

Inaugural Meeting of the Regional 3R Forum in Asia

11-12 November 2009, Tokyo

**Introduction of the Objectives, Structure,
and Vision of the Regional 3R Forum**

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United Nations Centre for Regional Development

Why should Asian countries mainstream 3R ?

- Open dumping of solid waste is widespread, not full utilization of 3R potential



Why should Asian countries mainstream 3R ?



Source: ADB (2004)



Why should Asian countries mainstream 3R ?



Living in a place 20 times above safe level of
lead, arsenic, nitrogen.....

Source: ADB (2004)



Why should Asian countries mainstream 3R ?



Source: ADB (2004)

Many children waste pickers at the highly polluted dumping site...



Why should Asian countries mainstream 3R ?



*Highly contaminated
leachate seeps
untreated into
groundwater,
a source of
drinking water....*

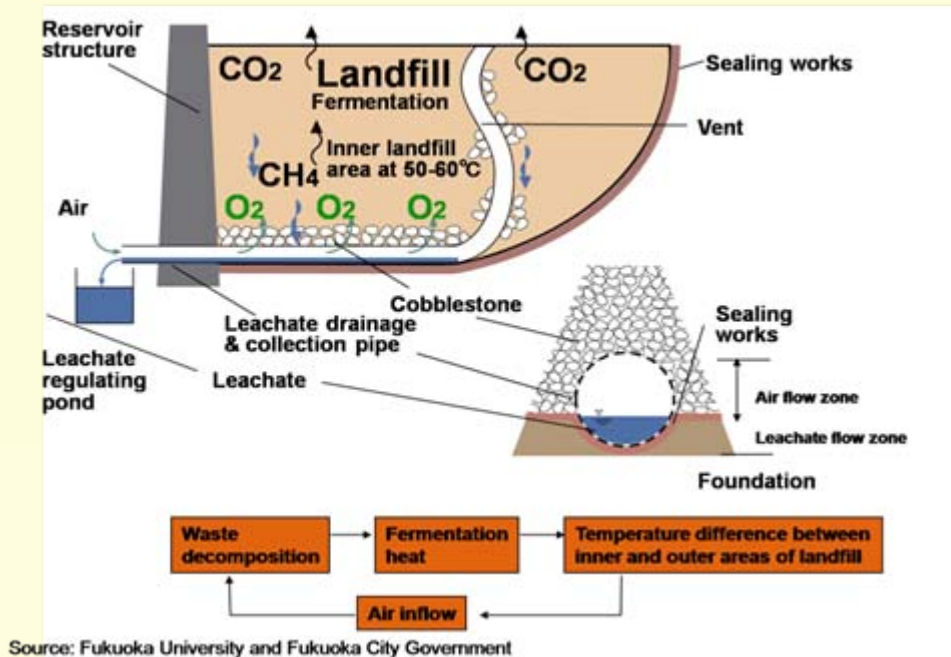
*Water availability is an
emerging issue in Asia with
some countries already
heading towards water
stress, but water quality
deterioration because of
industrial discharges and
municipal sewage,
agrochemicals will further
accelerate the issue!*

Source: ADB (2004)



Why should Asian countries mainstream 3R ?

- Over reliance on conventional type waste management such as landfills and incineration is not sustainable (landfills are major source of methane (CH_4), a powerful GHG, and land costs are getting very high).



GHG emissions from waste are directly affected by numerous policy & regulatory measures that encourage energy recovery from waste, restrict choice for ultimate waste disposal, waste prevention / minimization through 3R. In many countries, e.g., in EU & Japan, waste management policies are closely related to & integrated with climate policies.

Why should Asian countries mainstream 3R ?

- Focus is more on downstream or end-of-pipe solutions and local governments spend significant amount of money on waste collection & disposal without adequate consideration on resource saving measures and their economic return or input

