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## WASTE PICKERS: POOR VICTIMS OR WASTE MANAGEMENT PROFESSIONALS?

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### Abstract

*Waste pickers have been scratching out a living on the margins of urban solid waste systems since these systems came into being, taking advantage of the status of waste materials as common property resources and earning, in general, much more than the minimum wage. While picking may provide a solution and a livelihood for pickers, it is often seen as a problem by formal authorities and development agents. With the intention of helping the waste pickers, development interventions focus on pickers' welfare needs or rights, and not on their professional activities, an approach which may disrupt livelihoods and fail to meet the needs of the pickers themselves.*

*The modernisation of waste management systems opens new niches and puts governments and the formal private sector into new relationships to each other. In the process, it allocates both responsibilities and rights around waste in new ways. In this process, waste pickers can be losers, but they can also be winners, especially when waste picking is contextualised as providing new opportunities for waste picking, and as contributing to solving the waste management problem by keeping materials out of landfills. The best chance to support sustainable and positive change comes when there is a commitment to work with waste pickers embedded in their professional context, and to support them in finding and entering the better and more stable economic niches that can open during the process of modernising the waste management system.*

*This is a sector-specific conclusion, but it has broad implications for other kinds of poverty reduction actions.*

### 1. Introduction

This paper seeks to develop some integrated insights into how solid waste management practitioners might want to work with waste pickers, the lowest layer of the solid waste chain, and a phenomenon that practitioners are likely to encounter when working outside of the OECD countries. The paper approaches its goal by bringing together several solid waste management topics which are closely related to the themes of this conference and we hope that the paper will raise some new issues and insights for discussions about waste pickers, livelihoods, and poverty alleviation.

#### 1.1 Background

The basis for this paper was an analysis done by WASTE and IPES of interventions designed to “help” waste pickers. The report was commissioned by the ILO in the context of its own goal of eradicating child labour in scavenging. In the process, the researchers had the opportunity to look quite closely at

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the assumptions and approaches used by development projects focused on one quite specific very poor sector: waste pickers and their children.

Using a variety of analytical and theoretical frameworks, the authors of this paper revisit the data collected in the ILO report. They arrive at a clear set of insights and recommendations for working sustainably with waste pickers to improve their lives and livelihoods. The conclusions are that the best chance to support sustainable and positive change comes when there is a commitment to work with waste pickers embedded in their professional context, and to support them in finding and entering better and more stable economic niches that open during the process of modernisation of the waste management system. This is a sector-specific conclusion, but it has broad implications for other kinds of poverty reduction actions.

## 1.2 Main lines of reasoning

The main lines of reasoning brought together here can be summarised as follows:

1. There is a clear trend towards the (ecological) modernisation<sup>2</sup> of solid waste management systems. These changes usually begin by an initiative to redevelop or move the landfill, and come to include, over time: changing environmental standards, privatisation, diversification of management strategies away from disposal and towards recycling and composting, and increasing pressure for cost recovery. This modernisation process often occurs under the direct or indirect influence of globalisation or international pressures, a process in which donors have a key role.
2. The maturation of modernisation processes in the North has stimulated some observations about the resulting changing nature and structure of socio-technical systems of provision in general, including solid waste, sanitation, energy, water, and transport. These broad-based changes are resulting in a gradual but nevertheless dramatic shift away from so-called Large Technical Systems, or “Fordist Provisioning,” to complex, multi-provider, multi-technology systems, sometimes referred to as “modernised mixtures”.
3. There is a need to understand and analyse more systematically the condition and position of waste pickers, both as poor people (who should become beneficiaries of the MDGs) and as economic actors involved in provisioning systems in transition to modernised mixtures.
4. Such understanding needs to be based on consultative, participatory processes that have been found to be essential to sustainable change.
5. This process and the insights it yields have the potential to contribute to a more general understanding of how to work with local people to build the types of urban environmental infrastructure for water, sanitation and solid waste that the Millennium Development Goals demand.

