

# EXAMPLES OF INTEGRATION: PHILIPPINE EXPERIENCE

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Office of the President  
**NATIONAL SOLID WASTE MANAGEMENT COMMISSION**  
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NSWMC Resolution No. 47, Series of 2010

**RESOLUTION ADOPTING THE  
 NATIONAL FRAMEWORK PLAN FOR THE INFORMAL SECTOR  
 IN SOLID WASTE MANAGEMENT**

**WHEREAS**, Republic Act 9003 provides for the adoption of a systematic, comprehensive and ecological solid waste management program which shall, among others, ensure the protection of public health and the environment and encourage greater private sector participation in solid waste management;

**WHEREAS**, the participation of the private sector, both formal and informal are deemed critical actors in SWM to support the operation of an environmentally acceptable SWM system including segregation, collection, transfer, treatment and disposal.

**WHEREAS**, the National Solid Waste Management Commission through its Secretariat with the assistance of the *Asian Institute of Technology/United Nations Environment Program Regional Resource Center for Asia and the Pacific* in collaboration with the *Ministry of Environment Japan, Institute of Global Environmental Strategies and the United Nations Centre for Regional Development* formulated a Framework Plan to mainstream the informal sector in solid waste management.

**WHEREAS**, the Framework Plan hopes to empower the informal waste sector that is recognized as a partner of the public and private institutions, organizations and corporations in the promotion and implementation of the 3Rs (reduce, reuse and recycle) of solid waste management in the Philippines with the end in view of alleviating poverty.

**WHEREAS**, the members of the National Solid Waste Management Commission – Technical Working Group in its May 14 meeting approved for adoption by the NSWMC the National Framework Plan for the Informal Sector in Solid Waste Management;

**NOW THEREFORE, BE IT RESOLVED, AS IT IS HEREY RESOLVED**, that the National Framework Plan for the Informal Sector be adopted by the National Solid Waste Management Commission.

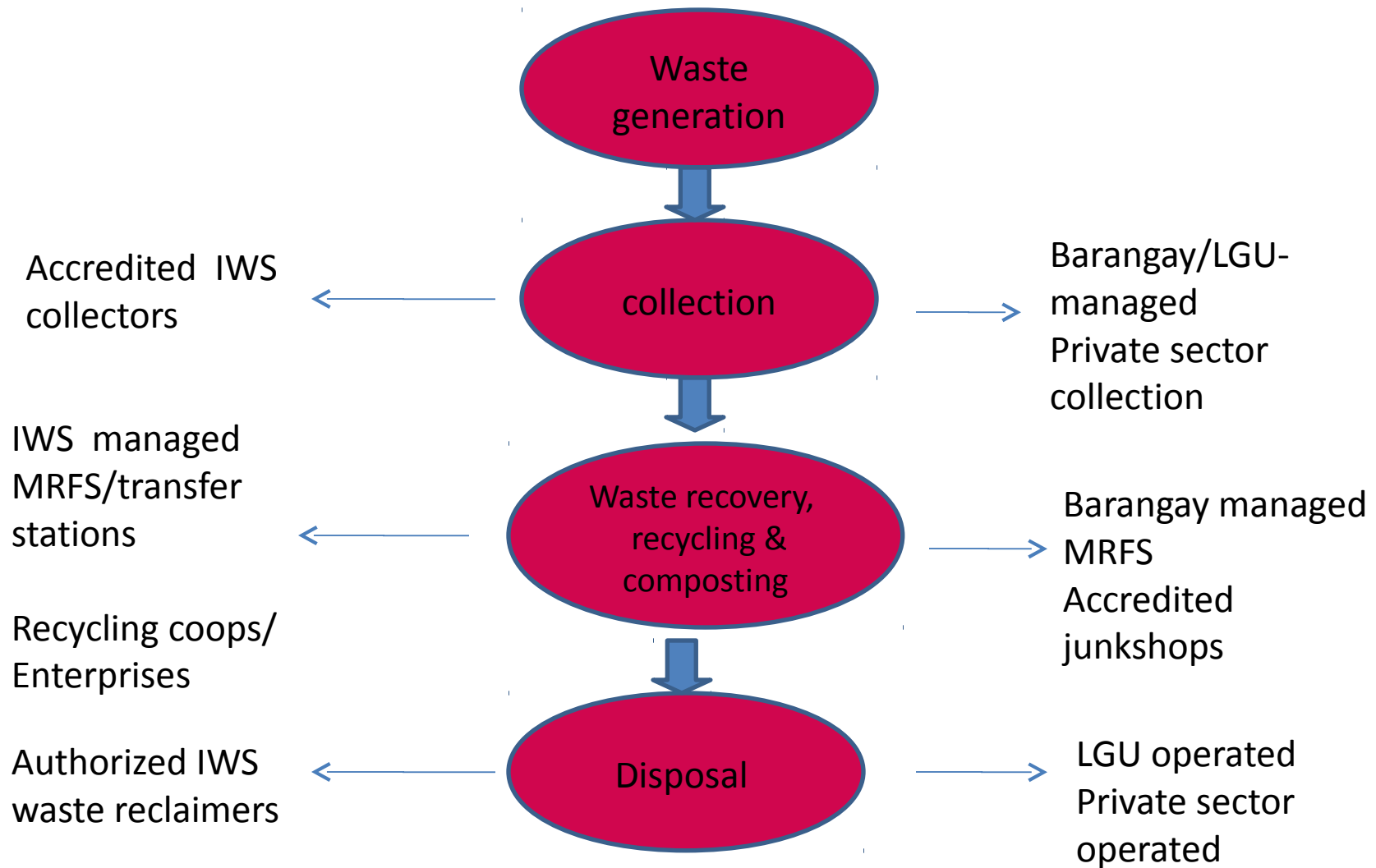
This resolution takes effect upon approval.

