

Solid waste collection that benefits the urban poor

Suggested guidelines for municipal authorities under pressure



Based on discussions at the CWG Workshop
held in Dar es Salaam

March 2003

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Collaborative Working Group on Solid Waste
Management in Low- and Middle-income Countries

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Based on discussions at the CWG Workshop
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Introduction

This leaflet is based on the ideas of over 80 people who attended an international workshop in Dar es Salaam in 2003. The theme of the workshop was

Solid waste collection that benefits the urban poor.

We would like to share some ideas on the subject with you, and try and answer the following questions:

- Why is it so important to collect solid waste from poor areas? 3
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Why is it so important to collect solid waste from poor areas?

Few cities in middle- and low-income countries would claim to collect all of the waste that arises each day. In most cases the majority of the uncollected waste is generated in the poorer neighbourhoods. There are several reasons why it is often a low priority to collect solid waste from low-income areas. For example:

- **Difficult access:** It is difficult to gain access to a large proportion of the dwellings in low-income areas because access lanes are narrow, poorly drained, not surfaced and unplanned. Many dwellings are located at considerable distance from a road that is large enough for even a small truck. Unpaved lanes may be impassable in the rainy season.
- **Low social status:** The poor have the lowest social status and so they are regarded by city authorities as having the lowest priority. In many cases they have very little political influence, and so any requests for improved services are not given attention.
- **Lack of land tenure** and low level of tax payment are seen as barriers to the provision of formal waste collection services. Informal, squatter or formalising areas may be regarded as having no right to any municipal services or support.
- **Awareness:** Lower levels of education and lower awareness of the links between hygiene and disease transmission may result



Difficult access in unplanned areas

in waste management being given a low priority by the low-income groups themselves, and so there is a lack of interest in supporting a solid waste collection service.

- **Lack of incentives:** Waste collectors may ignore low-income areas because they do not expect to receive tips or additional informal payments, or opportunities for providing additional services, in such areas.
- **Lower value of waste:** The waste itself is likely to have less value in low-income areas, where consumption and wastage are less, where defective items are repaired rather than discarded, and where the residents themselves sell for recycling items that might be discarded by more prosperous households.

Pro-poor initiatives

So far we have **not** answered the question: Why is it so important to collect solid waste from poor areas? Instead we have given more reasons for ignoring the poorest. But to return to the question, and bearing in mind all these obstacles, why should the poorest get a waste collection service? Since poor areas tend to be ignored, there is a need for specific, targeted initiatives to ensure that services are extended to the poor. Why should this be necessary?

Why serve the poor?

There are several important reasons for such initiatives. One is humanitarian solidarity - the desire to help our fellows. But, apart from this idealistic concern, there are health implications that can affect the whole city. If disease vectors are allowed to breed freely in poorer districts, they can fly or run to more affluent areas, carrying their cargoes of germs. If people are accustomed to dumping waste anywhere in their own community, they will do the same elsewhere in the city also. Open dumps of waste may be used as public toilets, increasing the health risks. Smoke from waste that is burned in poor areas may drift into the homes and lungs of the prosperous. Flooding caused by blocked drains in low-lying areas colonised by the poor can back up to cause problems upstream such as inconvenience, health hazards, and damage to roads and bridges by erosion, and provide breeding grounds for mosquitoes. Disease has economic

implications that affect the whole country. Recently there has been a growing awareness that poverty can have an impact on security and political stability, and, in many cities, observable differences in environmental sanitation emphasise the gulf between the “haves” and the “have nots”. Good waste collection is often seen as a sign of good governance, and conversely dirty streets are taken as a symptom of poor management.

Self-help

The best approaches involve a considerable degree of self-help, as discussed later. If a community learns to work together in waste collection, they are likely to start working together on other improvements that benefit their community.

Job creation

Increasing waste collection and recycling services will also generate more employment. The capital requirement for much of this work is very low.

Yes, but ...

These are clear reasons for focussing efforts on ensuring waste collection services for the poor. But when municipal budgets and physical resources are stretched, how can we afford to provide more?

How can we afford to collect waste from poor areas when the waste collection service is already overloaded?

Alternatives

Municipal waste collection services are often unable to keep pace with the rapid growth of population and the problems of maintaining an ageing vehicle fleet. Low labour productivity and restrictions on recruitment may add to the problems. Fortunately there are other options for providing a service. The main options can be described as community-based arrangements and private sector involvement,

though in practice there is often not a clear dividing line between the two. Both of these options require inputs from municipal authorities, but these inputs are less demanding than full provision of the service. In many cities the service providers collect payment directly from the people they serve, so they do not make extra demands on the municipal budget.

Will they pay?