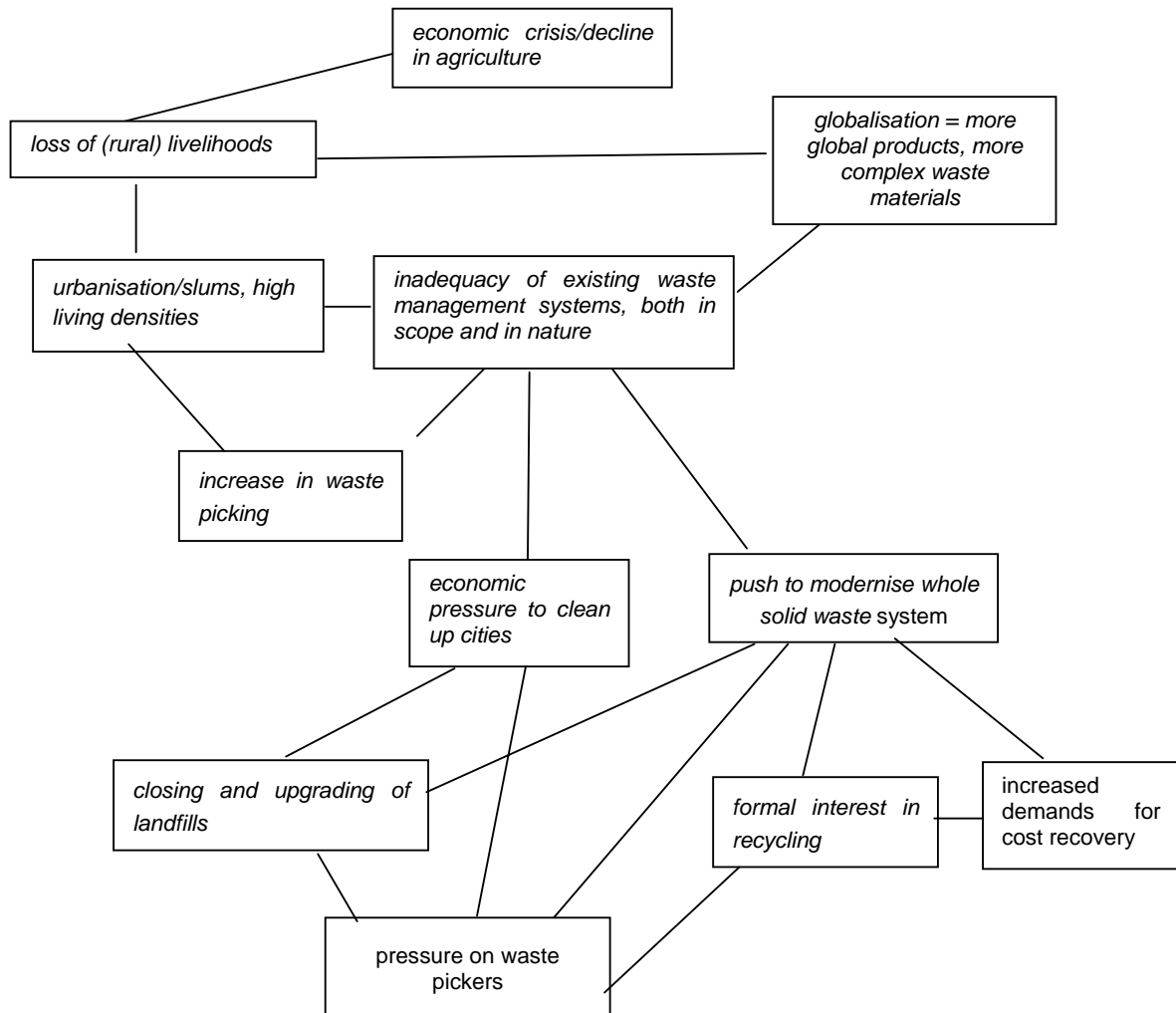
These main lines of thought are shown in relation to each other in Figure 1.

## 1.3 Structure of this paper

In Section 2, we present a very brief overview of the process of modernisation of solid waste systems. Section 3 first characterises the position and condition of waste pickers in a pre-modern system, and secondly summarises the approaches to “help” them from a development co-operation standpoint. Section 4 uses the insights of participatory rapid assessment (PRA) and the framework of Integrated Sustainable Waste Management (ISWM) to critique these approaches, and to suggest a fundamentally different way of working with waste pickers to improve their lives and livelihoods, in the context of the

<sup>2</sup>“Ecological Modernisation Theory”, (EMT), represents a set of theories and insights by predominantly Northern European social scientists to describe social and economic changes which are influenced by environmental regulation, legislation, or the direct imperative of environmental degradation or resource exhaustion. See for example, Mol and Sonnenfeld (2000, pp 6-9, for a historical overview).

modernisation of their host waste management systems. Section 5 draws conclusions, and directs the insights from these conclusions to the world-scale activity to meet the Millennium Development Goals in general, and to those relating to urban services and livelihood in particular.