*Ramos* 13 Sep  
**RORACIO C. RAMOS**

Secretary, Department of Environment and  
 Natural Resources (DENR) and  
 Chairman, NSWMC

**NSWMC Resolution 47  
 Series 2010:  
 Empower the informal  
 waste sector to be  
 recognized as a partner  
 of public-private sector  
 in the implementation  
 of 3 Rs in solid waste  
 management**

## WASTE MANAGEMENT SYSTEM INTEGRATING IWS



**Privately owned disposal  
facility/WPS INTEGRATION**



# Metro-Clark Sanitary Landfill

Metro Clark Sanitary Landfill handles sanitary and industrial waste being generated by Clark Freeport Philippines locators and the neighboring cities/municipalities & industries using recycling, composting, and sanitary landfill technologies that conform to European standards.

As part of its Corporate Social Responsibility, Metro-Clark has engaged the services of former wastepickers in the landfill to work in the Materials Recovery Facility inside the facility. They formed themselves in 3 cooperatives and registered their organization at Cooperative Development Authority (CDA) .

## MCWMSLF COOPERATIVE MEMBER

Male	552
Female	169
<b>Total</b>	<b>721</b>



# Informal Waste Sector in the MRF

As workers in the MRF, the IWS are required to strictly follow the rules of the MRF operations:

- Only bonafide member of cooperative are allowed inside the Material Recovery Facility.
- All segregator waste picker wear proper PPE's. and wear corresponding uniform and ID.
- No segregator / waste picker are allowed to do sorting/segregation at the Garbage Pit Area.
- Segregators should be at-least 4 meters away from the Garbage Truck/Bin during the unloading operation at the Material Recovery Facility.
- Segregator should observe cleanliness at the MRF area.



