



Incentive and co-benefits on 3Rs implementation in the context of Developing Countries

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Topics for presentation

- Part I** Why does 3 Rs implementation not increase rapidly?
- Part II** Co-benefits on 3Rs implementation
- Part III** Incentives on 3Rs Implementation



Part I

Why does 3 Rs implementation not increase rapidly?



3Rs practices have not increased as they should be

1. Comprehensive policy but implementation level is low

2. Awareness raising is not consistent

- Inconsistent awareness programs implementing on the public sector

3. Low degree of enforcement

- Actual implementation of the comprehensive policy on 3Rs

	Well	Not well
Policy & Plan Institution	/	
Legal	/	
Science & Technology	/	
Public Awareness		/
Enforcement		/
Private Participation & partnership		/ (esp. for packaging)
Apply R&D in commercial scale		/
R&D	/ (need for specific waste)	



Part II

Co-benefits on 3Rs implementation



Co-benefit : Climate change and waste management

- **Alternative:** waste to energy, waste to fertilizer
- **Benefit:** profit, CERs
- **Co-benefit:** reducing budget for waste disposal, reducing land use for landfill, energy security, GHGs reduction, improve water quality, increasing quality of soil
- **Concern issue:** bottleneck problems
 - Awareness of people in sorting waste
 - Low waste collection and segregation
 - Weather and moisture content in waste



- **Mechanism for solving bottleneck problems**
 - Capacity building for public participation and engagement for on-site waste segregation
 - Financial investment on fundamental infrastructures
 - Financial incentive mechanism to increase waste segregation of recyclable materials
 - Private sector should take leading role and has high responsibility for their products, especially packaging waste



Co-benefit: Poverty reduction on 3Rs

Background:

- Immigration of rural poor population (moving to town) to be informal waste collectors and recyclers causing further social problems in urban area in terms of traffic, security, health impacts etc.

Alternative: (informal) waste collector and recycler for 3Rs implementation



Mechanism for solving bottleneck problems

- EPR system in a national scale that provide financial incentives (buy-back and deposit-refund systems) and employs the force of informal waste collectors and recyclers
- Registering system for informal waste collectors and recyclers
 - Capacity building programs on safe waste collection, separation practices, pricing mechanism, good house keeping
 - Technology and equipment improvement
- Integrated approaches for solving immigration of rural poor population



Co-benefit:

- 1) not contaminated waste or ready to recycle
- 2) high value of waste
- 3) guard for houses
- 4) reducing drug addict
- 5) reducing a crime
- 6) increase incomes of communities (women & students) from recycled hand-made products



Co-benefit: 3Rs and industrial waste

- **Alternative:** waste management and utilization in industrial activities
- **Co-benefit:** financial benefits (cost reduction and income generation), public image, compliance law, ISO 26000, reducing chronic effects from hazardous waste contamination



Co-benefit: 3Rs and quality of life

- Improving environmental pollution means improving our health
- Change the way of life-style to sustainable consumption and sustainable production
- reducing the fiscal year budget for sanitary and treating patients



Part III

Incentives on 3Rs Implementation



How could we move forward effectively?

...Relying on the implementation of 3Rs policy from the government may not be the only answer.

...**Private sector** can step in and driving 3Rs



Key Driving Factors

- Climate change and CSR are well-known among the private and public sectors
- Private sector is the key element
 - Take full responsibility for their products and services
 - CSR implementation



Responsibility of Private Sector for their products and services

- Establishing fund providing financial budget to local government for managing the waste (beneficial pay principle)
- Implementing eco design and product approaches
- Establishing full-scaled EPR system (ex. deposit refund, buy-back)



CSR of Private Sector (Use budget for society)

- Activities to raise awareness and increase 3Rs practices for the society
 - Waste bank
 - Education (both formal and informal)
 - Information sharing



Regional Scale Effort

- National efforts may not enough to implement 3Rs
- Regional Database System:
 - For sharing information
 - For waste trade and exchange (concern on Basel Convention)



Thank you very much