Issues and Results of Community Participation in Urban Environment

Comparative analysis of nine projects on waste management



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Cover photograph: Cleaning-up the neighbourhood – the MSE Patan City at work Source : Community Participation in Urban Solid Waste Management in Patan City (Nepal) – UWEP Case study

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- Marie-Thérèse Arcens: "La participation de la communauté à la gestion des déchets solides au Burkina Faso, Collecte des ordures ménagères à Ouagadougou", ENDA/WASTE, 1997.
- Asse Diarra et Seydou Togola: "La participation de la communauté à la gestion des déchets solides au Mali, Collecte des ordures ménagères à Bamako", ENDA/WASTE, 1997.
- El Housseynou Ly: "La participation de la Communauté à la gestion des Déchets solides en Afrique d'Ouest", rapport de synthèse, ENDA/WASTE, 1997.
- Bachir Kanouté: "La participation de la Communauté à la gestion des Déchets solides en Afrique de l'Ouest", Atelier de capitalisation, ENDA/WASTE, 1997.
- Guru Bar Singh Thapa, Bina Thapa, Rosha Raut, Sameena Shrestha et Nhasala Tuladhar: "Community Participation in Urban Solid Waste Management in Patan City (Nepal)", WASTE, 1996.
- Sohail Shamsi et Rehan Ahmed: "Community Participation in Urban Solid Waste Management in Karachi (Pakistan)", WASTE, 1996.
- Danilo G. Lapid, Ligaya U. Munez et Lidel Lee I. Bongon: "Community Participation in Urban Solid Waste Management in Metro Manila and Metro Cebu (the Philippines)", WASTE, 1996.
- El Housseynou Ly: "La participation de la Communauté à la gestion des Déchets solides au Sénégal, Collecte des ordures Ménagères à Dakar", ENDA-WASTE, 1997.
- K.A. Jayaratne: "Community Participation in Urban Solid Waste Management in Colombo (Sri Lanka)", WASTE, 1996.
- ENDA GRAF: "Etude transversale sur la gestion des déchets dans les villes de Dakar et Thiès", ENDA-PRECEUP, September 1998.
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- acquiring knowledge on participation by communities and MSEs in waste management
- developing and mobilising expertise with regard to urban waste in the South.

The **PRECEUP** programme **by ENDA TIERS MONDE**, funded by the European Commission since 1994, is intended to support local initiatives in the South towards the improvement of living conditions for underprivileged populations, and acting as a platform for reflection and exchange on urban environmental problems.

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SUMMARY

This working document analyses nine projects in solid waste management, conducted in West Africa and Asia, with the participation of residents of some underprivileged neighbourhoods where public utilities were totally lacking.

On the basis of case studies, this document attempts to bring forward the following aspects:

- What are the various forms of community participation and who are the key actors in waste management?
- What are the various technical, financial and operational methods of community management and what is the actual capacity of residents to deal with a waste management project?
- What is the overall impact of these projects in terms of local politics, improving living areas, reducing unequal distribution of public utilities, but also in terms of decentralisation?

These case studies show the variety and complexity of forms of participation by local residents, as well as the difficulty of sociologically defining participation in a sociological sense. The borderline between giving a sense of responsibility, awareness-raising and management is not always easy to draw. Though participation is to be understood as a collective or individual commitment to improve the environment, it often conceals informal contents, or indeed invisible ones, as residents are not necessarily associated with service management.

Local religious, social and political leaders, including women, are key actors in a project at a neighbourhood level. Likewise, the formalisation of a project for waste or environmental management may, according to the residents, be broader related to urban issues, more particularly the regulation of land-ownership.

This analysis of organising and running a number of waste management projects shows that private management entrusted to micro and small enterprises should be clearly distinguished from management by community actors (committees of residents) collaborating with local authorities. In fact, the social issues vary with the projects, and so does the role played by residents at different stages (cleaning-up public spaces, monitoring management, providing information and raising awareness).

Whilst the projects have a distinctively social, sanitary and even political impact (cleanliness, growing awareness of responsibilities in health matters, development of structured activities within the neighbourhood, partnerships with local authorities), real and sustainable forms of co-operation between community organisations and municipalities still need to be developed, so that the disadvantaged groups, including women, may be effectively involved with the process of decision-making and management for their own environment and so that the economic and technical achievements of the management structures ("Economic Interest Group" = micro and small enterprises, MSEs), neighbourhood committees) are strengthened.

Issues and results of community participation in the urban environment, ENDA / WASTE, March 1999

GLOSSARY

Solid waste management: the collection, transport, dumping, and final treatment (incineration or recycling) of non-liquid waste from households, business, industry, government bodies or public spaces

Neighbourhood: spatial and sociological living entity in which residents have close relations with each other, may share common interests (in the day-to-day management of equipment, space, etc.).

Community-based organisations: groups of social actors at the level of one or several neighbourhoods, who share an interest in pursuing activities of public interest (sport, festivities, culture, health, hygiene, environment, literacy, water). Based on individual and voluntary membership, they consist of members who are active to various degrees, and take the form of associations. The principal sociological base of development projects consists of such basic organisations (since they formally represent the residents).

Community participation: the sociological process by which residents organise themselves and become involved at the level of a living area or a neighbourhood, to improve the conditions of daily life (water, sanitation, health, education, etc.). It comprises various degrees of individual or collective involvement (financial and/or physical contributions, social and/or political commitment) at different stages of a project. Since it implies that residents set up management committees in charge of equipment, **community management** is to be considered the most operational and highest level of participation.

Community structures: broad designation for management tools and decisions in the framework of a collective project conducted by residents (supervision committees, neighbourhood committee, sector committee, community councils, etc.).

Informal housing districts: neighbourhoods that are built or occupied by their residents without legal title of ownership or without authorisation from local authorities (in shanty-towns, squats, makeshift settlements). These are not acknowledged in the legally prescribed, municipal documents and are often not serviced by local authorities.

CHAPTER 1 INTRODUCTION

1.1 Rethinking forms of production and management of the city

In the cities of the South, the urban crisis forces an ever growing number of people living in disadvantaged neighbourhoods to mobilise themselves and find their own answers to inadequate facilities and a lack of basic services. As a matter of fact, in informal housing areas, and sometimes even in inner city areas, neither the national government nor the municipalities have the resources or financial means to organise urban management and improve the living conditions of their citizens.

As "Habitat II", the Second United Nations Conference on Human Settlements, showed in 1996, a plea to the international community is inherent in both the urban crisis and in actions by residents to try and make up for the shortcomings in neighbourhoods. We have to think about new forms of government, ones that should include responsibilities shared by local authorities and society at large, to give residents better access and to allow them to take possession of their city.

How can we rely on local communities that organise themselves to improve their living conditions, and how can this be integrated in improving the effectiveness of the urban management? More and more, donors and NGOs are lending their support to neighbourhood associations, committees of residents and micro and small enterprises that are moving towards institutional decentralisation and shared competence, taking into account the urban poor, and that may also exercise some influence on local politics.

Against this backdrop, **WASTE** [by means of the Urban Waste Expertise Programme (UWEP)] and **ENDA** [through their **programme on urban et popular environmental economies (PRECEUP)**]¹ wish to promote public knowledge about experiments in the field of the environment and, more specifically, solid waste management (collection, recycling, separation, clean-up). These projects involve both research activities and pilot projects, aimed at the users along with the development associations².

In fact, all municipalities in the South find themselves confronted with management and organisational problems in the fields of sanitation and waste management:

- inability to comply with growing demands concerning waste dumps and waste collection,
- technocratic aspects in decision-making systems,
- lack of equipment, financial resources, municipal policies or legal frameworks
- as they are unable to co-operate with the micro and small enterprises, the private sector, the residents' associations and the NGOs, local authorities keep their distance, and are sometimes even fairly suspicious of them.

¹ Programme d'Economie Environnementale Urbaine et Populaire

² A first working document was drawn up by WASTE in the framework of the Urban Waste Expertise Programme on community participation in the fields of sanitation and drinking water. See Community Participation in Waste Management - UWEP Working Document 2 (7/92).

The implantation of sustainable overall policies in the field of waste management implies simultaneous action on a legal, institutional, political, social and economic front, and in the field of environmental management as well.

The Urban Waste Expertise Programme (UWEP) by WASTE, has formulated conditions for sustainable and integrated waste management:

- bringing together the private, public and community-based sectors and giving them welldefined responsibilities in the various fields, from preliminary collection to recycling waste,
- integrating specially adapted technologies into the sector (from source separation, to preliminary collection, recycling and composting), thus generating income and jobs,
- taking into account the poorest neighbourhoods, that are now untouched by urban management and lack basic services.

The organisation of waste collection with the participation of residents should therefore be understood as a dynamic and interactive process that calls upon know-how (collection techniques, fees adapted to the means of poor households). This allows for the integration of sanitary and social objectives, and makes a project financially viable while guaranteeing reliable service. At the same time, making households aware of the issue and securing their participation is more difficult in waste collection than in other sectors like drinking water supply and sanitation, to which residents tend to give greater priority. Moreover, waste management with its complex tasks must conquer cultural obstacles before its activities are integrated into genuine environmental awareness and can become part of the culture.

1.2 Objectives of the working document and selection of the districts studied

This working document seeks to explore the potential of community participation in waste management while pointing out the problems encountered, based on experiments carried out in neighbourhoods in a number of cities in the South:

- Quartier Djicoroni Para, Bamako (Mali),
- Quartier la Gueule Tapée, Dakar (Senegal)
- Quartier Médina Fass, Thiès (Senegal),
- Quartier Patte d'Oie, Ouagadougou (Burkina Faso),
- Siddharthapura Shanty Settlement, Division A, Colombo (Sri Lanka),
- Subahal Toole, Patan City (Nepal),
- Ghousia Colony, Karachi (Pakistan),
- Barangay Basak San Nicolas, Cebu City (the Philippines),
- Surat city (India).

The document summarises the case studies made by local consultants at the request of WASTE or ENDA.

All research projects cited here have to do with informal housing areas having between 1500 and 5000 residents. One of them, a district in Colombo, is in the process of being officially recognised. All these neighbourhoods have to face similar urban problems related to their poverty:

- overpopulation due to the rural exodus and the demographic explosion (households of up to 30 people in the Gueule Tapée district in Dakar),

- a volatile social situation on account of the lack of funds in the households and the high percentage of jobless, in particular among young people.

These case studies are drawn from experiments on **preliminary collection of waste**, **cleaning-up public spaces and environmental awareness-raising** carried out by community-based organisations or micro and small enterprises, sometimes in co-operation with local authorities. On average, the projects were fairly small scale, involving a single urban district most of the time. They have been selected on the basis of key criteria to help us gain an understanding of community participation:

- **highly disadvantaged districts** with low-income population, that are served poorly or not at all by the municipality in matters of waste collection and sanitation,
- **interesting or typical** projects launched in co-operation with residents, with respect to management methods, partnerships with local authorities or NGOs, and social constraints,
- having reached a sufficiently advanced stage to allow lessons to be learned about the **creation of awareness** among residents, **changes in their behaviour** in respect to public cleanliness, the environment and health matters.

All nine case studies have the same objective: to gain a better knowledge of the mechanisms of participation and community management. Consultants used similar methodologies: diagnosis of the situation with regard to waste management, interviews with various actors in the project (residents, sweepers, municipal staff, NGOs), or sometimes evaluation by the target group. Evaluation of the waste management project in Dakar was carried out in close collaboration with the local authorities, using a specially designed participatory process: drawing and filling in a sanitation map showing the ways in which the results achieved were perceived by the population.

1.3 State of the environment and situation with regard to waste collection

Most urban districts studied have no infrastructure at all in the way of sewerage or roads, and they are but rarely connected to a main supply of drinking water. The environment is therefore in a particularly poor state, and the absence of sewerage, clean water and sanitary facilities entails enormous health risks for urban dwellers. Moreover, since many districts have been built without ownership title (in *Karachi*, half the population of the district studied is composed of squatters), they are not recognised by the local authorities.

Public services, maintenance of public space, waste collection - all these facilities exhibit the same disorganisation. To a degree, and at best once or twice a week, municipal services undertake collection of refuse along public roads and take it to transfer sites, provided the latter exist at all.

