#### Eighth Regional 3R Forum in Asia and the Pacific

"Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency- A 21<sup>st</sup> Century Vision for Asia-pacific Communities" Indore, Madhya Pradesh, India, 9-12 April 2018

### **Country Report**

<Bangladesh>

This country report was prepared by Bangladesh as an input for the Eighth Regional 3R 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: Bangladesh

Name, Designation and Organization Respondent:

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Other Ministries, Organizations, Agencies contributing to Country Report:

Timeline of Submission: 20 February 2018 (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 interest and commitment 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 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 not only help the member countries to learn various 3R best practices in place across the region, but it would also help bi-lateral and multi-lateral development agencies, donors, development banks in assessing the sustainable needs and challenges to better devise their existing as well as future capacity building programmes and technical assistance in the areas of 3Rs and sustainable waste management.

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 Forum in Asia and the Pacific United Nations Centre for Regional Development (UNCRD)

Email: 3R@uncrd.or.jp

**Country Name: Bangladesh** 

#### 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?

National 3R Strategy for Waste Management, 2010 launched in Bangladesh. The City Corporations and Municipalities are making efforts to incorporate the concepts and guidance of this Strategy in their solid waste management activities. However, there have been dedicated pilot initiatives in line with 3R Strategy through different programs and projects being implemented by various Ministries/Divisions/Agencies.. Major initiatives are as follows:

- Programmatic CDM using organic Wastes of Urban Centers (Phourashava/ Municipalities) throughout Bangladesh: Pilot Phase-1 Fund: Government used its Climate Change Trust Fund (2012).
- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/ Municipalities) throughout Bangladesh: Pilot Phase-2 Fund: Government used its Climate Change Trust Fund (20116).
- Implementation of 3Rs (Reduce, Reuse and Recycling) Pilot Initiative in Dhaka and Chittagong Cities to Reduce Green House Gas Emission (Phase 1) (2012). This project aims at promoting the concepts and practices of 3Rs in order to raise public awareness about the benefits of source segregation of wastes and recycling. Fund: Government used its Climate Change Trust Fund.
- Co-composting Project based on Faecal Sludge and Organic Waste (2012) Initiated by Waste Concern, UNESCAP, Local Government Engineering Department and Kushtia Municipality.
- CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008)
- Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 city corporations
- Purbachal New Town Project by RAJUK (Capital Development Authority of Dhaka) incorporated the National 3R Strategy in their master plan. They kept the provision of source separation of waste and earmarked land for waste recycling projects.
- Bangladesh Bank's (Central Bank of Bangladesh) Green Banking Initiatives to promote Green Projects and Products in the country and introduced Taka 2 billion refinance line for these project.
- UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh
- Feasibility Study On Conversion of Multi-technology Poa-DD on Solid Waste Management Into NAMA In Bangladesh Study supported by KfW and UNESCAP, Waste Concern and W2RF
- Valuing the Sustainable Development Co-benefits of Climate Change Mitigation Actions: A case of Waste Sector and Recommendations for the Designed of Nationally Appropriate Mitigation Actions (NAMAs): with the support from

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#### UNESCAP, UNFCCC, SOUTH POLE and Waste Concern

- Regional Landfill and Resource Recovery Facility for Jessore Municipality. Construction work for the project is supported by LGED under CRDP project.
- Composting project has been included as green category in the updated ECR revised in 2017,
- Support to Kaliakoir Hi-tech part/IT park.

2 What is the level of participation of households in "source" segregation of municipation of	ipal
ste streams? (Please check the appropriate box)	
Very High (> 90%)	
High (>70%)	
Average (50-~70%)	
Low or not satisfactory (< 50%)	
Does not exist	
<i>3 Total annual governmen</i> t expenditure per capita (US\$ per capita) in municipal so este management in 2014-2015	olid
ta not readily available	

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

- 1. Policy needs to be reformed to attract investments in the 3R sector of waste.
- 2. Inter ministerial co-ordination required to facilitate, 3R related initiatives and Public Private Partnerships.
- 3. Lack of Capacity of officials and staffs to understand, monitor, review and document 3R related projects.
- 4. Lack of technological knowhow to promote effective 3R initiatives.
- **5.** Lack of financial resources to promote and manage 3R related initiatives and opportunity of climate finance from developed country lacking

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

- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/Municipalities) throughout Bangladesh (in 64 Districts): Pilot Phase Fund: Government used its Climate Change Trust Fund (2012).
- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/ Municipalities) throughout Bangladesh: Pilot Phase-2 Fund: Government used its Climate Change Trust Fund (20116).
- Implementation of 3Rs (Reduce, Reuse and Recycling) Pilot Initiative in Dhaka and Chittagong Cities to Reduce Green House Gas Emission (Phase 1) (2012). This project aims at promoting the concepts and practices of 3Rs in order to raise public awareness about the benefits of source segregation of wastes and recycling. Fund: Government used its Climate Change Trust Fund.
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- Purbachal New Town Project by RAJUK (Capital Development Authority of Dhaka) incorporated the National 3R Strategy in their master plan. They kept the provision of source separation of waste and earmarked land for waste recycling projects.
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- UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh
- Feasibility Study On Conversion of Multi-technology POA-DD on Solid Waste Management Into NAMA In Bangladesh Study supported by KfW and UNESCAP, Waste Concern and W2RF
- Valuing the Sustainable Development Co-benefits of Climate Change Mitigation
   Actions: A case of Waste Sector and Recommendations for the Design of
   Nationally Appropriate Mitigation Actions (NAMAs): with the support from
   UNESCAP, UNFCCC, SOUTH POLE and Waste Concern
- Support to Kaliakoir Hi-tech part/IT park

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

• Seventh National Five Year Plan (FY2015-FY2020)

Seventh Five Year Plan is in the final stage that inculcated 3R/4R options for waste management and low carbon path.

- Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change 2016-2021
- Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- Intended Nationally Determined Contribution (INDC) 2015
- Nationally Determined Contribution(NDC) Road Map 2018(Draft)

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

**Country Name: Bangladesh** 

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

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? Yes; The central government formulated National 3R Strategy for Waste Management, 2010. In the strategy every things are clearly mentioned. Besides, the following policy guidelines are also readily available

- Guideline for Bio Gas to Energy/Electricity 2018(Draft)
- Renewable Energy Policy 2008

The national 3R goal for waste management is to achieve complete elimination of waste disposal on open dumps, rivers, flood plains by 2015 and promote recycling of waste through mandatory segregation of waste at source as well as create a market for recycled products and provide incentives for recycling of waste.

