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

------

"3R as an Economic Industry - Next Generation 3R Solutions for a Resource Efficient Society and Sustainable Tourism Development in Asia and the Pacific" Malé, Maldives, 17-19 August 2015

### **Country Report**

(Draft)

### <Bangladesh>

This country report was prepared by the Government of Bangladesh as an input for the Sixth 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: Md. Raisul Alam Mondal Director General Department of Environment Ministry of Environment and Forests, Bangladesh

Other Ministries, Organizations, Agencies contributing to Country Report: N/A

Timeline of Submission:17 JULY 2015 (Email: 3R@uncrd.or.jp)

#### <u>Progress and achievements towards implementation of the Ha Noi 3R Declaration</u> -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

**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.

Using fund from Climate Change Trust Fund of the Ministry of Environment and Forests (MoEF) initiated 2 projects:

- 1. **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).
- 2. 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.
- 3. **Co-composting Project based on Faecal Sludge and Organic Waste (2012)** Initiated by Waste Concern, UNESCAP, Local Government Engineering Department and Kushtia Municipality.
- 4. CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008)
- 5. Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 city corporations
- 6. **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.
- 7. 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.
- 8. UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh
- 9. 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
- 10. Valuing the Sustainable Development Co-benefits of Climate Change Mitigation Actions: A case of Waste Sector and Recommendations for the Designe of Nationally Appropriate Mitigation Actions (NAMAs): with the support from UNESCAP, UNFCCC, SOUTH POLE and Waste Concern

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

 $\Box$  Very High (> 90%)

□ High (>70%)

□ Average (50-~70%)

I. 3R Go	bals in Urban/Industrial Areas (3Rs in municipal solid waste)
Goal 1	Significant <b>reduction</b> in the quantity of <b>municipal solid waste</b> 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.
	or not satisfactory (< 50%)
$\Box$ Doe	s not exist
waste r	<i>etal annual government</i> expenditure per capita (US\$ per capita) in municipal solid management in 2013-2014 ot Readily Available
Challer	nges (policy/ institutional/ technological/ financial) faced in implementation:
2.	Policy needs to be reformed to attract investments in the 3R sector of waste. Inter ministrial co-ordination required to facilitate, 3R related initiatives and Public Private Partnerships.
	Lack of Capacity of officials and staffs to understand, monitor, review and document 3R related projects.
5.	Lack of technological knowhow to promote effective 3R initiatives. Lack of financial resources to promote and manage 3R related initiatives and opportunity of climate finance from developed country lacking.
	les of pilot projects, master plans and/or policies developed or under development –
include	e websites where relevant
	<b>Programmatic CDM using organic Wastes of Urban Centres (Phourashava/Municipalities) throughout Bangladesh (in 64 Districts):</b> Pilot Phase Fund: Government used its Climate Change Trust Fund (2012).
	<b>Implementation of 3Rs (Reduce, Reuse and Recycling) Pilot Initiative</b> 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.
	<b>Co-composting Project based on Faecal Sludge and Organic Waste (2012)</b> 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
	<b>Purbachal New Town Project by RAJUK (Capital Development Authority of Dhaka)</b> 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. <b>Bangladesh Bank's (Central Bank of Bangladesh) Green Banking Initiatives</b> to

refinance line for these project.
UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh

promote Green Projects and Products in the country and introduced Taka 2 billion

• Feasibility Study On Conversion of Multi-technology POA-DD on Solid Waste Management Into NAMA In Bangladesh Study supported by KfW and UNESCAP,

I. 3R Goals in	u Urban/Industrial Areas (3Rs in municipal solid waste)		
	Significant <b>reduction</b> in the quantity of <b>municipal solid waste</b> 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.		
Was	te Concern and W2RF		
Acti App	<ul> <li>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</li> </ul>		
	policies/programmes/projects/master plans the government plans to undertake five years (2015~2020)		
	<b>ational Five Year Plan (FY2015-FY2020)</b> Year Plan is in the final stage that inculcated 3R/4R options for waste management and low		

**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?

#### National 3R Strategy for Waste Management, 2010

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.