Waste collection systems are totally lacking in the informal housing areas (as they are not connected to the public road system); there is almost no equipment whatsoever, and public or private dump-sites are few and far between. This encourages people to dump their refuse along the roads, outside the homes, in the courtyards, in the rivers. As a result, uncontrolled dumps - not just ugly, but unhealthy - will continue to grow in number.

Very few composting systems or waste separation at source schemes have been organised by the local authorities; the only example found was the informal door-to-door collection of bottles by children (in *Surat, India, or* in *Karachi*). Local authorities do not organise health campaigns, and only few of them provide funds for extension work and prevention projects in relation to health and the environment.



Photograph 1: In this neighbourhood, maintenance is a community project, as the sign indicates.

Source : Community Participation in Urban Solid Waste Management in Metro Manila and Metro Cebu (the Philippines) - UWEP Case Study

Of course municipalities make some broad, overall efforts to contain the proliferation of refuse and to stop the health situation from worsening.

- In *Patan City, near Kathmandu*, following a serious cholera outbreak in 1994, the local authorities recruited 650 sweepers to carry out a clean-up campaign, paid for by government funding.
- In *Colombo*, the city government goes to considerable length with regard to waste collection and recycling. 38% of the municipal budget is allocated to waste collection, basically for transfer points along public roads (containers and dustbins). Collection takes place about twice a week. Each district has a solid waste depot, that is managed by a trained engineer with overseers, their assistants and labourers. The entire collection effort is co-ordinated at city level by a superintending engineer who is working under a deputy municipal engineer.

In West Africa, municipalities faced with growing responsibilities in the field of urban management delegate the organisation of their services to micro and small enterprises, to youth groups, or neighbourhood associations, in an effort to combine decentralisation with combating under-employment of young people and improving the neighbourhoods.

- In *Dakar*, the municipal authorities entrust all refuse collection services to private operators, who in turn delegate preliminary collection jobs to micro and small enterprises (MSEs). There are 140 of such organisations in charge of sewer and street cleansing, and preliminary collection in informal housing areas; they have joined to form a federation.
- In *Bamako*, in areas without coverage by municipal services, refuse collection is directly entrusted by the municipality to the micro and small enterprises, under the terms of a municipal ordinance defining collection zones and fees. Bamako has 60 MSEs in the field of cleansing alone, only half of which are reported to be operational. They, too, have formed a federation to defend their common interests.

1.4 Structure of the report

This report focuses on the following aspects from the case studies:

- What are the different forms of community participation and who are the key actors in waste management?
- What are the technical, financial and operational methods of community management and what is the capacity of residents to manage a waste management project?
- What is the over-all impact of these projects in terms of local policies, improvement of urban districts, reduction of inequality with regard to public services, but also in relation to decentralisation?

Chapter 1 explains the concept of community and the interfaces between participation and management on the basis of the case studies and their actors. Chapters 2 and 3 take stock of management problems encountered by community actors, and stress some key points for success in waste collection. Chapter 4 broadly considers the potential and the impact of community initiatives or micro and small enterprises within the perspective of sustainable and decentralised waste management of sanitation and basic services in an urban environment. Chapter 5 deals with the institutional impact of community participation in waste management on the working relations between the various actors, and it deals with questions of scale. Chapter 6 finally, considers the conditions that strengthen participation as well as the performance of waste management services.

CHAPTER 2 APPROACH TO PARTICIPATION AND ITS ACTORS

2.1 How to define participation?

The case studies reflect the great variety in forms of participation and in their results in terms of awareness among residents. How broadly should general concepts such as "mobilisation", "awareness" and "participation" be understood? Is there a common ground between the information given to residents, effective participation in decision-making on improving the neighbourhood and the payment of financial contributions?

Community participation comes **neither automatically nor spontaneously**. It must be understood as a collective system of different types of behaviour, leading back to different perceptions, representations and practices.

2.1.1 Participation and the concept of interest

On the one hand, participation coincides almost completely with the concept of **interest**. In the case of urban dwellers participating in a clean-up campaign, this means that they are contributing to a collective action of common interest to their neighbourhood; at the same time, however, it means that they join together in order to gain access to financial resources (micro-credits, support from NGOs or donors) or even to get jobs.

The dynamics of participation are thus dependent on the concept of interest. The evaluation of projects on community waste management in *Ouagadougou*, conducted by the NGO CREPA, shows a great difference in numbers of participating residents at the start of a maintenance campaign, when they had hopes of being recruited as cart operators and sweepers, and once it was in full operation, when fewer people were enthusiastic as they no longer had any prospects of employment within the district.

In the same sense, when clean-up operations in *Patan City* were launched, strong motivation was evident among the street sweepers who were paid by the metropolitan council.

The concept of collective or individual interest plays a very strong role in the case of micro and small enterprises in the field of waste collection. There is no question about it: unemployed young people exhibited a great interest in organising themselves and even to create a MSE in order to become eligible to work in the public works sector, as shown in the cases of Senegal and Mali. However, they showed less interest in becoming organised in order to achieve **social objectives** in their community, related to environmental protection. In other words, community action in favour of a project requires a variety of steps (setting-up a micro-activity, founding an association) for which people have to be brought together, but this does not necessarily imply that **objectives are shared** with the rest of the neighbourhood.

City councils often consider participation to be a means, or even a tool, on which to found a project with a sanitation or economic objective. In that case, participation has become an instrument for the organisation of an environmental waste project. On the other hand, participation may also be seen as having a genuine social and sociological objective, aimed at instituting a democratic debate on a project for urban development and leading to genuinely decentralised urban management.

2.1.2 Management or participation?

Each and every attempt at analysing what community participation is all about implies that **it may be divided** into community **awareness**, **education and management**, and suggests that there is a clear understanding of the social scope of action.

In most case studies, participation has to do with normal, **everyday actions** of residents at a domestic level (house-cleaning, cleanliness and food), that often remain in the background or are not taken into account in assessing a collective sanitary action nor, generally speaking, considered in the formal definition of the concept of participation.

In fact, the daily sweeping around the homes carried out by women may be considered a practice of responsibility as part of a cycle of sanitary improvement.

Conversely, residents who are taking part in an activity within their neighbourhood may be considered to be carrying out a **conventional** task, which for that reason is not perceived in a broader social scope. This may be the case when households are asked for **financial participation**: in the absence of any such civil or political traditions, these payments may be viewed merely as tax to be paid without residents taking any form of responsibility and without sanitary impact.

In many cases, it is hard to define the interfaces between participation, **feeling a sense of responsibility** and community **management**. On the one hand, the tasks attributed to residents at various stages should be defined more precisely. On the other hand, the categories of sociological actors included in the concepts of "community" and "neighbourhood" are very mixed indeed. Residents, micro and small enterprises (MSEs) and sweepers do not feel the same need, nor do they have the same interest in participating in collective action.

Generally speaking, the case studies have shown that **residents do not take part at each and every stage** of a waste collection project. Conversely, **managing a service is only one of many aspects** in a community service project.

Some forms of participation exist **regardless of management tools** (MSEs, district committees, etc.). For example, people (particularly women, as in Bamako or Cebu City) spontaneously take initiatives for clean-up activities, health care and sanitary awareness that are not carried out in any formal structural framework. On the other hand, some micro and small enterprises start their own preliminary refuse collection without allowing any means of control to residents, since no social mechanism has been created for consultation on the performance of the MSEs (as in MSE "Les Linguères" in Dakar).

The cases studied show that, if residents do not always take an active part in the development of waste collection projects - deciding on fees to be paid for the services, on collection methods and technical choices - they are always induced to express their opinion, as responsible users, in a **pragmatic way**. as the service gets under way.

2.1.3 Participation and social objectives

In the districts, various management tools, with more or less economic or social objectives (development committees, residents' associations, micro and small enterprises) are already in existence. However, it is not always easy to determine whether they are geared to community or general interest. Even if an enterprise (recycling centre, workshop) created by young

people in the framework of an environmental programme should become part of the local economy or daily life, it remains to be seen whether it is a matter of local initiative. Should a MSE set up for waste collection or the clean-up of public spaces be considered part of the informal economy or is it no more than a service operator like any other neighbourhood undertaking?

The case of micro and small enterprises (MSEs)

In Mali and Senegal, MSEs are to be found in all realms of public life concerning the environment or urban management (preliminary waste collection, sanitation, maintenance of public spaces, supply of drinking water, building infrastructures). MSEs have come into being for two reasons:

- young people are looking for their own ways to acquire employment or to earn a proper living (in the face of the meagre prospects offered by the public and private sectors in their country),
- while also contributing to the improvement of their neighbourhoods by means of activities focusing on urban management.

Should micro and small enterprises that provide waste collection services to the public be viewed as **community actors**? Yes indeed, they are run by citizens, by residents living in the informal housing areas where they deploy their activities. In most cases, they belong to development associations and are committed to the improvement of living conditions.

They undertake activities of a general interest with the support of public bodies (donors, NGOs, local authorities, government agencies like AGETIPE), on whom they are dependent. In the trend towards decentralisation, they organise themselves so as to be able to tender for public contracts and to receive project management. Although they are legally **registered companies**, albeit in most cases with limited financial means, they may be viewed as belonging to the **local**, or even the informal economy.

2.2 Significance and degrees of participation

Statements about participation, more often made in a formal rather than a popular sense, are not always confirmed in practice. To evaluate projects in terms of residents' participation, it is best to define degrees of participation, to differentiate between stages of participation, starting with the mobilisation of residents, through representing them, up to creating management structures.

Participation of the community in a neighbourhood activity neighbourhood should be considered as a **voluntary act of civic responsibility**, a commitment by the residents to one or several stages of a collective project, (control, awareness-raising, providing information, promoting, decision-making), although the actual tasks **may not always be visible**. Waste collection or clean-up actions are most effective when residents gain genuine control over their content and their social or sanitary scope; that is when they take an active part in informing people, monitoring the service and/or raising their awareness at the neighbourhood level.

To the extent that participation is a **collective and individual commitment** by citizens, it may not be considered to be a **coercive** process. In numerous cases, however - for instance in Patan City and Karachi - residents are under obligation or even duress to comply with the rules on waste collection imposed by NGOs and local authorities. They comply to avoid being

rebuked (people are reprimanded in Karachi, have to pay fines, or are even discriminated against and isolated), so as to escape from the social pressure of their neighbours and local authorities.

As this form of participation is imposed on residents by **norms, rules** or the law (fines, penalties, punishment in the event of non-compliance with the rules on cleanliness), they may still be deemed responsible if they contribute more or less spontaneously to the improvement of their environment, so that such actions remain without effect. However, since participation is referring to the concepts of empowerment, self-control and a sense of responsibility, it cannot be reduced solely to a prescriptive, conventional and authoritarian process.

On the basis of case studies, different degrees of participation may be classified:

- □ Making citizens as users at a neighbourhood level **individually responsible**. This involves everyday domestic actions for the improvement of the immediate surroundings: cleaning around homes, using the primary waste collection points correctly, practising source separation in dustbins, using the drinking water supply properly, spontaneously exchanging information in the neighbourhood on health risks and cleanliness of public spaces
- □ Making people **collectively responsible** and getting them to participate in more or less organised activities within the district:
- clean-up campaigns, sweeping of public spaces, participation in meetings with associations and local authorities,
- formal participation in awareness-raising actions as co-ordinators, voluntary sweepers, community health workers, area supervisors,
- participation in door-to-door actions or campaigns in public spaces
- **D** Making **material or financial contributions** to activities:
- by making equipment (dustbins, containers) and physically participating in services (cart operators sweepers, etc.),
- by regular payment of fees for services towards improving the environment (waste collection, funding of facilities for drinking water supplies and health care).
- **Actively participating in formulating the project**:
- participating in meetings; expressing their opinion on choices and propositions made by the NGO, the city council, the district committee,
- closely following the project and its statement of accounts.
- Assuming responsibilities in community management. This is the highest level of participation among residents. They may:
- become committee members and be elected representatives of their district,
- commit themselves morally and even financially as members of a committee of residents or a public health committee,
- become involved in controlling the project and be answerable to the residents for decisions taken.

2.3 Contexts and factors that favour participation

2.3.1 Role of NGOs in relation to project leaders

The mobilisation of residents and the acceptability of waste collection projects vary according to the situation. Generally speaking, participation and mobilisation depend on the residents' comprehension of a project, and therefore on the way it is **formulated** by the NGO, the community-based associations or the local authorities.

The presence of an NGO and the voluntary involvement of political leaders and communitybased associations in most cases enables people to clearly express their needs and to formulate requests for facilities, which thus far had remained latent or implicit.