<b>Q-2</b> What is happening to country's organic waste? (Please check the appropriate box)	
☐ mostly land filled	
☐ mostly incinerated	
□ both landfilled and incinerated	
⊠ mostly open dumped or open burned	

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

- 1. There is a need for proper implementation of Solid Waste Management Handling Rules and National 3R Strategy.
- 2. Source Separation, Extended Producers Responsibility, Awareness of people, capacity of government and private sector needs to improved.
- 3. Promotion of Public Private Partnerships needs to be improved and for this incentives (land, TAX, VAT, free delivery of waste to recycling facility, product marketing/pricing etc.) may attract private investments.
- **4.** Opportunity of climate finance needs to be harnessed.
- 5. Enhancement of R & D and capacity building are required

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

- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/Municipalities) throughout Bangladesh (in 64 Districts): Pilot Phase Fund: Government used its Climate Change Trust Fund (2012). (www.doe.gov.bd)
- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/ Municipalities) throughout Bangladesh: Pilot Phase-2 Fund: Government used its Climate Change Trust Fund (20116).
- Implementation of 3Rs (Reduce, Reuse and Recycling) Pilot Initiative in Dhaka and Chittagong Cities to Reduce Green House Gas Emission (Phase 1) (2012). This project aims at promoting the concepts and practices of 3Rs in order to raise public

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awareness about the benefits of source segregation of wastes and recycling. Fund: Government used its Climate Change Trust Fund. (www.doe.gov.bd)

- Co-composting Project based on Faecal Sludge and Organic Waste (2012) Initiated by Waste Concern, UNESCAP, Local Government Engineering Department and Kushtia Municipality. (www.wasteconcern.org)
- CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008).(www.wasteconcern.org)
- Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 city corporations.
- UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh
- Feasibility Study On Conversion of Multi-technology Poa-dd on Solid Waste Management Into NAMA In Bangladesh Study supported by KfW and UNESCAP, Waste Concern and W2RF. (contact email: office@wasteconcern.org)
- Regional Landfill and Resource Recovery Facility for Jessore Municipality. Construction work for the project is supported by LGED under CRDP project.(www.lged.org)

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

#### **Seventh National Five Year Plan (FY2015-FY2020)**

- Seventh Five Year Plan is in the final stage that inculcated 3R/4R options for waste management and low carbon path.
- Intended Nationally Determined Contributions (INDC), 2015 has targets for organic waste recycling and use of compost in agriculture
- Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change 2016-2021
- Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- Intended Nationally Determined Contribution (INDC) 2015
- Nationally Determined Contribution(NDC) Road Map 2018(Draft)

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

**Country Name: Bangladesh** 

#### 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	Very High	High	Average	Poor	Recycling	Definition
Type	(>90%)	(>70%)	(50-~60%)	(<50%)	does not	of recycling
					exist	rate
Paper			X			3
Plastic		X				3
Metal	X					3
Construction				X		3
waste						
e-waste		X				3
others		X				3

<sup>\*</sup>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?

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

	Rate	Very High	High	Average	Poor	Recycling
Type		(>90%)	(>70%)	(50-~60%)	(<50%)	does not exist
Paper				X		
Plastic				X		
Metal		X				
Construction	on				X	
waste						
e-waste		X				

(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?

Rate	Every Major	Few Major	Does not exist	Supportive	No supportive
	City	Cities only		policy or	policy or
Type				programmes	programmes
				exists	
Paper		X		X	
Plastic		X		X	
Metal		X		X	
Construction			X	X	
waste					
e-waste		X		X	

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

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

- 1. Effective implementation of policy needed.
- 2. Strengthening of relevant institutions along with capacity building of staffs and inter ministerial co-ordination needed to increate the recycling rate.
- 3. Source Separation of waste needs to be improved. Due to soiling value of recycling is going down.
- 4. Awareness building of local government, citizen needed to be increased.
- 5. To promote PPP and attract private investments in this sector there is need to provide incentives linked with land for facility, TAX & VAT incentives, soft loan, free delivery of waste to recycling facility (mentioned in the existing National 3R Strategy).
- 6. Harness Climate financing in this sector.
- 7. More R&D required in this sector.
- **8.** Capacity building of government officials as well as private entrepreneurs needed for implementation of 3R related project.

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

- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/Municipalities) throughout Bangladesh (in 64 Districts): Pilot Phase-1 Fund: Government used its Climate Change Trust Fund (2012). (www.doe.gov.bd)
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**Appropriate Mitigation Actions (NAMAs):** with the support from UNESCAP, UNFCCC, SOUTH POLE and Waste Concern. (contact email: office@wasteconcern.org)

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

- Seventh Five Year Plan (2015-2020) is in the final stage that inculcated 3R/4R options for waste management and low carbon path.
- Intended Nationally Determined Contributions (INDC), 2015 has targets for organic waste recycling and use of compost in agriculture
- Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change 2016-2021
- Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- Intended Nationally Determined Contribution (INDC) 2015
- Nationally Determined Contribution(NDC) Road Map 2018(Draft)
- Zero discharge Plan for Industry Sector

Is this Goal relevant for your country? $\boxtimes$ Highly $\square$ Partially $\square$ Not at all	
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**Country Name: Bangladesh** 

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

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

- Q-1 What specific waste management policies and programmes are introduced to encourage private sector participation in municipal waste management?
  - 1. National 3R Strategy for Waste Management, 2010 Encourages Private sector investment in waste sector.
  - 2. The National Clean Development Mechanism (CDM) Strategy 2004: prepared by the Dept. of Environment. It was identified that waste sector has the potential for attracting CDM finance in the country.
  - 3. Zero Discharge Policy: The Department of Environment(DOE) is promoting Zero Discharge Policy for industrial operation. Now DOE is issuing conditional environmental clearance and renewal certificate to the industry that they should follow zero discharge policy and the derailed plan should be submitted.
  - 4. Private Sector Infrastructure Guideline

This guideline of the GoB has recommended private sector investment in waste management sector which includes all types of waste. It has also identified waste sector as one of the priority sector for private investment.

- 5. Purbachal New Town Project by RAJUK (Capital Development Authority of Dhaka) incorporated the National 3R Strategy in their master plan. They kept the provision of source separation of waste and earmarked land for waste recycling projects.
- 6. **Bangladesh Bank's** (Central Bank of Bangladesh) Green Banking Initiatives to promote Green Projects and Products in the country and introduced Taka 2 billion refinance line for these project.
- 7. **Secondary transfer station for waste management**in the Dhaka City to improve solid waste management system.
- Q-2 What are the major waste management areas that have strong involvement of private and business sector? (Please check appropriate boxes and add other areas if not listed below)
- x waste collection
- x resource recovery
- x waste recycling
- x waste to energy, composting, etc.
- x PPP projects in waste sector

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

- 1. Existing waste recycling projects based on carbon trading are affected due to fall of carbon market. Immediate attention needs to be given by government to support these project. This will become good example for private investors to invest in waste and 3R sector.
- 2. Co-ordination between local government, relevant ministries and private sectors to fast track 3R related project.
- 3. Lack of capacity of local government and relevant ministries to promote 3R projects.
- 4. Awareness and Capacity building programs on waste separation and recycling needs to be promoted.
- 5. Lack of soft easy financial support is prevailing.
- 6. Lack of fiscal and policy incentives to attract private investment is prevailing.
- 7. Attract climate finance in this sector as other co-benefits can be harnessed from waste sector.
- 8. Lack of land for waste management

Examples of pilot projects, master plans and/or policies developed or under development include websites where relevant	ıt –
Already shown in previous sections.	
	-

Important policies/programmes/projects/master plans the government plans to unde within next five years (2016~2021)	rtake
Already shown in previous sections.	

