

# Chapter 3

## Solid Waste Management in Cambodia

**Ran Yagasa**

*Institute for Global Environmental Strategies, Japan*

**Rithy Uch**

 <https://orcid.org/0000-0001-5780-8914>

*Cambodian Education and Waste Management Organization, Cambodia*

**Phalla Sam**

*Cambodian Education and Waste Management Organization, Cambodia*

### ABSTRACT

*Driven by economic development, population growth, change in life style, and consumption patterns, Cambodia is faced with equally rapid increase of solid waste, with MSW disposal amount attaining 1,709,379 tons/year in 2018. Various policy instruments and legislations have been developed over the years in response to this long-existing crisis, which effectively translated into tangible improvements on the ground. But municipalities continue to suffer from weak waste management system including collection, transportation, treatment, and disposal. Resource recovery almost entirely depends on informal sector while efforts for reduce and reuse are still weak, while presenting vast opportunity if effective policies are employed and implemented. The ongoing governance reform involving functional decentralization of waste management service is being implemented although at a slow pace.*

### INTRODUCTION

Rapid economic development, population growth, and changes in lifestyle, consumption patterns and industrial structure are all intensifying the waste management problem in Cambodia. Increasing waste generation with diversity of waste including hazardous and toxic waste is causing negative impacts on the local environment such as air, water, and land, as well as impacting on human health. On the other hand, local governments struggle to improve the current waste management system to cope with the

DOI: 10.4018/978-1-7998-0198-6.ch003

generated amount of waste as well as different types of waste to minimize its environmental and public health consequences. Following decades of struggle, the country's waste management system is currently in the midst of a transformation with the decentralization of service responsibility from province to municipalities (district). The full-fledged results of this tectonic change are yet to be seen, but it is expected to contribute to the development of an Integrated Waste Management System and will hopefully result in improved service delivery and minimized risk to society.

## **WASTE DEFINITION AND CLASSIFICATION**

### **Waste Definition**

Sub-decrees No. 36 on Solid Waste Management (1999) and No.113 on Waste Management (2015) provide legal definitions of waste in general, and constitute the key waste management legislation in the modern legal system of Cambodia while also supported by many subject-specific laws and regulations.

Sub-decree No. 36 defines “Solid waste” as comprising all the waste arising from human activities, including animal waste that is discarded as useless or unwanted, while it distinguishes “solid waste” and “garbage” as follows:

1. Solid waste refers to hard objects, hard substances, products or refuse which are useless, disposed of, are intended to be disposed of, or required to be disposed of.
2. Garbage is the part of solid waste which does not contain toxins or hazardous substances, and is discarded from dwellings, public buildings, factories, markets, hotels, business buildings, restaurants, transport facilities, recreation sites, etc.

Sub-Decree No. 113 also defines “garbage”, “Municipal Solid Waste (referred to as ‘solid waste in towns’ in the text)”, “industrial waste” and “hazardous waste” in its annex as follows:

1. Garbage: referring to tools, equipment, products that were left or created by actions or from the everyday livelihoods of humans, not including toxic substances or hazardous waste.
2. Solid waste in towns: referring to solid waste that was left or created by business activity or services, not including toxic substances or hazardous waste.
3. Industrial waste: referring to solid waste that was left or created by productivity of factory or enterprise, not including toxic substances or hazardous waste.
4. Hazardous waste: referring to solid substances, liquid, gas, radioactive substances, explosive substances, flammable substances, disease-transmitting substances, or substances that cause burning and decay, antioxidants, substances that cause poisoning, cancer, or other chemical substances that cause danger to humans, animals or damage to plants, public property, resorts, public buildings, education establishments, business activities, services, crafts, factories, agricultural activities or mining business.

28 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/solid-waste-management-in-cambodia/240072](http://www.igi-global.com/chapter/solid-waste-management-in-cambodia/240072)

## Related Content

---

### Sustainable Urban Infrastructure Development in South East Asia

Suharto Teriman, Tan Yigitcanlarand Severine Mayere (2011). *Green Technologies: Concepts, Methodologies, Tools and Applications* (pp. 1059-1071).

[www.irma-international.org/chapter/sustainable-urban-infrastructure-development-south/51746](http://www.irma-international.org/chapter/sustainable-urban-infrastructure-development-south/51746)

### Experiment to Test RTK GPS with Satellite “Internet to Tractor” for Precision Agriculture

Stacey D. Lyle (2013). *International Journal of Agricultural and Environmental Information Systems* (pp. 1-13).

[www.irma-international.org/article/experiment-test-rtk-gps-satellite/78154](http://www.irma-international.org/article/experiment-test-rtk-gps-satellite/78154)

### Supporting Decision for Environment-Friendly Practices in the Agri-Food Sector: When Argumentation and System Dynamics Simulation Complete Each Other

Rallou Thomopoulos, Bernard Moulinand Laurent Bedoussac (2018). *International Journal of Agricultural and Environmental Information Systems* (pp. 1-21).

[www.irma-international.org/article/supporting-decision-for-environment-friendly-practices-in-the-agri-food-sector/207752](http://www.irma-international.org/article/supporting-decision-for-environment-friendly-practices-in-the-agri-food-sector/207752)

### A Linguistic Approach to Model Urban Growth

Lefteris Mantelas, Poulicos Prastacos, Thomas Hatzichristosand Kostis Koutsopoulos (2012). *International Journal of Agricultural and Environmental Information Systems* (pp. 35-53).

[www.irma-international.org/article/linguistic-approach-model-urban-growth/68008](http://www.irma-international.org/article/linguistic-approach-model-urban-growth/68008)

### Agricultural Environment Information Management

Xi Cai (2020). *International Journal of Agricultural and Environmental Information Systems* (pp. 48-60).

[www.irma-international.org/article/agricultural-environment-information-management/256990](http://www.irma-international.org/article/agricultural-environment-information-management/256990)