- In Karachi, a voluntary sanitary programme being launched in the informal housing area Ghousia Colony by the Association for the Protection of the Environment (APE), rapidly enjoyed an enthusiastic welcome from residents thanks to a well targeted and active awareness-raising campaign.

The overall participation structure was orchestrated by APE, with the support of residents' committees and ethnic leaders, particularly at the start of the project: community-based groups and opportunities for public debate were created, voluntary community health workers were recruited and trained, sweepers were recruited, and area surveillance and management committees were set up.

- The same goes for Ouagadougou where the NGO (Centre Régional pour l'Eau Potable et l'Assainissement à faible coût - CREPA) strongly supported the Bao Menégré Association in its start-up period (training collection workers, forming the committee of wise men, holding users' meetings for information purposes, etc.). In other cases, however, the NGO may play a very reserved role at the mobilisation stage, not exercising its influence on the formation of a dynamic structure. This is the situation in Bamako, where NGO ALPLHALOG merely lends technical and financial support to the Faso Kanu MSE.

Experiments on waste management may receive a considerable boost from external partners like local authorities. This is what happened in Dakar, in the Gueule Tapée district (with 7000 residents) where the MSE was set up in the context of municipal policies, without any efforts from the people.

At any rate, participation in a project and empowerment of the population are facilitated by close relationships with the NGO, associations, political leaders, but above all by the presence of a **culture of public debate**, of dialogue and collective means of expression. **Political discontinuity**, lack of a democratic framework and electoral changes bring about a certain mistrust of community activities among urban dwellers. In Karachi, a change in government meant the disappearance of a political party that used to be much involved in the clean-up campaigns; it therefore took a considerable length of time before the programme was resumed by the NGO and the new local authorities.

Broadly speaking, the lack of basic services and the fact that informal housing areas are not recognised by local authorities is a major argument for the mobilisation of residents in order to gain access to a minimum of facilities (water supplies, sanitation, waste collection and

electricity). Community projects on a district level, supported by residents, prove to be a popular way of pointing out the inadequacies of local authorities, to make up for their failures and to set up private means of management. This happened in *Bamako* and *Ouagadougou*, where MSEs publicly announced their distrust of politics.

2.3.2 Impact of projects on land-ownership regulation

In certain projects, there are close links between **the regulation of land-ownership and public sanitation**. Driven by **fear of being evicted, pursuit of land-ownership** and aspiring at recognition by local authorities, the residents of informal housing zones without proper administration bring to the fore formal projects in which public health and the creation of basic infrastructures tend to become central issues.

The land regulation projects allow them to show their competence in organising themselves, in creating management structures, or even community investment mechanisms, to gain knowledge of a process of urban management and collective decision-making. In Karachi, the regulation of the district has reinforced **social cohesion** between residents, particularly in overcoming ethnic divisions; they have shown local authorities their organising capacities. Moreover, it has allowed the waste collection project to be carried to completion, with the support of the local authorities.

The organisation of a kind of community waste management service is therefore linked to a desire for recognition of land-ownership title and urban status. Cleanliness and public health, as well as access to drinking water supplies are **used as arguments in support of claims** and aimed at shaking off their informal status. At the same time, they are the **direct result** of a land regulation procedure that often allows the creation of community management structures (health care funds, water supplies, waste collection, etc.).

- In *Colombo*, from 1989 onwards, the national "Million Houses Program" aimed at 120 underprivileged areas has enabled residents to organise themselves collectively in order to become the official owners of their plots and to acquire infrastructure. The community development councils, representing the residents, are responsible for formulating action plans, co-ordinating town planning decisions and fund-raising. In the Siddharthapura district, the community development councils, created with a view to land regulation, have proved to be a strong basis for setting up a waste management strategy. Regulation and access to ownership title have allowed urban dwellers to pay more attention to hygiene problems.

2.4 Key actors in community projects on waste management

2.4.1 The roles of traditional and informal leaders in new initiatives

Traditional leaders are the wise men, the notables, district leaders and religious figures. They play an important role in the success of an activity and act as mediators between residents and community structures. They benefit from their image of respectability due to their social rank (their age and their religious status) and they are vested with traditional powers. Being well acquainted with residents and younger people at a neighbourhood level, they often have control over social life, solve problems, centralise requests and approach the local authorities. They may also become personally involved in the activities, providing associations with backing and lending them moral support. They act as arbiters in conflicts between residents, associations, micro-enterprises and local authorities.

- In *the Gueule Tapée area* in *Dakar*, the wise men regularly act as intermediaries between the MSE "Les Linguères" and households in settling disputes (unsatisfactory service, non-payment of contributions by households, etc.). In *the Patte d'Oie area* in *Ouagadougou*, the women MSE Bao Manégré were compelled to ask the imams to intervene on their behalf before they were accepted by residents. In *Karachi*, the muggadam (head-men) regularly participate in clean-up campaigns.

Social or informal leaders (opinion leaders, teachers, leading politicians) are more involved at the **management** level, although they may have a certain influence on a neighbourhood level. They often help to initiate projects, setting-up committees and clean-up campaigns.

- In *Karachi*, the political leaders of the MQM-party conducted the urban regulation project for people threatened with eviction, thereby gaining their confidence. Then they became involved in the waste collection programme.

- In *Ouagadougou*, two young district leaders took the waste project in hand, with the support of the church.

- In San Nicolas Batak in *Cebu City*, the political leaders form nowadays the local council ("barangay"). Back in 1993, they mobilised themselves on environmental matters, and for the representation of underprivileged people in local decision-making. The local council, as the political and administrative authority in the district, is now strongly involved in the clean-up campaign, conducted jointly with the MSEs.

In general terms, the individual commitment of the leaders enables them to convey collective demands that have so far remained unexpressed. When individual leadership is assimilated to a personal political project, however, it may well curb the residents' participation. This happened in *Ouagadougou*, where the waste collection MSE was viewed with quite some derision at first, because of the political allegiance of its leaders.



Photograph 2: Three community wardens are full-time waste collection employees. Source : Community Participation in Urban Solid Waste Management in Metro Manila and Metro Cebu (the Philippines) - UWEP Case study

2.4.2 The roles played by young people

Young people are reported to be the motors behind projects. Since they know their district and attach great importance to sanitation and health care issues, they long for a change and set themselves apart from political structures or traditional meeting places in order to organise their own community projects. They act very efficiently in their tasks as community health workers, communicating with residents and participating as voluntary workers in clean-up campaigns.

The MSEs and neighbourhood associations are often composed of young people, who are unemployed and thus available for voluntary activities and unpaid work. Participation in a collective action represents an opportunity to demonstrate their abilities, to put them in the service of a district or a sanitary project and hopefully to get jobs as cart operators, community health workers, educators, sweepers, etc. In *Ouagadougou*, the founding of the Bao Manégré Association gathered 150 young people, attracted by job prospects.

2.4.3 The roles played by women in community participation

Women are the first ones to be affected by deterioration in the environment and the urban framework. They bear the brunt of the daily load of unhealthy situations on a domestic level: infectious diseases and childhood diseases, lack of clean water, accumulating waste, lack of sanitation. Since they are responsible for the maintenance of domestic space and the health of children, they are endowed with a sense of civic responsibility and a desire to improve their living conditions and health situation.

This is the reason for their strong involvement in solidarity networks, where they seek collective solutions for improving the environment. They are found at the root of many initiatives on health care, supply of drinking water or awareness about environmental sanitation, and they exert pressure on the authorities to obtain representation for the most underprivileged people.

- In *Cebu City*, two-thirds of the members of the Basak Urban Poor Co-ordinating Council (BUCCP) are women. This committee is composed of associations and works in liaison with local authorities on the clean-up of public spaces and waste collection. The environmental surveillance committees in the "sitios" are mainly composed of women, too.

However, even if they are becoming more involved in public spheres, women face numerous difficulties in gaining better representation, having their advice listened to and becoming involved in decision-making: they are up against religious barriers, social hierarchies and the weight of traditions.

2.5 The concept of scale in participation and community management

Each project, whether it is about waste collection or other basic urban services, faces questions of the scale on which to operate. When setting up waste collection services, **the neighbourhood scale** (housing units, streets, mosques, markets and squares) definitely appears to be **the most relevant space for awareness-raising** and the exchange of information. As a matter of fact, the neighbourhood is the natural space where residents, particularly women, express themselves and meet each other. It is also the space with which opinion leaders, district leaders and associations can identify.

When the different levels of operation - between **domestic space**, **neighbourhood and city** - have been well structured and identified, the participatory potential may be exploited to the full.

- In *Colombo*, waste management is based on a clear division of roles with residents being represented at different levels: small groups and core groups at the neighbourhood level, and the community development council representing the neighbourhood to the NGOs and the partners.

- In *Cebu City*, the campaign on public hygiene and the clean-up of public spaces is strongly rooted at the level of "sitios" (blocks), under the supervision of voluntary members of the Basak Urban Poor Co-ordinating Council for the Alleviation of Poverty in collaboration with the Barangay authorities.

But the operators' **scale of work** does not necessarily coincide with **the sociological scale of participation** in the community. When operators work on a large scale (in several districts), they may be out of touch with demands or insufficiently aware of neighbourhood practices. As it is difficult for them to identify the households, they have scarcely any influence on people to improve their empowerment and information on the collection service.

- For example, the MSE working in *Dakar (in the Gueule Tapée area)* has been identified and recognised as a management structure by the municipal authorities; its presence is hardly noticed, however, at the neighbourhood level; this is due to the total absence of structured

communication, follow-up and information exchange between the MSE and the residents (control committee, environmental sanitation committee, management committee).

In this case, **the lack of participatory and management structures** and the total absence of co-ordination on information campaigns are detrimental to the quality of the waste collection service, and make its empowerment extremely difficult. Since awareness about waste is not stimulated, residents have difficulty in identifying responsibilities, in showing an interest in the follow-up of the service and its durability.

- In *Ouagadougou*, the awareness committees set up for the clean-up campaign supported by notables have no operational means of support (follow-up of the service, payment of fees) beyond the provincial awareness committee, whereas the latter is considered to be insufficiently geared to the neighbourhood scale.

In attempts to determine the scale of project intervention and participation, we come back to the strategies of operators, NGOs, local authorities, micro and small enterprises and associations. In some cases, this is a matter of **firmly establishing a participatory structure** by means of a neighbourhood committee on environmental sanitation, civic responsibility and management, that may extend its scope of action to basic services or services in the waste sector, and will thus eventually initiate more projects. This is what happened, for example, in the case of the *MSEs in Thiès*: nowadays, their activities extend over the entire sector of waste collection, from source separation to composting, market gardens, and even into health care and literacy projects. Most of the projects give support to structures **with restricted activities** (waste collection) that may be replicated on a city scale (*as is the case* in *Karachi*, where the programme conducted at Ghousia Colony is about to be extended to the entire city).

CHAPTER 3 A COMMUNITY MANAGEMENT APPROACH IN DEALING WITH WASTE

3.1 Different types of management structures

Two types of management structures are distinguished:

- private management, that entrusts waste collection to private companies or to micro and small enterprises,
- **community** management by **community-based organisations** (associations, development committees) that supervise and manage the collection service in consultation with the local authorities and in which residents take an active part.

3.1.1 A case involving private management: micro and small enterprises



Photograph 3: An MSE in Dakar.

Source: Community Participation in Urban Solid Waste Management in Dakar (Senegal) - UWEP Case study In *Surat (India)*, the town council privatised half of the services for the collection and transport of waste, surrounding these new companies with strict conditions and control measures (an obligation to separate refuse, penalties if the collection was carried out poorly or late). The council also set requirements for residents in respect of sanitary conditions and environmental safeguards.

In *Dakar*, "Les Linguères" is a community-based organisation acting as an enterprise (MSE) that provides its services to a semi-public agency (AGETIPE) set up by government with a view to decentralising urban services and combating underemployment. The MSE has concluded a contract with AGETIPE and the local authorities of Dakar. The latter designates the collection zones, the primary collection routes, the collection days and the rates (by means of municipal ordinance). Private companies perform the secondary collection (by public road to controlled dumpsites).

