of hazardous waste?</i> Environment Protect Act and Regulation Public Health Service Act 2018 Health Care Waste Management Guideline | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| II. 3R Goals in Rural Areas | |
|--|--|
| Goal 10 | Reduce losses in the overall food supply chain (production, post harvesting and storage, processing and packaging, distribution), leading to reduction of waste while increasing the quantity and improving the quality of products reaching consumers. |
| <i>Q-1 What specific policies, rules and regulations, including awareness programmes, are introduced to minimize food or crop waste?</i> | |
| <i>Q-2 Is there any continuing education services or awareness programmes for the farmers or agricultural marketing associations on reduction of crop wastes for increased food security?</i> | |
| <i>Q-3 What is the average wastage of crops or agricultural produce between farms to consumers, if there is a study in your country?</i> | |
| <input type="checkbox"/> Very High (> 20~ 30%) <input type="checkbox"/> High (10~20%) <input type="checkbox"/> Medium (5~10%) <input checked="" type="checkbox"/> Low (< 5%) <input type="checkbox"/> Negligible (<1%) | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| Stated in Nepal Zero Hunger Challenges Action Plan (2016-2025) , Ministry of Agriculture. Pillar 5 | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| II. 3R Goals in Rural Areas | |
|---|---|
| Goal 11 | Promote full scale use of agricultural biomass waste and livestock waste through reuse and/or recycle measures as appropriate, to achieve a number of co - benefits including GHG emission reduction, energy security, sustainable livelihoods in rural areas and poverty reduction, among others. |
| <i>Q-1 How much amount of – (a) agricultural biomass waste and (b) livestock waste are grossly generated per annum?</i> | |
| <i>Q-2 How are most of the agricultural biomass wastes utilized or treated?</i> (Please <u>check all appropriate boxes</u>) | |
| <input type="checkbox"/> as secondary raw material input (for paper, bioplastic, furniture, etc.) <input type="checkbox"/> biogas/electricity generation <input type="checkbox"/> composts/fertilizers <input checked="" type="checkbox"/> mostly left unutilized or open dumped <input checked="" type="checkbox"/> mostly open burned | |
| <i>Q-3 What specific policies, guidelines, and technologies are introduced for efficient utilization of agricultural biomass waste and livestock waste as a secondary material inputs towards full scale economic benefits? Relevant websites could be shared for additional information.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| III. 3R Goals for New and Emerging Wastes | |
|--|--|
| Goal 12 | Strengthen regional, national, and local efforts to address the issue of waste, in particular plastics in the marine and coastal environment. |
| <i>Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in coastal and marine environment?</i> | |
| <i>Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)</i> | |
| <input type="checkbox"/> Very much <input type="checkbox"/> Somehow <input type="checkbox"/> Not at all | |
| <i>Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic particulates (<5 mm) on coastal and marine species? If yes, please provide relevant websites.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Not at all | |

III. 3R Goals for New and Emerging Wastes

Goal 13 Ensure **environmentally-sound management of e-waste** at all stages, including collection, storage, transportation, recovery, recycling, treatment, and disposal with appropriate consideration for working conditions, including **health and safety aspects** of those involved.

Q-1 How do people usually recycle their e-waste (waste electrical and electronic equipment)?
(Please check the appropriate box in order of priority by filling in numbers like 1, 2, 3, 4,...etc., for example 1 => Highest priority)

| Check if applicable | Number in priority order | |
|---------------------|--------------------------|---|
| | 2 | Take to recycling center / resource recovery facilities |
| | | Take to landfill |
| | | Take to the retailer |
| | | Take to local charity for re-use |
| | 1 | Take to second-hand shop for re-use |
| | | Ship back to the manufacturer |
| | | Ship back to the manufacturer |
| | | Recycle in another country |
| | | Do not know how people dispose |

Q-2 What specific policies and regulations are in place to ensure health and safety aspects of those involved in e-waste management (handling/sorting/resource recovery/recycling)?