Case studies show how even the poor may be willing to pay for a waste collection service. Factors that tend to encourage payment are

- There should be a demand for the service. Sometimes this demand is encouraged by seeing the results of a waste collection service in a neighbouring area. Often there is a need for an intensive programme of awareness-raising in order to obtain the support and co-operation of the residents. Community and religious leaders can play an important role here.
- The community members should be involved in making decisions, for example about the level of service, the method of paying and who should provide the service.



Community members should be involved in making decisions

- The payment should be closely associated with the service provided – in some low-income communities residents prefer to pay a small charge each time the waste is collected, rather than paying a monthly fee.

Willingness-to-pay studies are important for defining the type of service that households are willing to pay for, and how much they are prepared to contribute.

Sharing the burden

It is helpful if low-income areas can be linked with adjacent districts that are more prosperous, so that some of the income from the richer can support work amongst the poorer.

Supplementary income

Collection activities in some low-income areas have gained extra income by making and selling compost (soil improver) from collected waste, and from separating and selling items and materials for recycling. In Dar es Salaam some enterprises supplement their income from waste collection by sweeping major roads under contract to the Municipalities.

How can we enhance the contributions of the poor to waste collection services?

Decent work

Generally large numbers of the poor are involved in solid waste management, and often there are ways of improving their working conditions, their productivity, and hence their financial situation. If, in addition, it is also possible to increase the numbers who find decent employment in solid waste management, the benefit is even greater.

Making improvements

The first steps in finding ways to improve working conditions and productivity are to use one's eyes and ears – to watch how the work is done and to listen to suggestions from the workforce. Many examples can be quoted. Waste collectors should not be obliged to put their hands into a container of waste in order to empty it. Many handcarts are inefficient or difficult to use. Methods for loading trucks are often slow and very unhygienic.

Start where you are

If there are already waste collection services provided by communities or small enterprises, it may be possible to improve their performance and reduce health risks by modifying the way that waste is transferred into municipal trucks or rescheduling the transport service. Granting official recognition to their efforts could have a great impact on their ability to collect fees from the community they serve. This theme will be taken up again later.

Benefits of recycling

In many of the large cities of Asia, Africa and Latin America, significant proportions of the populations survive because of recycling. These people include not only the waste pickers who separate recyclable materials from the waste, but also those who clean and sort these materials, and those who manufacture and sell products made from recycled material. The economic importance of recycling should not be underestimated. There is also the benefit that material that is diverted for recycling does not need to be transported and disposed. There are also negative aspects, such as the scattering of waste by people looking for materials they can salvage and pollution caused by cottage recycling industries. These drawbacks are often very obvious, whereas the huge economic benefits may be unseen.

Something for everyone

To find win-win arrangements it is necessary to work together. Waste pickers are usually not organised into groups, so the support of non-governmental organisations and the formation of co-operatives can be very helpful. Methods of storage



Recycling of municipal waste provides income for countless thousands. Household segregation could make this work more hygienic

and collection of waste should allow access for separation of usable material without the creation of a mess.

New institutional arrangements, such as the appointment of a contractor, should be carefully developed so that the livelihoods of poor waste recycling workers are not threatened by any proposed method of collection. If new methods of working pose a serious threat to the livelihood of waste collection or recycling workers, there may be hidden opposition that makes the new system very difficult to operate, so it is important to work together with all groups of people who are involved to develop win-win solutions.

Household segregation

The ideal arrangement for collection and recycling seems to be segregation of household waste in the home into two categories (such as wet waste and dry waste), with the dry waste being collected by recycling co-operatives. Changes in habits take time to achieve, especially when there is a loss of convenience from the householder's point of view. (Consideration needs to be given to the possibility of incentives, such as a rebate on local taxes, to encourage this segregation at source.)



Materials reclaimed for recycling save transport and disposal costs

Concentrate on constraints

Often the best approach is to remove unnecessary constraints but otherwise to interfere as little as possible. Recycling workers can often readily list the constraints that cause them most difficulties.

Are community-based schemes the best solution?

Common scenarios

In many cities municipal waste management departments are unable to provide a solid waste collection service to all of the area for which they are responsible. Usually the central business district and government housing estates are given the priority – also perhaps the street where the mayor’s mother-in-law lives. The other areas may get no service, so that waste piles up on open ground and in streets, blocks drains and poisons the air when it is burned. Alternatively a private company or a community-based group may step in and offer a service, to be paid either by the residents directly or by the municipal authorities.