*Q-2 What is happening to country's organic waste?*(Please check the appropriate box)

 $\Box$  mostly landfilled

 $\square$  mostly incinerated

 $\Box$  both landfilled and incinerated

x 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.

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

- 1. **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)
- 2. 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. (www.doe.gov.bd)
- 3. **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)
- 4. CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008). (www.wasteconcern.org)
- 5. Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 city corporations.
- 6. UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of

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. Bangladesh
  - 7. 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)
  - 8. Valuing the Sustainable Development Co-benefits of Climate Change Mitigation Actions: A case of Waste Sector and Recommendations for the Designe of Nationally 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 (2015~2020)

#### 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.

Is this Goal relevant for your country?	Х	Highly	$\Box$ Partially	$\Box$ Not at all
---	---	--------	------------------	-------------------

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.

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

#### 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
	(>90%)	(>70%)	(50-~60%)	(<50%)	does not	of recycling
Туре					exist	rate*
Paper			Х			3
Plastic		Х				3
Metal	Х					3
Construction				Х		3
waste						
e-waste			Х			3
others			Х			

\*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 3R Strategy for Waste Management, 2010

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

F	Rate	Very High	High	Average	Poor	Recycling
Туре		(>90%)	(>70%)	(50-~60%)	(<50%)	does not exist
Paper				Х		
Plastic				Х		
Metal			Х			
Construction	1				Х	
waste						
e-waste			Х			

(*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	Every Major	Few Major	Does not	Supportive	No supportive
	City	Cities only	exist	policy or	policy or
Туре				programmes	programmes
				exists	
Paper		Х		Х	
Plastic		Х		Х	
Metal		Х		Х	
Construction			Х	Х	
waste					
e-waste		Х		Х	

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:

- 1. Effective implementation of policy needed.
- 2. Strengthening of relevant institutions along with capacity building of staffs and inter ministrial 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

- 1. **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)
- 2. 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. (www.doe.gov.bd)
- 3. **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)
- 4. CDM Based Composting Project (capacity 130 tons/day) Project In Dhaka (2008). (www.wasteconcern.org)
- 5. Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 city corporations.
- 6. UNICEF initiated Composting Initiative and Promoting 3Rs in 19 towns of Bangladesh
- 7. 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)
- 8. Valuing the Sustainable Development Co-benefits of Climate Change Mitigation Actions: A case of Waste Sector and Recommendations for the Designe of Nationally Appropriate Mitigation Actions (NAMAs): with the support from UNESCAP, UNFCCC, SOUTH POLE and Waste Concern. (contact email: office@wasteconcern.org)

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.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

#### 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.

Is this Goal relevant for your country?	x Highly	$\Box$ Partially	$\Box$ Not at all
---	----------	------------------	-------------------

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

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. 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.

- 4. **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.
- 5. **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.

*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.

Sixth Regional 3R Forum in Asia and the Pacific, 17-19 August 2015, Male, Maldives

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

- 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.

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

Already shown in previous sections.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Already shown in previous sections.

Is this Goal relevant for your country?	x Highly	$\Box$ Partially	$\Box$ 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.

Q-1 What are the major clean technology related policies aiming to increase energy and resource efficiency of SMEs?

- 1. National 3R Strategy for Waste Management, 2010 Encourages Private sector investment in waste sector.
- 2. National Renewable Energy Policy- 2008 This policy seeks to promote production of biogas and other green energy from waste and also providing incentives for development of CDM to promote green energy projects
- 3. Policy Strategies for Small & Medium Enterprises (SME) Development in Bangladesh January 2005

Q-2 What are the capacity building programmes currently in place to build the technical capacity of SMEs in 3R areas?

Dept. of Environment under the to 3R pilot projects providing few capacity building training programs based on the respective projects.

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

Need financial and technical support from local and external support egencies.

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

Already shown in previous sections.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

 $\Box$  Not at all

Already shown in previous sections.

