



## **WELL Study**

# **Stakeholder analysis in local solid waste management schemes**

## **Task No: 69**

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## **Abbreviations**

ABO	Area-based Organisation
CBO	Community-based Organisation
DFID	Department for International Development, British Government (formally ODA)
ESA	External Support Agency
FAUP	Faisalabad Area Upgrading Project
FMC	Faisalabad Municipal Corporation
MPCO	Multi Purpose Community Organisation
MCH	Municipal Corporation of Hyderabad
NGO	Non-governmental Organisation
ODA	Overseas Development Administration
WEDC	Water, Engineering and Development Centre Loughborough University

## 1. Purpose

The purpose of this Study is to create a better understanding of stakeholder participation in solid waste management with particular reference to South Asia; the readership for the report comprises DFID staff, their local project partners in government and Non-governmental Organisations (NGOs), and consultants.

We have found that there exists a wide range of stakeholders in both the formal and informal sectors; their inter-relationships may be complex, and this reinforces the importance of a thorough analysis as part of project preparation for projects or programmes involving:

- primary collection of waste from households and communities
- 'cleaner local environments' through resident/Community-based Organisation (CBO)/NGO actions
- municipal collection and transport of solid waste
- disposal of solid waste through landfill
- recycling and reuse of waste materials
- promotion of institutional reform through increased private sector participation

This study is the outcome of desk research, supported by a number of semi-structured interviews and two short informal workshops in Faisalabad, Pakistan and Hyderabad, India. It is structured as follows:

- definitions
- a description of how the solid waste management system operates in South Asia
- the key stakeholders in solid waste
- sample stakeholder analyses based on secondary information sources from Hyderabad and Faisalabad
- stakeholder perceptions of their role based on workshops held in Faisalabad and Hyderabad
- concluding comments on stakeholder analysis in relation to solid waste management projects

A full description of these case studies and the detailed stakeholder analysis is available separately from WELL.

## 2. Stakeholder analysis and participation

We assume that readers are familiar with key guidance documents of DFID (ODA, 1995a and 1995b). A stakeholder analysis focuses on identifying those groups who may directly or indirectly be affected by a project, both positively and negatively. As described by DFID, it refers to:

*"...the identification of a project's key stakeholders, an assessment of their interests, and the ways in which these interests affect project riskiness and viability." (ODA, 1995b)*

In essence a stakeholder analysis is a tool of project management and should be repeated at intervals throughout the project cycle (ODA 1995a and 1995b). The purpose of a stakeholder analysis is therefore to assist professionals in assessing a project environment and to help identify key persons, groups or institutions with an interest in a project or programme and assess how their interests may affect its success.

The importance of stakeholder participation should be recognised in specific aspects of project preparation:

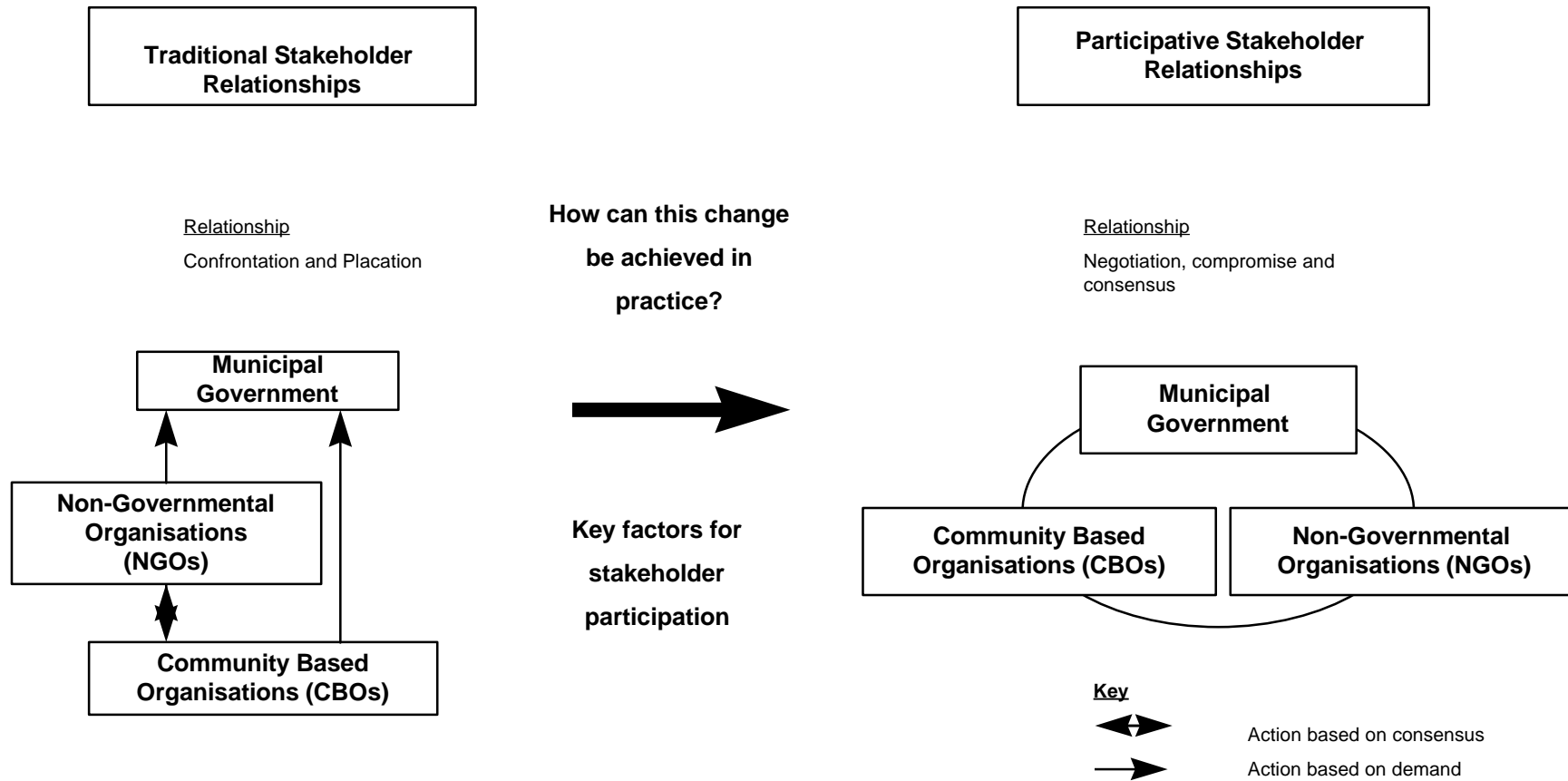
- addressing the interest of stakeholders both to enhance the economic and social development and well-being of recipients
- identifying conflict of interests between stakeholders
- identifying relations between stakeholders that can be built upon to improve success
- assessing the most appropriate way that different stakeholders should participate at different stages of the project

Stakeholders are "key persons, groups or institutions with an interest in a project or programme". Stakeholders can be divided into three categories:

- **primary stakeholders** who are directly affected, either positively or negatively, by the implementation of a project or programme
- **secondary stakeholders** who play some intermediary role and may have an important effect on the project/programme outcome
- **external stakeholders** who are not directly involved, but may nevertheless be affected by a specific project or programme

An effective relationship between the various stakeholders within a stakeholder framework is one based on compromise and consensus rather than confrontation. Any action between local government, NGOs and CBOs should refer to such a framework rather than be driven by immediate crisis issues. Figure 1 illustrates the changing relationships, attitudes and experiences between a variety of stakeholders in the way communities, neighbourhoods and cities are beginning to co-operate in the field of solid waste management.

**Figure 1: Differences in Principal Stakeholder Relationships for Traditional and Participative Development Approaches (Olley, 1996.)**



### 3. About solid waste management

#### 3.1 Background

Solid waste management involves the storage, collection, transport and disposal of waste which is generated in the home, commercial premises and institutions. As such, it comprises an extremely complex set of operations which has to take place on an enormous scale; Karachi in Pakistan generates upwards of 3000 tonnes *daily*. It may consume between 20% and 50% of municipal revenues; in India, it employs between 3 and 6 people per 1000 population. Karachi Municipal Corporation has 15,000 employees associated with solid waste.

Good solid waste management is an important component of a strategy for improving environmental health. In addition to the obvious aesthetic importance of a garbage-free living environment, uncollected solid waste rapidly putrefies in tropical climates, creating noxious smells, giving rise to polluting leachates, providing breeding areas for countless flies and, in the wet season, mosquitoes. Vermin also abound. A particularly important indirect effect is the blocking of drains, which causes local flooding with its associated environmental health risks and economic disbenefits.

