

COLLECTION OF **MUNICIPAL SOLID WASTE**

Key issues for Decision-makers in Developing Countries



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The collection of municipal solid waste is a public service that has important impacts on public health and the appearance of towns and cities. Unfortunately many urban administrations seem to be losing the battle of coping with the ever-increasing quantities of waste. The challenge is made greater by the diversity of materials in the waste, which is no longer mainly food waste and ash, but includes more and more plastic packaging, paper and discarded electronic equipment.

The booklet is written for decision-makers in the fields of local politics, management and technical issues and who are concerned to upgrade the solid waste collection service for which they are responsible.

This booklet serves as an introduction to a much larger book, also published by UN-Habitat, which is entitled "Collection of Municipal Solid Waste in Developing Countries", and which can be found on the CD accompanying this booklet, as well as being available in printed form. (In this booklet it is referred to simply as "the book"). The ideas and suggestions in this booklet are discussed and illustrated in much more detail in the book, and the reader of this booklet is encouraged to refer to the book for more information.

Solid waste collection faces a range of challenges, and the difficulties faced by one city can be very different from those experienced by another. The aim of this booklet is to assist the reader to find help for particular challenges. The first chapter presents some basic principles of good solid waste collection. Chapter 2 summarises the challenges

that commonly face decision-makers, and suggests strategies for improving the effectiveness, efficiency and acceptability of solid waste collection services. Chapter 3 suggests key points on decisionmaking.

Short answers to the following questions can be found in this booklet, together with links to more comprehensive information in the book.

- Why are we experiencing problems with our existing waste collection vehicles?
- How can we extend the coverage of our waste collection service to more of the urban population?
- How should the method and frequency of collection be decided?
- What information is needed to set up a reliable waste collection system?
- Where should public storage containers be located?
- How can we get the waste off our streets?
- Why do some modern collection trucks give disappointing results?
- What are the benefits of designing particular systems for particular cities?
- When is it necessary to install transfer stations?
- What can be done to ensure that the waste collection service is reliable and value for money?
- How can we involve the private sector so that we get a good service at reasonable cost?
- What should be done with informal waste pickers and recyclers?

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6 The collection of municipal solid waste is a public service that has important impacts on public health and the appearance of towns and cities. ?



1

BASIC PRINCIPLES

1.1 LOCAL FACTORS HAVE A MAJOR IMPACT

The failure to consider important parameters of each particular location has led to many failed systems and the wastage of huge sums of money. In many cases, collection vehicles and containers have been purchased in large numbers but they have not been effective and have been operational for only short periods that are much less than their expected design lives. In some cases unsuitable equipment has been purchased because of corruption, but in many cases the fault lies with the assumption that the same type of waste collection equipment will work effectively in any situation.

It is not difficult to understand how such mistakes are made. Sometimes decision-makers visit cities in industrialised countries that use sophisticated compaction vehicles, and often these cities are very clean. The visitor assumes that the cleanliness is the result of using complex vehicles and so he or she determines to purchase similar vehicles in the expectation that the same results will be

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