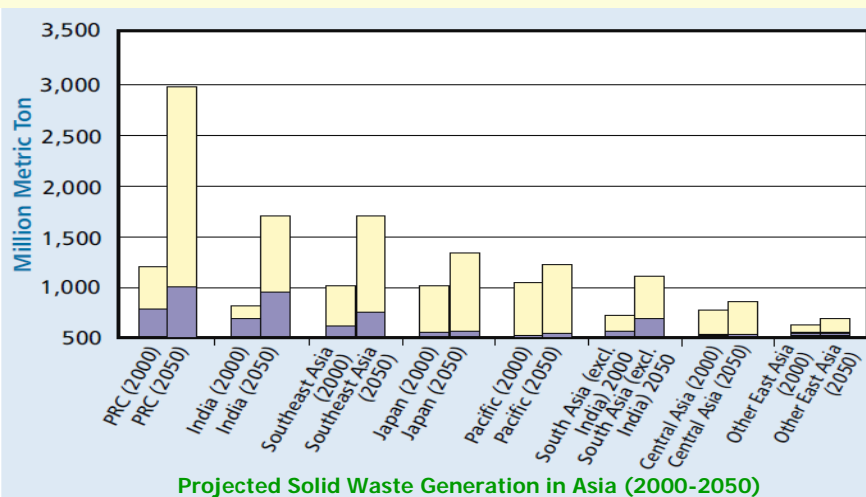
where as up-stream solutions provide opportunities for –

- source reduction (increased resource efficiency/minimize raw material input)
- waste prevention/minimization of environmental risks through eco-friendly designs and products
- structured or reorganized production processes so that the waste of one industry is a valued input to another (industrial symbiosis)



Why should Asian countries mainstream 3R ?

- Prevailing economic system does not provide adequate incentives for conservation and efficient resource allocation
- Prevailing production and consumption patterns are not adequately oriented towards resource efficiency, contributing to growing quantities of wastes that must be managed for final disposal
- As Asian industrial economies continue to grow, the region will generate more toxic chemicals & hazardous wastes, mostly coming from industrial, agriculture, and manufacturing processes



Projected Solid Waste Generation in Asia (2000-2050)

Industrial Solid Waste (Yellow) Municipal Solid Waste (Purple)

PRC = People's Republic of China.

Source: Solid Waste Projection Study by Tanaka et al. Source: ADB & IGES, 2009



Where should Asia countries be heading?

Product
policy

versus

Waste Policy

(Preventive/up-
stream solutions)

(Down-stream/end-of-
pipe solutions)



Where should Asia countries be heading?

Waste
prevention,
extended
use, re-use

versus

An expanded
recycling
industry

(Resource
Conservation/Resource
efficient economy
& society)

(Resource intensive
and hazardous
production of
expanding markets)



Where should Asian countries be heading?

The governments must be clear in their strategy –

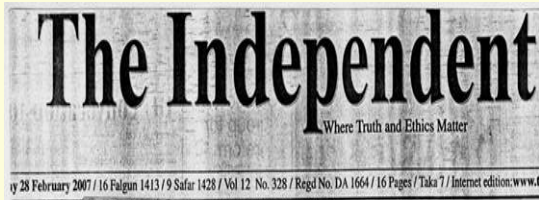
- Whether to continue with business-as-usual with 'more waste and more recycling' approach?

-OR-

- whether the goal is to encourage the producer to alter the design of the products?
- whether the goal is to utilize the expertise of the manufacturers in managing the used products after they attain end-of-life?
- whether the goal is to develop modalities for gradual shifting of the cost of managing the used products from municipalities to manufacturers (EMS, EPR, etc.)



Bangladesh National 3R Workshop (2007): Raising Nation-wide awareness



Business Independent

3R strategy needs to promote waste management: C S Karim

BSS, DHAKA

Adviser for Environment and Forest Ministry Dr C S Karim yesterday said that the 3R (Reduce, Reuse and Recycle) strategy for managing waste needs to be promoted in the country for sustainable environment as well as better economy.

The Government has the all-out intention to tackle the waste problem and in this regard an integrated effort comprising all stakeholders needs to be undertaken to proper waste management for minimizing the risk of health and environment," he said this while speaking as the chief guest at inaugural session of the 'National 3R Workshop.'

The two-day long workshop was jointly organised by the Department of Environment under the ministry of Environment and Forest, United Nations Centre For Regional Development (UNCRD) and Waste Concern, a local research organisation at the LGED Bhaban at Sher-e-Bangla Nagar here. Local Government, Rural Development and Cooperative Adviser Mohammad Anwarul Iqbal and Director of UNCRD Kazunobu Onogawa were present as the special guests while Environment and Forest secretary S M Jahurul Islam chaired the inaugural session.

Director General of Environment Department Khandker Rashedul Haque gave the welcome address and Executive Director of Waste Concern Masood Sinha gave the vote of thanks. C S Karim said, all industries and medical service centres need to set up a waste management strategy and they

should submit the plan to the environment department before getting the legal license to operate their function.