Yet to date, solid waste management has received scant attention from external support agencies.

#### 3.2 Understanding how solid waste management works

This section describes in general terms how urban solid waste management works; we describe the situation of a typical city in the Indian subcontinent, although exact details will vary from place to place.

**Whose responsibility is it?** Municipal corporations and councils are charged with solid waste management; it is usually the Health Department, headed by a Doctor of Medicine, which has lead responsibility. The Engineering Department maintains the vehicle fleet, and may provide inputs if service contracts involving the private sector are involved. Given the size, complexity and budget share, it remains surprising that dedicated solid waste management departments are very rare in municipal government.

**What happens to municipal waste?** Many southern Asian countries do not have a formal house to house collection system; householders either deposit their waste in a communal container, or leave it in small piles outside the house. It is removed by *municipal sweepers* who take it to a larger waste transfer point, from where it is lifted and transported to a disposal site, possibly via another intermediate transfer point. The collection frequency of the waste varies from daily upwards, depending upon the resources available and the perceived importance of the locality in question.

**Who works in municipal solid waste?** The municipal sweepers are organised into a system of 'beats' i.e. length of street, and there is a hierarchical system of supervision in the Health Department which is usually based around council/corporation Wards (the key functional unit in urban local government). Vehicle crews are under the overall control of the Transportation Officer, who assigns their pick up routes. Sweepers have established posts within the municipality, and appointments are often related to social group and family history. In many towns and cities, sweepers groups have formed strong unions. Although sweepers are relatively poor and carrying out what is often regarded as demeaning work, they nevertheless hold prized positions; in earlier work, we discovered complex relationships whereby sweepers regularly pay money to their supervisors which works its way up the system (Ali & Cotton 1998). Certain beats are regarded as more remunerative, and there are informal systems whereby access rights are

informally traded between sweepers and supervisors. Matters are further complicated by the fact that municipal sweepers enter into informal contracts with households for the removal of waste, some of which is sold on. Some households enter into agreements with private sweepers (i.e. persons not in the employ of the municipality) for cleaning and the removal of household waste.

***Is there any waste recycling/reuse?*** The composition of solid waste entering the municipal waste stream indicates that (in contrast to Europe and America) there is very little paper, plastic, glass or metal; it is mainly silt (from road sweeping) and organic vegetable matter. This is because solid waste is an important resource, and as a result there exists a highly developed and complex system of waste recovery, reuse and recycling which operates on a commercial basis. This is not a system which has been developed by the public sector, nor is it an environmental hobby; it is market based and market driven. (However, we will also look at a case where there has been NGO, CBO and municipal involvement in promoting local schemes). Itinerant waste buyers purchase recyclable items door-to-door from householders or their servants; this material is sold on to middle dealers who may specialise in certain types of waste. Finally, there are the waste reprocessors; in earlier work (Ali, 1996) we estimated that this 'informal' industry could provide employment for up to 40,000 people in Karachi (an important centre for waste reprocessing). At the micro-level, there are particularly complex intra-household relationships involving women and domestic servants which have gender implications (Beall, 1997). There are also large numbers of waste pickers who are not part of the formal system, who make their living from picking out material for reuse/recycling from communal bins, transfer points and waste disposal sites. These people may be amongst the poorest of the poor.

***Are there other enterprises associated with solid waste?*** In addition to waste reuse/recycling, there are many cases where residents have taken initiatives to improve the primary collection of solid waste from their neighbourhood. Rich and poor alike pay for additional waste services. Area based organisations and NGOs have played important roles here and the basis is some form of local enterprise. This may involve municipal sweepers being paid extra, local activists either facilitating or managing collection, or a small contractor providing local services.

Thus solid waste management comprises a whole range of activities involving the public sector, small-scale private enterprises and service users. There are potential knock-on effects from project interventions aimed at particular groups or institutions; therefore in concluding this section, our first **Key Guidance Point** is:

<b>Solid waste management is complex; it is essential to explore the full extent and range of activities taking place in order to understand the processes and systems which are operating.</b>
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### **3.3 Defining stakeholders in solid waste management**

We have found evidence that all of the groups described below are important in the project delivery process for solid waste management services; they are usually divided into three main categories:

- **primary stakeholders** are directly affected, either positively or negatively, by the implementation of a solid waste management project and include householders and citizens receiving waste management services;
- **secondary stakeholders** play some intermediary role and may have an important effect on the project/programme outcome. These include urban government (municipalities) and their employees, other national/state government departments, NGOs, CBOs & Area



Based Organisations, donor/lending agencies, waste pickers, private sweepers, small entrepreneurs and contractors working on area-based waste collection;

- **external stakeholders** are not directly involved but may nevertheless be affected by a specific project. In solid waste management this is an important group and there are many potential actors. For example: residents of nearby communities; itinerant waste buyers; middle-men in the waste recycling trade; waste reprocessors.