<i>Is this Goal relevant for your country?</i> A Highly	☐ Partially	☐ Not at all

I. 3R Goal	s in Urban/Industrial Areas (3Rs in Industrialwaste)
	Encourage the <b>private sector</b> , including small-and medium-sized enterprises (SMEs) to implement measures to increase <b>resource efficiency and productivity</b> , creation of decent work and to improve environmentally-friendly practices through applying environmental standards, clean technologies, and cleaner production. <b>are the major clean technology related policies aiming to increase energy and</b>
resource e	fficiency of SMEs?
	tional 3R Strategy for Waste Management, 2010 rages Private sector investment in waste sector.
Thi and	tional Renewable Energy Policy- 2008 s policy seeks to promote production of biogas and other green energy from waste also providing incentives for development of CDM to promote green energy jects
	icy Strategies for Small & Medium Enterprises (SME) Development in ngladesh January 2005
	are the capacity building programmes currently in place to build the technical SMEs in 3R areas?
-	nvironment under the to 3R pilot projects and Programmatic CDM providing few ailding training programs.
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:
Need finar	icial and technical support from local and external support agencies.
include we	of pilot projects, master plans and/or policies developed or under development – ebsites where relevant with in previous sections.
within nex	policies/programmes/projects/master plans the government plans to undertake t five years (2016~2021) which is previous sections.
Is this God	al relevant for your country? ⊠ Highly □ Partially □ Not at all

I. 3R Goal	s in Urban/Industrial Areas (3Rs in Industrialwaste)
Goal 6	Promote the <b>greening of the value chain</b> by encouraging industries and associated suppliers and vendors in socially responsible and inclusive ways.
voluntary  □ Very H  □ High (>  □ Averag	t percent of companies and industries have introduced green accounting and environmental performance evaluation (Ref: ISO 14000)? (igh (> 90%)
8000) in co  ☐ Very H  ☐ High (>  ☐ Averag  ☐ Low or  ☐ None	percent of companies and industries have introduced social accounting (Ref: SA onsultation with their workers?  Tigh (> 90%)  To (50-~70%)  To not satisfactory (< 50%)  ation available
	government have a programme for promoting greening of the value chain? What olicies, programmes and incentives are introduced to promote greening of value
• Dh tax	O Bangladesh has initiated program to promote Green Jobs in Bangladesh.  aka North City Corporation and Dhaka South City Corporation has declared 20% Holiday for roof top gardening which has contributed to increase the demand of mpost fertilizer
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:
Examples include we	of pilot projects, master plans and/or policies developed or under development – ebsites where relevant s Initiative by ILO Bangladesh
_	policies/programmes/projects/master plans the government plans to undertake at five years (2016~2021)
• Zero D	ndesh Industry Policy 2010 Discharge Policy for Industry ishment of 100 Economic Zones in Bangladesh
Is this God	al relevant for your country? A Highly Partially Not at all

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#### I. 3R Goals in Urban/Industrial Areas (3Rs in Industrialwaste)

Goal 7 Promote **industrial symbiosis** (i.e., recycling of waste from one industry as a resource for another), by providing relevant incentives and support.

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?

No Official Policies and Programs on Industrial Symbiosis are Available Presently. But some industries have initiated this program voluntarily.

Q-2 How many eco-industrial parks or zones or the like, which is supported by the government, are there in the country?

No eco-industrial park declared by the government is Available in the country Presently. But there is a good number of Export Processing Zone(EPZ),industrial park/estates administered and supported by the government where environmental rules and regulations are followed strictly. Besides, 100 economic zone have been declared by the government where industries will be operated in line with environmental rules and regulations including national 3R strategy for waste management 2010.

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

- Absence of effective and rigorous compliance and monitoring by the regulatory agencies due to inadequate manpower, logistics and network;
- Absence of effective coordination and collaboration among key institutions;
- Unwillingness of industry owners to comply with the environmental norms and regulations;

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

Few industries have established bio gas plant where they use industrial waste to produce bio gas.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

Focusing this goal specific plans and programs are not readily available, but the following plans indirectly involves with the goal

- Seventh Five Year Plan (2015-2020) is in the final stage that inculcated 3R/4R options for waste management and low carbon path.
- Intended Nationally Determined Contributions (INDC), 2015
- Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change 2016-2021
- Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- Nationally Determined Contribution(NDC) Road Map 2018(Draft)
- Zero discharge policy for Industry Sector

Is this Goal relevant for your country? $\square$ Highly	□ Partially	$\square$ Not at all
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I. 3R Goal	s in Urban/Industrial Areas (3Rs in Industrialwaste)
Goal 8	Build <b>local capacity</b> 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.
O-1 How i	many dedicated training facilities or centers are there to cater the needs of SMEs
~	tioners in the areas of cleaner production, resource efficiency and environment-
_	chnologies, etc.?
<i>y</i>	8 /
There are n	nany industrial training institutes in the country run by government but no training
	dedicated for cleaner production or resource efficiency. Department of Environment
	ew workshops and seminars focusing this goal. Waste Concern has a dedicated training
institute fo	r cleaner production/resource efficiency.
O 2 Dlagg	a manida an indicatina figure on annual consument (IIS \$) consuditure on
	e provide an indicative figure on annual government (US \$) expenditure on echnical capacity of SMEs and practitioners in the areas of cleaner production,
	fficiency and environment-friendly technologies, etc.?
resource e	juictiney and environment-friendly technologies, etc
No informa	tion available
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:
Absence o	f policy guidelines and cost effective technology.
_	of pilot projects, master plans and/or policies developed or under development -
	ebsites where relevant
	Environment Awards are given to the green industries in every years. Besides, the
•	and HSBC Climate Change Award gave award are given to the industry involves
	production in the country.
-	policies/programmes/projects/master plans the government plans to undertake
within nex	ct five years (2016~2021)
National 3	BR Strategy for Waste Management, 2010
	es Private sector investment in waste sector.
Lifeourage	cs i fivate sector investment in waste sector.
Is this God	al relevant for your country? ⊠ Highly □ Partially □ Not at all