**Figure 1. Modernisation of waste management and waste pickers**

## 2. The modernisation of urban waste systems

### 2.1 Pre-modern solid waste systems

We use the term “pre-modern solid waste system” to describe the types of solid waste systems that arose in the process of industrialisation of Northern Europe in the nineteenth century, and that have since attained a kind of generally accepted status. A composite pre-modern system has the following features, in general.

1. The local authority is the main – often the only – formal actor in the system, sometimes supplemented by private waste collectors.
2. The focus of policy and activity is removal of waste materials from residential areas.

3. In the city centre, where there are high population densities and many shops, there is one variety or form of waste collection, often daily or three to five times per week, using one kind of truck and based on every generator having the same level and type of service, the same containers, etc.
4. The removed waste is dumped in one official, usually low-lying, place, as far as possible from the city centre; all other places are illegal, but may be in use as well.
5. The waste itself has no recognised value to the formal system, and becomes a common property resource.
6. Valuable elements and materials in at the dump may be extracted and valorised for recycling by informal sector entrepreneurs for whom it is a livelihood activity. The most commonly valorised materials in a pre-modern system are metals and paper, both of which have been informally recovered worldwide for more than 100 years.
7. In addition to dump scavenging, extremely valuable or perishable items may be separately collected from households and businesses by entrepreneurs, who either use them themselves or can make a livelihood processing and trading them. The materials most likely to be recovered in this way include food wastes, whole glass containers (with or without deposit), plastics and clothing, in addition to metal and paper.
8. In a non-modernised system, the main improvements will always focus on upgrading the dumpsite, changing it to a “sanitary landfill” and in some cases supplementing its disposal capacity with a large-scale waste incinerator.

In summary, a pre-modernised waste system is a **large technical system** based on a **single technology – the dump or landfill**. It is managed by a **single major stakeholder, local government**. Other actors – like waste pickers – operate **at the margins**, and have the status of **informal sector actors**.

## 2.2 Pressures to modernise

Modernisation usually begins in response to a growing water scarcity, and a fear that the dump is polluting groundwater; by an environmental crisis like the collapse of the Payatas dump outside Manila, or by some other shift in local circumstances, such as an election campaign focusing on cleaner, healthier cities. Modernisation may also be stimulated by a push for economic development or political modernisation, for example when local government wants clean downtown based on a well-functioning solid waste management system, using nice technology and efficient operations. In the South, modernisation frequently reaches the policy agenda through proposals for financing by donors. In Eurasian transitional countries, it is generally motivated both by a wish to “be modern” and by the specific demands of the accession process to the European Union.

## 2.3 The modernised solid waste system

Whatever the source of the idea, the modernisation process typically proceeds rapidly, with a resulting “modernised system” emerging after two to five years, having the following features contrasting with those of a pre-modernised system:

1. There has been a move from a single-actor to a multi-actor system. That means that the local authority is no longer the main formal actor, if indeed it remains involved in direct activity at all. The role of the local authority has been split up and re-distributed to a range of other stakeholders, including private waste and recycling companies, NGOs, community groups, parastatal organisations, and other levels of government.
2. There has been a broadening of focus of policy and practice in two stages: first from removal to **environmentally sound management**, including recycling, composting, and energy recovery, and secondly to **eliminating or preventing the generation of waste**.

3. Waste collection has become diversified and has also spread to other areas than the city centre. The frequency of collection usually drops in the city centre, from three to five times per week to once or twice. In other areas, there is a much greater diversity of service, ranging from containers to house-to-house service, and collecting a variety of materials separately. For example, there may be separate collection of organic wastes, household hazardous wastes, re-usables, etc.
4. The destination of the waste is also diversified, with as little as 50% actually going to the disposal site, and the rest being reused, recycled, composted, or used to generate energy.
5. In the process the perceptions have grown that the waste itself has value. This is generally accompanied by the emergence of a variety of claims to the waste itself, many of them implicitly or explicitly conflicting with each other. Waste in a modernised system is no longer a common property resource, and there can even be legal sanctions applied to those treating it as such.
6. A wider variety of materials is being valorised by formal actors, who have a strong interest in forcing the informal sector off the dumpsite. Informal sector waste pickers tend to lose their implicit or traditional claim to the waste and may lose livelihood opportunity.
7. All forms of (separated and mixed waste) collection from households and businesses become part of the formal modernised waste management system. Previous approaches may be outlawed for a variety of official reasons (such as the outlawing of collection of food waste for pig feed, based on health concerns, or the criminalising of door-to-door scavenging based on rights to the materials granted to the formal collector). In this process street scavengers and itinerant waste buyers may also be forced to cease their activities.
8. In a modernised system, the main improvements will focus on diversifying the activities still further, identifying new uses for materials still entering the disposal stream, and in continuing to reduce the role – and budgetary responsibility – of the local authority.