In *Bamako*, the Faso Kanu MSE, serving 4000 residents, offers its services to the municipality that issues a permit to operate. The MSE has a management committee with 2 to 7 members for technical or administrative problems. **A committee of wise men** was set up for each urban sector, composed of 6 members representing the residents and chosen by the chief of the quarter. He is the intermediary between the MSE and the local population. The sector committees are linked in a co-ordinating committee that also includes municipal advisers. The MSE has an administrative council that meets regularly to evaluate waste handling and to draw up annual accounts.

3.1.2 A case involving co-operation between community structures and local authorities

This case refers to a partnership between the local authorities or the state and communitybased organisations (volunteer committees of residents dealing with refuse). The authorities are stakeholders in waste collection supported or supervised by MSEs: the latter operate a refuse collection service in consultation with the population.

- At *Basak San Nicolas, a district of Cebu City (the Philippines)*, the municipal council offers incentives and has adopted legal measures for the protection of the environment: under the pressure of environmental NGOs, a municipal ordinance for cleaning-up public spaces came into being. The Basak Urban Poor Co-ordinating Council (BUCCP), composed of 32 associations at neighbourhood (barangay) level, co-ordinates the awareness campaign for the cleansing programme, that is led by volunteers.

Inspection committees are formed in all sectors composing the barangay. They are monitoring compliance with the ordinance on the matter of refuse dumps, they inform residents, identify owners who are in violation of the law and draw up reports for the BUPCC. The inspection committees (barangay composed of 6 elected members) are recognised by the local authorities of the barangay. The barangay authorities oversee the process, making available inspectors who can issue fines to residents who violate the law by not respecting the municipal ordinance on refuse dumps. Volunteers may obtain information on households and businesses from the local health service. Waste is collected in waste trucks staffed by employees paid by the local authorities.

- In *Colombo*, a major national programme on the environment and improving of living conditions led to the creation of **300 community development councils (CDCs)** in working

class districts that are composed of community-based organisations. The CDCs are the community agents for refuse collection, the construction of infrastructure and the mobilisation of financial resources. They set up awareness programmes and action plans after these have been discussed with the municipal council. They supervise the **core groups and small groups** composed of selected residents who are the representatives of their neighbourhood.

The regularity of the service is in the hands of the small groups that comprise 13 households for each city block and they appoint a representative from their midst. These representatives form a core group committee where problems of sanitation (co-ordination with council services, long-term plan of action for the cleanliness of the neighbourhood, prevention) are discussed. At the city district level, the 6-member community development council represents the municipality and the NGOs.

The core groups, that represent residents, therefore have important responsibilities. The local council provides a free collection service from storage points along the public roads and monitors the environmental programme.

- An integral pilot project (including waste management) is taking place in the neighbourhood of *Subahal* in *Patan City* in the context of the "Conservation of the City" programme. The project makes a realistic division of responsibilities and decision-making among the city's Department of Community Development, the development committees of the neighbourhood (composed of residents and responsible for mobilising the community and supervising the clean-up campaign) and the self-help group, consisting of 13 workers who clean public spaces and collect refuse.



Photograph 4 : Clean-up of the neighbourhood by the Patan City MSE.

Source : Community Participation in Urban Solid Waste Management in Patan City (Nepal) - UWEP Case study

- In *Karachi*, the clean-up programme is based on strong community participation. Management committees have been established, composed of members from different ethnic groups; paid sweepers are supervised by lane-managers and there is a strong volunteer force of residents who work on awareness-raising.

3.2 Organisation of the waste collection services

3.2.1 Waste collection

In general, community operators or micro-entrepreneurs are responsible for the preliminary collection of refuse from dwellings and for transporting it to the municipal storage areas (where it is kept in containers or dustbins). The cart operators are spread out over the metropolitan area and are responsible for fairly large collection zones, some of them fixed by the metropolitan council. If the collection zones are big, means are available to help them locate sites: in *Ouagadougou*, cart operators have a cadastral survey map showing each house and each building, so that they can find their way more readily. In *Bamako*, the house of a subscriber to the collection service is identified by a cross on the door.

The preliminary collection is generally done by hand by workers using carts furnished by the NGOs. The community operators do not have vehicles (trucks, tractors) and the secondary roads do not offer easy access to motorised vehicles.

- In *Colombo*, households are asked to gather their domestic refuse in dustbins until the municipal collectors come by (in trucks). Committees of residents (small groups and core groups) are responsible for the co-ordination of the service.

3.2.2 Cleaning-up public spaces

Public spaces are kept clean by hand by the sweepers or by teams of cart operators who do this work alongside the actual collection:

- In *Thiès (Senegal)*, the MSEs divide tasks between men and women: the women sweep up refuse and dispose of it in refuse bins, while the men are responsible for emptying them into the municipal dump trucks. The preliminary collection here is well geared to the municipal service, which synchronises its pick-up times with the cart operators.

- In *Patan City*, the young workers of the self-help group carry baskets when they clean the streets; they store the waste in municipal dustbins until the day when these are emptied by the vehicles of the local council (once a week). Residents are alerted to their arrival by means of a bell, and it is the residents themselves who load the domestic waste into the trucks.

- In *Bamako*, the MSE has made arrangements with the municipal council to sweep the market on the evening, after it is closed. It is the women who are responsible for sweeping.

3.2.3 Integrated management

Projects with integrated waste management by district organisations are rare.

- In *Thiès*, with the support of ENDA GRAF, fifteen MSEs jointly co-ordinate an experimental recycling programme, which includes source separation by young people, composting activities and urban agriculture, workplaces where plastics are recycled and cloth sacks are produced, and a knitting course for young girls.

Kitchen gardens are run by 65 small farmers, who have been trained in composting methods. Some of the refuse left from the sales of vegetables is returned to the small farmers and to the MSEs, which have set up a credit fund. Thanks to the integrated approach, the project releases financial resources (compost, recycling) that are reinvested to finance sanitation facilities (cesspits).

3.3 Methods of monitoring the service provided and the financial aspects

There are different ways to co-ordinate and monitor the cart operators and sweepers. The members of community-based organisations may voluntarily take charge of monitoring the service (as is the case with the Watsen Committee in *Cebu City* and members of the core group in *Colombo*). They may also recruit paid overseers for the collection and cleansing zones. An overseer notes down complaints from households, responds to their requests and is responsible for mediation between cart operators and residents in the event of conflicts. Overseers have authority over the sweepers or cart operators and are sometimes responsible for collecting fees (*MSE* in *Bamako*).

- In *Karachi*, the sweepers recruited by the metropolitan council are supervised by an overseer known as a **lane manager**, who lives in the area. He reports on the quality of the service to a **management committee**, consisting of the municipal sanitary inspector, representatives from each ethnic group and the muqaddam or head-man. The area for which the sweepers and the lane manager are responsible is very small (2 or 3 rows of houses) to allow him to monitor the service in great detail and to guarantee that the cleaning-up is done well. Sweepers start their shifts with the house of their lane manager, who registers their hours and keeps an eye on them all day. Most of the lane-managers are women.

3.3.1 Collecting fees from households

The payment of rates for the collection services is a key aspect of these facilities, because it contributes to the financial balance and thus the durability and autonomy of the management structures (MSEs or committees of residents). But it also provides information on the level of motivation of households and their sense of public duty when it comes to hygiene, cleanliness and respect for their environment.

Generally speaking, around 50 to 70 % of the households subscribing to the service actually pay their contributions. The financial balance of the facilities and more particularly, the cart operators' salaries and their motivation, are dependent on the collection of fees from users. All the case studies show that residents do not pay their fees spontaneously. Moreover, unlike other public utilities such as water, payment for which is immediate and mandatory and is an integral part of domestic life, payment for this service is not required at each collection round.

Acceptance of the fact that the service is not free of charge and the rate of payment by households depend directly on their level of satisfaction and their interest. If residents understand the sanitary objectives of collection and its public usefulness, and if they are satisfied with the service, they will be willing to pay their contributions.

- In *Dakar*, users do not pay their fees for preliminary collection to the MSEs, but to the municipal council as part of the local taxes owed by all landowners and tenants. **Households are therefore unable to identify the costs of this service**. Here the fiscal system is in contradiction with the objectives of "ownership" of the waste service and its viability. It is difficult for the residents to pick out the cart operators (who have been absorbed into the municipal staff) and so they are less motivated to monitor, assess and promote, as well as to pay for, a service they view as a public utility.

- In *Bamako*, the cost of the service is fixed by the municipal council (750F CFA per month) and the MSE considers the amount to be insufficient.

There are ways to optimise the profitability of this service. Incentive measures include **community workers who go from door to door**, not only to collect fees but more particularly to build up relationships with the households. They note down complaints and requests *(Ouagadougou)*.

Fee collection also depends on **geographic scope**: cart operators and sweepers must be able to identify the households.

- In *Ouagadougou*, CREPA feels that the awareness committee that collects the rates is not close enough to the neighbourhood level of operation, is not well organised and is poorly motivated: this leads to delays in the collection of contributions.

- Conversely, in *Karachi*, it is the lane manager who is in charge of the sweepers who sees to the collection of rates; he can easily put pressure on households. He/she also pays the sweepers.

3.3.2 Handling and administration of revenues

Fee payments are not always properly registered: in *Ouagadougou*, the overseer distributes invoices at the end of the month, after which attendants mark the houses that have paid their monthly fees with a cross which is legible for the collection workers. However, often these workers have some difficulty refusing to remove waste from debtor households. Special arrangements may be made with households such as:

- longer terms of payment (the MSE in *Bamako* allows three months),
- adjusted rates for households with special problems (invalids, single women),
- payment is made each time the sweepers come (Karachi).

To sum up, there are several ways of dealing with the administration and with handling the revenues. Accounts are more or less well controlled, invoices are issued more or less well and it is difficult to keep track of the exact number of subscribers. The MSEs are not always in a position, or do not have the bookkeeping or administrative personnel, to monitor this aspect.

On the other hand, efforts can be made to rationalise the administration:

- a precise count can be made of all subscribers with the help of the *land registry records* (*MSE Bao Manégré* in *Ouagadougou*) to locate all the dwellings served by the carts,
- premiums can be awarded to attendants who collect contributions, and when they succeed in collecting 90% of the amount due from subscribers (*Ouagadougou*),
- collection workers can be awarded a financial interest (a premium) if they find ways of organising the service better.

3.3.3 Reinvesting revenues and economic dynamics

Preliminary waste collection and cleaning-up of public spaces do not require major investments (unlike public utilities such as water supply and sanitation) and in the end, their administration is not very complex. Equipment is usually allocated by NGOs or the local council; the organisations do not require investments, except in Ouagadougou where the MSE has contracted a loan for the acquisition of a site intended for making compost.

But in the end, are not the collection services very lucrative: **they are scarcely profit-making** and they generate few earnings or productive resources. If any profits are made, they are allocated for the maintenance of the equipment (*Karachi*), the care of the animals or the creation of saving funds (*MSE* in *Thiès*).

3.3.4 Social status and behaviour of sweepers and cart operators

Sweepers and cart operators (men or women) are the key figures of the waste collection service because they are in everyday contact with residents and exercise social control in their districts: they make sure neighbourhoods are kept clean and settle conflicts. They are also in direct contact with the people responsible in the organisations (civic committees, management committees, administrative committees). But they are not always recognised or accepted by society at large. Anthropological or religious ideas about purity sometimes form an obstacle to their social recognition, particularly in India where sweepers are felt to be inferior. Moreover, they are not always respected by their superiors (superintendents or overseers), who feel they have more noble duties. Their status varies with the type of the community projects.

- They may be unpaid volunteers, motivated by a collective project. This is the case for the sweepers belonging to the self-help group in *Patan City*,
- They may be employed by the authorities (*Cebu City*) or the MSEs and receive a tiny salary in exchange for very long working days.
- In the MSEs in Dakar and Ouagadougou the sweepers are de facto partners in decisionmaking as they are member of the enterprises rather than employees.

3.4 Position of women and gender relations in management

What degree of responsibility is held by women in the management organisations that handle the preliminary collection of refuse or the cleansing of public spaces? Are there discriminatory practices between men and women? All the projects concur in proclaiming the vitality and the motivation of women who act as cart-operators with respect to the difficulty of the tasks: handling refuse, covering long distances, working hours over and above the time spent on their domestic tasks.

Female employees of the collection services generally have difficult family circumstances and perhaps difficulties in the community as well, so they must use **survival strategies**. They see themselves obliged to take a job outside their home that can bring in an income for their family. For example, 4 women in 10 are divorced in *the MSE "Les Linguères"* in *Dakar*. They are thus less hesitant than men when it comes to accepting a job which is not esteemed highly (cart-operators, sweepers) or which is merely informal.

