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Review

Policy implementation of the Republic Act (RA) No. 9003 in the Philippines: A case study of Cebu city

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ABSTRACT

Municipal Solid Waste Management (MSWM) is considered to be one of the most serious environmental issues in the Philippines. The annual waste generation was estimated at 10.6 million tonnes in 2012 and this is expected to double in 2025. The Republic Act (RA) No. 9003, widely known as the Ecological Solid Waste Management Act of 2000, provides the required policy framework, institutional mechanisms and mandate to the Local Government Units (LGUs) to achieve 25% waste reduction target through establishing an integrated solid waste management plan based on the 3Rs (reduce, reuse and recycling). Although the initial impact of the LGUs is still very limited in implementing the national mandate, this article highlights the successful experiences of Cebu, the second largest city in the Philippines, in reducing its MSW generation by more than 30% in the past three years. This study also explores the implementation process, innovative actions taken by the Cebu City Government in implementing the national mandate at local level and identifies the factors that influence the policy implementation. The findings suggest that the impacts of the national mandate can be achieved if the LGUs have the high degree of political commitment, planning and development of effective local strategies in a collaborative manner to meet with local conditions, partnership building with other stakeholders, capacity development, adequate financing and incentives, and in the close monitoring and evaluation of performance.

Contents

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1. Introduction

In recent years MSWM has been considered to be one of the most serious environmental and public health issues confronting urban areas in developing countries. Rapid urbanisation, economic growth and development, changes in lifestyles and consumption patterns have resulted in a remarkable increase of waste volume and its diversity in recent decades (Minghua et al., 2009; Oliveira et al., 2013).

To overcome these challenges, many developing countries with their counterparts in industrialised countries have developed appropriate national policies and strategies in implementing the 3Rs (Reduce, Reuse and Recycle) approach to reduce the amount of MSW generated at source, rather than later at the end-of-cycle (Premakumara et al., 2011). However, the implementation of these national policies and strategies meaningfully at a local level is a far challenging issue for many developing countries. This is not exceptional in the Philippines, the country which identified MSWM as one of the serious urban environmental issues (Aguinaldo, 2008).

With an average per-capita waste generation ratio of about 0.5 kg per day, the annual waste generation in the Philippines is estimated at 10.6 million tonnes in 2012. This figure is expected to double in 2025 (World Bank, 2012). The National Solid Waste Management Commission (NSWMC) reported that the country's solid waste generation includes 73% of households, 26% of commercial establishments, institutions and industries, as well as 1% of healthcare facilities (NSWMC, 2007).

Recognising the importance of taking immediate actions to address this fast growing urban environmental issue at national level, the country's Department of Environment and Natural Resources (DENR), established under the Office of the President, prioritised proper management of MSW in its 12-point environmental agenda. Through the passage of the 2000 Ecological Solid Waste Management Act, widely known as the Republic Act No. 9003 (RA 9003), proper MSWM has been institutionalised at LGU level.

As a national policy, the RA 9003 adopts a systematic, comprehensive, and ecological solid waste management (SWM) programme that recognises the LGUs as the leader in its implementation. The policy mandates the creation of Solid Waste Management Boards (SWMB) from the national, provincial, city/municipal, down to the barangay, the lowest-level political and administrative body in the Philippines. As a support system for establishing an integrated SWM system, the RA 9003 mandates the establishment of material recovery facilities (MRFs) in all barangays based on 3Rs in order to achieve its 25% waste reduction target by 2010. Consequently, instead of using open dumping or illegal burning, the RA 9003 advises LGUs to adopt sanitary landfills (Antonio, 2008).

While the RA 9003 is a major breakthrough in reforming MSWM in the Philippines, its implementation at the LGU level is still very limited. However, Cebu, the second largest city in the Philippines with one million inhabitants, has successfully implemented the national policy of RA 9003. This article highlights Cebu's experience in achieving 30% waste reduction target by involving innovative institutional and partnership strategies. It also presents reformation of the MSWM in Cebu and theoretical perspectives on policy implementation. Innovative actions taken by the Cebu Government and its cooperation with different stakeholders such as the local community and the private sector are also critically discussed. Key factors that have contributed to the implementation of the RA 9003 at the LG level are also analysed and elaborated.

2. Materials and methods

2.1. Current SWM in the Cebu City

2.1.1. Location and population

As one of the highly urbanised centres in the Central Philippines, Cebu City is situated in the Central Eastern part of the Cebu Island, bounded by the Mandaue City in the North and the Talisay City in the South, while on the East is Mactan Channel and on its West is the municipality of the Balamban and the Toledo (Fig. 1). Historically, the city was a small fishing village. Since 1521, the Cebu City has grown into a highly urbanised metropolitan city in the Philippines. Currently, Cebu is the second largest of growth centre in the Philippines, next to the Metro Manila, the country's capital. Due to its strategic location and easy accessibility by air and sea transport, service industries such as tourism as well as information and communication technologies (ICT) predominantly control the economic activities of the city.

With a total land area of 326.10 km^2, the Cebu city is divided into 80 barangays that consists of 50 urban barangays and 30 rural barangays. Urban area shares almost one-fourth of the city's total land area, while the rest is rural areas. In terms of topography, the coastal areas that accounts to about 15% of the city's total land area (50 km^2), have a relatively flat terrain, while 85% has elevations ranging from 40 to 400 m above sea level (Cebu City, 2012). As of 2013, the Cebu City has a population of 866,171 inhabitants with 3% of annual growth rate. However, the city's population rises to over a million during daytime due to the influx of the working force who commutes into the city daily. On average, the city has a population density of 2204 persons per m^2. There are about 161,151 households in Cebu City with five (5) members per household on average (Ancog et al., 2012).

2.1.2. MSW generation and characteristics

Due to the rapid urban and economic growth in the city in recent years, the daily MSW generation has increased almost 200% from 212 tonnes in 1982 to 420 tonnes in 2010. Most of the MSW in the city originates from households, which account for about 40%, while the rest come from commercial establishments, public markets, schools, hospitals, and industries. Fig. 2 indicates that almost 50% of the waste is biodegradable, while 40% is recyclable and the rest is hazardous (Cebu City, 2012).