"If we don't have the appropriate plan of waste disposal now then it could be difficult to manage waste in future as the urban population in the country is growing very fast" he observed. Anwarul Iqbal said an estimated 17,000 metric tonnes of waste is generated every day in the urban areas of the country, of which only between 30-40 per cent are managed and rest remain unmanaged. He said, the government give special emphasis on solid waste management for all municipalities, as well as in other major cities and recommended that each municipality should have a plan for solid waste management.

"In accordance with the strategy eight secondary towns have already prepared individual action plans to manage solid waste problems with the assistance from Asian Development Bank (ADB) which is being implemented by LGED and concerned municipalities" he said.

Iqbal hoped that the workshop would provide an in-depth review on selected issues such as international experience on 3R, municipal solid waste management, medical waste management, industrial and hazardous waste management to promote 3R in Bangladesh.

The workshop said that the 3-R strategy includes three principles - 'Reduce' the amount of waste generation to a minimum level, 'Reuse' the waste whether possible and 'Recycle' much of waste what remains.



3R strategy should be promoted for proper waste management

Adviser for Environment and Forest Ministry Dr C S Karim Tuesday said that the 3R (Reduce, Reuse and Recycle) strategy for managing waste needs to be promoted in the country for sustainable environment as well as better economy," reports BSS.

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A good number of environment experts from government, development organizations and non-government organisations participated in the workshop.



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Inception Workshop on National 3R Strategy in Bangladesh (2008)



Sustainable waste management to generate green jobs

Says Mahbub Jamil

UNB, Dhaka

Chief Adviser's Special Assistance Mahbub Jamil has said principles of sustainable waste management -- reduce, reuse and recycle -- could create a "win-win situation" for all as it has potentiality to generate green jobs specially in recycling business.

"It could build a resource efficient economy," said Jamil while he was inaugurating the Inception Workshop on "Formulation of national strategy on waste reduce, reuse and recycle (3Rs) for Bangladesh" in the city yesterday. Department of Environment organised the workshop.

Special Assistant to the Chief Adviser, in-charge of Ministry Environment and Forest, Raja Devashis Roy was also present as special guest. Presided over by Environment and Forest Secretary AHM Rajaul Karim, the function was addressed by UNCRD Director Kazunobu Onogawa and DG of Department of Environment Dr Khandaker Rashedul Haque.

Mahbub Jamil, in-charge of Industries, Civil Aviation and Tourism Ministry, said industrial waste management in Bangladesh has been based on "Reactive Approach".

He continued: "The new approach to solve the waste problem globally is based in

"Proactive Approach" which is basically a preventive approach. This can be achieved through introducing Environmental Management System (EMS) in the industries."

He said use of EMS would show practical business results in terms of increased efficiency, reduced costs and reduced waste as well as environmental benefits.

Raja Devashis Roy stressed the cooperation of all agencies concerned among civil society, media and experts to overcome the problem of waste.

A significant number of representatives from various government autonomous and non-government organisations participated in the workshop.

AGE

THURSDAY, DECEMBER 25, 2008

Reduce, reuse and recycle waste to create jobs: adviser

United News of Bangladesh - Dhaka

CHIEF adviser's special assistant Mahbub Jamil said on Wednesday waste reduce, reuse and recycle can create a win-win situation for all as it has potentiality to generate green jobs especially in recycling business.

"It can build a resource efficient economy," he said while inaugurating an inception workshop on 'Formulation of National Strategy on Waste Reduce, Reuse and Recycle for Bangladesh' in Dhaka. Department of Environment organised the workshop.

Raja Devashis Roy, special assistant to the chief adviser, in-charge of the environment and forest ministry, was also present at the function as special guest.

Chaired by environment and forest secretary AHM Rajaul Karim, the function was addressed by UNCRD director Kazunobu Onogawa and director general of Department of

Environment Khandaker Rashedul Haque.

Mahbub Jamil said industrial waste management in Bangladesh has been based on reactive approach. "The new approach to solve the waste problem globally is based on proactive approach which is basically a preventive approach. This can be achieved through introducing Environmental Management System in the industries."