Q-3 How much amount of e-waste is generated and recycled per year?

| Type of e-waste | Estimated total volume generated (ton/year) | % of collected by permitted recycler | % of volume recycled in collected |
|------------------|---|--------------------------------------|-----------------------------------|
| Television | | | |
| Computer | | | |
| Mobile phone | | | |
| Refrigerators | | | |
| Washing machines | | | |
| Air conditioners | | | |
| Others... | | | |

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years

Is this Goal relevant for your country? Highly Partially Not at all

| | |
|--|--|
| III. 3R Goals for New and Emerging Wastes | |
| Goal 14 | Effective enforcement of established mechanisms for preventing illegal and inappropriate export and import of waste, including transit trade, especially of hazardous waste and e-waste. |
| <i>Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste?</i> Environment Act | |
| <i>Q-2 Do you have required number of well-trained custom or other officials (for airport, sea-port, land border control, etc.) to track illegal export and import of e-waste?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| III. 3R Goals for New and Emerging Wastes | |
|---|--|
| Goal 15 | Progressive implementation of “ extended producer responsibility (EPR) ” by encouraging producers, importers, and retailers and other relevant stakeholders to fulfill their responsibilities for collecting, recycling, and disposal of new and emerging waste streams, in particular e-waste. |
| <i>Q-1 What specific Extended Product Responsibility (EPR) policies are enacted or introduced? (If there is none, then skip Q-2 below)</i> | |
| None | |
| <i>Q-2 Please provide a list of products and product groups targeted by EPR nationally?</i> | |
| | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| III. 3R Goals for New and Emerging Wastes | |
|---|--|
| Goal 16 | Promote the 3R concept in health-care waste management. |
| <i>Q-1 What specific policies and regulations are in place for healthcare waste management?</i> | |
| <i>Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)?</i> | |
| <i>Q-3 List the agencies or authorities responsible for healthcare waste management.</i> | |
| Hospitals | |
| <i>Q-4 What is the common practice for disposal of healthcare wastes?</i> | |
| (Please check the appropriate box and add if any other practice followed) | |
| <input type="checkbox"/> open dumping (untreated) <input type="checkbox"/> open burning (untreated) <input checked="" type="checkbox"/> ordinary landfilling (untreated) <input type="checkbox"/> sanitary landfilling (treated) <input checked="" type="checkbox"/> Low cost small scale incineration (do not meet air emission standards) <input type="checkbox"/> Highly controlled air incineration (dedicated/modern medical waste incinerators) <input checked="" type="checkbox"/> Other methods (please specify names:) | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|--|
| Goal 17 | Improve resource efficiency and resource productivity by greening jobs nation - wide in all economic and development sectors. |
| <i>Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)?</i> | |
| <i>Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?</i> | |
| <i>Q-3 What specific policies are introduced to create green jobs in product and waste sector?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 18 | Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change. |
| <i>Q-1 Please share how climate mitigation is addressed in waste management policies and programmes for co-benefits?</i> | |
| Reduction of open burning | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 19 | Enhance national and local knowledge base and research network on the 3Rs and resource efficiency , through facilitating effective and dynamic linkages among all stakeholders, including governments, municipalities, the private sector, and scientific communities. |
| <i>Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas?</i> | |
| <i>Q-2 Please share the number and list of dedicated scientific institution, or coordinating centers in the areas of 3Rs (e.g., waste minimization technologies, eco-products, cleaner production, recycling technologies, industrial symbiosis, resource efficiency, etc.)?</i> | |
| NAST | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 20 | Strengthen multi-stakeholder partnerships among governments, civil society, and the private sector in raising public awareness and advancing the 3Rs, sustainable consumption and production, and resource efficiency, leading to the behavioural change of the citizens and change in production patterns. |
| <p><i>Q-1 Does central government have official dialogue with multi-stakeholders in the process to formulate 3R-related policies and regulations? Which stakeholders are involved in the dialogue?</i> (Please check all applicable)</p> <p> <input checked="" type="checkbox"/> NGOs <input type="checkbox"/> Industrial Association <input checked="" type="checkbox"/> Local Government <input type="checkbox"/> Academic Institution <input type="checkbox"/> Others, please add/specify () </p> | |
| <p><i>Q-2 What is the level of NGOs' involvement in 3R, sustainable production and consumption, resource efficiency related promotional activities?</i> (Please check the appropriate box)</p> <p> <input checked="" type="checkbox"/> Very high <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/> Almost Negligible </p> | |
| <p><i>Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency.</i> (Please check the appropriate box)</p> <p> <input type="checkbox"/> Very high <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/> Almost Negligible </p> | |
| <p><i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i></p> | |