Stakeholders will not always fall into the above categories. In particular, whether a group is classified as secondary or external clearly depends on the specific project objectives.

## **4. Stakeholder Participation in Hyderabad and Faisalabad**

We present two solid waste management case studies taken from cities where there have been DFID urban development programmes. In each case, we aim to explain the issues in relation to each stakeholder and draw out points which might not be immediately obvious, but which arise from the complex web of interactions between formal and informal activities taking place around solid waste. Subsequently, we present the perceptions of two stakeholder groups, NGOs & CBOs, and municipal officers from both case study cities.

### **Case study 1: Waste disposal scheme in Hyderabad, India**

From the mid 1980s to the mid 1990s, DFID funded a slum improvement programme in Hyderabad, India; this included provision of solid waste bins, but without any direct intervention in the municipal management of the service. The case we describe does not directly involve DFID, but operates in some of the areas upgraded earlier by the DFID programme. The case involves local government, NGOs, CBOs and citizens in the collection and processing of waste; it recognises the need to develop local solutions which match local needs, reflecting small-scale solutions based on effective partnership between key stakeholders. The key features of this waste disposal scheme are:

- to promote the recycling of organic and non-organic waste at the neighbourhood level (some small composting schemes using collected household organic waste are actually working)
- to base the scheme around low-impact technology and small-scale production
- eventually to integrate street waste pickers into the municipal waste management system by employing them for door-to-door collection, separation of waste and organic waste recycling

Table 1 describes roles and potential problems/issues in relation to the various stakeholders.

**Table 1 Stakeholder participation in Hyderabad waste disposal scheme**

Stakeholder	Role	Issues/Risks
<b>Primary</b>		
Citizens	<ul style="list-style-type: none"> <li>Payment by collection for waste pickers working in primary waste schemes</li> </ul>	<ul style="list-style-type: none"> <li>Maintain payments by individual citizens to the sweepers and private waste collectors</li> </ul>
<b>Secondary</b>		
Municipal Corporation of Hyderabad (MCH)	<ul style="list-style-type: none"> <li>City wide solid waste management</li> <li>Subsidy to some residential areas for waste disposal scheme</li> <li>Promotion and future investment in waste disposal scheme</li> <li>Funding of tricycles for schemes</li> <li>Working with NGOs and CBOs</li> </ul>	<ul style="list-style-type: none"> <li>Insufficient staff for the increasing population and area coverage</li> <li>Inadequate set-up and managerial practices</li> <li>Inadequate pay and labour conditions</li> <li>Lack of sufficient vehicles in operation</li> <li>Ineffective financial management</li> </ul>
Municipal Councillors	<ul style="list-style-type: none"> <li>Elected representatives of the citizens</li> </ul>	<ul style="list-style-type: none"> <li>May exert control over the local management of Ward level sweeping and cleansing</li> </ul>
Local Organisations (includes NGOs & CBOs and ABOs)	<ul style="list-style-type: none"> <li>Labour-market &amp; socially oriented agenda, such as working with street children and women</li> <li>Environmental focus</li> </ul>	<ul style="list-style-type: none"> <li>Dependent on the MCH for subsequent transportation and disposal of waste.</li> <li>Problems of working as a flexible and efficient enterprise under the controls exercised by MCH</li> <li>Lack of clarity on the part of MCH; their guidelines for waste operators and for financing arrangements are vague.</li> <li>Subsidies for the system discriminate against low-income areas</li> <li>Insufficient capital to start up new schemes</li> </ul>
Private sweepers	<ul style="list-style-type: none"> <li>Collecting waste from households on a private basis</li> </ul>	<ul style="list-style-type: none"> <li>Lack of reliability</li> <li>Inadequate equipment &amp; health protection</li> </ul>
Waste pickers/Local people employed on schemes	<ul style="list-style-type: none"> <li>Focus for the waste disposal schemes</li> <li>Individuals &amp; groups who make a living by collecting reusable or recyclable materials from households or waste transfer points</li> </ul>	<ul style="list-style-type: none"> <li>Suffer social discrimination from citizens</li> </ul>
Municipal sweepers	<ul style="list-style-type: none"> <li>Regular MCH employees paid for street sweeping</li> <li>Households pay extra to sweepers for waste collection from the neighbourhood</li> <li>Not part of the waste disposal schemes</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate clearance of assigned areas by sweepers</li> <li>Lack of enforcement of the performance of sweepers</li> <li>Improper equipment and inadequate health protection for sweepers</li> <li>Sweepers may lose income because this scheme is introducing a new system using retrained waste pickers</li> </ul>
<b>External</b>		
Nearby communities	<ul style="list-style-type: none"> <li>No direct role</li> </ul>	<ul style="list-style-type: none"> <li>No direct risk or conflicts</li> </ul>
External Support Agencies	<ul style="list-style-type: none"> <li>DIFD has no direct role</li> </ul>	<ul style="list-style-type: none"> <li>No direct risk or conflicts</li> </ul>