The behaviour of residents can be **discriminatory** towards women cart-operators by paying them less respect than the men: in *Ouagadougou*, the female members of the MSE, looked down on by the population, have only been able to gain credibility thanks to the intervention of wise men and notables.

Discrimination is also manifest **in the division of roles within the MSEs**. Because they have little education, and in fact are often illiterate, women carry out duties that do nothing to improve their status (pushing a cart). They are assigned work belonging to the domestic and private sphere (cleaning). Business dealings and public decisions (bookkeeping, management) remain male prerogatives. **The women are not really involved in decisions** about the management of the service they provide because they are not always available (on account of their double working day), but more particularly because they lack proper training. Their poor educational background limits their access to key responsibilities (treasurer or responsible chairperson of the management committee of the MSE).



Photograph 5: Sweepers in Dakar.

Source : Community Participation in Urban Solid Waste Management in Dakar (Senegal) - UWEP Case study

Issues and results of community participation in the urban environment, ENDA / WASTE, March 1999

Being in charge of the family budget at the domestic level, they are concerned about the utilisation of the funds, the expenditures and the financial transparency of the projects. They demand the right to appropriate training (*Ouagadougou, Bamako*). In a good many cases they put pressure on project executives to grant them genuine involvement in decision-making process to the quality of the projects and especially to aspects giving people responsibilities in respect of environmental waste management. In Ouagadougou, an evaluation by the MSE shows there has been a change in management methods since women have been involved in it.

This is offset by the fact that, in all the projects, women are **partners when it comes to awareness-raising and motivating others**, thanks to their pragmatic knowledge of the environment, the sanitation issues involved and their ability to settle conflicts in the neighbourhood. In *Cebu City*, two-thirds of the members of the public hygiene surveillance teams set up by community organisations are women.

3.5 Methods of resident participation in management, methods of awareness-raising

The degree of acceptance and espousal of the collection services and of their sanitation objectives depends on **relationships established** by community operators with residents at the start-up and awareness-raising stage and when the service is monitored and evaluated. Residents prove to be involved in different ways when a service is managed by a MSE, a development committee or a private operator. In the case of micro and small enterprises there is no **functional and direct relationship** between management committee and users. This thrusts the users into the position of taxpayers: they pay for a service, but they do not have a direct role in its control and management, even if they are in contact with cart operators or community workers.

Conversely, hygienic behaviour depends on voluntary participation of residents at the start-up stage and the degree of awareness, the organisation and monitoring of the proper functioning of the service.

- In *Patan City*, self-help groups composed of community workers (young trainees) are in charge of organising and motivating residents who have a direct interest in the clean-up campaign.

- In *Cebu City*, volunteer overseers assigned to each "sitio" (zone), who come from the community-based organisations, are trained by the BUPCC (Basak Urban Poor Co-ordinating Council) and they monitor local compliance with municipal orders on refuse and respect for the environment.

Although they do not have the authority to issue fines to residents who do not observe the municipal ordinance (prohibiting the dumping of refuse in unauthorised areas), they carry out awareness work in the districts. Municipal wardens hand out fines.

In all cases, residents who take part in **awareness** work constitute the **primary line of communication** and of information provision to give publicity to the public sanitation issues involved in refuse collection.

As the examples show, residents can play an effective role in **ensuring compliance with municipal ordinances** on health and hygiene, in passing on information, in influencing hesitant neighbours, in exercising collective and individual discipline. Once the objectives have been understood, residents engage in cleansing the streets and surrounding areas of their own volition. They watch over the neighbourhood, reprimand people and even report them to the authorities, but also pressurise the authorities in order to obtain public sanitation facilities or to alter the collection zones (*as* in *Colombo*).

As users paying for a service, residents are concerned about its quality; they take action towards the MSEs and committees to point out problems, even if they are not necessarily interested in the aspect of management.

The degree of acceptance of the service and of its cost depends directly on the methods of awareness raising and organisation that play a key role in learning hygienic and cultureappropriate behaviour. **The near vicinity is in fact the scale for awareness raising,** the place where clean up and awareness campaigns must take place. When they are held in schools, in markets and public spaces, they are more effective because the results are directly visible (the environment is cleaner), but especially because they appeal to each resident to offer his or her voluntary participation. Moreover, they are perceived as aspects of social life and are integrated in the form of domestic and public events.

Incentive actions can be targeted: this is the case in campaigns to motivate residents to cleanliness in and around the house, oral messages in mosques, markets, health centres, even tree plantings (*Cebu City*).

In *Karachi*, a large-scale awareness-raising programme has been implemented, **adapted to the sociological rhythm of life** in a context of ethnic conflict. Following the failure of a previous municipal clean-up programme, the Association for Protection of the Environment (APE) has managed to breathe new life into a latent community process, by adapting its stages to the development cycle of projects, ranging from the mobilisation of residents to the training of volunteers.

By relying on religious leaders and the eldest residents, the programme has succeeded in reinforcing social cohesion in a divided community while reuniting the ethnic groups which had until then led existences quite separate from each other and from public life.

Particular attention was given to methods of information provision adapted to the division of the sexes: on the street corner for the men, in their homes for the women, while ensuring the representation of all ethnic groups in scheduling meetings. Video tapes were used for teaching environmental awareness.

The **metropolitan council was invited to all the awareness meetings so as to lend credibility to** the clean-up campaign, but also to collect the opinions of residents on the functioning of the clean-up and collection services by the municipal sweepers.

The first clean-up and disinfecting campaigns in the district were conducted by volunteers trained by the association (APE) in collaboration with ethnic leaders. The volunteers received presents. Gradually, the collection service was put in place by the association: vaccination campaign, training of women in health problems, installation of private containers.

- Young volunteers attend to the education of the population on **the use of containers** rather than plastic bags, items that the households are able to afford. The association pays for delivery of the containers.

- School children chosen by the association are trained by primary school teachers to carry out information campaigns in private homes, thus reaching both the children and their parents.
- Cleanliness certificates were issued to households as part of a festival. Monthly meetings take place between the community organisations and the municipality, which trains its own sweepers to supplement the voluntary sweepers.

Awareness campaigns are effective when they **are co-ordinated with municipal actions** and in particular to ordinances relating to the environment: information on legislation concerning the cleanness of public spaces, on fines for leaving or dumping refuse. The campaigns can be led by municipal superintendents themselves (*Karachi*). Self-discipline and collective surveillance may turn into ways of coercing residents who do not respect the rules of cleanliness: they may be reprimanded or insulted, or even physically menaced (in *Cebu*).

3.6 The relationship of community-based organisations to external partners

The success of the collection service, its acceptance and espousal by the population, benefits from a more or less favourable relationship between the community-based organisations and the authorities, to which we must add the NGOs. The towns are directly involved in waste collection by reason of their prerogatives in environmental matters. But relations between municipalities and community-based organisations differ in the different projects. Sometimes the municipal councils content them with providing a forum for community experiments from a remote position, without becoming involved themselves. Sometimes they are active partners and view the management of waste collection as an issue of economic development.

In a great many cases, there are legitimacy conflicts with the community-based organisations; the latter claim to represent the people themselves.

- In *Ouagadougou*, the collection suffers under a **lack of co-operation** and support on the part of the municipality in the matter of permits issued to community-based organisations for the storage areas. The permits are issued late, without any consultation with the health and hygiene service, even though the refuse is en route to the disposal point when it is stored in these transfer areas.

- In *Bamako and Dakar*, the geographic dividing lines between zones for municipal collection and for MSE collection have not been clearly established: the communities are therefore served poorly or not at all.

Naturally, the community-based organisations, that are linked in a federation, provide services to the communities, and they can exert pressure to have legislation passed or awareness policies implemented in environmental matters. But they are **weak partners in negotiation**: in *Dakar*, they are not involved in municipal meetings, and the co-ordination in decision-making is inadequate. Conversely, sometimes the federation does not pass on information on municipal decisions to the community-based organisations.

Finally, the responsibilities and the division of tasks between community operators and the municipal council are rarely put down in contracts. The co-ordination frameworks that have been set up in Dakar between the community-based organisations and the urban community may appear to be a formality only, because there is no genuine scope for discussion between

the service providers and the municipal council on the participation of residents, on environmental sanitation public sanitation activities and on the possibly social dynamic effects arising from refuse management.

In the absence of a well-articulated division of responsibilities between management, development and participation, waste-management policies delegated to community-based organisations have but limited impact.

Moreover, the good acceptance of the clean-up programmes by residents of informal districts in *Colombo and Karachi* is directly related to the role played by the metropolitan council towards community-based organisations.

-In *Karachi*, **a monthly meeting** is attended by local associations, residents and the metropolitan council to assess the municipal clean-up service. There, residents can ventilate their complaints and put pressure on the service providers.

- In *Patan City*, the town council is a genuine partner of the **neighbourhood committees** (Tole Development Committees) created for clean-up and the self-help groups. The development committees are presided over by the mayor, and the self-help groups are in direct contact with the municipal services. A community development service has been established. Moreover, NGOs and community-based organisations meet in a forum on a regular basis.

The point is: **the community system** (Tole Development Committee, self-help group) **gains legitimacy** from the municipality and the sponsors at the level of decentralised management.

- In *Colombo*, the **community development councils (CDCs)** are also drawing up action plans for waste collection that have been discussed with the municipality and the NGOs. The recognition of the action plans by the municipal council makes it possible to better mobilise residents to deal with the problem of refuse. The community development councils and the municipal council are official partners, with their obligations set down in a contract: mobilisation of the residents on the one hand, technical operation conducted by the municipal council on the other.

3.7 Role of support organisations and NGOs in community management

The role played by NGOs varies greatly in the different projects.

Strong support is given *to MSE Bao Manégré* in *Ouagadougou* by CREPA (Centre Régional pour l'Eau Potable et l'Assainissement à faible coût). It has proven to be the key actor in the start-up, with activities adapted to societal demand:

- identifying the needs of the population through surveys,
- training community workers,
- continual support to the set-up of the collection service in which the NGO supervises cartoperators and organisers.

- In *Karachi*, the development association (APE) played a decisive role in the relaunch of the clean-up programme following a change in the metropolitan council, by safeguarding the social and ethnic equilibrium of the community-based committees, and by involving the leaders and the metropolitan council in all stages. The awareness campaign was conducted in a gradual manner while taking into account **the social rhythms** and the multiethnic context without setting them down in a formal framework.

- In *Bamako*, NGO ALPHALOG gives financial aid in the form of a loan to the community-based organisation for the clean-up campaign in the Djicoroni Para district.

On the other hand, no single NGO supports the community-based "Les Linguères" in Dakar, or the community-based organisations that form Basak Urban Poor Co-ordinating Council in Cebu City.

- In *Colombo*, a network of local NGOs specialised in environmental sanitation and water projects has stepped in to support the community development councils by furnishing containers and training a working group of residents.

CHAPTER 4 LESSONS ON COMMUNITY MANAGEMENT

What problems are most frequently encountered in the various stages of the projects: do they involve participation, the collection of contributions, agreements between the partners? What solutions have been implemented to improve the service and to reinforce its operation?

4.1 Problems linked to participation and mobilisation of residents

The fact that community projects have been set up for waste management or other services does not mean that **citizens are equal as to the information they possess**, as to participation, as to their representation within organisations, or even that they spontaneously and automatically lend their support to projects. **Populations that are geographically and socially far removed** from sources of information, from local authorities, NGOs - the poorest or most marginalised families (inferior castes, elderly persons, the handicapped, women, illiterate) - are not always taken into account or informed about the projects.

There are also obstacles to participation and mobilisation when a programme is starting:

- an overly political perception of the project on the part of the initiators: this is the case for the Set Setal or clean-up campaigns when they are organised by political parties (*Dakar*),
- resistance on the part of the population towards collective initiatives following a previous failure (*Karachi*),
- ethnic tensions which prevent the formation of groups and actions based on solidarity,
- absence of a democratic tradition and customs of public debate, difficulty in defining projects due to a lack of leaders,
- a poor image of leaders who are affiliated with political parties (*this is the case* in *Dakar and Ouagadougou*).