I. 3R Goals in Urban/Industrial Areas (3Rs in Industrialwaste)
Goal 9 Develop proper classification and inventory of hazardous wasteas a prerequisite towards sound management of such waste.
Q-1 Is there a systematic classification of hazardous waste? If so, please attach.
⊠ Yes □ No
See the publication Bangladesh Standards and Guidelines for sludge management
(www.doe.gov.bd/site/view/publications)
Q-2 What specific rules and regulations are introduced to separate, store, treat, transportation and disposal of hazardous waste?
<ul> <li>Medical Waste (Management and Processing) Rules 2008</li> </ul>
• Lead Acid Battery Recycling and Management Rules 2006 and amendment Rules 2008
• Hazardous Waste and Ship Breaking Waste Rules 2011.
• E-Waste Management Rules 2018 (draft)
• Solid Waste management Rules 2018 (draft)
Challenges (policy/ institutional/ technological/ financial) faced in implementation:
Absence of interdepartmental coordination.
<ul> <li>Inadequate training and research programs</li> </ul>
Thuncquite truiting and research programs
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant
Hazardous Waste and Ship Breaking Management Rules 2011
Provides detailed regulation on environment-friendly ship-breaking and hazardous waste management (www.doe.gov.bd)
Safe and Environmentally Sound Ship Recycling in Bangladesh – Phase I
The project, aimed at improving standards and sustainability within the industry, will consist of five work packages, covering studies on economic and environmental impacts of ship recycling industry and on the management of hazardous materials and wastes, recommendations on strengthening the Government's One-Stop Service (in which all the various ministries with a responsibility for ship recycling – e.g. Industries, Environment, Labour, Shipping – offer a single point of contact for related matters), a review and upgrade of existing training courses for health, safety and environmental compliance, and the development of a detailed project document for a possible follow-up project to implement the recommendations of phase I.  Support to Development of Kaliakoir Hi-Tech Park/IT parks (SDKHTP)  Bangladesh Hi-Tech Park Authority (BHTPA) established in 2010 is responsible for the establishment and expansion along with management, operation and development of Hi-Tech Parks within the country. Under this project, e-waste recycling facility will be established.
Important policies/programmes/projects/master plans the government plans to undertake
within next five years (2016~2021)
Seventh Five Year Plan (2015-2020)
To promote proper management and recycling of E-waste
<i>Is this Goal relevant for your country?</i> ☐ Highly ☒ Partially ☐ Not at all

II. 3R Goa	ls 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.
	specific policies, rules and regulations, including awareness programmes, are
	to minimize food or crop waste?
_	h Country Investment Plan(CIP)- A road map towards investment in agriculture,
100d secur	ity and investment.
	re any continuing education services or awareness programmes for the farmers tural marketing associations on reduction of crop wastes for increased food
consumers	is the average wastage of crops or agricultural produce between farms to s, if there is a study in your country?
-	igh (> 20~ 30%)
$\boxtimes$ High (1	
☐ Mediun	
$\square$ Low (<	
☐ Negligi	ble (<1%)
Cl 11	/ 1° /° 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /
0	s (policy/ institutional/ technological/ financial) faced in implementation: ordination and collaboration among key institutions
	nancial resources to implement CIP on agriculture and food security
	of pilot projects, master plans and/or policies developed or under development –
_	bsites where relevant
	initiatives are being undertaken in line with CIP
	policies/programmes/projects/master plans the government plans to undertake
within nex	t five years (2016~2021)
	on agriculture and food security
• 7 <sup>th</sup>	Five Year Plan (2015-2020)
Is this God	al relevant for your country? $\boxtimes$ Highly $\square$ Partially $\square$ Not at all

II. 3R Goal	s in Rural Areas
	Promote full scale <b>use of agricultural biomass waste and livestock waste</b> 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. <b>nuch amount of</b> $-$ (a) agricultural biomass waste and (b) livestock waste are
~	erated per annum?
_	al Waste: 65 million Metric Ton/ Year (2005, Waste Concern) waste: 138.19 million tons
<b>Q-2 How a</b> appropriate	tre most of the agricultural biomass wastes utilized or treated? (Please check all boxes)
⊠ biogas/e	dary raw material input (for paper, bioplastic, furniture, etc.) electricity generation es/fertilizers
☐ mostly l	eft unutilized or open dumped open burned
utilization	specific policies, guidelines, and technologies are introduced for efficient of agricultural biomass waste and livestock waste as a secondary material inputs ll scale economic benefits? Relevant websites could be shared for additional n.
<ul><li>Inte</li><li>Ban</li><li>Nat</li></ul>	grated Livestock Manure Management (ILMM) Policy 2016 gladesh Climate Change Strategy and Action Plan 2009 ional Action Plan on Short Lived Climate Pollutants 2014 gladesh 2 <sup>nd</sup> National Communication on Climate Change
•	(policy/institutional/technological/financial) faced in implementation:
<ul><li>Lac</li><li>Lac</li></ul>	ed specific policy and capacity of relevant ministries for promoting the idea k of effective coordination and collaboration among key institutions k of capacity building initiatives for relevant ministries/agencies k of financial and technological support
Examples of include we	of pilot projects, master plans and/or policies developed or under development – bsites where relevant and Implement Livestock Manure Management Action Plan in line with relevant
Important within next Ban 7 <sup>th</sup>	policies/programmes/projects/master plans the government plans to undertake t five years (2016~2021) gladesh Livestock Manure Management Policy 2016 and related Action Plan Five Year Plan(2015-2020)
In this Con	I relevant for your country? Mighly Dertially Not at all

**Country Name: Bangladesh** 

#### 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.

Q-1 What specific policies and regulations are in place to address the issue of plastic wastes in coastal and marine environment?

No specific policy but the following policy, act and rules address the issue indirectly

- 1. Hazardous Waste and Ship Breaking Waste Management Rules 2011.
- 2. Integrated Coastal Zone Management Policy 2005
- 3. National Fisheries Policy 1998
- 4. Bangladesh Environment Conservation Act 1995
- 5. National Action Plan on Coastal and Marin Pollution from Land based Activities.
- 6. Environment conservation rules, 1997
- 7. Fish and Fish product (quality control) rules, 1997
- 8. Territorial Water and Maritime Zone Act, 1974
- 9. The Protection and Conservation of Fish Act, 1950

Q-2	What	extent	issue	of plastic	waste is	considered	'in inte	egrated	coastal	zone	manage	ment
(ICZ	ZM)? (	Please	check	k the appr	opriate b	oox)						

	Very	/ much⊠	Somehow		Not a	t al
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Q-3 Please provide a list of centre of excellences or dedicated scientific and research programmes established to address the impacts of micro-plastic participles (<5 mm) on coastal and marine species? If yes, please provide relevant websites.