These issues will be compared in Table 3 and a further stakeholder analysis is described in Tables 4, 5 and 6.

### **Case study 2: Primary collection of solid waste in Faisalabad, Pakistan**

In Faisalabad, DFID has funded a programme to upgrade four areas of the city through participatory development. Associated with this, DFID has also funded a consultancy into solid waste management in the city with a view to providing specific support for improving the city-wide services.

There have been a number of local initiatives to improve the primary collection of solid waste in Faisalabad, where the traditional services provided by both municipal and private sweepers have been poor. As a result, local schemes based on an organised house to house collection system have been established through a partnership approach between the Faisalabad Municipal Corporation (FMC), Area-based Organisations (ABOs) and Community-based Organisations (CBOs) known locally as Multi Purpose Community Organisations (MPCOs). Some of the key features of the scheme include:

- focus on primary waste collection facilitated by NGOs, ABOs and CBOs
- use of low cost appropriate equipment
- linking as closely as possible to the current municipal waste management system

Table 2 describes roles and potential problems/issues in relation to the various stakeholders.

**Table 2 Stakeholder participation in Faisalabad primary waste collection schemes**

Stakeholder	Role	Issues/Risks
<b>Primary</b>		
Citizens	<ul style="list-style-type: none"> <li>Payment by collection for municipal or private sweepers working in primary waste schemes through ABO or CBO</li> </ul>	<ul style="list-style-type: none"> <li>Informal, individually based payments by citizens to the sweepers and other waste collectors</li> </ul>
<b>Secondary</b>		
Faisalabad Municipal Corporation (FMC)	<ul style="list-style-type: none"> <li>City wide solid waste management</li> <li>Working in partnership with NGOs and CBOs to facilitate primary collection schemes</li> </ul>	<ul style="list-style-type: none"> <li>Waste continues to be dumped on open areas or at the end of streets</li> <li>Insufficient staff for the increasing population and area coverage</li> <li>Inadequate organisational set-up and managerial practices</li> <li>Inadequate pay and labour conditions</li> <li>Lack of sufficient vehicles in operation</li> <li>Ineffective financial management</li> </ul>
Municipal Councillors	<ul style="list-style-type: none"> <li>Elected representatives of the citizens</li> </ul>	<ul style="list-style-type: none"> <li>May exert control over the local management of Ward level sweeping and cleansing</li> </ul>
Local Organisations (includes NGOs & CBOs and ABOs)	<ul style="list-style-type: none"> <li>Monitoring system for the primary collection of waste</li> <li>Attend to local complaints regarding management of scheme</li> <li>Ensure payment to waste collector</li> </ul>	<ul style="list-style-type: none"> <li>Lack of motivation to monitor the system</li> </ul>
Municipal Sweepers	<ul style="list-style-type: none"> <li>Regular FMC employees paid for street sweeping</li> <li>Informal contracts for additional work made between the sweeper, local ABOs, CBOs and NGOs</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate equipment provided for primary waste collection</li> <li>Inadequate occupational health protection for sweepers</li> <li>Indiscriminate dumping</li> <li>Miscommunication on the potential (informal) contract between the waste collector, community and FMC</li> </ul>
Private Sweepers	<ul style="list-style-type: none"> <li>Collecting waste from households on a private basis</li> </ul>	<ul style="list-style-type: none"> <li>Lack of reliability</li> <li>Inadequate equipment &amp; health protection</li> </ul>
Waste pickers	<ul style="list-style-type: none"> <li>Collection of waste done privately by informal waste pickers</li> </ul>	<ul style="list-style-type: none"> <li>Social discrimination of informal (private) sweepers by those employed in the scheme</li> </ul>
<b>External</b>		
Nearby communities	<ul style="list-style-type: none"> <li>No direct role</li> </ul>	<ul style="list-style-type: none"> <li>No direct risks or conflicts</li> </ul>
ESAs	<ul style="list-style-type: none"> <li>No direct role; DFID funding of area based infrastructure improvements</li> </ul>	<ul style="list-style-type: none"> <li>No direct risk or conflicts</li> </ul>

