

National and Local Initiatives on Solid Waste Management and Implementation of 3Rs in the Philippines

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The initiatives of the Philippine government particularly the National Solid Waste Management Commission, the local government units and the private sector on solid waste management shall be presented in the following manner:

- General Profile of the Philippines
- Republic Act No. 9003 – the Ecological Solid Waste Management Act of 2000
- Policies and Programs on Recycling
- MSW Generation Profile
- National and Local Initiatives
- The 3R Mechanisms
- Activities on 3R Implementation
- Study on Recycling Market Development

The Philippines is one of the countries with diverse geography. It is an archipelago of 7,107 islands and it is divided into 3 major geographic divisions – Luzon in the north, Visayas in the middle, and Mindanao in the South. The country has over a hundred ethnic groups and a mixture of foreign influences which have molded a unique Filipino culture. Because of this diversity, managing solid wastes really posts a challenge.

The Philippines is largely urban, with over 50% of people living in urban areas and is growing. Urbanization is growing at a fast rate and the local government units (LGUs) are not prepared to properly manage - leading to congestion, illegal settlements, traffic, environmental degradation of the land, air and water)

Republic Act No. 9003

This law was enacted on January 26, 2001 and its implementing rules and regulations was approved the following year. The law mandates a paradigm shift in the management of daily municipal waste. From a purely government concern, RA 9003 brought solid waste management to the home of every Philippine resident as a communal responsibility. It shifted 3R into a national strategy to minimize natural resource

extraction, to abate pollution, and to augment the household income or community resources.

The National Solid Waste Management Framework clearly defines the Philippine 3R strategy as: Avoid, Reduce, Reuse, Recycle, Treat, and Dispose. Under RA 9003, the lead implementing agency for Solid Waste Management Programs are the Local Government Units or LGUs. The law reposes upon the barangays, the smallest unit of government, the responsibility of managing compostable and recyclable wastes, the city and the municipal governments, the residual and special household hazardous wastes, and the provinces provides complementary programs.

The salient features of the law on recycling are mandatory segregation at source and segregated collection, waste diversion goal of 25%, , inventory of recycling market, recycling market development, ecolabelling program, establishment of reclamation and buy-back centers for recyclables, listing of non-environmentally acceptable products and packaging and establishment of Materials Recovery Facility or System (MRF/S) in every barangay or cluster of barangays.

The country's solid waste generation per day is 30,000 tons 73% of which come from households, 26% from commercial establishments, industries, institutions and 1% from healthcare facilities. Twenty-three percent (23%) of the total waste generated nationwide are generated in Metro Manila, a mega city consisting of 17 cities and municipalities with a generation of 7,200 tons per day.

Section 20 of RA 9003 mandates the local government units to divert at least 25% of all solid waste from waste disposal facilities through re-use, recycling, composting and other resource recovery activities within five years after the effectivity of the Act, which shall be increased every three years thereafter.

Recycling remains largely an informal sector activity. In 1997, only 6% of solid waste is recycled in Metro Manila. In 2007, recycling rate is at 25%. At the local government level, the law provides that Materials Recovery Facility or System are established in every barangay or cluster of barangays. The MRF enhance the recovery of recyclables and the processing of biodegradable/compostable wastes. Based on the NSWMC database, as of 2nd Qtr. Of 2008, there are 2,361 MRFs established serving 2,634 barangays nationwide. This is still very small compared to the 42,000 barangays nationwide that should have established their own facilities.

The 3Rs Mechanism

There is a progressive implementation of the Eco-labeling Program, and pushing for the implementation of the Extended Producers Responsibility, Green Productivity and Cleaner Production and various recycling activities.

The Ecolabelling Program encourages the manufacturers to register their products for ecolabelling. There are already 16 product criteria developed by the Technical Working

Groups created for the purpose. The Department of Trade and Industry-BPS chairs the Board and the Environmental Management Bureau act as co-chair.

The law identified several actors and their corresponding roles in its implementation. The National Solid Waste Management Commission is the policy-making body composed of 17 members, 14 coming from the national government agencies and three from the private sector (Recycling Industry, Manufacturing and Packaging Industry and the non-governmental organizations). RA 9003 also mandates the creation of a multi-sectoral Solid Waste Management Boards in every Province, city, municipality and a Solid Waste Management Committee in every barangay. Its major task is to develop and implement a comprehensive Solid Waste Management Plan that would ensure that waste segregation at source, segregated collection and segregated destination of the different types of wastes are properly done.

The Department of Science and Technology, a member of the Commission intensified its technology development for processing of biodegradable/compostable wastes, recyclable wastes and residual wastes. It also conducts Environmental Technology Verification.