*Is this Goal relevant for your country*? x Highly Dartially

I. 3R Goals i	n 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.
	percent of companies and industries have introduced green accounting and nvironmental performance evaluation (Ref: ISO 14000)?
□ Very Hig	gh (>90%)
$\Box$ High (>7	70%)
□ Average	(50-~70%)
x Low or n	ot satisfactory (< 50%)
$\Box$ None	
	percent of companies and industries have introduced social accounting (Ref: SA nsultation with their workers?
□ Very Hig	
$\Box$ High (>7	
-	(50-~70%)
	not satisfactory (< 50%)
□ None	
No informa	tion
	government have a programme for promoting greening of the value chain? What licies, programmes and incentives are introduced to promote greening of value
ILO Bangla	adesh has initiated program to promote Green Jobs in Bangladesh.
Challenges	(policy/institutional/technological/financial) faced in implementation:
Need more	attention for effective policy
	of pilot projects, master plans and/or policies developed or under development – bsites where relevant
Green Jobs	Initiative by ILO Bangladesh
-	policies/programmes/projects/master plans the government plans to undertake
within next	five years (2015~2020)
No informa	tion available
Is this Goa	<i>l relevant for your country</i> ?

#### 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.

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?

Not yet

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

Not applicable

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 applicable

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not applicable

*Is this Goal relevant for your country*? Highly

x Partially

 $\Box$  Not at all

I 2D Cools in Ukhow Industrial Arros (2Ds in Industrial wests)	
I. 3R Goals in Urban/Industrial Areas (3Rs in Industrial waste)	
<b>Goal 8</b> Build <b>local capacity</b> of both current and future practitioners, to enable the privation sector (including SMEs) to obtain the necessary knowledge and technical skills foster green industry and create decent, productive work.	to
Q-1 How many dedicated training facilities or centers are there to cater the needs of SM and practitioners in the areas of cleaner production, resource efficiency a environment-friendly technologies, etc.?	Es nd
Recycling Training Center in Dhaka run by Waste Concern May few existing but no information available.	
<b>Q-2</b> Please provide an indicative figure on annual government (US \$) expenditure building technical capacity of SMEs and practitioners in the areas of cleaner production resource efficiency and environment-friendly technologies, etc.?	
No information available	
Challenges (policy/ institutional/ technological/ financial) faced in implementation:	
No more attention in this sector by the national government.	
Examples of pilot projects, master plans and/or policies developed or under development	-
include websites where relevant	
Few private industries are practicing cleaner production in the country (The Daily Star a HSBC Climate Change Award gave award of recognition to some industries)	nd
Important policies/programmes/projects/master plans the government plans to underta within next five years (2015~2020)	ke
1. National 3R Strategy for Waste Management, 2010 Encourages Private sector investment in waste sector.	
<i>Is this Goal relevant for your country</i> ? x Highly	

I. 3R Goal	s in Urban/Industrial Areas (3Rs in Industrial waste)
Goal 9	Develop proper <b>classification and inventory of hazardous waste</b> as a prerequisite towards sound management of such waste.
<i>Q-1 Is the</i> x Yes□ N	<i>ere a systematic classification of hazardous waste? If so, please attach.</i> No
~	tt specific rules and regulations are introduced to separate, store, treat, transportation osal of hazardous waste?
Challeng	es (policy/ institutional/ technological/ financial) faced in implementation:
-	s of pilot projects, master plans and/or policies developed or under development – vebsites where relevant
	us Waste Management Policy of Bangladesh 2009 (Draft) to set regulatory standards for hazardous waste management (www.doe.gov.bd)
Provides	us Waste and Ship Breaking Management Rules 2012 detailed regulation on environment-friendly ship-breaking and hazardous waste nent (www.doe.gov.bd)
-	nt policies/programmes/projects/master plans the government plans to undertake ext five years (2015~2020)
Finalizat	<b>ic Waste Handling Rules, 2012 (Draft)</b> tion of the rules the proper management and recycling of E-waste
Is this Go	<i>oal relevant for your country</i> ? x Highly