Sometimes, community-based organisations that have taken the initiative in clean-up projects **reinforce inequalities in access to information** by giving priority to people with a particular ethnic background or some other characteristic, thus impairing social equality. Such organisations do not always represent the demands of residents; they are not well acquainted with their needs, their practices, the ways they might contribute; they may be poorly informed or not at home in the district.

The neighbourhood and the community are not homogeneous entities. Community action does not mean that all urban dwellers participate, or are interested in participating; however, it does mean that the **potential at the various social levels**, people's expectations, have been taken into account. If measures are not well targeted (focusing on those most in need of them), if the objectives are not well expressed or understood, they may be claimed or misappropriated by the most influential residents, by those who are most capable of expressing themselves and of participating.

4.2 How can the mobilisation and participation of residents be strengthened?

When a project on the environment is being launched, people too easily come to depend on its support, whereas the objective is to foster truly emancipated practices that will lead to

effective **empowerment** and participation. The fact that a collection or clean-up project is promoted assumes a certain **quality of communication** and of information; it requires a **thorough knowledge of the urban districts**, and demands that their social, economic and ethnic heterogeneity be taken into account.

The projects in *Karachi* and *Patan City* were highly successful because they were adapted to meet the social demands of residents. At the same time as the information campaigns, training was offered to people with little or no education in the form of literacy classes. Also, surveys were conducted among all households, taking into account the various ethnic groups. And door-to-door information campaigns were held on the clean-up project so as to reach the poor and the illiterate.

These experiences show that the acceptance of projects and thus the empowerment of city dwellers depends on:

- the **scale of operation**, which must correspond to the natural scale of social life (the neighbourhood)
- relations between residents and community-based organisations.

It is possible to strengthen relations between community-based organisations and residents at the level of the street or block:

- by developing information provision in local neighbourhoods, and at places where social groups congregate (mosques, schools, health centres, markets) using specially targeted methods (notice boards, a public crier),
- by entrusting residents with the responsibility to transmit information at a micro-level (making people responsible for their streets),
- by safeguarding the social, cultural, ethnic and geographical equilibrium in meetings and in representative structures,
- by consolidating the social foundations of the organisations to allow larger numbers of people to join, and by encouraging that participants represent women or the poor,
- by encouraging all city dwellers to make use of their equal right to express themselves and by safeguarding the democratic functioning of organisations (elections, fair and just representation),
- by relying on organisations that have a solid basis as well as experience in participation and are attentive to the concerns of residents.

The traditional leaders (neighbourhood and religious leaders) have a natural authority and can often bestow their approval on projects (*Bamako*). They encourage the young people, the mainstays of the projects. They may support the start-up stage of projects, but their role is primarily one of mediation between community-based organisations and the authorities at a neighbourhood level. They can help organisations to identify needs and to resolve tensions. In *Karachi*, the **political and ethnic leaders** launched the clean-up campaign and motivated residents to join. In *Cebu City*, the **local political leaders** are responsible for distributing informative letters to residents on the municipal waste ordinance. **Support organisations** obviously play a key role in helping community organisations to represent the concerns of residents as well as possible, by ensuring that they have real legitimacy or that they give even the humblest of residents access to the information.

4.3 How can women be better integrated in participation and in community management?

More and more, women are working in these initiatives as community health workers or as voluntary staff, and they bring vitality to the processes of participation. They continue to be under-represented in the management structures and in decision-making even though they are major actors: in *Bamako*, 5 MSEs in 100 are run by women. Women cart-operators and sweepers are not always respected by the users, not even by members of their own organisations.

As residents and citizens, women play a determining role in the small-scale activities, and they form important channels of communication thanks to their numerous opportunities to meet one another. Unfortunately, they are not always listened to and are sometimes not even kept informed. The low rate of literacy among women, the hierarchies, the separation of the sexes at mobilisation sites, the weight of traditions and the additional burden of domestic tasks often prevent them from taking part in meetings and from having access to information. Their participation often requires the consent of the head of the household. **Literacy** is everywhere an obstacle to participation by women. Women from the social elite or who have a dominant role in society (entrepreneurs, teachers, better educated women) have an important role to play in inciting their less fortunate sisters to participate (giving them oral reports of documents, visiting households).

Collective action does not always take account of **female customs**. The integration of women into management structures or awareness-raising activities for collection services neglects to take into account their domestic circumstances:

- hours of meetings need to be adapted to their working days and their responsibilities in the home,
- cultural traditions need to be taken into account by scheduling women's meetings separate from those of men,
- literacy classes should be offered,
- women need to be encouraged to participate in elections of delegates in decision-making structures (MSEs, committees), and a better balance must be achieved in the recruitment of volunteers.

4.4 Little sense of environmental responsibility

The city dwellers of informal settlements **are not always aware of the sanitation risks** involved in unhealthy behaviour, and they have difficulty in perceiving a relationship between refuse collection and public health. The most disadvantaged households, concerned with more pressing needs such as water, health and employment, are not always attentive and receptive to awareness-raising campaigns on the subject of public hygiene or cleanliness. At the same time, the local authorities are often sadly remiss when it comes to their duty to provide information on preventive sanitation measures and improvement of waste management For the majority of the activities studied, although awareness campaigns were conducted, they were not always well geared to those of the municipal councils, or they were not adapted to urban expectations or priorities. The impact of awareness campaigns could definitely be improved if they succeeded in exploiting all the potential in a community, whether this means its social customs (scheduling meetings, taking local behaviour into account for clean-up actions) or the added value of the grass-roots scale of action. Political or social leaders play an important role in setting an example (depositing refuse in the containers, cleansing public spaces). The educational tasks of social workers and primary school teachers can take on added value. In *Patan City*, it is the children who are charged with waking up their parents and the neighbourhood to the necessity of sanitary behaviour.

Going from door to door and paying visits in the neighbourhood have proved to be effective means when used by voluntary community health workers, leaders, or even the responsible local politicians.

- In *Karachi*, volunteers and leaders jointly visited each household to demonstrate the use of dustbins that they distributed. The campaign rapidly led to changes in behaviour.

Modes of communication take traditional and cultural practices into account: skits and oral messages, prayers and sermons by imams in the mosques, demonstrations in the women's meeting places.

- In *Cebu City*, local leaders pay visits to refuse collectors and to volunteers who form the inspection committees for dump sites.

The difference between educating people and teaching them responsibilities

Giving residents responsibilities and empowering them to internalise sanitary objectives depends less on the impact of information campaigns and external education than on self-discipline or on **empirical and grassroots learning**.

Experience shows that **what residents say does not always tally with their collective behaviour** and that it is difficult to evaluate the result of awareness campaigns: a resident may claim that he or she has been well informed on cleaning while continuing to treat his or her personal surroundings badly.

Empowering people on health issues must be viewed as the result of a creative and collective process comprising self-discipline, spontaneous transmission of knowledge and adapting methods to traditional techniques of the people, rather than an **information flow imposed by the outside world**.

Giving people collective responsibility must be evaluated from the narrower point of view of **the transmission of empirical knowledge** and know-how adapted to local customs (changes in eating habits, in sweeping techniques) rather than from the broad viewpoint of information campaigns, that may become imbued with a different significance in the minds of residents.

The success of an awareness campaign also **greatly depends on the role played by volunteers**, on the level of training they have in waste management matters, and thus on recruitment strategies.

- In *Karachi*, volunteers are recruited on the basis of their motivation, educational background, and the image they project in their neighbourhood. Their training in cleansing techniques, source separation and the use of dustbins is accompanied by a literacy programme (specially adapted for girls).

Making people aware and giving them responsibilities can be encouraged by **incentive measures**: competitions offering prizes, festivals, but also use of the media and visits from the authorities to present the cleanliness prize (prize awarded by the Prime Minister in *Patan City*).

4.5 Households have little influence on the costs of waste collection or cleansing services

Residents may be reluctant to pay their contributions because they do not always understand the importance of the service, its impact, its quality. The poorest families do not always have enough money to pay their fees, or they may prefer to participate physically in a campaign or help the collectors rather than pay a monetary contribution.

When the managers or representatives of a service cannot be identified, or people do not understand that it is generally beneficial, it is difficult to collect the subscription fees. MSEs, for example, often resemble the municipal and public services in not dialoguing with the population.

The fees may be too high, the methods of payment inappropriate, and the population may not have been informed about payment dates. The personnel (cart operators or fee collectors) may have a poor image among the population.

The financial assets of households and then primarily of the poorest ones, as well as their inducement to pay for a subscription, should be better measured.

- In *Karachi*, surveys were conducted directly by sweepers to investigate the financial means of their customers (80% of the households declared they were willing to pay for the clean-up service).

Residents are also consulted as to methods of payment; their opinion on the fees for clean-up services is asked.

Residents should have a greater involvement in starting up a service so that it can be adapted to their needs and their financial means and so that its practicality can be assessed.
In *Ouagadougou*, before the set-up of the MSE, an objective and impartial diagnosis was conducted by CREPA with the help of a consulting sociologist based on surveys held among all households.

Cart-operators can **encourage greater loyalty** among residents by handing out notebooks for complaints about the service, or by having community health workers conduct surveys of their satisfaction.

- In *Ouagadougou*, women community health workers deliver the monthly invoices, register complaints and pass them on to the MSE. The same thing is done in Karachi by the zone managers.

The sweepers, cart operators, community health workers or inspectors should be better trained in communication techniques and didactics so they can explain the objectives.

- In *Ouagadougou*, inspectors receive a premium related to the subscription rates they have collected.

- In *Karachi*, lane managers who supervise the management committees live in the district that they oversee, so they are in contact with the population. They are also responsible for the equipment. Weekly follow-up meetings are held by the lane manager and the management committee of each zone.

Traditional and neighbourhood leaders and committees of wise men play an important role in making households understand that paying for the service is, in fact, in their own interests, and they find solutions when subscribers are in financial straits. Payment facilities can be granted to the poorest households, and fees can be levied in accordance with income.

4.6 Difficulties encountered by micro and small enterprises (MSE): management and profitability

When a service functions poorly and is in financial difficulties, the autonomy, viability and durability of the administrative organisation is at stake. Micro and small enterprises in particular may encounter technical and organisational problems:

- lack of knowledge about how to supervise the management,
- poor division of roles among members,
- conflicts between cart operators and persons in positions of responsibility (directors, accountants),
- poorly functioning structures of communication with the population (management committee, committee of wise men).

Communication between MSEs or the committee of wise men **and the local population** is not always adequate, and MSEs do not always think to render account of their management or of the financial position of the service to the population (*as is the case* in *Dakar*).

Cart operators and sweepers are the ones who come into actual contact with households. Low pay for difficult and onerous work forms an obstacle to their motivation and to the continuity of the service, leading to absenteeism as well as illness. In certain cases, the work of the sweepers is so poorly defined that they even perform supplementary services free of charge at the request of residents (sweeping the surroundings of the houses *as* in *Dakar*).

Certain teams **are neglectful when it comes to maintaining their equipment** (carts, wheelbarrows), take poor care of their animals or have a permanent lack of material. There are not always enough carts or animals to cover the preliminary collection zones (*Ouagadougou*); this may result in loss of motivation or even the complete abandonment of the service.

In a general sense, **the failure to rationalise management** inhibits viability as well as durability of the services, which can grind to a halt due to lack of funds (in *Bamako*, the preliminary collection service ceased for the period of one year). The services are not always managed with a view to achieving financial autonomy that would allow them to make investments, finance awareness campaigns, and channel profits into other waste management activities.

Naturally, there are some internal strategies to optimise viability:

- increased monitoring of the service by managers and increased training of personnel,
- clearly distinguishing between paid and free tasks performed by sweepers and cart operators,
- the implementation of internal schemes for workers' futures,
- a minimum of social insurance cover granted to cart operators, who are prey to accidents and to illness (in *Dakar*, AGETIPE keeps health records for the members of MSEs),
- having their equipment financed by the NGOs or sponsoring associations,
- keeping records on collection points in the districts in which MSEs are active,
- allocating a budget for the maintenance of equipment and the care of animals,
- seeking collaboration with recyclers for the sale of refuse from preliminary collections.

The difficulties encountered by MSEs in maintaining continuity and regularity of services often stem from the fact that **their objectives and their status** are misunderstood. As micro and small enterprises, they have the same constraints as private service providers and must ensure a minimum level of earnings so as to pay salaries and taxes, even if they receive material and funds from NGOs and donors. On the other hand, they are not free to fix the cost of their services; that is decided by the local authorities. They may also have to compete with other private companies.