The process of modernisation can be summarised as a shift from a Fordist, centralised, large technical system to a complex, integrated system, characterised by **multiple providers, a wide range of payment, service, and provider options open to clients, and a great diversity of technical operations** all tied together in a single **co-ordinated management system**. This type of “post-Fordist” system is what we refer to as a “**modernised mixture**.”

### 3. Waste picking and waste pickers

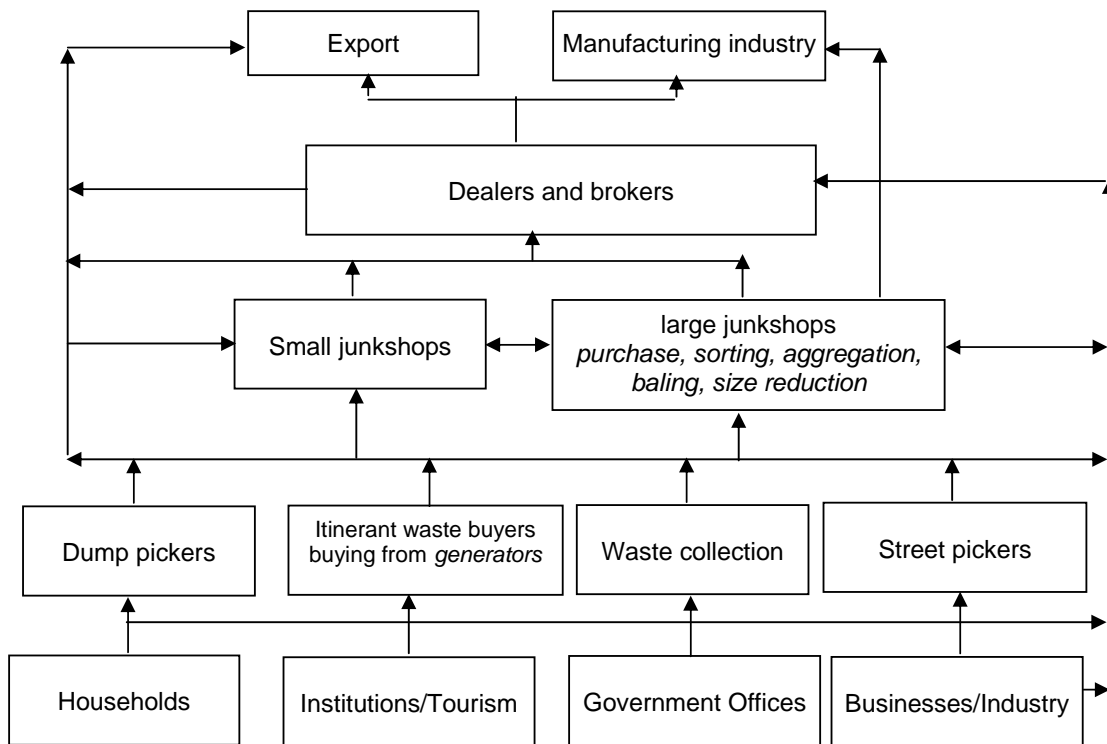
‘Waste pickers are semi-visible entities and waste recycling industries are invisible operations in the urban scenario’ (Rosario, 2004). Informal sector scavengers, or waste pickers, have been scratching out a living on the fringes of the urban waste landscape since cities in Europe and North America first began collecting waste in the 1880s (Melosi, 1981). They recover and sell materials into a secondary materials chain that begins with waste picking in cities ranging from New York to Bangkok; from Paris to Tegucigalpa; from Melbourne to Harare, and that feeds global industries that produce autos, computers, newspapers, books, building materials, clothing, and many other products.