II. 3R Goals in Rural Areas	
<b>Goal 10 Reduce losses in the overall food supply chain</b> (production, post harvestin storage, processing and packaging, distribution), leading to reduction of waste increasing the quantity and improving the quality of products reaching consume	while ers.
Q-1 What specific policies, rules and regulations, including awareness programmes introduced to minimize food or crop waste?	s, are
Not available	
Q-2 Is there any continuing education services or awareness programmes for the farme agricultural marketing associations on reduction of crop wastes for increased food secur	
Not existing	
Q-3 What is the average wastage of crops or agricultural produce between farm consumers, if there is a study in your country? □ Very High (> 20~ 30%)	ns to
x High (10~20%)	
□ Medium (5~10%)	
$\Box$ Low (< 5%)	
$\Box$ Negligible (<1%)	
Challenges (policy/institutional/technological/financial) faced in implementation:	
Need specific policy	
Examples of pilot projects, master plans and/or policies developed or under developm include websites where relevant	ent –
Not available	
Important policies/programmes/projects/master plans the government plans to unde within next five years (2015~2020)	ertake
Not available	
<i>Is this Goal relevant for your country</i> ?  Highly x Partially  Not at al	1

II. 3R Goals in Rural Areas
<b>Goal 11</b> Promote full scale <b>use of agricultural biomass waste and livestock waste</b> throug reuse and/or recycle measures as appropriate, to achieve a number of co - benefit including GHG emission reduction, energy security, sustainable livelihoods in rura areas and poverty reduction, among others.
Q-1 How much amount of $-(a)$ agricultural biomass waste and (b) livestock waste are grossly
generated per annum?
Agricultural Waste: 65 million Metric Ton/ Year (2005, Waste Concern) Livestock waste: not available
Q-2 How are most of the agricultural biomass wastes utilized or treated? (Please check al appropriate boxes)
□ as secondary raw material input (for paper, bioplastic, furniture, etc.) x biogas/electricity generation
x composts/fertilizers □ mostly left unutilized or open dumped
□ mostly open burned
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.
1. National 3R Strategy for Waste Management, 2010
Challenges (policy/ institutional/ technological/ financial) faced in implementation:
Need specific policy and capacity of relevant ministries for promoting the idea
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 undertak within next five years (2015~2020)
Not available
<i>Is this Goal relevant for your country</i> ? x Highly

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?

- 1. No specific policy but the Hazardous Waste and Ship Breaking Waste Management Rules 2012 Addressed this issue.
- 2. National Fisheries Policy 1998
- 3. Integrated Coastal Zone Management Policy 2005
- 4. Environment Conservation Act 1995
- 5. National Action Plan on Coastal and Marin Pollution from Land based Activities.

Q-2 What extent issue of plastic waste is considered in integrated coastal zone management (ICZM)? (Please check the appropriate box)

 $\Box$  Very much $\Box$  Somehow x Not at all

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.

Not available

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

Need awareness and policy in this sector.

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

- 1. No specific policy but the Hazardous Waste and Ship Breaking Waste Management Rules 2012 Addressed this issue.
- 2. National Fisheries Policy 1998
- 3. Integrated Coastal Zone Management Policy 2005
- 4. Environment Conservation Act 1995
- 5. 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 (2015~2020)

Not available

*Is this Goal relevant for your country*? Highly

x Partially

 $\Box$  Not at all

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
Х	1	Take to the retailer
		Take to local charity for re-use
Х	1	Take to second-hand shop for re-use
		Ship back to the manufacturer
		Ship back to the manufacturer
Х	3	Recycle in another country
Х	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 Handling Rules, 2012 (Draft)

Shall address health and safety issue.

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

Study going on with the support from JICA by Re-Tem a japanese private company with the support from Waste Concern Consultants. Findings will be shared later.

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:

Need guideline and policy in this sector. Need national inventory on E-waste

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

Sixth Regional 3R Forum in Asia and the Pacific, 17-19 August 2015, Male, Maldives

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.

