

## V. Conclusion

RA 9003 and local SWM ordinances have many provisions that promote waste diversion and recycling. Segregation of waste at source and segregated collection are necessary to ensure good quality recyclables would reach the recyclers, and thus also help to sustain the trading of recyclables. LGUs at the city and barangay levels must have political will to implement their ordinances and to provide the necessary segregated collection recovery systems. The political will must be translated into allocation of financial and human resources for ecological solid waste management. By complying with RA 9003 requirements, they will contribute in the protection of public health and the environment while also promoting livelihood and economic opportunities for the recycling sector.

Effective segregation-at-source and segregated collection result to high waste diversion from disposal to recycling and composting as illustrated by the SCC experience. Citizen awareness about waste segregation-at source and the 3Rs do not translate into changed behavior if not accompanied by efficient and segregated collection, recycling infra-structure and rewards and incentives.

Poor segregation is usually blamed by local governments on the lack of awareness and discipline of waste generators. But QC and SFC micro experiences show that targeted waste segregation and collection works. QC is able to regularly recover food waste from the different offices in the City Hall complex. SFC is able to get uncontaminated biodegradable waste from its public market.

Waste diversion activities of local governments should not merely focus on promoting materials recovery facilities by barangays but also support the IWBs, and junkshops and consolidators as key stakeholders. Due to the informal nature of activities of those in the lower rungs of the recycling chain – the IWBs, IWPs and illegal junkshops, LGUs need to revisit their permitting, monitoring and enforcement procedures to ensure the health and safety of the informal waste workers and the community.

Organizing the stakeholders facilitate materials flow and promotes recycling. Among the IWS, associations and cooperatives can help provide for their needs for formal recognition, social protection and help secure access to alternative livelihoods. QC has strong junkshop associations which enable them to interface with government and each other unlike in SFC

and SCC. Government recognition of these associations allow for partnerships and mutual support.

Consolidators-traders and local processors are vulnerable to competition from illegal traders and processors. National agencies and local governments need to establish mechanisms for monitoring this sector and to enforce sanctions. The legitimate companies think that the government should provide them the support they need to strengthen their sector.

The export of recyclables contribute to closing the recycling loop but sometimes at the expense of local processors who experience a shortfall in their recycled raw material requirement. Local processors who manufacture for the domestic market are also affected by the influx of cheap imported goods to the country. Local industries need support from the government in the form of tax incentives, financial, technical and market assistance.

Each part of the recycling chain has an important role to play in their roles as waste generators, collection service providers, waste sorters, waste traders and processors. The national and local governments have important roles to play either as direct part of the recycling chain, as promoters, policy makers, enforcers and as oversight bodies.

### **Acknowledgment**

The authors would like to acknowledge the following for generously sharing relevant information and their experiences on waste management particularly on recycling and waste trading: Vice Mayor Edgar Quisumbing, Engr. Loreto Sanchez, Engr. Arthur Batomalaque, Ms. Mayet Lomocso, Ms. Ma. Rosa Solis, Ms. Ma. Carla Romanillos, and Mr. Henry Akol (San Carlos City, Negros Occidental); Ms. Annabelle Millarez (EMB-DENR Province of Negros Occidental); Mr. Valmar Valdez, Mr. Celso Jucutan and LGU officials (San Fernando City, La Union); Col. Jameel Jaymalin, Engr. Louie Sabater, Ms. Frederika Rentoy, Ms. Lala Rios, Ms. Andrea Po, and Ms. Illuminada Teves (Quezon City, Metro Manila); the Philippine Plastic Industry Association; the Polysterene Packaging Council of the Philippines; and other key informants and respondents in this study from the government, private industries and associations, NGOs, and members of the informal waste sector in the Philippines. Also, the authors would like to acknowledge the contribution and assistance of Mr. Victor Val Alvin Sison during data gathering and field visits.