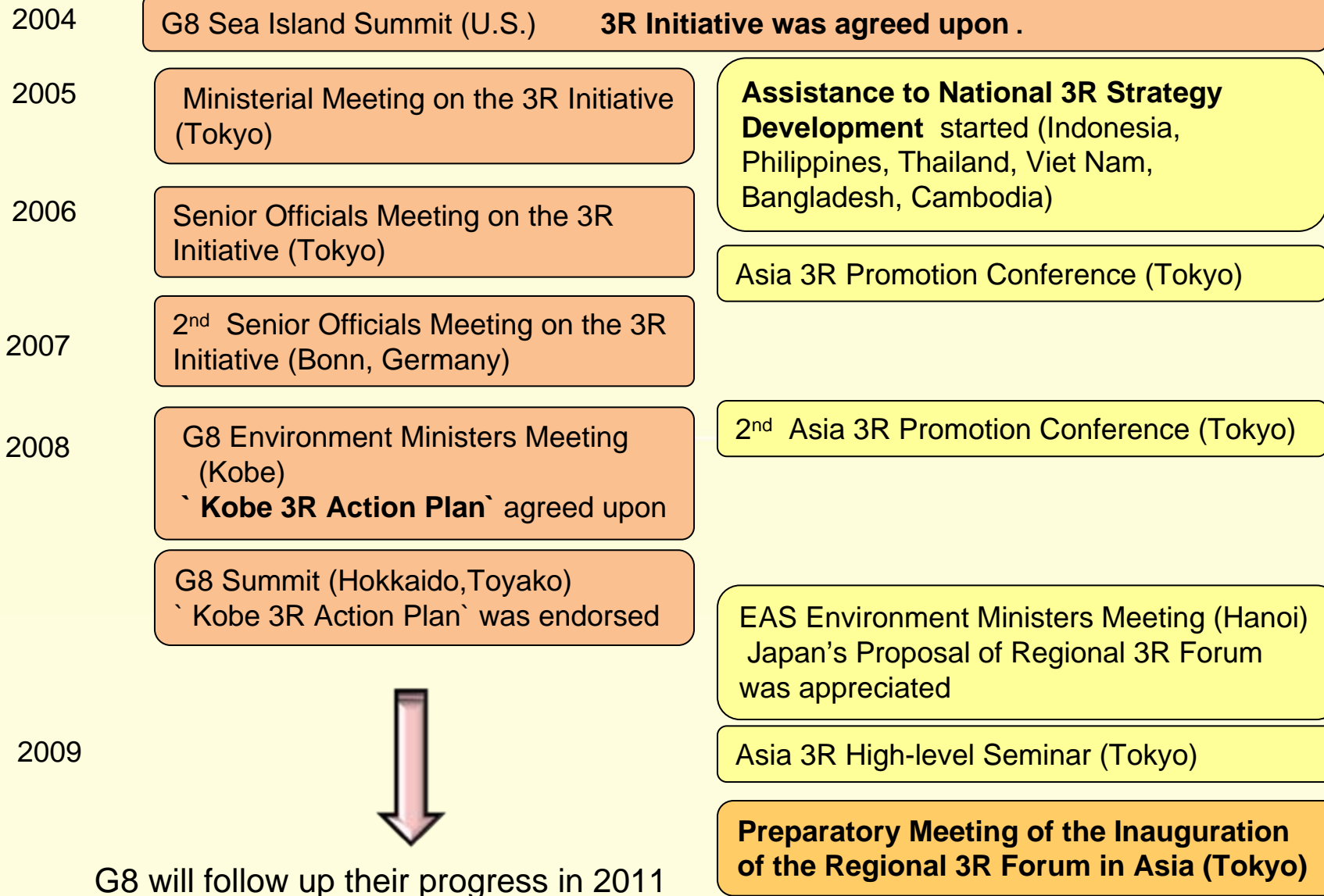
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3R Initiative



Regional 3R Forum in Asia

Goal:

To achieve *low carbon and sound material cycle societies in Asia* through facilitating bilateral and multilateral cooperation for increasing **resource and energy efficiency** through the 3Rs, and for promoting **environmentally sound management of wastes** in the region; to set in motion a **regional mechanism** to address 3R issues, needs and priorities in Asian countries, including emerging issues of concern in waste management.