Two private formal company collect E-waste and exports PCB to Singapore and China.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not Available

Is this Goal relevant for your country? X Highly

 $\Box$  Partially

 $\Box$  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. **Basel Convention:** People's Republic of Bangladesh is a signatory and has accessed to the **Basel Convention** in April 01, 1993. The environmental legislations are not comprehensive and there is no specific legislation on hazardous wastes.
- Hazardous Waste and Ship Breaking Management Rules 2012
   Provides detailed regulation on environment-friendly ship-breaking and hazardous waste
   management

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?

□ Yes x 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 (2015~2020)

Not available

III. 3R Goals for New and Emerging Wastes
<b>Goal 15</b> Progressive implementation of " <b>extended producer responsibility (EPR)</b> " 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
Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)
Not available

*Is this Goal relevant for your country*? Highly x Partially

 $\Box$  Not at all

**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 mandotary.

### 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. PRISM, PRODIPON(NGOs)
- 4. Department of Environment gives licence

#### 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)

 $\Box$  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)

x Other 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:

- 1. Implementation of the rule effectively needed.
- 2. Incentives required for private sector

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 and Prodipon

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

x Partially

Not available

□ Not at all

**Goal 17** Improve **resource efficiency and resource productivity** by greening jobs nation - wide inall 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.

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

Energy efficient CDM project initiated by government.

Q-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)

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.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not available

*Is this Goal relevant for your country*? Highly x Partially

 $\Box$  Not at all

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?

- 1. The National 3R Strategy on Waste clearly addressed climate mitigation issues.
- 2. **National CDM Strategy:** This strategy is promoting pro-poor CDM projects on waste sector by harnessing carbon financing
- 3. 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:

- 1. Due to fall of carbon price existing CDM projects in Bangladesh are suffering. Attention should be given to help these projects.
- 2. Co-benefit, climate fiancé 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 (2015~2020)

- 1. Sixth Five Year Plan (FY2011-FY2015)
- 2. Sixth Five Year Plan (FY2016-FY2020)
- 3. Bangladesh Climate Change Strategy and Action Plan (BCCSAP) (2009)

## **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 scientificinstitution, 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
- 4. SME Foundation
- 5. Department of Environment
- 6. Bangladesh University of Engineering and Technology
- 7. Waste Concern
- 8. BCAS
- 9. GOBESHONA

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

Please google the organizations

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not available now

IV. 3R Goal	s 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.		
	central government have official dialogue with multi-stakeholders in the process to		
•	<b>3R-related policies and regulations?</b> Which stakeholders are involved in the (Please <u>check all</u> applicable)		
xNGOs	(Please <u>check an</u> applicable) xIndustrial Association		
	overnment x Academic Institution		
	s, please add/specify (Producers, informal sector, consumer society etc.)		
~	<i>t is the level of NGOs' involvement in 3R, sustainable production and consumption, efficiency related promotional activities?</i> (Please check the appropriate box)		
$\Box$ Very h	high $\Box$ Moderatex Low $\Box$ Almost Negligible		
Q-3 What is the level of citizens' awareness on beneficial aspects of 3R, sustainable production and consumption and resource efficiency. (Please check the appropriate box)			
□ Very h	high 🗆 Moderate X Low 🗆 Almost Negligible		
Challenge	es (policy/ institutional/ technological/ financial) faced in implementation:		
Need more	e attention, capacity, knowledge, awareness, financial support and R&D		
Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant			
Already m	entioned earlier		
-	t policies/programmes/projects/master plans the government plans to undertake xt five years (2015~2020)		
National H	Five year plan		
Is this God	al relevant for your country? X Highly		

**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.

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

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.

Not available

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

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?

Not available

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

Need attention in this issue

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

Shown earlier

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not available

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

**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 Department of Environment Ministry of Local Government Rural and Cooperative

### Q-2 What type of coordination mechanism are there among ministries and agencies for a resource efficient economic development?