Origins

Community-based groups are usually started by an individual or small group of residents because they wish to improve their surroundings or avoid other

problems caused by the lack of a solid waste collection service. After forming a core group and persuading neighbours to subscribe, they start to collect waste, but they usually do not have the resources to take the waste to a disposal site. Sometimes they set up their own processing operation, making compost and selling other materials for recycling. Members of such groups may be so motivated that they continue to provide a service on a voluntary basis, without pay, and office holders may take their turn at collecting waste or sweeping streets. Whilst this willingness to work without pay shows commendable dedication, it is not a sustainable arrangement.

Strengths

Community-based groups have the advantages of knowing the area and people well and of being known to their customers. It can be expected that the residents will be more willing to pay a fee to people from their own community than to outsiders. The waste collection labourers may also be motivated to work harder because they are being watched by people they know, and are working to improve their own environment.

Support

In general community-based groups need support. They may need official recognition from the municipal authorities to encourage residents to pay them for the service they provide. In low-income areas they may also need support in the form of transport of the waste from an agreed transfer point to the disposal site, since small groups in low-income areas usually use handcarts to collect waste from areas with narrow lanes, because of access problems and insufficient capital for buying a truck. Alternatively, if they wish to process their waste in their area rather than transporting it, they may ask the municipal authorities for land for this purpose.

Roles for NGOs

Community-based groups also benefit from support from NGOs. Such support may include credit for purchasing handcarts and other basic equipment, training in business skills, accounting and customer relations, and assistance with raising



Providing secondary transportation to take collected waste to the disposal site can be a heavy burden for community-based groups working in low-income areas.

the awareness of leaders and other residents. There is a risk that community-based groups may become dependent on outside support, so there should be a strategy for phasing out of subsidised support. The dependence on voluntary inputs (for example dependence on unpaid work from senior members of the community) is another threat to the sustainability of this kind of arrangement. It is better to pay all who have extra responsibility because of the waste collection service.

Are private contractors the answer?

The spectrum

Private contractors vary in size from microenterprises comprising three or four people, to large multinational companies with waste management contracts in many major cities. Small enterprises may provide only a small part of the total waste management in a city, but they may be very effective and efficient. Multinational companies are valued for their international experience and capital reserves.

No guarantee

It is often believed that, since municipalities have been unable to provide a complete service, the private sector is the only alternative. However, involving the private sector is no guarantee of an affordable and sustainable service, and careful preparation on both sides is essential before the contract is signed, if disaster is to be avoided.

Complex

The whole subject of private sector participation is large and complex, and there is no space to deal with it fully here, but some key points will be made in the context of serving the poor.

Balance

The relationship with the private sector should be seen as a partnership. It should be a balanced partnership. This point is illustrated in Cartoons 1 and 2.

Municipality dominating

Cartoon 1 shows the mayor (representing the local government authority or municipality that is responsible for providing or organising a waste collection service) and the leader of a small enterprise that collects waste from a low-income community. If the municipality side of the partnership is so powerful and authoritative that it does not pay attention to the concerns and needs of the small enterprise, but regards the enterprise as a servant without rights, ignoring agreed contractual arrangements and conditions, then it is likely that the partnership will not last long. If the municipal side appoints a suitable officer to work together with the enterprise, expecting a win-win relationship, such problems can be avoided. Small enterprises usually have little experience of legal agreements and little or no access to impartial legal advice, so the support of an NGO or an independent body can be useful here. Alternatively, if small enterprises can form a co-operative or joint negotiating team, and the municipality recognises this group, then a balance can be achieved.