Objectives:

- (a) facilitate **high-level policy dialogues** on 3R issues, challenges, and opportunities;
- (b) facilitate **improved dialogue and cooperation with international organizations and donor communities** for materializing and implementation of 3R projects at local and national level identified through national 3R strategies;
- (c) provide a **strategic and knowledge platform** for sharing experiences and disseminating among Asian countries best practices, tools, technologies, policy instruments on various aspects of the 3Rs;
- (d) provide a platform to develop **multilayered networks of stakeholders** such as governments, academia, scientific and research community, private sector, and NGOs;
- (e) generate international consensus and understanding on the beneficial aspects of the 3Rs in the context of achieving **MDGs, resource and energy efficiency, resource efficient economy, and climate change mitigation**; and to
- (f) provide a platform for **proliferation of national 3R strategies** in developing countries.

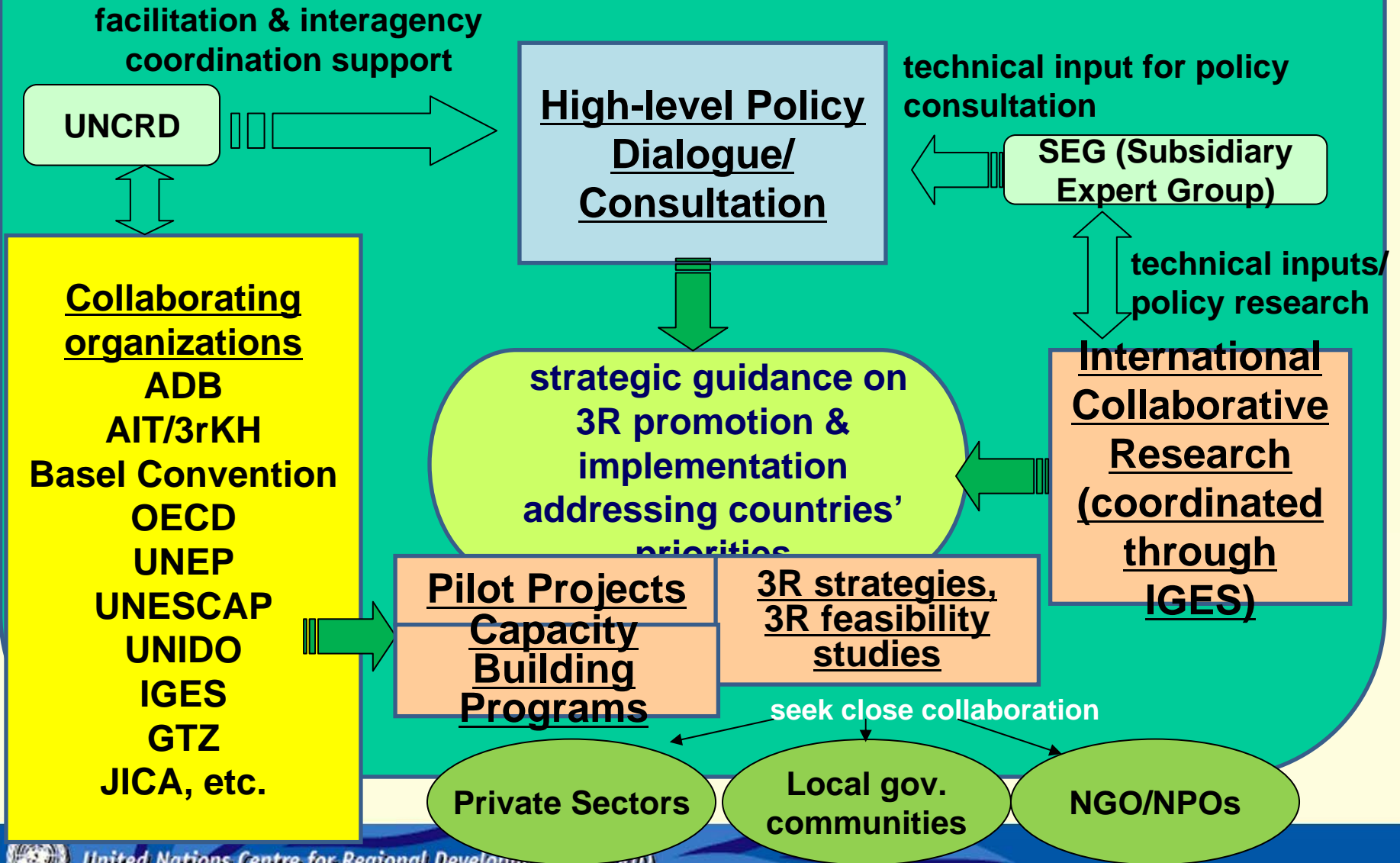


Composition of Regional 3R Forum

- National, local government representatives (MoE, MoI, MPW, MOUD, etc.)
 - Subsidiary Expert Group (SEG)
 - Regional and international organizations, bi-lateral/multi-lateral donors
 - NGOs and business sectors
-