At the same time, residents hold them to the free public services or to the voluntary associations and to neighbourhood organisations.

The MSE's status as public service providers also creates an expectation that they will be able to mobilise people and to raise their awareness. This aspect of their work is entrusted to them by the local authorities in the same way as it is to voluntary associations; they are neither prepared nor equipped to assume for it.

Difficulties in the operation of MSEs result from **the constraints imposed on them in an economic and a social sense,** but also from their difficulties to set up a partnership with users due to a lack of funds or to inefficient intermediary structures (management committee, committees of wise men).

The NGOs play a key role in helping micro and small enterprises as well as community operators (zone committees, etc.) to define economic strategies, to supervise the management and to ensure profitability.

4.7 Difficulties in collaborating with the authorities

Just as the implementation of waste management policies depends on the co-operation of residents, collection services that operate well and are integrated with other refuse-related activities depend on the co-operation of the authorities. The local authorities are not always active partners in providing support to grass-roots initiatives. They do not always have the technical or financial means to ensure that their activities form a complement to those of the community operators or MSEs:

- there is often no legislative or legal framework to supervise and oversee initiatives (legislation on dump sites),
- often no geographic boundaries have been drawn between the operating zones of municipal and community services.

There may be legitimacy conflicts due to an absence of dialogue and a poor division of roles, frequently leading to delays in collection and in setting up dump sites and source separation projects.

Thus, the service and the delineation of the tasks of preliminary collection, collection, source separation and recycling of refuse, whether it is done by MSEs or committees of residents, is highly **dependent on the organisation, or rather lack of organisation, of the municipal services**. The removal of refuse following preliminary collection is late, the local councils do not reserve sites for dumping or source separation, even though operators deposit refuse on intermediate dump sites. These transfer sites (containers, refuse bins) are sometimes in the wrong locations, forcing collectors to walk long routes and entailing delays in the preliminary collection.

In these circumstances, residents have hardly any incentive to take responsibility for their environment, and the poor management of municipal services is detrimental to the image of community operators. In the same sense, there is no co-ordination between the installation of individual sanitary facilities, the elimination of used water and collection of refuse or street cleaning, so that the technical and sanitary effects of the projects are but limited.

The lack of co-operation between local authorities and community-based organisations or MSEs is an obstacle to the implementation of broad environmental policies. The local authorities rarely ensure that sanitation facilities and that drains for the elimination of used water have been completed prior to public cleansing campaigns or to the collection of refuse.

There are not always close ties between public management structures (health centres, public hygiene services) and community structures, and community-based organisations are not always involved in defining public policies.

- In *Dakar*, the evaluation showed that MSEs that provided services to the urban community were rather **carrying out orders** than acting as genuine partners. The MSEs demanded the introduction of a co-ordinating forum linking them with private companies and municipal services, as well as the set-up of surveillance committees.

All in all, the participation of residents in activities of public interest is still sometimes badly received by municipal organisations, because they fear that their prerogatives are being undermined.

The interfaces between municipal and community management will be better defined if:

- contracts are drawn up stating the tasks in relation to primary and secondary collection, awareness and motivation that can be entrusted to NGOs or to associations,
- a partnership is set up for the financing of activities,
- closer ties are achieved between the local authorities and those who act as the mainstays of projects when programmes are formulated. Local councils are better motivated and more dynamic if they are **involved early on and on a regular basis** with the community-based organisations (as is the case in *Karachi and Cebu City*).

Some projects showed that the authorities are capable of **integrating micro-projects at a municipal or national level**, of delineating the various sectors (health, waste management) and of jointly managing services with community-based organisations.

- In *Patan City*, the local council established a **community development service** for public health, cleansing and waste management, endowed it with financial means and gave it personnel. This service is the sole contact point for residents: it answers their questions, supports and forms partnerships in the field of waste management , manages and oversees town planning activities. It also co-ordinates all the NGOs (in a forum) and is a legitimate partner recognised by donors, forming a stable factor. The service is to develop towards financial autonomy (presently 25% of its budget is self-financed).

- In *Colombo*, the community development councils and the core groups work in close collaboration with the municipal services to define sanitation strategies for the entire district of Siddharathapura and to delineate responsibilities between preliminary and secondary collection.

In *Surat*, the local council has **organised its services** entirely according to its sanitation policy aimed at informal housing districts suffering from epidemics.

Clean-up services, sanitary prevention activities, the regularity of refuse collection and the surveillance of dumping have been **entirely decentralised;** they are now managed at urban district levels by management cells, that can enlarge their field of action and put in place a broad policy in relation to the environment, urban management and sanitary prevention.

Responsibilities are clearly assigned to the services at the various levels: zones, neighbourhoods, municipality. Objectives are set, ranging from **decreasing mortality**, particularly among infants, by way of voluntary measures on the use of public space to the discipline of users in dealing with refuse. This dynamic approach for setting up a municipal project relies on:

- a horizontal and non-hierarchical approach to services, with the municipal authority delegating its powers at the district level,
- valuing all human resources,
- an amalgamation of services at the district level (hygiene inspectors, doctors, work supervisors).

Good relations have been established between the various services that pursue the same sanitary objectives, thus increasing their effectiveness. At an administrative level, each zone depends on a local service that co-ordinates activities in the field of cleansing, sanitary prevention (vaccinations, education, etc.), and monitors the collection of refuse entrusted to private companies. The services include a doctor, sanitary inspectors and sub-inspectors, sanitary engineers, sweepers (each sweeper is assigned a zone of 3500m²). The inspectors monitor the private collectors and impose fines or penalties if the latter do not observe the regulations (if collection is irregular, in the event of negligence or delays).

Zone commissioners, appointed by the municipality, supervise the services; they are vested with decision-making power. Each zone commissioner is answerable to **the central commissioner** at municipal level. The commissioners meet once a week to evaluate objectives and results, particularly with respect to the work of sanitary inspectors who pay daily visits to the districts.

At municipal level, there is a co-ordinating committee composed of the mayor, the directorate of economic planning, elected officials of the district and the municipal physician. A central technical

service supervises the works completed for each zone and is responsible for maintaining the equipment, but also for the social aspects of the programme.

Today, these decentralised management structures cover almost the entire area of Surat (52 zones where 300 sweepers and between 15 and 30 inspectors and sub-inspectors work, for a total of 1200 employees involved in implementing environmental policy).

The local council has clearly chosen to achieve its objectives, not by reinforcing community participation, but by strengthening **its technical and institutional operating capacities** with a non-hierarchical and non-vertical organisation.

Through the commissioners, the council intends to develop a professional culture in relation to environment issues and the public sanitation project:

- training personnel in multidisciplinary tasks,
- staff members take part as individuals in the achievement of objectives (commissioners participate in the demolition and rehabilitation of unhealthy dwellings),
- setting up internal disciplinary regulations and problem-solving methods that are discussed at a local level, not centrally,
- broadening of knowledge and capacities, so the functional division between services is eliminated.

CHAPTER 5 WHAT IS THE OVERALL IMPACT OF PARTICIPATION AND COMMUNITY MANAGEMENT ON WASTE MANAGEMENT?

Some effects of waste collection strategies are, for instance, a reduction of illegal waste dumping, clean surroundings and consequently urban comfort. But what are the criteria to assess sanitary, institutional and social changes and the economic dynamics linked with collection projects managed by residents or by micro and small enterprises?

It is difficult to measure precisely the **impact on health and society** of programmes aimed at mobilisation of residents: clean-up campaigns and source separation, and - in a broad sense - the impact of health and information campaigns. In order to evaluate changes in public health care, it is necessary to have indicators, research and precise (anthropological) observations: surveys on changes in hygiene, on food practice, cleansing and epidemiological indicators.

Even at an economic level it is far from easy to measure the dynamics resulting from community structures, such as direct and indirect jobs created, working hours, salaries earned, financial benefits made by NGOs or local committees, and reinvestments. More often than not, these organisations rarely have the financial or bookkeeping tools to measure job creation and productive resources, let alone their impact on the local economy and the struggle against poverty.

Generally speaking, local collection services create but few jobs, unless projects are on a larger scale (34 jobs created by *MSE Faso Kanu* in *Bamako*). In many cases, sweepers and community health workers are recruited by municipal programmes or NGOs: they are either paid out of public funds or working on a voluntary basis. The economic status of cart operators in the MSE is always quite uncertain, as it depends on whether the service is financial viable.

However, the project on integrated waste management, that is run by a number of *MSEs* in *Thiès* and covers all aspects from source separation to horticulture, has been shown to produce local wealth: investments in equipment and land acquisition, profits made by the smallholders on the sales of their produce, some of which were paid into mutual credit funds, as well as the creation of 30 permanent jobs.

5.1 Results in terms of public hygiene and social impact of community participation

When residents are mobilised for a cleansing programme, when they participate financially or physically, an evaluation of the degree of their awareness can be made on the basis of **changes in their individual and collective behaviour** in environmental matters.

The most common indications of this are:

- waste is deposited outside the homes, in specially supplied holders (containers, dustbins);
- depositing refuse, and perhaps even source separation, becomes a habit, a part of day-today domestic behaviour, particularly for women;
- less refuse is dumped into rivers and on streets, less refuse is incinerated;
- uncontrolled waste dumping, and its powerful stench are reduced;

- childhood diseases decline;
- use of toilets and public lavatories grows;
- there are fewer begging children in the vicinity of dump sites (Surat).

Indirectly, preliminary collection of waste helps to ease the burden of domestic tasks on women and craftsmen.

The permanent effects of participating in collection should also be mentioned, starting from awareness -raising practices and a growing awareness of problems related to the environment. The awareness campaigns help individual residents to gain **empirical knowledge** about cleansing and hygiene, knowledge that they transmit to others to the greater benefit of the community. Residents tend to pay more attention to waste management when they have to pay for the service and they appreciate the resulting improvement of their surroundings.

On a different level, residents become part of the **dynamics of collective control**. They talk to other people in the neighbourhood, give advice, spontaneously organise clean-up groups. They exert pressure on the local authorities and ask for new facilities. Collective discipline works like a kind of social pressure on households that do not respect the ordinances. Such sanitary awareness may result in structured activities - i.e. certain forms of citizens' participation such as setting up "think tank" committees (*Thiès*), defining neighbourhood projects.

Once residents have been acknowledged as citizens, they become mobilised, **learn to express themselves, to take part in a dialogue, to co-operate** and they gain confidence. Relationships within the neighbourhood are strengthened:

- In Patan City, voluntary sweepers are better accepted and have greater self-confidence.

- This also goes for girls (community health workers, sweepers) who acquire an ability to express themselves in public and are acknowledged as social actors.

- The evaluation of *Surat* underscores that **precisely the most destitute** show the greatest concern with cleanliness; they wish to improve the image of their neighbourhood and appeal to the council for new projects.

- In *Patan City*, thanks to the improved health and hygiene situation brought about by the clean-up programme, refugees and squatters were able to set up **a project to regularise land-ownership**, whilst strengthening social and ethnic cohesion

- In *Bamako*, the committee of wise men (arbitrating between MSE and residents) acquired legitimacy and is now considered an official neighbourhood committee.

Most projects see an **increase in the number of requests made by residents** to MSEs asking for more services. Most operators had to extend their working areas to surrounding neighbourhoods.

- In *Thiès*, in two years' time, the number of collection teams has doubled in 29 districts (1300 households).

5.2 The institutional impact of community management programmes

Very different types of co-operation come into being between NGOs and community-based organisations on the one hand, and local authorities and private enterprises on the other. Co-operating in waste collection may comprise anything from a simple contract-based partnership

to high-tech jobs, from implementing shared management tools and incentives to integrating community structures within municipal politics.

5.2.1 Forms of technical co-operation between operators and municipalities

At an operational level, and provided there is a strong social community project, communitybased organisations stimulate local authorities to become involved in the initiatives. Administrative and legal obstacles, especially within governmental services, are related to technocracy, lack of funds or conflicts about legitimacy.

However, the city councils do their best to support local NGOs and other community-based organisations, by means of:

- incentive measures concerning the environment (legislation, ordinances) as in Bamako,
- making personnel available (technical services, sanitary services),
- campaigns to promote the use of dustbins (Dakar),
- studies on the valuation of the waste production chain and on composting (Bamako)
- pilot activities: in *Bamako*, the municipality supports projects on sludge treatment, the installation of cesspits, projects in training of local MSEs and other community organisations with the support of the NGO ALPHALOG,
- financing collection equipment (waste trucks, dustbins in *Ouagadougou*).
- increasing staff available for secondary collection, thus bringing them up to the level of preliminary collection,
- explaining municipal policies on waste management and the institutional framework to donors and governments (*Bamako, Dakar*).

