Policy Implication of the Republic Act (RA) 9003 in the Philippines: A Case Study of Cebu City

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1st IWWG-ARB Conference, 18-20 March 2013, Hokkaido University, Japan
Outline of the Presentation

• This paper presents the experience of Cebu City in implementing the national mandate of RA 9003 and discusses its efforts in achieving a 30% waste reduction target during 2010-2013.

• It gives basic facts on SWM in Cebu City, innovative actions were introduced and key lesson learned.
Basic facts on SWM in Cebu

Cebu is the highly urbanized centre in the Central Philippines.

Estimated waste generation was doubled during last 10 years (Cebu city, 2012):

- 212 tons/day in 1982
- 470 tons/day in 2010
- Per capital waste generation is 0.5 kg/person in 2010

Estimated cost for SWM (DPS, 2012):

- Operation and management costs for waste collection and transport is 20 US$/ton
- Tipping fee is 18 US$/ton
- Hiring private company for waste transport from transfer to final landfill in Consolacion is 85 US$/truck/day

Characteristics of SWM (CPDO, 2006):

- Organic/bio 50%
- Recyclable 39%
- Electronic/hazardous (special) 04%
- Residuals 07%
The SWM system before the project implementation

- Barangay collection
- DPS (Department of Public Services) collection

Diagram:
- Households
- Dumping, Burning, Burying
- Barangay collection
- Scavenging
- Recyclables
- Junkshops
RA 9003 (Ecological SWM Act of 2000)

RA 9003 mandates the Local Government Units (LGU) to prepare a systematic, comprehensive and ecological SWM plan, creation of SWM Boards to give a leadership of the implementation of plans, and achieve 25% waste reduction target by 2010 through establishment of material recovery facilities (MRFs) and composting in all barangays (a lowest political/administrative body) and encourages to improve the existing open dumps into sanitary landfills (Antonio, 2008).
Implementation of RA 9003

City Level

Can be achieved 93% waste reduction to be land filled

Household/Barangay/Village Level (470 tons/day)

Segregation of Wastes according to Classification

- Biodegradable: 235 tons/day
- Recyclables: 180 tons/day
- Special Waste: 20 tons/day
- Residual: 35 tons/day

Source: Cebu City. Compiled by Premakumara, 2012
Achievement of waste reduction

Estimations show the achievement of 30% (140 tons/day) waste reduction by Cebu city in 2012 compared to 2010.

Since 2010, implement innovative actions

Increased by 200%
Reduced by 30%

Source: DPS. Compiled by Premakumara, 2012
Innovative actions - 1

Establishment of the shared vision, institutional setup and secure the political will for implementation.

Solid Waste Management Board (SWMB)

- Provide long-term vision, strategic actions, political leadership, adopt necessary financial, institutional and legal system and coordinate the implementation.

Barangay Solid Waste Management Committee (BSWMC)

- Formulate SWM programme, implement separated waste collection, establish MRF and composting, allocate resources, coordinate the implementation.

Sitio or Purok Waste Management Committee

- Planning and implementation of community-based SWM programs, undertake environmental education.
Innovative actions - 2

Enforcement of No Segregation and No Collection Policy, ban of open dumping, encourage separated waste collection and introduce environmental education programs.

Source: Cebu city, 2012
Innovative actions - 3
Creating supportive institutional mechanisms for awareness raising and enforcement.

- Cebu Environmental Sanitation Enforcement Team (CESET) for carrying out information/environmental education and enforcement of laws.

- Barangay Environmental Officers (BEOs) for environmental education, establish and supervise MRF and composting facilities.
Innovative action - 4

Creating financial and incentive mechanisms to establish MRF/composting facilities.

- Backyard composting (effective education tools, interest to join the program and strong follow-up mechanism)
- Barangay composting (waste separation, finding suitable land, technical know-how, and cooperation of citizens)
- Business enterprises (finding lands, initial capital, difficulty in covering costs only from compost incomes)
Innovative action - 5

Evaluation of progress of the barangays, documentation of best practices and awards recognizing their innovative efforts.

Barangay Luz, best urban barangay in 2011.
Source: Cebu city

Barangay Agsungot, best rural barangay in 2011.
Source: Premakumara
Innovative actions - 6

Building partnership with private sector in establishing central MRF and Composting facilities
Innovative action - 7

Building partnership with relevant stakeholders in locally and abroad

Source: Premakumara and others, 2012
Key lessons learned

The experience of Cebu City reveals the potential in achieving national mandate of RA 9003 at local level. However, the evidence suggest that these national policies will only be effective if they are accompanied by the following key points:

- Strong political commitment at the local government level in establishing supportive institutional framework as well as ensuring political will to implement innovative, strategic programs by allocating financial and organizational resources.

- Further, community participation is necessary to implement successful SWM program and that can be achieved when implemented programs provide economic incentives coupled with a strict enforcement scheme.

- In addition, active participation and partnership among different sectors of the society such as the businesses, non-governmental organizations, and barangay councils must be established to ensure a sustainability of the program. The international partners can play a vital role, especially at the initial stage by providing technical know-how and capacity building opportunities, facilitate research and good practices and provide development assistance to advance city waste management system.
Future Studies

• Waste minimizing and recycling strategies
• Market-based approaches to waste regulation and policy-making
• Innovative management systems for partnership and community-based initiatives
• Sustainable landfills for final disposal
• Management of other wastes, such as e-waste and hazardous waste
• Proper data collection, monitoring and evaluation.
Thank you