

# Chapter 11

## Waste Management in the Philippines

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### **ABSTRACT**

*In response to the growing problems on waste management in the country, the Philippines' Republic Act 9003 (RA 9003), also known as the Ecological Solid Waste Management Act of 2000, was enacted in January 26, 2001. This chapter hopes to provide the brief background of the country particularly on the issues related to waste management such as population, economic situation, urbanization, and modernization, among others. It will also discuss the definition, classification, and generation of waste both in urban and rural areas. In addition, it will also review the existing policies and the current waste management practices, and the lessons learned based on case studies of both successful and failed experiences. Furthermore, this will also provide the latest updates on the compliance of the local government units to RA 9003, identify the challenges, opportunities, and the proposed recommendations on how the waste management in the country can possibly be improved and become more sustainable.*

### **INTRODUCTION**

The problems on waste management remain a challenge for many developing countries including the Philippines. Although various policies have been formulated to address these concerns, there are many underlying issues that affect their effective implementation such as the political will and capability of the leaders, the availability of appropriate waste management technologies, and the understanding and willingness of the members of the society to act cooperatively towards achieving more sustainable waste management.

The increasing population, urbanization, and changing lifestyle have contributed to the continued increase of waste generation in the Philippines. Based on the 2015 census of population (POPCEN), the country has a total population of 100,987,437 persons (Philippine Statistics Authority [PSA], 2017). The waste generation per person is 0.70kg/day in highly urbanized city areas, 0.60kg/day in urban city

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areas, and 0.30 kg/day in rural areas (Aguinaldo 2009, as cited in Atienza, 2017). The National Capital Region (NCR) has the highest waste generation rate of 0.71 kg per capita per day while the Autonomous Region of Muslim Mindanao (ARMM) has the lowest with 0.30 kg per capita per day. It was estimated that the total waste generation was 35 tons per day or 13.1 million tons per year (National Solid Waste Management Commission [NSWMC], 2016).

With the above-mentioned data, there is indeed an urgent need to find ways on how to effectively manage waste in the country. As in many developing countries, a higher volume of waste generated was not properly collected and thus, ended up in open dumpsites or waterways which caused severe flooding especially during typhoons. The country experienced a waste management tragedy in 2000 when the former open dumpsite in Payatas collapsed due to heavy rains and thus, killed about 200 people (Atienza, 2013).

In response to the growing problems on waste management in the country, the Philippines' Republic Act 9003 (RA 9003), also known as the Ecological Solid Waste Management Act of 2000, was enacted in January 26, 2001. Unlike previous waste management policies which seemed to be a piecemeal approach, RA 9003 is considered as the most comprehensive act which declares the "policy of the state to adopt a systematic, comprehensive, and ecological solid waste management program which shall ensure the protection of public health and environment" (Republic of the Philippines, RA 9003, Article 1, Section 2). It has been eighteen years since it came into force, however, the rate of compliance is still low.

As mandated by the RA 9003, all local government units (LGUs) through its solid waste management (SWM) boards, shall prepare a 10-year solid waste management plan which shall ensure the efficient management of solid waste within their jurisdiction. But as of October 2018, the National Solid Waste Management Commission (NSWMC) reported that only 30.4% (497 LGUs) have approved SWM plans; 62.4% (1,080 LGUs) are for evaluation and pending approval; and 7.2% (117 LGUs) have not submitted their plans (NSWMC, 2018).

In terms of waste diversion, it is cited from RA 9003 that each LGU shall divert at least 25% of all waste from waste disposal facilities within five (5) years after the effectivity of the law in 2001 through re-use, recycling, and composting and other resource recovery activities; and that this 25% diversion goals should be increased every three (3) thereafter (Section 20) or after 2006. However, it was reported by the Metro Manila Development Authority (MMDA) that as of May 31, 2011, the average waste diversion rate in Metro Manila was only 33.92% (MMDA, 2011). It is assumed that there is even lower diversion rate in other parts of the country. Based on the report of the Philippines' Senate Economic Planning Office (SEPO), there was a 48% solid waste diversion rate in Metro Manila while 46% outside of Metro Manila as of 2015 (SEPO, 2017).

Based on the National Solid Waste Management Strategy 2012 - 2016 of the Philippines, it was reported that more than 50% of municipalities in the country are classified as low income communities and do not have sufficient funds for waste management activities. Others may have financial resources but lack the technical capacity to effectively implement these activities (NSWMC, 2016). This implies that the low compliance rate of LGUs may not necessarily be due to their unwillingness to comply with the law, but is dependent on their level of capacity. Hence, it is necessary to also review other underlying causes of the low compliance rate of the LGUs to RA 9003 and the possible strategies to effectively implement solid waste management policies and programs in a more sustainable manner.

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