There is a temptation to look at waste pickers as dirty and pitiable, or, at the other extreme, to blame them for a city’s problems and dirtiness. Before modernisation of solid waste management, waste pickers and the businesses they feed are responsible for most of the recycling that occurs. Because they are often not recognised as key to solid waste operations, in the process of modernisation they risk losing their livelihoods, their homes, and sometimes their lives. The solid waste system also risks losing its basis in material recovery, with the consequence that problems become larger and more acute at the very moment they should be being solved. Not even solid waste experts appreciate the close relationship between waste picking and the formal solid waste system nor its potential to divert substantial quantities of materials to recovery.

While the situation of waste pickers and their children has changed little in the last 100 years, both who they are, and the urban waste landscape in which they find their niches has changed radically. Rag and waste pickers in the 1890s were most likely immigrants – entrants into the economy, while today they are more likely to be from groups that are marginalised or rejected by larger political and global process of change (Bauman, 2004).

Waste pickers today are poor people who create livelihoods for themselves and their families by recovering recyclable materials from mixed waste in street bins, containers, communal collection sites, vacant lots, and final disposal sites. They recover secondary resources directly from disposal, that is, after they leave the original owner and become common property resources, and re-direct them to local and global industries using recycled resources.

Waste pickers sell materials to specialized small-scale materials dealers ('junk shops') at or near the landfill. The junk shops aggregate, pack, and sell materials in industrial quantities for export or domestic manufacturing uses. Dealers may employ waste pickers, or may offer them loans, equipment, or shelter (Furedy, 1997). Figure 2 gives an illustration of the secondary materials chain.



**Figure 2. The secondary materials chain.**

Source: Adapted from Marchand, 1998

Waste picking is often family enterprise, with parents and older children picking from landfills or in the streets, and women and children (especially girls) sorting and processing the materials at home, washing dirty plastics or stripping or burning off non-metal parts of wires or appliances so that the remaining metal can be sold as clean scrap. Girls are less involved in street picking than boys, and more involved in sorting at home, although girls and boys are about as likely to be working on a landfill. (ILO, 2004).

In most pre-modern waste systems (and in some modernised ones as well), waste pickers suffer from chronically poor labour and living conditions, especially when they work and/or live on landfills and dumpsites. They face injuries from dogs, rats, and other vectors, combined with chemical and

biological health risks due to contact with toxic substances, healthcare wastes, faecal matter, body parts, used syringes, and other materials in the waste stream. In the best of situations, pickers report ergonomic problems due to the physically taxing nature of the work, and psychological and social disadvantages stemming from their low social status (van Eerd, 1996). This is complicated by ideas that handling waste materials is dirty, nasty or is associated with violating religious or class taboos (Scheinberg *et al.*, 1999).

Waste picking appears to be most common in poor groups with lack of access to paid work, living in the vicinity of a large conurbation which uses a dumpsite to dispose of its waste. Often they are subsistence farmers who have lost their land and have no legal access to land and so live and work on the landfill (La Ceiba, Honduras), industrial workers who have lost their jobs (Baia Mare, Romania), teen-age boys for whom there is no work (Nairobi, Kenya), or families or individuals who are in other ways dislocated, internal or cross-border migrants, or working outside of the municipality where they are registered.

In Central and Eastern Europe and the former Soviet Union, elderly people are increasingly seen scavenging waste at dumpsites. They have lost professional jobs during the transitional economic phase. For example on the disposal site in Riga, Latvia it was found that most waste pickers were between 40 and 60 years old, and some were pensioners supplementing their income (Bernstein, 2004).



**Photograph 1. Landfill picking in Romania, 2004**

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Waste pickers are frequently internal or cross-border migrants, or belong to religious, social, or ethnic minorities with a tradition of waste-related activities, such as the Coptic Christians in Egypt, who made up the majority of the 'Zabbaleen' waste collectors and waste pickers, or the Muslim minority in Kolkata, India (ILO/IPEC, 2004b). Throughout India the 'dalit' (casteless, formerly 'untouchable') people are involved in picking waste and emptying latrines. In Romania and most of Eastern Europe, Roma (gypsies) have a structural relation to all 'dirty work' such as street sweeping, gutter clean-out, or working at the dump. In Lebanon many waste pickers are Syrians and Palestinians; in Delhi (India) Bangladeshis; in Pakistan., Afghan refugees (*ibid.*). The combination of 'difference' (ethnic, national, geographic) and the 'dirtiness' of the work generally results in society despising pickers (Furedy, 1997; Dias, 2000).