- $\Box$  Official regular coordination meeting among ministries and agencies
- □ Official ad-hoc coordination meeting among ministries and agencies
- $\Box$  Informal meeting among ministries and agencies
- X Other coordination mechanisms (please add/specify)

The existing National 3R Steering Committee needs to be strengthened

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

Need more attentions

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

The National 3R Strategy on Waste

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not available

	ls 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 Wha procurem	it specific policies are introduced to promote green and social responsible ent?
The Natio	onal 3R Strategy on Waste clearly addressed the issue.
Q-2 Pleas	e provide details of eco-labelling schemes of your country.
Not exist	ting
Q-3 Pleas	e provide a list of criteria for eco-labeledproducts and services in your country.
Not existin	ng
~	e provide the list of Ministries and major Government Agencies which have adopted curement policy.
Not existin	ng
Q-5 What	% of municipalities have adopted the green procurement policy?
Not existin	ng
Challenge	es (policy/ institutional/ technological/ financial) faced in implementation:
Need atter	
	of pilot projects, master plans and/or policies developed or under development - ebsites where relevant
	onal 3R Strategy on Waste clearly addressed the issue.
The Natio	
Important	t policies/programmes/projects/master plans the government plans to undertak xt five years (2015~2020)
Important	xt five years (2015~2020)

IV. 3R Goals for Cross-cutting Issues			
Goal 24 Phase out harmful subsidies materials and water) and implementing the 3Rs and effective	energy, and c	channel the freed	funds in support of
Q-1 Are there any government subsurvey unsustainable use of resources (raw masuch programmes along with the reimplementing it. Data Not Readily Available	aterials, water,	energy)? If so, pl	ease provide a list of
Challenges (policy/ institutional/ techno	logical/ financi	al) faced in implei	mentation:
Examples of pilot projects, master plan include websites where relevant	ns and/or police	ies developed or u	under development –
Important policies/programmes/project within next five years (2015~2020)	s/master plans	the government	plans to undertake
Is this Goal relevant for your country?	□ Highly	$\Box$ Partially	$\Box$ Not at all

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

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.
0.1.1	

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?

Buriganga Turag Dhalashori Padma

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 Act 2000
- 6. Bangladesh Water Act 2013

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

1. Coastal Zone Policy 2005

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

Need more attention

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

See DOE website

IV. 3R Goals for Cross-cutting Issues		
Goal 25	<b>Protect public health and ecosystems, including freshwater and marine resources by eliminating illegal</b> activities of open dumping, including dumping in the oceans, and controlling open burning in both urban and rural areas.	
-	t policies/programmes/projects/master plans the government plans to undertake xt five years (2015~2020) able	
Is this Go	<i>al relevant for your country</i> ?	

IV. 3R Goa	ls 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?
CDM base	waste Recycling Companies exporting PCB ed composting project in Dhaka e exporters
Q-2 Pleas	e specify the regulation on transboundary movement of hazardous waste.
Banglades	sh is a signatory of Basal Convention
~ .	ur government has restriction on import of non-hazardous waste or quality control zardous waste, please list it up.
Import Po	licy Order 2012-2015 (http://www.mincom.gov.bd/Polices.php)
Q-4 Does	your government restrict import of remanufactured goods?
No	
	your governmentregardremanufactured goods as secondhand goods, and regulate is hand goods?
Yes	
Challenge	es (policy/ institutional/ technological/ financial) faced in implementation:
More atte	ntion needed
-	of pilot projects, master plans and/or policies developed or under development - ebsites where relevant
Not availa	able
	t policies/programmes/projects/master plans the government plans to undertake xt five years (2015~2020)
Not availa	able now
Is this Go	<i>al relevant for your country</i> ?

IV. 3R Goals	s 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	Х				Х
Material flow		Х			Х
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		Х			X
Total landfilled waste		X			x
Import of recyclables		X			X
Export of recyclables		Х			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?

Recently government conducted a national survey on waste under a 3R project.