| <p><i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i></p> | |
| <p><i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i></p> | |
| <p><i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 21 | Integrate the 3Rs in formal education at primary, secondary, and tertiary levels as well as non-formal education such as community learning and development, in accordance with Education for Sustainable Development. |
| <i>Q-1 Provide a list of formal programmes that addresses areas of 3R and resource efficiency as part of the academic curriculum?</i> | |
| <i>Q-2 Please provide an overview of the Government policies and programmes to promote community learning and development (non-formal education) on 3R and sustainable waste management.</i> | |
| <i>Q-3 Please provide a list of academic and research institutions offering PhD programmes in the areas of 3Rs and resource efficiency?</i> Institute of Engineering, Tribhuwan University | |
| <i>Q-4 Please provide a list of management institutions (offering BBA / MBA courses) which have integrated resource efficiency and life cycle assessment (LCA) as part of their curriculum or course development?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 22 | Integrate the 3R concept in relevant policies and programmes, of key ministries and agencies such as Ministry of Environment, Ministry of Agriculture, Forestry and Fisheries, Ministry of Industry, Ministry of Trade and Commerce, Ministry of Energy, Ministry of Water Resources, Ministry of Transport, Ministry of Health, Ministry of Construction, Ministry of Finance, Ministry of Labour, Ministry of Land and Urban Development, Ministry of Education, and other relevant ministries towards transitioning to a resource-efficient and zero waste society. |
| <p><i>Q-1 Please list the name of the Ministries and major Government Agencies which are promoting 3R and resource efficiency as part of their policy, planning and developmental activities at local and national level.</i></p> <p>Ministry of Urban Development Ministry of Forest and Environment Ministry of Health Ministry of Education Ministry of Energy, Ministry of Water Resources Ministry of Agriculture Ministry of Industry, Commerce and Supplies Ministry of Labour, Employment and Social Security</p> <p><i>Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?</i></p> <p><input type="checkbox"/> Official regular coordination meeting among ministries and agencies <input checked="" type="checkbox"/> Official ad-hoc coordination meeting among ministries and agencies <input type="checkbox"/> Informal meeting among ministries and agencies <input type="checkbox"/> Other coordination mechanisms (please add/specify)</p> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <p><i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all</p> | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 23 | Promote green and socially responsible procurement at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products. |
| <i>Q-1 What specific policies are introduced to promote green and social responsible procurement?</i> | |
| <i>Q-2 Please provide details of eco-labelling schemes of your country.</i> | |
| <i>Q-3 Please provide a list of criteria for eco-labeled products and services in your country.</i> | |
| <i>Q-4 Please provide the list of Ministries and major Government Agencies which have adopted green procurement policy.</i> | |
| <i>Q-5 What % of municipalities have adopted the green procurement policy?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 24 | Phase out harmful subsidies that favour unsustainable use of resources (raw materials and water) and energy, and channel the freed funds in support of implementing the 3Rs and efforts to improve resource/energy efficiency. |
| <i>Q-1 Are there any government subsidy programmes that directly or indirectly favour unsustainable use of resources (raw materials, water, and energy)? If so, please provide a list of such programmes along with the responsible Ministry or Agency administering and implementing it.</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 25 | Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas. |
| <i>Q-1 Is waste management a public health priority in your country?</i> | |
| Yes | |
| <i>Q-2 What are the rules and regulations to prevent open dumping and open burning of waste?</i> | |
| No open burning | |
| <i>Q-3 Rank the five most important rivers in terms of water quality (BOD values) passing through major cities and urban areas?</i> | |
| <i>Q-4 What are the specific laws, rules and regulations in place to prevent littering in river and water bodies?</i> | |
| <i>Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?</i> | |
| NA | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input checked="" type="checkbox"/> Highly <input type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 26 | Facilitate the international circulation of re-usable and recyclable resources as well as remanufactured products as mutually agreed by countries and in accordance with international and national laws, especially the Basel Convention, which contributes to the reduction of negative environmental impacts and the effective management of resources. |
| <i>Q-1 What are major recycling industries in your country?</i> | |
| <i>Q-2 Please specify the regulation on transboundary movement of hazardous waste.</i> | |
| <i>Q-3 If your government has restriction on import of non-hazardous waste or quality control of non-hazardous waste, please list it up.</i> | |
| <i>Q-4 Does your government restrict import of remanufactured goods?</i> | |
| <i>Q-5 Does your government regard remanufactured goods as secondhand goods, and regulate it as secondhand goods?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