Table 3 summarises the similarities and differences between the two projects.

**Table 3 Comparison of stakeholder participation in Hyderabad and Faisalabad**

Stakeholder	Hyderabad	Faisalabad
<b>Citizens</b>		
Demand for improved waste management services	<ul style="list-style-type: none"> <li>Payment by collection for waste pickers working in primary waste schemes</li> </ul>	<ul style="list-style-type: none"> <li>Payment by collection for municipal or private sweepers working in primary waste schemes through ABO or CBO</li> </ul>
<b>Municipal Corporation</b>		
Needs to look for more effective waste management services to cope with increasing population and area coverage	<ul style="list-style-type: none"> <li>Partnership between NGOs, CBOs and citizens.</li> <li>Focus on regular removal of waste only from primary transfer points e.g. communal bins</li> </ul>	<ul style="list-style-type: none"> <li>Partnership involves municipal (and private) sweepers, ABOs and CBOs</li> <li>Focus on regular removal from both primary and secondary transfer points</li> </ul>
<b>NGOs/CBOs</b>		
Community based monitoring of the system Objective of improving primary waste collection	<ul style="list-style-type: none"> <li>Focus on the separation of waste reusable materials and organics</li> <li>A decentralised system to use organic waste for compost production</li> </ul>	<ul style="list-style-type: none"> <li>Simply a means of collecting waste more efficiently at the primary collection stage</li> <li>No focus on using organic waste for compost production</li> </ul>
<b>Municipal Sweepers</b>		
	<ul style="list-style-type: none"> <li>Municipal sweepers not involved</li> </ul>	<ul style="list-style-type: none"> <li>Additional payments of municipal sweepers</li> </ul>
<b>Private Sweepers</b>		
	<ul style="list-style-type: none"> <li>Private sweepers not involved</li> </ul>	<ul style="list-style-type: none"> <li>Continuing employment of private sweepers</li> </ul>
<b>Waste pickers</b>		
	<ul style="list-style-type: none"> <li>Waste pickers are the target group to be offered employment</li> </ul>	<ul style="list-style-type: none"> <li>Waste pickers not involved</li> </ul>

Some of these differences are quite subtle yet significant; for example, the roles of municipal and private sweepers compared with waste pickers. This understanding becomes important if, for example, a request is received for "support for NGO projects for local environmental improvement through solid waste removal". This description would fit both of these cases, yet they will both have quite different impacts. In Hyderabad waste pickers, often regarded as amongst the most vulnerable in society, are the focus. In Faisalabad the scheme is much more closely linked with the current municipal operations and is more of an innovative extension to the current system; it does not target waste pickers, who nevertheless operate in the city. This in itself is not a problem, and one project is not automatically better than the other because of the different focus at this level. This reinforces the importance of the first Key Guidance Point as outlined in section 3.2. In concluding this section, our second **Key Guidance Point** is:

**In projects for improving local solid waste management a clear understanding of the processes, with an appreciation of who is benefiting and in what way, is necessary in order to carry out stakeholder analyses.**

## **5. Stakeholder analysis in Hyderabad and Faisalabad**

We now use the secondary sources of information at our disposal to undertake a desk-based stakeholder analysis for both of the cases described; this is an example of an initial attempt which would be appropriate for the early stages of project identification. By this stage we had conducted informal interviews with certain stakeholders with the sole objective of ascertaining what their role was, and where they fitted into the complex picture of activities around solid waste. These interviews were carried out as part of other work in 1995 & 1996. We had not held any workshops at which specific project activities were discussed.