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

Need updated information, inventory and institutional capacity and financial allocation

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

Waste Concern, CEGIS conducting surveys related to waste.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

**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).

Sixth Regional 3R Forum in Asia and the Pacific, 17-19 August 2015, Male, Maldives

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

#### 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?

At present government is seriously looking for opportunity to harness energy from waste. Biogas, Refuse Derived Fuel etc., Waste to energy projects are priority.

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

R&D is required 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 study on potential of RDF as source of energy from soiled plastic, waste, fabric conducted by Dept of Env.

Important policies/programmes/projects/master plans the government plans to undertake within next five years (2015~2020)

Not available now.

*Is this Goal relevant for your country*? Highly x Partially

 $\Box$  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.

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 Centres (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.

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

Already shown earlier.

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

IV. 3R Goals for Cross-cutting Issues
<b>Goal 30</b> 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 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> )
Not available
Challenges (policy/institutional/technological/financial) faced in implementation:
Not available
<i>Examples of pilot projects, master plans and/or policies developed or under development – include websites where relevant</i>
Not available
Important policies/programmes/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  x Not at all

IV. 3R Goal	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.			
~	t specific policies, programme, urn" concept? (This is <u>to be re</u>	<b>U 1</b>	1 0 /	plemented to promote
Not applic	cable			
Challenge	es (policy/ institutional/ techno	logical/ financ	ial) faced in imple	ementation:
-	of pilot projects, master plan ebsites where relevant	ns and/or polic	ies developed or	under development –
-	t policies/programmes/project xt five years (2015~2020)	s/master plans	the government	t plans to undertake
L. d. i. C.	al relevant for your country?	□ Highly	$\Box$ Partially	$\Box$ 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.		
<i>Q-1</i> 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)

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

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

No

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

Ministry of Labor has Labor Law where child labor has been addressed.

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

Not available

Q-6 Average life span of informal waste workers?

Not available

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

Not available

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

Not available

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

Need more attention

IV. 3R Goal	s for Cross-cutting Issues			
Goal 32	Complete elimination of ill <b>sector</b> and gradually <b>impr</b> including <b>mandatory provis</b>	ove the world	king conditions an	nd livelihood security,
-	of pilot projects, master plan ebsites where relevant ble	ns and/or pol	icies developed or	r under development –
Important policies/programs/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	x Partially	$\Box$ Not at all

IV. 3R Goals for Cross-cutting Issues				
Goal 33	Promote 3Rs taking into account gender considerations.			
~	e give a brief assessment ts incorporate gender consid		· •	-
Not availab	ble			
The Nation	nal 3R Strategy on Waste clo	early addressed	the issue addressed	l gender issue
Challenges (policy/institutional/technological/financial) faced in implementation:				
Need more	attention			
-	of pilot projects, master pla bsites where relevant	ns and/or polic	ies developed or a	under development –
Not availab	ole			
within nex	policies/programmes/project t five years (2015~2020)	ts/master plans	the government	plans to undertake
Not availab	ole			
Is this Goa	l relevant for your country?	□ Highly	$\Box$ Partially	$\Box$ Not at all





### COUNTRY BREAKOUT SESSIONS-

Country Major Achievements and Initiatives on Implementation of Hanoi 3R Declaration (2013-2023)

Country Breakout Group 1 Country Presentation: Bangladesh

Md. Raisul Alam Mondal Director General Department of Environment Ministry of Environment and Forests Bangladesh

Sixth Regional 3R Forum in Asia and the Pacific 16–19 August 2015, Male, Maldives

### **Presentation** Outline

- 1. Introduction
- Major Achievements / New Initiatives in 3R Areas
- 3. Critical Challenges Faced
- 4. Major Plans
- 5. Way Forward

### Introduction





## Introduction



Year	Waste Generation (Tons/day) In Urban Areas of Bangladesh
1991	6493*
2005	13330**
2014	23688***
2025	47000****



\* World Bank, 1998,

Mainly focused on end-of-pipe solution. Un-controlled land filling is mainly existing in the country.