5.2.2 Recognition of the role of residents in municipal policies

Local governments are aware of their growing responsibilities with regard to the environment and urban management, and their problems in complying with the requests from inhabitants. The environment and urban participation may well become election issues.

- In *Cebu City*, local candidates developed their campaign for the city council election around the clean-up programme, in exchange for which they were supported by Basak Urban Poor Co-ordinating Council (BUCCP)

Decentralisation, on the other hand, brings about new methods of waste management and sharing of responsibilities The position of residents as users, citizens, having rights and obligations, acting collectively, has gained broad recognition from local authorities.

As more and more NGOs engage in lobbying in an effort to gain influence in local politics, municipal authorities are trying to get in touch with actors in the community, or indeed entrust them with the management of services (MSEs in West Africa). They experiment with awareness-raising projects and management structures with the NGOs and community-based organisations:

- recruitment of sweepers in collaboration with MSEs,
- participation in stimulation and information meetings run by local associations,
- joint running of awareness campaigns,
- joint planning of infrastructure (Patan City).

5.2.3 Integrating community projects in local politics

The city councils have learned to anticipate on social requests and to initiate a public debate on the environment. The local authorities show themselves to be **involved** and to **take part** in the managing process **to various degrees**:

- Municipal policies are based on community structures. In this case one should use the term **strategic alliance** rather than referring to sharing of responsibilities (in the case of *Dakar*). Above all, local governments aim at immediate results (collection, cleanliness of public spaces) that are clearly visible to urban dwellers.

- Experimental community projects **are conducted on a small scale** in order to test the implementation of municipal policies (health, water, waste) or the decentralisation of services with users participating in management. These may be based on effective sharing of responsibilities and decision-making between local authorities and community-based organisations.

- The pilot project in *Cebu City* in the Basak San Nicolas barangay is a significant example of shared management of a programme for the struggle against poverty and improvement of the environment, initiated at municipal level but **jointly managed** by community-based organisations and the authorities of the barangay. The city council draws the statutory framework for the cleanliness campaign (municipal ordinance); the "barangay" are responsible for waste collection (teams of wardens and collection workers). As for the community-based organisations, they take part in the Watsan committee, that co-ordinates the awareness-raising campaign, trying to make residents aware of their responsibilities.

The impact is clearly visible at an institutional level: the MSEs are recognised as social and political actors, while the city council and the district authorities, in their turn, have established their legitimacy in the informal neighbourhoods.

- **Community projects are directly integrated or reclaimed** by local authorities, councils or government agencies. Community participation is semi-institutionalised and integrated in large-scale voluntary programmes.

- In *Patan City*, the community development service (CDS), created by the city council as an operational tool, is the principal representative of residents. The development service has its own staff, carrying out all sorts of awareness projects, obtaining and managing facilities (e.g. sewerage installations, roadwork, public toilets). Its durability and the continuity of its projects depend directly on its technical, financial and managerial abilities, and therefore on its relationship with residents.

- In *Colombo*, 300 community development councils have been set up in the framework of a nation-wide programme to improve informal housing, conducted by the Ministry of Housing.

5.3 Changes in scale of participation and management

Once a strong social and waste project is in place, innovative and **localised** management tools may be created by city councils working together with community-based organisations. Such tools are based on **effective decentralisation of decision-making** and, at the same time, a

broader competence and more opportunities for action stretching beyond mere cleaning-up or collecting waste, and including other urban facilities (e.g. public sanitation , health care, water supply, economic development, etc.). These innovative tools are well suited to the progressive decentralisation of institutional structures for housing, public hygiene, health and generation of income, while shared responsibility lies with local communities and MSEs.

Such is the case with the **"Co-ordinated partnership on environmental sanitation in Disctrict IV"** (Co-ordination des Partenaires de l'assainissement en Commune IV (CPAC³) in *Bamako* that has only indirect management responsibility, but nevertheless offers ample scope for dialogue. Since its creation, as a result of lobbying by local NGOs and neighbourhood MSEs, and supported by the NGO ALPHALOG, CPAC has become a permanent centre for dialogue and proposals in the fields of sanitation, water supply and the environment.

Strategies for sanitation and environmental matters in district IV are formulated by CPAC on the basis of research and technical proposals, it also draws up sanitation regulations and supervises the contributions by various actors (i.e. MSEs, consultancies, the university, private services). CPAC conducts several pilot activities (e.g. composting, source separation).

Sponsored by MSEs and district leaders, it has an excellent network of actors, from block level right up to municipality. District leaders are honorary presidents of CPAC. District leaders and sector heads meet on a regular basis. In their respective neighbourhoods, they are assisted by committees of residents involved in the formulation of strategies for their neighbourhood and the region. Moreover, the CPAC is actively supported by local NGOs, co-operatives and associations that have managerial responsibilities within their neighbourhoods.

CPAC acts first and foremost as an interface between partners in environmental matters. It is firmly rooted in the area and its institutions, enabling it to call upon all partners, regardless of whether they re private persons, contractors, associations or environmental organisations. CPAC is to develop into a kind of environmental agency, with its own research facilities, and to become permanently established as part of a political and institutional framework.

What with the issue of decentralisation of urban management, as well as the growing problems of environmental sanitation in urban areas, municipalities are obliged to set priorities and to ensure that projects are firmly rooted in the neighbourhoods. Consequently, they have to set up sustainable forms of co-operation with NGOs and actors in the communities.

This brings about **a real change in the scale of intervention** by means of local actions. This is the case in *Surat*, where the city council's presence is clearly visible at neighbourhood level, in pursuing effective decentralisation of its powers and facilities. In this way, it demonstrates its effective implementation of an environmental strategy.

- In *Surat*, overall mortality rates have decreased by 70% over a period of two years, the incidence of malaria has fallen by 50%, thus becoming the lowest in the entire region, while hepatitis declined by 60%. Nowadays, 90% of waste is collected, and 95% of dustbins are emptied on a daily basis, thanks to municipal control of private enterprises and as a result of a prevention campaign among residents and shopkeepers.

³ Co-ordination des Partenaires de l'assainissement en Commune IV (CPAC)

These projects show that the social and sanitary impact is not so much dependent on **geographical coverage, but rather on the social scale** of actions. Evaluation criteria should therefore be more qualitative:

- how is decision-making effectively decentralised?
- how are the projects rooted in the neighbourhoods?
- which organisational capacities might enable them to extend their activities to overall urban management and to set up an integral environmental strategy?
- to what degree are the structures innovative in a social and technological sense?

CHAPTER 6 CONCLUSION: FOR DURABILITY AND CONTINUITY OF COMMUNITY INITIATIVES IN RESPECT OF WASTE COLLECTION

Waste management involves **concrete and immediate issues** for urban dwellers in disadvantaged districts, even if the issues are not always at the top of their priority list, or have not yet been formulated. Like all other basic services (water, health, sanitation), the waste management services that are managed by neighbourhood committees or rely on the popular economy (MSEs) offer **a potential complementary or even superior service** to that of private enterprise or public services, because they generally **produce social rapport and solidarity:**

- They allow city dwellers who are not served by the authorities (particularly those in informal housing districts) to obtain a minimum of urban comfort, and even to join the ranks of recognised landowners and city dwellers,
- They allow them to become involved in a collective process, to learn about management, about participation, and to express themselves in the public arena indeed, to be acknowledged by the local powers that be.
- Finally, they allow them to develop responsible practices to anticipate, control and watch over the risks of degeneration of their immediate surroundings.

For all that, learning about and taking part in urban management by community actors and their NGOs is complex. They are asked to prove their ability to manage a service, to find ways of getting in touch with the destitute and needy, to create financial resources and to set up ways of making people responsible for public sanitation in the districts, all at the same time. The initiatives examined in respect of refuse collection and cleaning-up show that they **are not durable if they are not, at some point, recognised** and taken over by the authorities. The construction of partnerships for management and participation is everywhere necessary, all the more so as decentralisation opens up important issues.

In order to be durable, the community collection services must not be approached merely on the basis of their **short-term scope of operation**, which is to compensate for the inadequacy of public services. They must be viewed as producers of broad policies on the environment that will also correct social inequalities in the access to basic services.

This assumes that activities are simultaneously undertaken at institutional, economic and technological levels:

- to strengthen the conditions for better participation, giving responsibilities to residents,
- to **strengthen the conditions for financial autonomy** and continuity of the services so that they can respond to the demand of society and put in place integrated services that are of good quality,
- to establish a presence of the authorities alongside community structures in the districts.

6.1 Strengthening conditions for better participation

Residents and their organisations play a key role in sanitary prevention and in setting up organisational structures for cleanliness in the districts, a role that is not always valued as it should be. The social aspect of projects in relation to the environment presumes that those in the forefront can respond to the growing demand from society and can put in place egalitarian systems for dialogue and decision-making that involve the minority populations (women, the elderly) and recognise them as collective actors.

The involvement of the **most disadvantaged population groups** in the process of information and decision-making on collective management boils down to:

- **relying on key actors** who contribute a great deal to making people responsible for the management of their environment, to objectives of solidarity and of equality (traditional leaders, women, religious leaders),
- **consolidating the social bases** of organisations so that they learn to recognise the demand in an egalitarian way,
- creating public information sources and relying on the organisations that are champions of the general interest and have become rooted in the districts.

As we have seen, the empowerment of city dwellers to manage services, making them durable, goes by way of making residents responsible for environmental issues. This goes further than informing them by means of campaigns: it means they must become genuinely involved and be consulted at all stages of a project, so as to integrate their cultural habits, their sanitary behaviours and social rhythms and to recognise their informal practices in the management of refuse.

Women turn out to be messengers of social transformation and political modernisation. The projects show that if they are in a dominant position economically, then they do not become marginalised. Beyond their role as actors in the popular urban economy, women contribute to changes in sanitary comportment as intermediaries in awareness-raising and as managers of community services. The participation of women, henceforth visible and recognised by the authorities, would seem to be symbolic of the underprivileged classes asserting themselves and becoming mobilised.

6.2 Strengthening economic and social performance of waste management structures

Once waste management activities are set in motion, much still remains to be done so that the clean-up, collection and recycling programmes become durable and integrated. The economic and technical results depend as much on the viability of the service as on the capacity to generate **productive resources** (jobs, assets, investments) in the various sectors (source separation, preliminary collection, collection, recycling, compost, urban agriculture). And this, in turn, depends on the creation of new tools that accelerate the redistribute effects of the social service projects (reinvestment of benefits, solidarity funds). The financial autonomy of such projects is indispensable for their level of technological or economic innovation and therefore for their continuity, to make community structures **less dependent on NGOs** and on donors.

Community projects must also be formulated in accordance with objectives of the general interest, a better division of internal responsibilities and improving the technological and operational know-how of those in the front lines. Moreover, in their research and experimentation with technological tools they must be supported by training in techniques for cleaning-up, source separation, composting and recycling and in creating awareness. Acquiring the recognition of insiders (the traditional bodies acting as sponsors) and of outsiders (technicians, elected officials, donors) is an important step.

6.3 Sharing responsibilities for management and operation with the authorities

Some form of partnership with the local authorities is inevitable in respect of issues linked to the environment. Community structures and MSEs can profit from opportunities opened by decentralisation to divide responsibilities with the authorities. This calls for:

- new technical and professional cultures,
- official and contractual links at all stages, adjustment of legal frameworks (environmental sanitation regulations, legislation with respect to dumping, abolition of taxes for micro and small enterprises, definition of non-competition zones and rates),
- targeted support in human resources to decentralised management and to the districts,
- effective decentralisation of public services so that they work together with or complement community initiatives.

This perspective of rapprochement, which is already at work in certain projects, inaugurates **new methods of urban management and new relations between city dwellers and authorities.** They are going in the direction of good local **administration** based on recognition of the users, who are citizens with rights and obligations, and on the correction of inequalities, by giving greater consideration to obligations of solidarity at the neighbourhood level for access to basic services. Finally, the durability of community actions depends as much on the creation of economic resources and on the waste sector becoming integrated into urban management as it does on the quality of relations between actors and authorities at a local level.