- Waste Concern(www.wasteconcern.org)
- Bangladesh University of Engineering and Technology (buet.ac.bd)
- Practical Action Bangladesh www.practicalaction.org/bangladesh)

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

Absence of awareness, policy guideline andtechnological option this sector.

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

No specific policy but the Hazardous Waste and Ship Breaking Waste Management Rules 2011can Address this issue. The related policies are given bellow-

- 1. National Fisheries Policy 1998
- 2. Integrated Coastal Zone Management Policy 2005
- 3. Environment Conservation Act 1995
- 4. National Action Plan on Coastal and Marin Pollution from Land based Activities.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

- Seventh Five Year Plan (2015-2020) is in the final stage that inculcated 3R/4R options for waste management and low carbon path.
- Intended Nationally Determined Contributions (INDC), 2015 has targets for organic waste recycling and use of compost in agriculture
- Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change

Country Name: Bangladesh

#### 2016-2021

- Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- Intended Nationally Determined Contribution (INDC) 2015
- Nationally Determined Contribution(NDC) Road Map 2018(Draft)
- Zero discharge Plan for Industry Sector

*Is this Goal relevant for your country?*  $\boxtimes$  Highly  $\square$  Partially  $\square$  Not at all

**Country Name: Bangladesh** 

#### 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	Number in	
applicable	priority order	
Х	4	Take to recycling center / resource recovery facilities
		Take to landfill
X	1	Take to the retailer
		Take to local charity for re-use
X	1	Take to second-hand shop for re-use
		Ship back to the manufacturer
		Ship back to the manufacturer
X	3	Recycle in another country
X	4	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)?

Electronic Waste Management Rules, 2017 (Draft) Shall address health and safety issue.

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

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

Data is not available at this moment. Recently DoE has taken initiatives to conduct a research study on "Assessment of Generation of e-waste, its impact on Environment and Resource Recovery Potential in Bangladesh."

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

Need guideline and policy in this sector.

Need national inventory on E-waste

Need appropriate cost effective technology for e-waste recycle

Examples of pilot projects, master plans and/or policies developed or under development -

Country Name: Bangladesh

#### include websites where relevant

Re-Tem a private Japanese company initiated a study with the help of JICA. They are planning to pilot and later scaleup a E-waste recycling project in Bangladesh.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

- To enact E-waste management rules, 2017
- To Conduct a research study on "Assessment of Generation of e-waste, its impact on Environment and Resource Recovery Potential in Bangladesh.".

Is this Goal relevant for your country? ⊠Highly	$\square$ 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.
Q-1 What specific policies and regulations are introduced to prevent illegal import and export of e-waste?
1. <b>Basel Convention:</b> People's Republic of Bangladesh is a signatory and has accessed to the <b>Basel Convention</b> in April 01, 1993. The environmental legislations are not comprehensive and there is no specific legislation on hazardous wastes.
2. Hazardous Waste and Ship Breaking Management Rules 2012 Provides detailed regulation on environment-friendly ship-breaking and hazardous waste management
<ol> <li>Bangladesh Import &amp; Export policy Order 2015-2018 for the e-waste export &amp; import.</li> </ol>
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? $\square$ Yes $\boxtimes$ No
Challenges (policy/ institutional/ technological/ financial) faced in implementation:  Need specific policy and capacity building training
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Not available
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)  Not available
Is this Goal relevant for your country?   ☐ Highly ☐ Partially ☐ 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.
Q-1 What specific Extended Product Responsibility (EPR) policies are enacted or introduced? (If there is none, then skip Q-2 below)
Not available
Q-2 Please provide a list of products and product groups targeted by EPR nationally?
Challenges (policy/ institutional/ technological/ financial) faced in implementation: Need policy, awareness and capacity building
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant Not available
include websites where relevant Not available Important policies/programmes/projects/master plans the government plans to undertake
include websites where relevant Not available

**Country Name: Bangladesh** 

#### III. 3R Goals for New and Emerging Wastes

Goal 16 **Promote the 3R concept** in health-care waste management.

Q-1 What specific policies and regulations are in place for healthcare waste management?

#### Medical Waste (Management and Processing) Rules, 2008

Source Separation of hospital waste as well as transportation treatment and disposal of all kinds of hospital and clinical waste made mandatory.

Q-2 What is the total annual government expenditure towards healthcare waste management (US\$ per year)?

Not available

- Q-3 List the agencies or authorities responsible for healthcare waste management.
  - 1. Ministry of Health and Family Welfare
  - 2. Local Government (Dhaka City Corporation has a pilot project)
  - 3. PRISOM, PRODIPON(NGOs)
  - 4. Department of Environment (Gives license to the hospital and hospital waste management organization)
  - 5. Directorate of Health Service (Gives license to the hospital)

#### Q-4 What is the common practice for disposal of healthcare wastes?

(Please check the appropriate box and add if any other practice followed)

x open dumping (untreated)

□ open burning (untreated)

x ordinary landfilling (untreated)

☐ sanitary landfilling (treated)

x Low cost small scale incineration (do not meet air emission standards)

☐ Highly controlled air incineration (dedicated/modern medical waste incinerators)

xOther methods (please specify names: a pilot project run by Dhaka City Corporation South and Prodipon practicing autoclave and chemical treatment and deep burial method)

Challenges (policy/ institutional/ technological/ financial) faced in implementation: Implementation of the rule effectively needed.

- Incentives required for private sector
- Absence of low cost technology
- Absence of policy guideline

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

Pilot project run by Dhaka City Corporation South in PPP modality

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

Information is not readily available

Is th	ris (	Goal	relevant f	for your country	?⊠Highly	☐ Partially	☐ Not at all
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**Country Name: Bangladesh** 

IV. 3R Goals for Cross-cutting Issues
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Goal 17 Improve resource efficiency and resource productivity by greening jobs nation - wide in all economic and development sectors.

Q-1 What specific policies and guidelines are introduced for product standard (towards quality/durability, environment/eco-friendliness, labour standard)?

- ILO, Bangladesh in partnership with Ministry of Labor took an initiative to promote green jobs in the country.
- Bangladesh Standards and Testing Institution (BSTI) has developed product standards
- Sustainable and Renewable Energy Development Authority (SREDA) has developed Energy Efficiency and Energy Conservation Master Plan
- Bangladesh Labor Policy
- National Occupational Health and Safety Policy
- Bangladesh Labor Act and Rules
- Bangladesh Labor Welfare Foundation Act and Rules

### Q-2 What specific energy efficiency schemes are introduced for production, manufacturing and service sector?

A collaborative initiative is being undertaken between the government of Japan and Bangladesh to facilitate transfer of low carbon energy efficient improved technology, product, systems under Joint Crediting Mechanism (JCM). Energy efficient CDM project initiated by government by replacing conventional bulp with CFL bulp.