Following our desk-based analysis, we visited both Hyderabad and Faisalabad in 1998 to carry out separate workshops with:

- officers from the Health Department in the Municipal Corporation
- members of NGO and CBO groups active in the waste collection schemes

In these workshops we discussed the local initiatives in solid waste management, which are described in the case studies, and asked both groups to carry out stakeholder analyses on these case studies with which they were familiar. We thus have stakeholder analyses carried out by three different sub-groups (including the analysis by WELL staff) on the same waste management project. From this, we can determine whether or not there are any significant differences in perception and if so, whether the impact is likely to be relevant. The outcome is presented in the following stakeholder analyses, Tables 4 to 9.

**Table 4 Stakeholder analysis by WELL for Hyderabad**

High importance				<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies 8) Municipal Councillors
<b>A</b>	<b>B</b>	*4	*3	
	*1		*2	
	*6			
<b>D</b>	<b>C</b>			
*5	*7			
	*8			
Low importance		Low influence		High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest; this applies to the waste pickers who are employed by the scheme.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. One would expect that citizens and NGOs & CBOs would feature here; urban local government in the form of the Municipal Corporation of Hyderabad (MCH) will always be important in solid waste related projects. Although much less obvious at first sight, municipal sweepers are key actors here, and they may be adversely affected by the introduction of a new scheme which impacts on their ability to earn additional income.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. Important here are the municipal councillors.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities which in this case are nearby communities.



**Table 5 Stakeholder analysis by NGOs/CBOs in Hyderabad**

High importance		<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies
<b>A</b>	*1  *2  *4 *3 *5 *7	
<b>D</b>	<b>C</b>	
Low importance    Low influence		High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest. Citizens and municipal sweepers and nearby communities were placed here, as were ESAs.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. NGOs/CBOs do not see local government as reflecting any source of significant risk but rather view them as important and influential actors.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. No groups were placed here.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities. Waste pickers were put into this category.

**Table 6 Stakeholder analysis by Municipal Officers in Hyderabad**

High importance		
<b>A</b>	<b>B</b>	<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies
*7 *4 *5 *3	*1 *2	
<b>D</b>	<b>C</b>	
*6		
Low importance		High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest; this applies to citizens, municipal sweepers, nearby communities and ESAs.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. One would expect that the municipality be placed here; also included are NGOs & CBOs.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. No groups were placed here.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities in this case waste pickers.

**Table 7 Stakeholder analysis by WELL for Faisalabad**

High importance		
<b>A</b>	<b>B</b>	<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies 8) Municipal Sweepers 9) Private Sweepers
	*9  *4  *3  *2	
<b>D</b>	<b>C</b>	
*6  *7  *5	*8  *1	
Low importance    Low influence		High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest; none of the stakeholders considered appear in this category.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. Both municipal sweepers and private sweepers are key actors in these schemes. NGOs/CBOs and citizens are also found in this category.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. As in Hyderabad, municipal councillors are important here.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities. This includes waste pickers, nearby communities, and external support agencies who play no formal role in these schemes.

**Table 8 Stakeholder analysis by NGOs/CBOs in Faisalabad**

High importance		<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies
<b>A</b>	<b>B</b>	
*4	*1	*2
*3		
<b>D</b>	<b>C</b>	
*7 *5		
*6		
Low importance	Low influence	High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest. Both citizens and municipal sweepers were placed here.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. NGOs/CBOs do not see local government as reflecting any source of significant risk but rather view them as important and influential actors.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. No groups were placed here.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities. Waste pickers and nearby communities and external support agencies were put into this category.

**Table 9 Stakeholder analysis by Municipal Officers in Faisalabad**

High importance		<b>Stakeholders (*)</b> 1) Local Government 2) NGOs/CBOs 3) Citizens 4) Municipal Sweepers 5) Nearby Communities 6) Waste Pickers 7) External Support Agencies
<b>A</b>	*1  *3                  *7  *4	
<b>D</b>	*2 *6  *5	<b>C</b>
Low importance    Low influence		High influence

**Comments**

- A.** Stakeholders with high importance and low influence will require special initiatives to protect their interest; this applies to the municipal sweepers involved with the schemes.
- B.** Stakeholders with high importance and influence must have good relations with the project if it is to be a success. One would expect the municipality to be placed here; also included are citizens and ESAs.
- C.** Stakeholders with low importance but high influence may be sources of significant risk and must be monitored. No groups were placed here.
- D.** Stakeholders with low importance and influence are unlikely to be the subject of project activities. NGOs/CBOs, nearby communities as well as waste pickers are in this group.