Framework for Implementation of Regional 3R Forum in Asia



Subsidiary Expert Group

Expected roles:

- Provide necessary technical input to the policy consultations, share best practices/experiences in the relevant 3R areas
- Participate in the International Collaborative Research which is coordinated by IGES under the overall framework of the Forum, conduct relevant research, and share the results/findings to support the policy discussions in the Forum;
- Provide over all advisory support/strategic guidance in the implementation of the 3R related activities at local and national level.

Criteria for Selection of Expert Members:

- Having sound understanding on the policy and institutional issues in developing countries concerning waste management/in one or more thematic areas of 3R
- sound expertise in assessment of various technologies concerning 3R/waste management in the context of developing countries; considerable experience as a researcher and/or practitioner
- sound understanding about the priorities of international donor communities in 3R/waste management.



3R Thematic Focus of the Forum

Waste Sectors:

- Municipal Solid Waste
- Industrial and Hazardous Waste
- Agriculture/Bio-mass Waste
- Construction Waste
- Medical/Health Care Waste
- Electric and Electronic Waste (e-waste)

Cross-Cutting areas:

- Resource Efficiency, Energy Efficiency (including CP aspects)
- Climate Change Mitigation/Co-benefits/CDM (in the context of 3R/Waste Management)
- Social aspects/Poverty/MDG/Informal sectors
- Illegal trade of wastes / transboundary movement of hazardous wastes
- Research and development (3R technology assessment & evaluation, and resource cycle/circulation)



Regional 3R Forum in Asia : Scope of Activities

Regional 3R Forum in Asia

(provide umbrella framework for a wide range of activities)

Strategy dev't and implementation	Demonstration projects	Reduction of GHG emissions (Co-benefits)	3R information and research network	Prevention of inappropriate and illegal trade of waste	Int'l collaborative research
<ul style="list-style-type: none"> • Support national 3R strategy dev't. • Share experiences in national 3R strategy development. • Facilitate implementation of national 3R strategies. 	<ul style="list-style-type: none"> • Develop regional facility to identify demonstration projects. • Support demonstration projects. • Convene Asia Congress for Reduction of Use in Disposable Plastic Bag. 	<ul style="list-style-type: none"> • Support co-benefits projects (reduction of GHG emission + sound waste management). 	<ul style="list-style-type: none"> • Compile/ disseminate 3R knowledge through the 3R Knowledge Hub (3RKH). • Develop/ strengthen regional network among key institutions and experts. 	<ul style="list-style-type: none"> • Facilitate international collaboration under the existing scheme of Asia Network for the Prevention of the Illegal Transboundary Movement of Hazardous Wastes. 	<ul style="list-style-type: none"> • Launch international collaborative research to identify strategic policy options and their effectiveness towards sustainable resource cycles in the region.

(Source: adapted from MoE-J, 2009)



Establish linkage with & complement

- Solid & Hazardous Waste Thematic Working Group (under the Ministerial Regional Forum on Environment and Health)
- 3R Knowledge Hub (3rKH)
- Basel Convention
- ASEAN Working Group on Environmentally Sustainable Cities (AWGESC)
- Commission on Sustainable Development (CSD)
- MDGs
- Other relevant processes



Asian Countries' Priorities for Strategic Implementation of the 3Rs

- **Mainstreaming 3Rs** in environmental and economic policies and programs
- Mobilizing **financial resources** for Implementation of 3Rs
- Development of **human resources** as well to facilitate efficient **diffusion of 3R knowledge and technologies**
- Understanding and implementation of **co-benefits of the 3Rs** (GHG reduction etc.)
- Development of necessary **organizational framework/support to deal with the informal sector**
- **Development and transfer of environmentally sound technologies for waste management and the 3Rs**
- **Empowering cities** to build them as core clients **for financing and investments towards implementation of 3Rs** / materializing Sustainable or Eco City.
- Information sharing and technical capacity development for **prevention of inappropriate and illegal trade of waste**
- **International collaborative policy research** on sustainable resource cycles in Asia



Guiding Principles/Framework

TOKYO 3R STATEMENT

(To be adopted in Session 6 on Day 2)