The Department of Trade and Industry, also a member of the Commission establish the incentives system. The DENR and the NSWMCS together with the non-governmental organizations conducted Nationwide Search for Model Barangays on Ecological Solid Waste Management in 2003 and in 2005 to encourage barangays to setup the system of ecological solid waste management and the winners were given cash prize and plaques of recognition for their efforts.

National and Local Initiatives

As provided by the law, all open dumpsites and controlled disposal facilities should have been closed by February 16, 2004 and February 16, 2006. However there are still more than 1,000 open dumpsites and controlled disposal facilities operating in the country. The DENR Secretary issued a policy pronouncement which we term as The 3-Strike Policy for non-complying LGUs who are still operating their open dumpsites and controlled disposal facilities. These LGUs are given 6-months within which to close these facilities otherwise an administrative case will be filed with the Department of Interior and Local Government.

As a continuation of the nationwide search for model barangays, the Zero Basura Olympics was launched last June 20, 2008 by the DENR-NSWMC, DILG in partnership with the Earth Day Network, an NGO, the Leagues of Provinces, Cities, Municipalities and Barangay, business sector in order to promote multi-stakeholder cooperation to attain and sustain ESWM Programs at LGU-wide level and to highlight and recognize novel and creative ESWM approaches that can serve as models for others to learn.

There is a project funded by the United Nations Development Program with the National Solid Waste Management Commission on Mainstreaming Ecological Solid Waste Management in the Philippine Educational System for five schools in Metro Manila

located along the Pasig River. 100 second year and third year students from these five schools were trained to be trainers on ESWM in their respective schools and in their community. This was replicated in Bgy. Poblacion in Solano, Nueva Vizcaya, Municipality of San Miguel, Bulacan and in the Province of Sorsogon under the Special Projects of the DENR. The Toyota Autoparts, Inc. also has the same program in the 15 schools in Sta. Rosa, Laguna and another 15 schools this year and up to 2011, as part of their Corporate Social Responsibility.

Several funding agencies like the Japan International Cooperation Agency, the GTZ and the USAID thru its EcoGovernance Program have provided support to the solid waste management programs of the local government units. The JICA assisted the municipality of Malay, Aklan and Boracay Island in Establishing an ESWM system, the Introduction of Solid Waste Management in 3 Model Sites in Sagay City, Calbayog City, Davao City and the Recycling Industry Development. The GTZ have supported 13 LGUs in Regions 6- Iloilo City, Region 7 – Cebu City, Region 8 in Tacloban City under its SWM4 LGUs Program. Under the Solid Waste Component of the Eco-Gov Program, they have assisted a total of 53 LGUs in Regions 2 in Cagayan, 3 in Aurora and Baler, Quezon, Region 7 in the provinces of Bohol, Cebu and Negros Occidental, Regions 9, 10 and 11 and 12 in Mindanao and in the Autonomous Region of Muslim Mindanao (ARMM) in the preparation of their Ten-Year Plan, in the identification and establishment of sanitary disposal facilities.

Also, several technical assistance and foreign assisted projects are being undertaken in “The Development of a Framework for the Management of the Informal Sector”, a UNEP-assisted program, the World Bank assisted Cost Sharing Framework Study .

Under the Clean Development Mechanism of Methane Gas Capture/Utilization the Payatas Controlled Disposal Facility has a 1 megawatt power generation while the Rodriguez Sanitary Landfill has a 10 megawatt power generation project from the methane gas extracted from the disposal facility.

Other activities on 3R implementation are the community/barangay Materials Recovery Facilities, the Eco-Savers Program in Marikina, the Recyclables Collection Events, Waste Markets, Cash to Trash in several malls throughout the country, establishment of EMS leading to ISO14001 certification, the listing of Non-Environmentally Accepted Products and Packaging, residual waste Recycling Technologies.

Under the Recycling Market Development Study conducted by JICA with the Board of Investments from July 2006 to February 2008, a Master Plan and Action Plan for each type of waste were formulated including the conduct of case study in Metro Manila to assess the applicability of the Master Plan.

The Conclusion of the JICA Recycling Study are:

- Lack of proper segregation of recyclable/recoverable waste material at source resulting to low recycling ratio and low quality of recyclable materials
- Limited technological and financial capacity of the domestic recycling industry
- Outflow of recyclables to international big market such as China
- Strong dependence of collection and trading of recyclable/recoverable materials upon price fluctuation based on market mechanism and unstable domestic supply of recyclables and
- Fragmented information network for optimizing the flow of recyclable/recoverable materials from generators to the final users.

Still much has to be done by all sectors to improve the efficiency of recovery and recycling. There is a need to mobilize and provide massive information and awareness campaign, setting up of necessary infrastructure and programs, provision of funding and technical assistance, should be in place.

Good day and thank You.