\*\* Waste Concern, 2005, \*\*\* Waste Concern, 2013 \*\*\*\* UMP, 1999

### National 3R Strategy for Waste Management, 2010

- Department of Environment developed the National 3R Strategy with the support of UN Centre for Regional development and Ministry of Environment, Japan.
- National 3R Goal: 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

## National 3R Strategy for Waste Management, 2010 contd..

### Institutional Measures

- The Environment Wing of the Ministry of Environment and Forests has re-organized its functions to act as the 3R Focal Point
- An inter-ministerial committee is being formed for coordination among different line ministries.
- A 3R Cell has been constituted within the Department of Environment to monitor implementation of 3R strategies

## National Consultation Meeting on 3R Strategy



National Consultation Meeting on 3R Strategy in Dhaka, Bangladesh

## Initiatives in 3R (Policies & Plans)

- National Renewable Energy Policy 2008: This policy seeks to promote production of biogas and other green energy from waste and also providing incentives for development of CDM to promote green energy projects.
- Bangladesh Climate Change Strategy and Action Plan 2009: Mitigation and low carbon development is one of the key pillars of this strategy, and waste sector has been considered potential contributor towards achieving the mitigation objectives of the country
- Bangladesh Environment & Climate Change Outlook 2012: Waste management has been considered one of the priority issues under this report
- Sixth Five Year Plan (FY 2010 FY 2015) and Seventh Five Year Plan (FY 2015 - FY 2020)

## Initiatives in 3R contd..

#### Acts

- Bangladesh Environment Conservation Act 1995 (Amended in 2010)
- Rules
  - Bangladesh Environment Conservation Rules 1997
  - Medical Waste (Management & Handling) Rules 2008
  - Source Separation, transportation, treatment and disposal of all kinds of hospital wastes
  - Hazardous Waste and Ship Breaking Management Rules 2011
  - Draft Electrical and Electronic Waste (Management & Handling) Rules and Solid Waste Management Handling Rules

To ensure proper management of E-Waste and Solid Wastes and involve private sectors in waste management

## Other Major Initiatives (Projects)

- CDM Based Composting Project (capacity 130 tons/day)
   Project In Dhaka (2008)
- Programmatic CDM using organic Wastes of Urban Centres (Phourashava/ Municipalities) throughout Bangladesh (64 Districts): Pilot Phase
- Implementation of 3R Pilot Initiative in Dhaka and Chittagong Cities to Reduce Green House Gas Emission (Phase 1) (2012)
- Co-composting Project based on Faecal Sludge and Organic Waste (2012) Initiated by Waste Concern, UNESCAP, LGED and Kushtia Municipality.
- Local Government with ADB (2012) Adopted 3R Concept in Waste Recycling Projects in 6 City Corporations
- UNICEF initiated Composting and Promoting 3Rs in 19 towns of Bangladesh.

# Other Major Initiatives (Studies)

- E-Waste Management Inventory for Proper Management and Recycling for Dhaka District
- Study on Soiled Poly Packaging Waste Management and Recycling Potential of Dhaka City
- Study on Potential of Producing Refuse Derived Fuel (RDF) from Waste
- 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 NAMAs: with the support from UNESCAP, UNFCCC, SOUTH POLE and Waste Concern

## Challenges

- Lack of strong institutional capacity, technical know-how along with limited financial resources for waste management
- Lack of awareness and Lack of initiatives and investments in waste management and recycling sector by private sector
- In many cases, External Support Agency (ESA) assisted waste management related initiatives are found to be isolated and disjointed
- Lack of R&D and information on 3R related issues on Waste

## Way Forward

- Develop necessary Policy, Rules, Standards and Guidelines for the promotion of 3R activities
- The proposed National 3R Steering Committee need to be strengthened
- Provide incentives for Public Private Partnerships (PPP) and investments related to 3R initiatives
- Improve mass awareness using media, initiate capacity building and hands-on training on 3R
- Promote proper R&D in 3R related activities for suitable solutions
- Harness opportunities of co-benefits along with carbon emission reductions from waste for both Public and Private benefit using NAMA facilitie

# Thank You.