Cartoon 1:
Domination by local government

Powerful companies

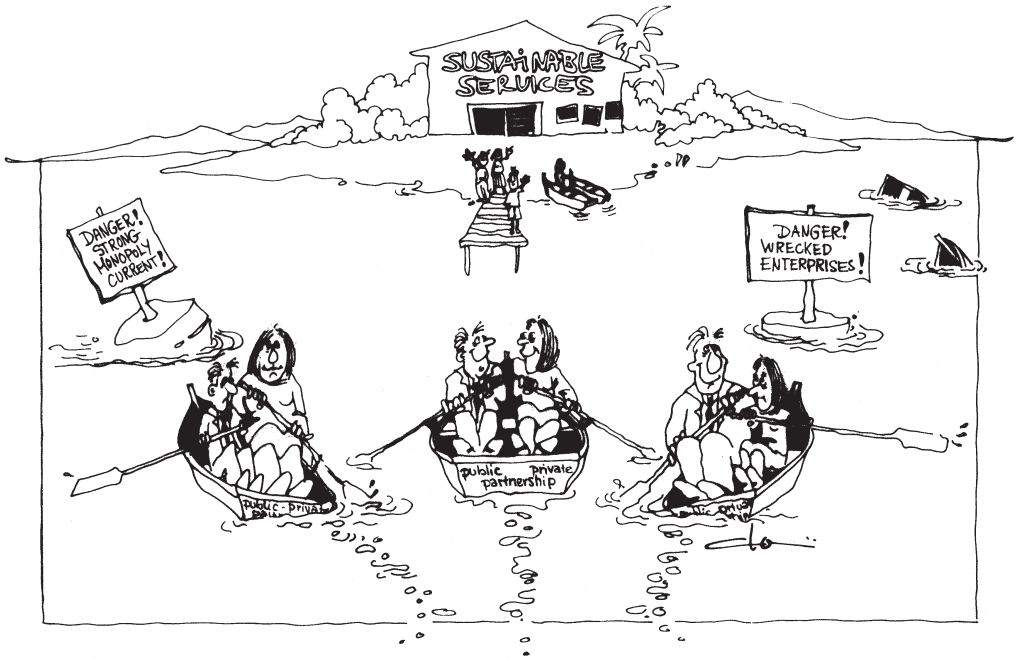
Cartoon 2 builds on this idea. It looks at the opposite problem also. If the private sector is very powerful – such as a large company with powerful political connections, or a multinational company – and if the municipality has little experience in dealing with such companies, and poor legal advice, the partnership may head towards a monopoly situation where the public sector has no choice but to accept what the private company does and says.

Vital role

The local government side has a very important role in a public-private partnership. By means of the contract (and the enforcement of the conditions of the contract) and effective supervision of the contractor it must ensure that service standards are met, that costs are controlled and that the environment is protected. Municipalities should also try to protect workers and customers from exploitation. This role is not a simple one, but too often municipalities do not prepare themselves sufficiently for their role in the partnership.

Tailor made

Another issue is the selection of the most appropriate approach. A multinational company may wish to use methods and machines that it has used effectively in



Cartoon 2:
The importance of balanced partnerships

other countries where conditions are very different, and this approach may be expensive and unsuited to some local aspects. A small company which does not have the finances to involve and implement technical advice, may copy inefficient methods that have been used previously. Methods must be tailor-made to suit local conditions

Low-income areas

Large conventional contractors may not be interested in collecting waste from low-income areas, preferring to work in areas where the wide streets allow them to use large trucks. Therefore it is necessary either to ensure that the contract includes provisions that guarantee that the poor receive a sufficient

waste collection service or to engage a small enterprise specifically to provide a primary collection service from low-income areas. It is important that the selection of which areas to serve is not left to the private companies, but controlled by the municipality to ensure that the poor also receive an adequate collection service.

Key points – the role of local government

- ➔ Though there are factors that make the collection of solid waste from low-income urban areas more difficult than collection from more prosperous areas, there are compelling reasons for providing a waste collection service for the urban poor.
- ➔ Solid waste collection and recycling provide important opportunities for job creation. Whenever possible, labour-intensive methods should be preferred and recycling should be encouraged.
- ➔ Community-based and private sector waste collection can provide useful alternatives to the use of municipal workforces for waste collection, but the public sector has a very important role in such partnerships.

Where can I get more information?

Workshop report

There is more information in the report of the workshop, which consists of a printed summary and an accompanying CD which includes the report, the papers, some PowerPoint presentations, a copy of a recent publication on involving the private sector in solid waste management¹, and more. If there are some copies left, you can get one free by sending an e-mail to publications@skat.ch mentioning the title "Solid waste collection that benefits the urban poor" and giving your postal address. Alternatively you can find much of the material on the Skat web site www.skat.ch. The workshop report includes the addresses of the participants, so if you would like to discuss what you read, you can get in touch with the authors of papers that particularly interest you.

Mailing list

If you would like to be kept informed of future events organised by the CWG, please send your contact details and some brief information regarding your interest and experience in solid waste management to Jürg Christen at juerg.christen@skat.ch.

¹ Guidance Pack "Private Sector Participation in Municipal Solid Waste Management" by Sandra Cointreau et al.

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This booklet is based on papers and discussions at a CWG workshop that was held in Dar es Salaam in March 2003. It provides a summary of some of the main points from the workshop and provides links to further information. The following questions are discussed:

- Why is it so important to collect solid waste from poor areas?
- How can we afford to collect waste from poor areas when the waste collection service is already overloaded?
- How can we enhance the contribution of the poor to waste collection services?
- Are community-based schemes the best solution?
- Are private contractors the answer?

This little publication should be of interest to managers in local government, NGOs, and others who are concerned to improve living conditions in the towns and cities of Africa, Asia and Latin America.

Further copies of this booklet can be obtained from:

Skat Foundation
Vadianstrasse 42
CH-9000 St.Gallen
Switzerland

e-mail: publications@skat.ch



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