Numbers of waste pickers fluctuate because of population growth and economic conditions. If economic conditions worsen, the numbers tend to grow. Waste picking can (re)appear during particularly stressful situations such as war and severe economic crises that lead to extraordinary circumstances and scarcity. During the siege of Sarajevo by the Bosnian Serbs, some of its inhabitants survived by scavenging for food and wood in refuse containers, dumpsters and dumps. During the United Nations-sanctioned trade embargo on Haiti, waste picking emerged at a large scale. Haitian waste pickers particularly looked for items discarded by US peacekeepers such as pre-packaged

military meals and metal parts (Medina, 1997). During the economic crisis in Argentina in 2001 many people – even from the middle classes – began to pick waste when they lost their jobs, and some children left school to pick waste with their parents. In Eastern Europe many social safety net systems that had provided special workplaces and guaranteed salaries for Roma ("gypsies") were dismantled after 1989, and so many Roma pick waste to supplement their earnings (Stanev *et al.*, 2004). If the conditions improve, the number of waste pickers usually decreases.

Referring back to the characteristics of a "Fordist" pre-modern system, it is not difficult to understand why waste pickers are at risk of marginalisation in a pre-modern situation. They are not part of the government waste management system and their recovery activities are invisible in a system that recognises no value of recovery. To summarise, in a pre-modern system, waste pickers are simply invisible. This goes a long way to explaining, for example, why so little data is collected on their economic and social circumstances.

## 4. Traditional approaches to "help" waste pickers and "alleviate poverty" of waste pickers and their children

### 4.1 Description

To those unfamiliar with the informal waste sector, and especially to residents of middle- or upper-income countries, the sight of families crawling through waste dumped from the back of a truck triggers shock and disgust. The pickers come to represent all that is shameful about poverty and poor people, and in this process the observers de-contextualise picking and see the pickers as disembedded victims of society, globalisation, the solid waste companies, or whatever. Commitment to "help" the pickers is an all too frequent reaction to this shock and disgust, and, like the reaction, such commitments often objectify pickers as de-contextualised poor people and victims. The development projects designed to 'help' or 'rescue' waste pickers treat picking as a disembedded phenomenon, separate from the local and global economy that produces waste. The result is that pickers become an objective problem, rather than being treated as protagonists who can and do make choices and act strategically.

Development approaches to alleviate poverty and eradicate scavenging tend to treat waste pickers as a social problem, rather than seeing them as economic actors in (or at the fringes of) the socio-technical solid waste and recycling system. When this happens, waste pickers become the 'targets' of a number of kinds of development approaches to improving the conditions of scavengers and reducing child labour (ILO, 2004; Furedy 1997). The three most common approaches are (1) the welfare-based approach, (2) the development-oriented approach, and (3) the rights-based approach.

The *welfare-based approach* works to directly improve the living conditions of waste pickers by focusing on daily needs and welfare problems. Waste pickers and their children are seen as passive victims of society, not as entrepreneurs involved in a livelihood activity. This approach assumes that it is possible to introduce improvements in pickers' *condition* without addressing the political and social forces that influence their *position*. The waste pickers in the welfare-based approach have ONLY a social identity, not a professional one.

The *development-oriented approach* sees waste pickers and their children as poor people who lack (other) opportunities, and focuses on strengthening their capacities and opening new opportunities. Although the projects differ, the development approach shares the social framework and vision with the welfare approach. Pickers' status as informal sector recyclers working on solid waste is not perceived as important.

The development approach is concerned with social and economic interventions such as education, credit and income generation to enable pickers to exit to other occupations. It supports empowerment

or gender training or creating access to schools or other social institutions, but continues to ignore the content of waste picking and its contribution to family livelihood. More seriously, it fails to recognize that an exit will deprive the family of the quite considerable income being generated in the existing situation<sup>3</sup>.

The *rights-based approach* aims at creating more political room for changing and strengthening pickers' position as a group in society, giving them a voice, making them visible, and stimulating their political participation. The rights-based approach addresses social, political and institutional aspects of waste picking, with its focus on social status and class. Typical approaches include supporting pickers to form organisations and lobby for rights and social status, but still without acknowledging the economic importance of picking. While the rights approach acknowledges waste pickers as political (in addition to social) actors, it falls short of understanding their role in the solid waste system.