O-3 What specific policies are introduced to create green jobs in product and waste sector?

Study conducted by ILO-Ministry of Labor-Waste Concern on 3 sectors (renewable energy, solid waste, construction industry) aiming policy on green jobs

Challenges (policy/ institutional/ technological/ financial) faced in implementation:
Need specific policy, technical and financial support in this sector

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

- ILO Bangladesh initiated a project to build capacity of on green jobs for few sectors.
- Under CDM and JCM, specific activities are going on
- BSTI and SREDA are also implanting some projects

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

- 7<sup>th</sup> Five Year Plan
- Energy Efficiency and Energy Conservation Master Plan

Is this Goal relevant	<i>for your country?</i> ☐ Highly	□ Partially	☐ Not at all

**Country Name: Bangladesh** 

IV. 3R Goals for Cross-cutting Issues	IV. 3	3R (	Goals	for	Cross-	cutting	Issues
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Goal 18 Maximize co-benefits from waste management technologies for local air, water, oceans, and soil pollution and global climate change.

Q-1 Please share how climate mitigation is addressed in waste management policies and programmes for co-benefits?

- The National 3R Strategy on Waste clearly addressed climate mitigation issues.
- National CDM Strategy: This strategy is promoting pro-poor CDM projects on waste sector by harnessing carbon financing
- Recently a Study on monetizing of co-benefits was conducted for Bangladesh and in partnership with UNFCCC, UNESCAP, SOUTH POLE and Waste Concern shared in a conference in Bonn, Germany.

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

Due to fall of carbon price existing CDM projects in Bangladesh are suffering. Attention should be given to help these projects.

Co-benefit, climate finance and NAMA needs to be harnessed

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

- 1. The National 3R Strategy on Waste clearly addressed climate mitigation issues.
- 2. CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008) (www.wastecncern.org)

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

- 1. Seventh Five Year Plan (FY2015-FY2020)
- 2. Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (2009)
- 3. Bangladesh Country Investment Plan(CIP) for Environment, Forestry and Climate Change 2016-2021
- 4. Integration of Sustainable Development Goals (SDG) into the 7<sup>th</sup> Five year Plan 20030
- 5. Intended Nationally Determined Contribution (INDC) 2015
- 6. Nationally Determined Contribution(NDC) Road Map 2018(Draft)

<i>Is this Goal relevant for your country?</i> Highly	□ Partially	☐ Not at all

**Country Name: Bangladesh** 

	IV.	3R	Goals	for	Cross-cutting	Issues
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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.

Q-1 What specific policies are introduced to encourage triangular cooperation between government, scientific & research institutions and private/business sector in 3R areas?

The National 3R Strategy on Waste clearly addressed the issue

- 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.)?
  - 1. Ministry of Environment and Forests
  - 2. Ministry of Industry
  - 3. Ministry of Energy and Mineral Resources
  - 4. SME Foundation
  - 5. Department of Environment
  - 6. Bangladesh University of Engineering and Technology
  - 7. Waste Concern
  - 8. BCAS
  - 9. GOBESHONA
  - 10. Practical Action of Bangladesh
  - 11. SREDA
  - 12. BSTI

Challenges (policy/institutional/technological/financial) faced in implementation:
Need capacity building and financial support and technical support
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 (2016~2021)
Not available now
<i>Is this Goal relevant for your country?</i> $\boxtimes$ Highly $\square$ Partially $\square$ Not at all

IV. 3R Go	als for Cros	s-cutting Issues					
Goal 20							
to formule	ite 3R-relai	ernment have office ted policies and reg ck all applicable)					
⊠ NGOs				⊠ Indust	trial Association		
⊠ Local G	overnment	:	⊠Acad	demic Inst	titution		
☐ Others,	please add/s	pecify (	)				
	on, resour	evel of NGOs' i rce efficiency rel			_		
☐ Very hig			□ Low	•	☐ Almost N	egligible	
~		vel of citizens' aw umption and resour		•	-	*	
☐ Very hig	gh		□ Low	,	☐ Almost N	egligible	
Examples include we Already m Important within nex	of pilot probables when the entioned ear policies/pr	rlier ogrammes/projects (2016~2021)	e, awarene s and/or po	ss, financi plicies dev	ial support and R& reloped or under d	D levelopment –	
Is this God all	il relevant j	for your country? X	⟨ □ Highly	у 🗆	Partially	□ Not at	

**Country Name: Bangladesh** 

IV. 3R Goals for Cross-cutting Issues	IV. 3	3R (	Goals	for	Cross-	cutting	Issues
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Goal 21 Integrate the 3Rsin 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.

Q-1 Provide a list of formal programmes that addresses areas of 3R and resource efficiency as part of the academic curriculum?

#### Information is Not available

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.

Information is Not available

Q-3 Please provide a list of academic and research institutions offering PhD programmes in the areas of 3Rs and resource efficiency?

Information is Not available

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?

Information is Not available

Challenges (policy/ institutional/ technological/ financial) faced in implementation: Not Applicable

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

Not Applicable

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2016~2021)

Information is Not available

Is this Goal relevant for your country? $\square$ H	$\square$ Partially $\square$ Not at all
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**Country Name: Bangladesh** 

#### 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.

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.

Ministry of Environment and Forests

Ministry of Agriculture

Ministry of Fisheries and Livestock

Ministry of Local Government Rural and Cooperative

Department of Environment

Department of Agriculture Extension

Department of Livestock

Need more attentions

Local Government Institute like City Corporation and Municipalities

Bangladesh University of Engineering and Technology

**SREDA** 

**BSTI** 

Q-2 What type of coordination mechanism are there among ministries and agencies for a resourceefficienteconomic development?
$\square$ Official regular coordination meeting among ministries and agencies
☑ Official ad-hoc coordination meeting among ministries and agencies
☐ Informal meeting among ministries and agencies
☐ Other coordination mechanisms (please add/specify)
The existing National 3R Steering Committee needs to be strengthened
Challenges (policy/institutional/technological/financial) faced in implementation:

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.
Examples of pilot projects, master plans and/or policies developed or under development –	
include websites where relevant	
The National 3R Strategy for Waste Management	
Important policies/programmes/projects/master plans the government plans to undertake	
within nex	ct five years (2015~2020)
Fifth Five Year Plan (2015-2020)	
<i>Is this Goal relevant for your country?</i> $\boxtimes$ Highly $\square$ Partially $\square$ Not at all	