## 6. Comments on stakeholder analysis

We consider firstly comparisons between the two groups of local stakeholders, namely municipal officers and NGO/CBO groups.

Important **similarities** in the stakeholder analyses carried out by the municipal officials and NGO/CBO groups are:

- local government is highly important and influential (Note that councillors were lumped under the general heading of local government)
- municipal sweepers are of high importance but low influence
- waste pickers are of low influence and importance
- there are no significant differences in perception between the municipal officers and the NGO/CBO groups regarding the waste management case study in Hyderabad
- interestingly, neither regarded waste pickers to be either important or influential even though they are an important focus of the project activities

Significant **differences** in Faisalabad are:

- municipal officers perceive NGOs/CBOs to be less important and influential than do the NGOs/CBOs themselves (this may be either due to lack of awareness of the roles of NGOs in the city, or an unwillingness to accept them)
- municipal officers perceive citizens to be more influential than do NGOs/CBOs (this is surprising given the nature of the Faisalabad schemes)
- municipal officers perceive ESAs to be more influential than do NGOs/CBOs (this may be because of a donor-funded consultancy for improved city solid waste management)

Secondly, we consider whether there are significant **differences** between the analysis by WELL and that carried out locally:

- WELL assigned greater influence to both municipal sweepers and citizens (this may be influenced by earlier WEDC work which investigated the role of sweepers in some detail)
- municipal officers and NGOs/CBOs in Hyderabad assign more importance to nearby communities
- WELL assigned greater importance to waste pickers in Hyderabad (our perception is influenced by the fact that the programme is targeted towards assisting waste pickers)
- neither the municipal officers nor NGOs/CBOs identified municipal councillors as relevant stakeholders in their own right

We can thus identify areas where relevant differences in perception concerning different stakeholders may occur. Our third **Key Guidance Point** is:

**Perceptions are all important, and we recommend paying particular attention to the roles of municipal councillors, municipal sweepers and citizens during stakeholder analysis for local waste management projects.**

## 7. Concluding remarks

This work has used stakeholder analysis as a tool to explore different perceptions of local initiatives in solid waste management. This has led to a clearer understanding of roles and responsibilities in a complex area of work. In conclusion, we reiterate the three key guidance points which have been developed from this work.

**Guidance Point 1:** solid waste management is complex; it is essential to explore the full extent and range of activities taking place in order to understand the processes and systems which are operating.

**Guidance Point 2:** in projects for improving local solid waste management a clear understanding of the processes, with an appreciation of who is benefiting and in what way, is necessary in order to carry out stakeholder analyses.

**Guidance Point 3:** perceptions are all important, and we recommend paying particular attention to the roles of municipal councillors, municipal sweepers and citizens during stakeholder analysis for local waste management projects.

We believe that these guidance points are substantiated both by the short case studies described, the review of literature, and our wider experience of solid waste management in South Asia.

## 8. References

Ali, M., (1996). Primary collection of solid waste management in Faisalabad, Pakistan. Draft Final Report. Water, Engineering and Development Centre (WEDC). Institute of Development Engineering. Loughborough University: Loughborough.

Ali, M and Cotton, A., (1998). Micro-Enterprise Development for Primary Collection of Solid Waste. Municipal and Private Sweepers- Faisalabad, Pakistan. Draft Final Report. Water, Engineering and Development Centre. Institute of Development Engineering. Loughborough University: Loughborough.

Beall, J. (1997). Households, livelihoods and the urban environment: social development perspectives on solid waste management in Faisalabad, Pakistan. (Ph.D thesis). London School of Economics: London.

ODA (1995a) Guidance Note on How to do Stakeholder analysis of Aid Projects and Programmes, Social Development Department. Overseas Development Administration: London

ODA (1995b) Notes on Enhancing Stakeholder Participation in Aid Activities, ODA Social Development Department: London.

Olley, J. (1996) Stakeholder Participation in Latin America. Unpublished MSc Project, Water, Engineering and Development Centre: Institute of Development Engineering. Loughborough University: Loughborough.