#### 4.2 Critique of development approaches: not participatory, not contextualised

Using the ISWM framework, we can derive some insight into why these approaches have not been effective (ILO, 2004). The ISWM framework is a conceptual framework and methodology developed by WASTE and its partners to analyse and improve waste management systems. It distinguishes three dimensions of waste management systems: stakeholders (everyone who has a stake, i.e. an interest in the current waste management system), waste system elements (the operational elements from generation through recycling and reuse to disposal), and sustainability aspects, ranging from technical, social, political, institutional, public health and environmental to financial-economic (IJgosse *et al*, 2004).

First of all, none of these three approaches treats waste pickers as stakeholders in the waste management system (or even in their own lives). The focus is on getting them out of the waste management system, rather than identifying interesting niches within it.

Secondly, none of these approaches uses the insights of PRA or other participatory approaches; they do not ask pickers how they themselves analyse their problems; they merely accept the Northern or outsider view that it is picking itself that is the problem. The approaches in general fail to contextualise pickers as economic and institutional actors already within the waste management system. This leads to an assumption that exit from this system will help, something the pickers themselves may or may not agree with.

In this, they replicate a common fault of development interventions, treating the observers as experts and the "target groups" as objects (Chambers, 1998). The waste picker projects studied neither consulted waste pickers as to their own priorities, nor engaged them in solving their problems (ILO, 2004; Price & Castro, 2004; Furedy 1997). In Romania, this lack of consultation has consistently led to Roma waste pickers ignoring projects to give them housing and schooling opportunities, creating much resentment in the (non-Roma) organisations doing the "helping" (Stanev *et al.*, 2004).

Third, and perhaps most importantly, none of these three traditional approaches succeeds in scrutinising the situation and concluding that the system of waste management is in transition; they are simply blind to the dynamism of the modernisation process. This has the result that interventions focus on influencing pickers' family or social circumstances by stimulating an exit from picking in particular, and from waste management in general. An analysis of the modernisation process suggests that this is short-sighted, since the general effect of the modernisation process is to open up the system to a variety of technical, economic, and institutional innovations, which can enrich the niches pickers already occupy, or open new possibilities. Neither the welfare, nor the development, nor the rights-based

<sup>3</sup> Research in the 1990s in Latin America, Africa and Asia by WASTE in the UWEP programme indicates, on the contrary, that waste picking consistently provides income that is approximately three times the minimum wage or the wage for an equivalent of skills and experiences (Arroyo *et al.*, 1998).

approach can capture the information on new economic and social niches within the waste system itself.

## 5. Waste picking during modernisation of waste management

### 5.1 Losers or winners in the modernisation process

Some of the most important changes to the condition and position of waste pickers occur when a waste management system actively enters the modernisation process. Modernisation may make their way of working obsolete, 'dis-embedding' pickers from their customs, leaving them seriously out of phase with modernisation, and putting them at risk. Or they may change in parallel with the modernisation process, strengthening their positions and/or seizing the opportunity to take advantage of new circumstances.

It is especially the activity of recycling that changes in the modernisation process: in its pre-modern form, as a charitable or informal sector source of supplemental income, it becomes increasingly supplanted by municipally organised separate collection and recycling initiatives that are motivated by a need to reduce the amount of waste requiring disposal on the one hand, and by a wish to improve the environmental performance of the solid waste system on the other (Scheinberg, 2003).

Waste pickers are losers in the modernisation process when their access to the waste is denied as a result of modernisation of the landfill, restricted gate access, or competition from formal recycling activities. When the modernisation process ignores pickers it risks depriving them of their common property use of the waste stream and disrupting their livelihoods, especially as the legal status and formal ownership of the waste changes and formal participants gain privileged access to materials.

Waste pickers who moved materials from dumpsites into the informal system are tolerated before modernisation begins, but as the municipality increasingly depends on organised recycling, the livelihood activity of waste pickers becomes criminalised, they are "stealing" resources that have been allocated to the local authority (by its own actions). Where a small informal payment to the dump attendant used to let them in and give them storage at the dumpsite, the new rules keep them out with electrified fences and armed guards<sup>4</sup>.