IV. 3R Goals for Cross-cutting Issues		
Goal 23	Promote <b>green and socially responsible procurement</b> at all levels, thereby creating and expanding 3R industries and markets for environmentally-friendly goods and products.	
Q-1 What specific policies are introduced to promote green and social responsible procurement?		
The National 3R Strategy on Waste clearly addressed the issue.		
Q-2 Please provide details of eco-labeling schemes of your country.		
Not existing		
Q-3 Please provide a list of criteria for eco-labeled products and services in your country.		
Not applicable		
Q-4 Please provide the list of Ministries and major Government Agencies, which have adopted green procurement policy.		
The Civil	The Civil Audit Department under the Ministry of Finance has initiated green procurement	
Q-5 What % of municipalities have adopted the green procurement policy?		
Not existing	ng	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:		
Need policy	formulation and programs implementation	
_	of pilot projects, master plans and/or policies developed or under development – ebsites where relevant	
The National 3R Strategy on Waste clearly addressed the issue.		
-	policies/programmes/projects/master plans the government plans to undertake at five years (2015~2020)	
Not available		
Is this God	al relevant for your country? □Highly ⊠ Partially □ 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.		
Q-1 Are there any government subsidy programmes that directly or indirectly favour unsustainable use of resources (raw materials, water, energy)? If so, please provide a list of such programmes along with the responsible Ministry or Agency administering and implementing it.  Data Not Readily Available		
Challenges (policy/ institutional/ technological/ financial) faced in implementation:  Absence of policy to Phase out harmful subsidies that favour unsustainable use of resources and energy,		
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant  Information is not available		
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)		
<i>Is this Goal relevant for your country?</i> □ Highly □ Partially □ Not at all		

**Country Name: Bangladesh** 

#### 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.

Q-1 Is waste management a public health priority in your country?

Yes

Q-2 What are the rules and regulations to prevent open dumping and open burning of waste?

- 1. Bangladesh Environment Conservation Act, 1995 (Last Amendment in 2010)
- 2. The National 3R Strategy on Waste clearly addressed the issue.
- 3. Draft Solid Waste Management Rules and E-waste Management Rules.
- 4. Bangladesh Environment Conservation Rules 1997.

### Q-3 Rank the five most important rivers in terms of water quality (BOD values) passing through major cities and urban areas?

BOD Value of the following rivers are is critically low. Therefore water quality of these rivers are very important

Buriganga

Turag

Shitalakha

Balue

Karnofuly

### Q-4 What are the specific laws, rules and regulations in place to prevent littering in river and water bodies?

- 1. Bangladesh Environmental Conservation Act 1995 (Last Amendment in 2010)
- 2. National Fisheries Policy 1998
- 3. National Water Policy 1999
- 4. Integrated Coastal Zone Management Policy 2005
- 5. Natural Water Body Protection and Preservation of Open space and Playground Act2000
- 6. Bangladesh Water Act 2013

#### Q-5 What are the specific laws, rules and regulations in place to prevent marine littering?

- 1. Bangladesh Environmental Conservation Act 1995 (Last Amendment in 2010)
- 2. Bangladesh Water Act 2013
- 3. Coastal Zone Policy 2005
- 4. Ecologically Critical Areas Management Rules 2016

IV. 3R Goa	als 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.			
Challenges (policy/institutional/technological/financial) faced in implementation:				
Absence o	f better coordination among the agencies			
Absence of awareness				
Need more attention				
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant				
Data is not	readily available			
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)				
Data is not	readily available			
Is this God	al relevant for your country? ☐ Highly ☐ Partially ☐ Not at all			

**Country Name: Bangladesh** 

#### 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.

#### Q-1 What are major recycling industries in your country?

Private E-waste Recycling Companies exporting PCB

CDM based composting project in Dhaka

PET Bottle exporters

Formal and informal recycling companies for paper, glass, plastic including PET bottle

#### Q-2 Please specify the regulation on transboundary movement of hazardous waste.

Bangladesh is a signatory of Basal Convention and Stockholm Convention Bangladesh hazardous Waste and Shipbreaking Waste Management Rules 2011 Import Policy Order 2015-18

Q-3 If your government has restriction on import of non-hazardous waste or quality control of non-hazardous waste, please list it up.

Import Policy Order 2015-2018 (<a href="http://www.mincom.gov.bd/Polices.php">http://www.mincom.gov.bd/Polices.php</a>)

Hazardous Waste and Ship breaking Waste Management Rules 2011(www.doe.gov.org)

Q-4 Does your governmentrestrict import of remanufactured goods?

No

Q-5Does your governmentregardremanufactured goods as secondhand goods, and regulate it as secondhand goods?

Yes

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

We face Policy and technological challenges

IV. 3R Goa	Is 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.			
Examples of pilot projects, master plans and/or policies developed or under development –				
include websites where relevant				
Information is not readily available				
Important policies/programmes/projects/master plans the government plans to undertake				
within nex	t five years (2015~2020)			
Information	is not readily available			
Is this God	al relevant for your country? ☐ Highly ☐ Partially ☐ Not at all			

**Country Name: Bangladesh** 

#### 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 \( \sigma \)) 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	X				X
Material flow		X			X
Cyclical use					X
Amount of final disposal		X			X
Disposal to land		X			X
Direct disposal to water		X			X
Import of waste		X			X
Export of waste		X			X
Total landfilled waste		x			X
Import of recyclables		X			X
Export of recyclables		X			X
Hazardous waste generation (solid, liquid, sludge, etc.)		х			X
e-waste generation		X			Х

(Please add any other date 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?

Government collect information the information of waste not regularly rather than project based. Last survey was conducted under the Programmatic CDM Project in 2013

IV. 3R G	oals 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.			
Challeng	ges (policy/ institutional/ technological/ financial) faced in implementation:			
Need upo	lated information, inventory and institutional capacity and financial allocation			
_	rs of pilot projects, master plans and/or policies developed or under development – websites where relevant			
Departme	ent of Environment conducting surveys related to waste under the Programmatic CDM of			
Municipa	I waste management project with the technical support from Waste Concern, CEGIS .			
•	nt policies/programmes/projects/master plans the government plans to undertake ext five years (2015~2020)			
thro	Programmatic CDM using organic Wastes of Urban Centres (Phourashava/ Municipalities) throughout Bangladesh (in 64 Districts): Pilot Phase Fund: Government used its Climate Change Trust Fund (2012).			
_	• Implementation of 3Rs (Reduce, Reuse and Recycling) Pilot Initiative in Dhaka and Chittagong Cities to Reduce Green House Gas Emission (Phase 1) (2012).			
Is this G	oal relevant for your country? Ø 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.		
Q-1 What are the government policies and programmes, including incentives, for waste-to-energy programmes?			
-	government is seriously looking for opportunity to harness energy from waste. fuse Derived Fuel etc., Waste to energy projects are priority.		
Ü	s (policy/ institutional/ technological/ financial) faced in implementation:  nired and later technological support and PPP projects encouraged.		
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant			
• A stud	y on potential of RDF as source of energy from soiled plastic, waste, fabric conducted by f Env.		
• Guidel	ine on waste to bio gas/electricity 2018(draft)		
• Promoting Low Carbon Urban Development in Bangladesh (Waste related activities include i) Implementing solutions for solid waste management including Integrated Resource Recovery Centre (IRRC); ii) waste to energy and 4R wherein some projects development in PPP modality.)			
	ly on potential of RDF as source of energy from soiled plastic, waste, fabric cted by Dept of Environment		
_	policies/programmes/projects/master plans the government plans to undertake t five years (2015~2020)		
Guideline o	n waste to bio gas/electricity 2018(draft)		
Is this God	al relevant for your country? ☐ Highly ☐ Partially ☐ Not at all		

**Country Name: Bangladesh** 

#### 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.

## Q-1 Please provide a list of on-going bilateral/multi-lateral technical cooperation in 3R areas?

No cooperation in 3R yet

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?