# **City-Government/Private Company/WPs Integration**



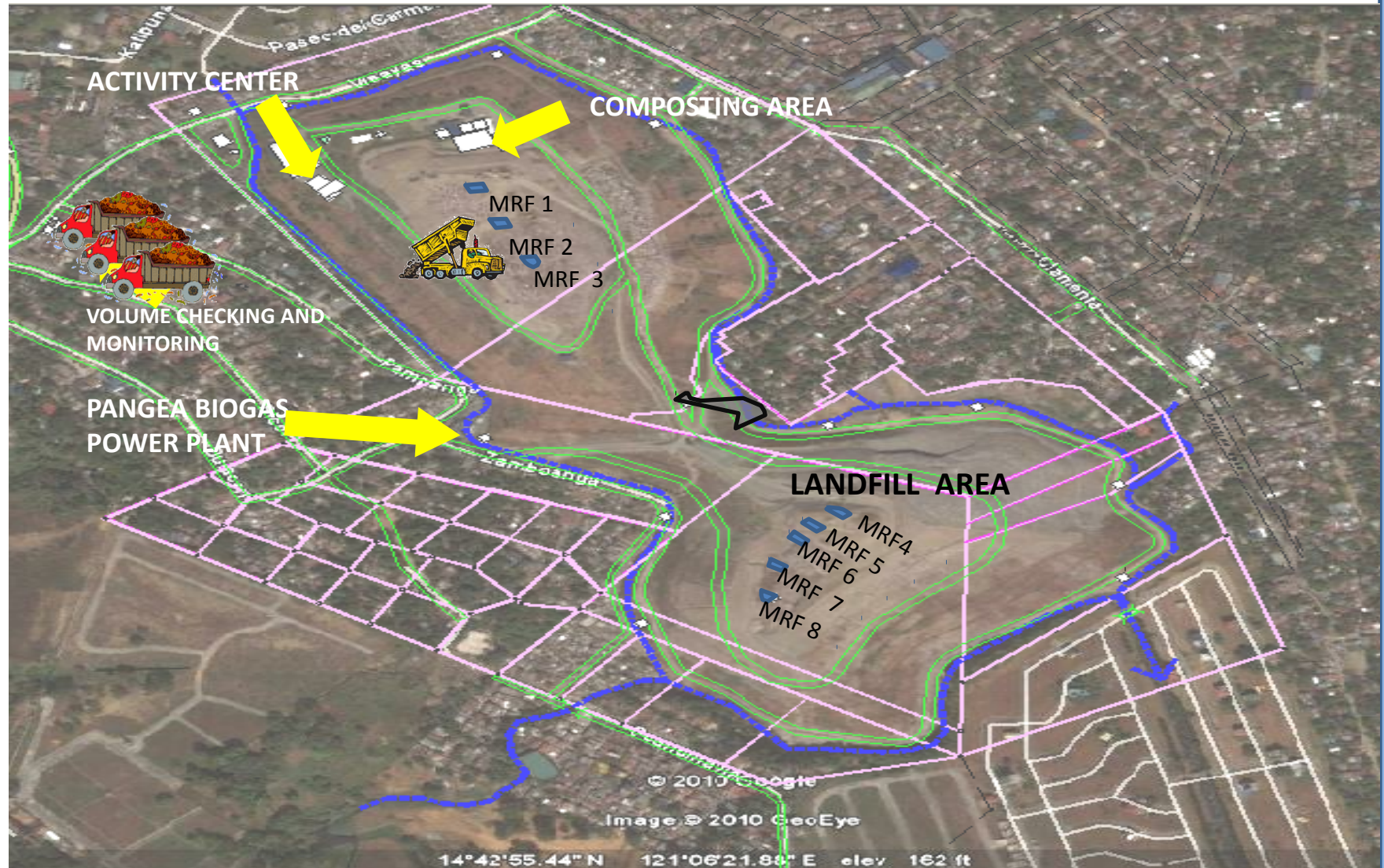


**Quezon City  
Experience:  
Organizing the  
Waste Pickers of  
Payatas  
Controlled  
Dumpsite**





# Quezon City Integrated Waste Disposal Facility



Before the July 2000 trash slide, scavenging at the dumpsite was unrestricted and open to anybody, including children. Around 2,000 people are engaged in picking recyclables at the dumpsite. And 3,000 people more, including the underground economy, are heavily dependent on dumpsite operations.

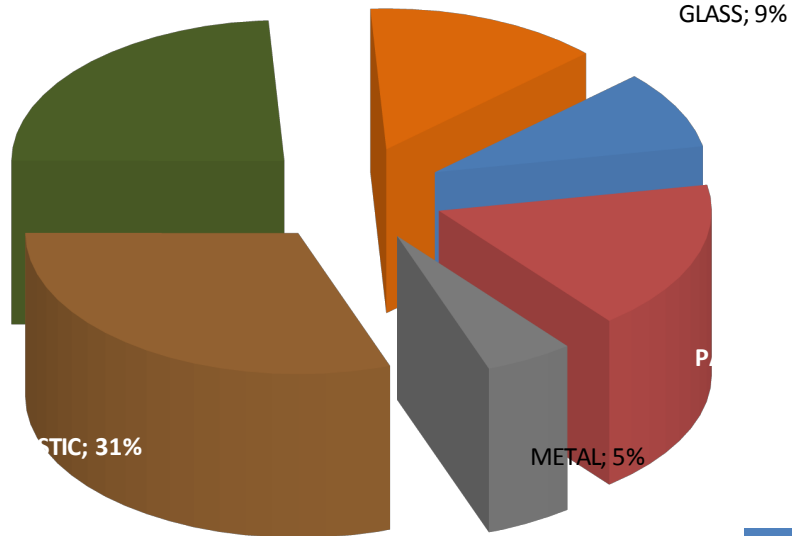
Since 2001, the PAYATAS OPERATIONS GROUP (POG) has implemented various measures and systems to improve dumping operations, which include “scavenging operations”, as part of the overall rehabilitation program of the dumpsite.

- Scavengers were organized into 13 associations (12 during daytime & 1 for nighttime operations) which were assigned sub-dumping areas at the dumping table
- The trucks tip their hauled waste on rotation basis on these designated dumping areas and each scavenger group is allowed 20 – 30 minutes to pick through the dumped waste
- With this system, infighting among scavengers was avoided and the scavengers' efficiency in the recovery of recyclables significantly increased

# MATERIAL RECOVERY FACILITY



## SUMMARY OF RECOVERED RECYCLABLES



RECYCABLE RECOVERY EFFICIENCY	
BIOWASTE	3%
PAPER	11%
METAL	41%
GLASS	52%
PLASTIC	54%
OVERALL	12%



# MATERIAL RECOVERY FACILITY



## PLASTIC DENSIFIER TECHNOLOGY

- ☐ Recovers residual waste such as polystyrene (styrofoam) and polypropylene plastic bags into useful products:
  - ☐ Paving blocks,
  - ☐ Planters, and
  - ☐ Table tops
- ☐ Provide another alternative source of livelihood for the waste pickers cooperatives





# MATERIAL RECOVERY FACILITY



## ❑ COMPOSTING

*Production of compost through WINDROW & VERMICOMPOSTING technologies;  
Equipped to produce 3 tons of compost daily*



# **Private Sector-WP integration**

# Smokey Mountain 1

- NGO organized former WPs into cooperative
- Unilever and RCBC Bank allow coop access to their dry and wet wastes
- Coop collects dry waste and segregates in its MRF ; wet waste are composted
- Coop sells dry waste to scrap buyers and recycles some of the paper and plastics into some products