

The role of **micro-enterprise in solid waste management**

Types of micro-enterprise

There are several different types of ME. These include:

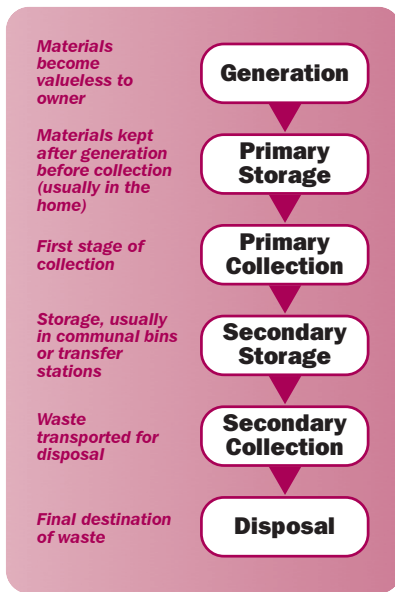
- Groups of small entrepreneurs offering services directly to the population.
- Informal sector waste pickers who have been organised to protect their livelihoods.
- Waste collection enterprises backed by the community.
- MEs sponsored by international development organisations.
- MEs created by and with the support of municipal governments.

What is a micro-enterprise?

A micro-enterprise (ME) is defined here as a service delivery or production business, usually low capital intensive and consisting of an individual or up to about 20 persons, either formally registered, or operating informally in an area (UNDP, 1996). The organisations or individuals are assuming all the risks for the sake of the profit. These enterprises can be workers, co-operatives, self-organised, community-based or promoted by non-government organizations. MEs work from the perspective of income generation and, hence, their main purpose is to be financially sustainable.



Stages in solid waste management (SWM) and the scope for micro-enterprises



MEs can be involved in many of the stages of SWM depending on their size and operational capabilities. Smaller MEs will be limited to primary stages of SWM. This may include house-to-house collection, resource recovery, street sweeping. These activities require low capital expenditure and can be efficient when operated on a small scale.

Larger MEs may be able to work in the realm of secondary storage and collection and even final disposal. These activities are more capital intensive and need to be operated on a larger scale to be efficient.



What are the advantages of involving micro-enterprises in SWM?

MEs can:

- Provide a new way of managing SWM activities or increasing the coverage of such activities.
- Aid in the cost recovery for services. For example, people may be prepared to pay for collection by a ME project when the municipal collection has failed.
- Frequently provide a good quality service at a low cost. Staff motivation is usually higher than in equivalent municipal services due to active competition and a closer relationship between quality of work and pay.
- Generate employment, which generates income for the poor and works to improve the environment. They also help to upgrade the status and working conditions of waste pickers.
- Act to promote citizen participation/responsibility for SWM by bringing decisions about SWM practices into the private realm.
- Develop innovative approaches, which are not constrained by institutional procedures and weaknesses.
- Provide a flexible alternative to an existing system.
- Be controlled better by public bodies by the use of penalty clauses etc.

What can micro-enterprises do in SWM?

- **Primary collection.** This commonly involves the door-to-door collection of domestic waste. In low-income countries, this service is rarely provided by the municipality. Many MEs provide this service and are financed directly by the households receiving the service.
- **Sweeping.** This involves the sweeping of streets and collection of waste that may have been dumped there. In some cases, where primary collection is not done this may include the collection of a substantial quantity of waste. It is likely that these MEs will be contracted by the municipality, although some community-based systems have developed.
- **Resource recovery.** This involves the collection of waste for direct re-use or recycling. Micro-entrepreneurs can make money through the buying and selling of waste. In many low-income countries, an extensive market exists for paper, glass, metals etc.
- **Waste transportation.** This involves the transport of waste, either between transfer stations, or to the final disposal site. MEs have developed where a micro-entrepreneur owns a single truck, which is used for this transportation. He/she is then paid for the quantity of waste transported.
- **Disposal site operation.** This is usually a large-scale activity, which involves the development, control and operation of a final disposal site.

Constraints of micro-enterprises

- MEs are frequently quite successful when operated on a small scale. However, when many small enterprises are used as a city level approach, the management becomes an additional burden in the city management. City managers prefer to deal with large-scale companies which can handle a large number of tasks.
- Because of the stigma attached to waste collection work, many entrepreneurs are not interested in starting a waste related job.
- The city governments are often not geared to manage the use of MEs for solid waste management. The staff are not trained and procedures are not in place.
- The monitoring of the performance of MEs may be a problem. There is an urgent need to develop and test monitoring indicators.
- Micro-entrepreneurs are often reluctant to invest their money because municipal priorities may change suddenly.
- If the mechanisms for cost recovery are not sufficiently well managed, the ME will run into financial trouble.
- Funders and governments often prefer to work with more established organisations such as NGOs rather than small scale MEs. This is commonly done to reduce the potential risks.
- In many low-income countries, the MEs' risks could not be covered, as there are no established systems for social and financial securities, such as insurance.

Street sweeping, Lima, Peru (Moreno et al, 1997)

The micro-enterprise exists in the high-income Miraflores District of the city and was developed after privatisation of the service was initiated by the municipality. The ME has a one-year contract with the municipality to provide the services. The workers sweep the area daily using brooms and long-handled dustpans. They place the sweepings into wheeled barrows, which are then taken to the municipal waste containers. The service is not personalised and the workers have no direct contact with the community. The municipality pays the ME on a monthly basis.

Waste collection, Nairobi, Kenya (Haan et al, 1998)

The ME, which has been operating since 1990, provides a twice weekly, door-to-door collection service. Residents who sign up are provided with blue plastic bags in which to store their waste. On the day of collection, these bags must be left on the kerbside. The company consists of two management staff and seven operational staff — a driver and six loaders. At present, the service uses two trucks and the total length of the collection route is 20km. If mechanical problems occur with one truck, the other is used more intensively in order that the service is still punctual. Maintenance of trucks is regarded as a priority.

Customers sign contracts with the company and payment is made on a quarterly, half-yearly or annual basis. If necessary, repeated reminders are issued when payment is due. However, the philosophy of the company is that, if the service provided is prompt and efficient, clients will be happy to pay. The collection crews continually look for more customers as they make their rounds.

Problems have occurred due to the development of other companies offering similar services but which do not perform adequately. Nairobi City Council exerts little influence over these waste collection services and, as a result, has difficulty in preventing the dumping of waste in inappropriate places. Blue bin collectors fear that greater management control by the council will lead to corruption, political interference and a lack of policies to safeguard the business that they have built up.

The provision of an enabling environment for the development of MEs

The municipality can aid (or hinder) the formation and subsequent success of MEs by the provision (or lack of provision) of certain situations. These include:

- The provision of suitable legislation and administrative processes to facilitate MEs and provide official recognition of such services.
- The provision of well functioning communication channels and active collaboration between MEs and local government.
- Support in access to capital loans for micro-entrepreneurs.
- The promotion of public awareness programmes on the importance of good SWM.
- The provision of technical assistance to micro-entrepreneurs.

This note presents the synthesis of a knowledge review on 'Micro-enterprise Development for Primary Collection of Solid Waste'. The research project aims to build capacities of government and non-government organisations in primary collection of solid waste. This note is written for organisations and individuals who in one way or another support the development of primary collection systems in low-income countries.

References / Further reading

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- Recognising livelihoods from urban waste
- Recognising gender issues in the management of urban waste

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