Through **Programmatic CDM using organic Wastes of Urban Centers (Phourashava/Municipalities) throughout Bangladesh (in 64 Districts)** local government, international development banks, external support agencies are brought under a platform for organic waste recycling

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

- Attract private sector with incentives and harness climate investment and NAMA.
- Promotion of Public Private Partnerships (PPP) needs to be realized, and various incentives (providing land at low cost, TAX & VAT rebate, free or easy delivery of waste to recycling facility, product marketing/pricing, etc.) should be provided to attract private investments;
- Lack of effective linkages with regional and international technology and financial institutions to facilitate transfer of technology on 3R;
- Lack of administrative and financial support for enhancing collaboration on research and extension among key stakeholders;

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

Already shown earlier.

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.		
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)  7 <sup>th</sup> Five Year Plan of Bangladesh has provision			
	al relevant for your country? A Highly Partially Dot at all		

IV. 3R Goa	lls for Cross-cutting Issues		
Goal 30	Pay special attention to issues and challenges faced by developing countries including SIDS in achieving sustainable development.		
Q-1 Please describe any past and on-going cooperation with SIDS (Small Island Developing States) countries in 3R areas.			
No			
Q-2 Please	e list 3R related projects linked to climate change, biodiversity, disaster		
management and sustainable tourism. (This is to be reported by SIDS countries only)			
Not availa	ble		
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			
Not availa	ble		
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)			
Not availa	ble		
Is this God	al relevant for your country? □ Highly □ Partially ☒ Not at all		

IV. 3R Goa	ls 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.	
Q-1 What	specific policies, programme, including pilot projects, are implemented to	
promote 3.	R+ "Return" concept? (This is to be reported by SIDS countries only)	
Not applic	able	
Challenge	s (policy/ institutional/ technological/ financial) faced in implementation:	
Examples of pilot projects, master plans and/or policies developed or under development –		
include we	bsites where relevant	
-	policies/programmes/projects/master plans the government plans to undertake t five years (2015~2020)	
Is this God	al relevant for your country? ☐ Highly ☐ Partially ☐ Not at all	

**Country Name: Bangladesh** 

#### 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?

According to the report of Global Finance, the average GDP growth rate of Bangladesh was about 5.7 percent during 2001 to 2009. Assuming that the work component of GDP will grow at the same rate of overall GDP, it was projected that the GDP contribution of the waste sector for the years 2014 and 2020 will be respectively Tk 35,478.37 million and Tk 43,347.12 million. (source: Waste Concern 2009)

Total 358,112 nos jobs waste existing in waste sector and economic contribution was US\$ 408.14 million in the year 2010. Source (Waste Concern 2010), a study conducted for ILO-Bangladesh.

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

Not available

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

No. But measurement for health and safety is required

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

According to Labour Law of Bangladesh 2006, the minimum legal age for employment is 14. Working below 14 years old is a punishable offence. The related rules and regulation are given bellow

- i) Bangladesh Labour Rules 2015ii) Bangladesh Labour Welfare Foundation (Amendment) Rules, 2015
- iii) Bangladesh Labour Welfare Foundation (Amendment) Act 2013
- iv) Bangladesh Labour Law (Ammendment) 2013
- v) Labour Welfare Foundation Acts 2006

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

Not available

Q-6 Average life span of informal waste workers?

Study is not available

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

Vaccination program for children including informal waste worker is done nation wide in every year.

IV. 3R Goals for Cross-cutting Issues

**Country Name: Bangladesh** 

# Goal 32 Complete elimination of illegal engagement of children in the informal waste sector and gradually improve the working conditions and livelihood security,

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

including mandatory provision of health insurance, for all workers.

Awareness and training programs on health and safetyfor informal workersare carried out on the project based, not regularly. Some NGO involve in waste sector like Waste Concern, Practical Action etc. are carried out such training for informal workers involved in waste sector.

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

Poverty causes families to send children to work like waste picking. So poverty is one of the major challenges for implementing the policy, rules and regulation to prevent child labour in the waste sector.

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

- i) National Child Labour Elimination Policy 2010
- ii) Combating child trafficking for the worst form of child labour
- iii)Including the Excluded: Action against the worst forms of child labour through education networking
- iv) Elimination of the Worst Forms of Child Labour in Bangladesh A Time-Bound Programme Approac
- v) Eliminating the Worst Forms of Child Labour (WFCL) in Bangladesh: Preparatory Phase of a Time-Bound Programme (TBP)
- vi) Developing a time-bound approach to eliminating the worst forms of child labour in Bangladesh
- vii) Prevention and Elimination of Selected Worst Forms of Child Labour in the Informal Economy of Dhaka City - Bridging Phase

Important policies/programs/projects/master plans the government plans to undertake within next five years (2015~2020)		
Not available		
<i>Is this Goal relevant for your country?</i> ⊠ Highly □ Partially	y □ Not at all	

IV. 3R Goals for Cross-cutting Issues				
Goal 33 Promote 3Rs taking into account gender considerations.	Promote 3Rs taking into account gender considerations.			
Q-1 Please give a brief assessment on how the national, provincial and municip	pal			
governments incorporate gender considerations in waste reduction, reuse and r	ecycle.			
The National 3R strategy for waste Management 2010 refers to equal participation of man waste collection, separation, reuse and recycle program.  Department of Environment is implementing Integrated Resource Recovery Centre(IREcities at 8 places where gender issue is considered to some extent, but the informal sector promoting 3R concept, gender issue is notconsidered structurally but both male and fen work together.	RC) in seven			
Challenges (policy/ institutional/ technological/ financial) faced in implementation	tion:			
The people are not aware of gender issues.				
Institutional arrangement is not suitable for woman to work in the waste sector	rl			
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant				
National Woman Development Policy 2011				
National Child Policy 2011				
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)  • Seventh National Five Year Plan (FY2015-FY2020)				
<i>Is this Goal relevant for your country?</i> □ Highly ⊠ Partially □ Not at all	11			