Goal 27 Promote data collection, compilation and sharing, public announcement and application of statistics on wastes and the 3Rs, to understand the state of waste management and resource efficiency.

Q-1 Please give an overview on availability of various data and information on material flow and waste management by checking (X or ✓) the appropriate boxes. (Please respond on both “Data Availability” and Monitoring Base”)

| Data Type | Data Availability | | | Monitoring Base | |
|--|-------------------|-------------------------------------|---------------|-----------------|-------------------------------------|
| | Good | Very limited | No data exist | Good | Not good |
| Waste generation | | <input checked="" type="checkbox"/> | | | <input checked="" type="checkbox"/> |
| Material flow | | <input checked="" type="checkbox"/> | | | |
| Cyclical use | | | | | |
| Amount of final disposal | | <input checked="" type="checkbox"/> | | | |
| Disposal to land | | <input checked="" type="checkbox"/> | | | |
| Direct disposal to water | | | | | |
| Import of waste | | | | | |
| Export of waste | | | | | |
| Total landfilled waste | | | | | |
| Import of recyclables | | | | | |
| Export of recyclables | | | | | |
| Hazardous waste generation (solid, liquid, sludge, etc.) | | | | | |
| e-waste generation | | | | | |

(Please add any other data type relevant to your country)

Q-2 What are the current and planned government policies and programmes to strengthen data and information availability in waste sector?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programmes/projects/master plans the government plans to undertake within next five years

Is this Goal relevant for your country? Highly Partially Not at all

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 28 | Promote heat recovery (waste-to-energy), in case wastes are not re-usable or recyclable and proper and sustainable management is secured. |
| <i>Q-1 What are the government policies and programmes, including incentives, for waste-to-energy programmes?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|---|---|
| Goal 29 | Promote overall regional cooperation and multi-stakeholder partnerships based on different levels of linkages such as government-to-government, municipality-to-municipality, industry-to-industry, (research) institute-to-institute, and NGO-to-NGO. Encourage technology transfer and technical and financial supports for 3Rs from developed countries to less developed countries. |
| <i>Q-1 Please provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas?</i> | |
| <i>Q-2 What actions are being taken to promote inter-municipal or regional cooperation in areas of waste exchanges, resource recovery, recycling, waste-to-energy and trade of recyclables?</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|---|
| Goal 30 | Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development. |
| <i>Q-1 Please describe any past and on-going cooperation with SIDS (Small Island Developing States) countries in 3R areas.</i> | |
| <i>Q-2 Please list 3R related projects linked to climate change, biodiversity, disaster management and sustainable tourism. (This is <u>to be reported by SIDS countries only</u>)</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input type="checkbox"/> Partially <input checked="" type="checkbox"/> Not at all | |

| IV. 3R Goals for Cross-cutting Issues | |
|--|--|
| Goal 31 | Promote 3R + “Return” concept which stands for Reduce, Reuse, Recycle and “Return” where recycling is difficult due to the absence of available recycling industries and limited scale of markets in SIDS, especially in the Pacific Region. |
| <i>Q-1 What specific policies, programme, including pilot projects, are implemented to promote 3R+ “Return” concept? (This is <u>to be reported by SIDS countries only</u>)</i> | |
| <i>Challenges (policy/ institutional/ technological/ financial) faced in implementation:</i> | |
| <i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i> | |
| <i>Important policies/programmes/projects/master plans the government plans to undertake within next five years</i> | |
| <i>Is this Goal relevant for your country?</i> <input type="checkbox"/> Highly <input checked="" type="checkbox"/> Partially <input type="checkbox"/> Not at all | |

IV. 3R Goals for Cross-cutting Issues

Goal 32 Complete elimination of illegal engagement of children in the **informal waste sector** and gradually **improve** the working conditions and livelihood security, including **mandatory provision of health insurance**, for all workers.

Q-1 What is the approximate market size (in US\$) of the informal waste sector?

Q-2 Number of annual labor inspections in waste sector?

Q-3 Is health insurance a mandatory to all informal workers in waste sector by law?

Q-4 What specific policies and enforcement mechanisms are in place to prevent illegal engagement of children in waste sector?

Labour Act 1991

Q-5 Number of landfill sites accessible to register waste pickers?

Q-6 Average life span of informal waste workers?

Q-7 Any government vaccination programmes for informal waste workers?

Q-8 Any public awareness programmes for informal waste workers on health and safety measures?

Challenges (policy/ institutional/ technological/ financial) faced in implementation:

Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant

Important policies/programs/projects/master plans the government plans to undertake within next five years

Labour Act 1991

Is this Goal relevant for your country? Highly Partially Not at all