For example, the company managing one of the landfills in Bangkok, Thailand, 'officially' denied access to waste pickers, but allowed them in to continue picking under condition that they sell only to that private company, at even lower prices (Barkhof, 2004). In Romania in 2002, an initiative for modernisation and landfill gas recovery at eight landfills resulted in forbidding access by the local Roma, enforced by armed guards at the periphery of the landfills (Hordijk, 2002).



**Photograph 2. Women waste pickers scavenging plastics at a formal dumpsite in India, 2004.**

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<sup>4</sup> As reported by Aad Hordijk, Environmental Resources Management the Netherlands, about five of the eight modernised, upgraded landfills in Romania in 2001.

In Dar es Salaam, Tanzania, the large private waste collector holding the concession to collect waste from downtown hotels threatened a women's group that wanted to collect plastic bottles from one hotel, causing the group to withdraw (Ishengoma, 2003). In Cairo, a national government commitment to privatize the city's waste management deprived the traditional waste collectors and recyclers, the Coptic Christian Zabbaleen, of their livelihoods collecting waste and using this for a range of semi-formalized economic activities, including raising swine from collected food waste (Abdel Raouf, 2005; Aziz, 2004).

There are some cases where waste pickers have been winners in the modernisation process, and where they have achieved legitimacy and status as important stakeholders in the solid waste system. In Belo Horizonte, Brazil, the municipal authorities created a separate status for waste pickers as the managers of recycling depots, designating them as formal participants, and giving them improved access to materials. This created a high-profile recycling system that saved the city considerable amounts of money (Price & Castro, 2004; Dias 2000).

In Bangalore, India, the NGO Mythri has worked with a number of large commercial waste generators to create a system of contracts with women waste pickers. Each business generator contracts with one specific waste picker, giving her a service relationship and service fee (for cleaning and sweeping) and guaranteeing her a stream of high-value recyclables. In return, the business avoids costs that would otherwise be associated with the modernisation process (UWEP Programme Progress Reports, 2003).

## 5.2 A fundamentally different vision: the system approach

The examples suggest that there is another way to approach waste pickers within development co-operation, and that is to consider the modernisation process as an opening to actively legitimize waste pickers as important stakeholders and economic actors. The authors call this the *system approach*. Such an approach analyses waste picking (and informal recycling and waste collection) as consisting of a range of legitimate economic activities taking place within the overall solid waste management system, and looks at how the system is changing in order to identify new or strengthened economic and operational niches.

Without calling it that, a number of practitioners and projects have used the system approach as part of an integrated waste management process, or with the specific goal of supporting waste pickers. In general, there are four kinds of steps usually taken to strengthen waste pickers in their economic role in the waste management system:

1. supporting waste pickers to enter new service roles and niches in separate collection and recycling;
2. assuring pickers structural access to sorting space at transfer stations, controlled and sanitary landfills;
3. supporting better market leverage and/or diversification of activities through cooperatives and associations;
4. opening channels of communication with formal stakeholders and decision-makers and into the planning process.

### 5.2.1 Supporting waste pickers to enter new service roles and niches in separate collection and recycling

These interventions support the entry of waste pickers (and other informal actors, such as itinerant waste buyers) into source separation and separate collection services. To be successful, this requires that the participation of waste pickers be anticipated during the planning, design and implementation of institutional systems and physical infrastructure for collecting or processing recyclables. Some projects

offer pickers service contracts and/or supply pickers with ID cards, uniforms, equipment and protective gear, and support them to be environmental educators and promoters of recycling.

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When a disposal site was closed, the municipality of **Rosario, Argentina** supported the formation of five cooperatives of dump pickers and gave them contracts to undertake selective collection of recyclables. The municipality also built a sorting/pre-processing plant, which is managed by one of the cooperatives. Also it is developing legal mechanisms to ensure the provision of sufficient quantities of recyclable material for the waste pickers' cooperatives (Price & Castro, 2004).

In **Belo Horizonte, Brazil**, the municipal authorities created a separate status for the waste pickers' association ASMARE, as the managers of recycling depots, designating them as formal participants, and giving them improved access to materials. This created a high-profile recycling system that saved the city considerable amounts of money and increased enormously the volume of recovered material. The association is currently acting as an adviser to 22 other local governments in the same state to establish waste pickers' cooperatives and set up selective collection systems (Dias 2000, Price & Castro, 2004).

#### 5.2.2 Assuring pickers structural access to sorting space at transfer stations, controlled and sanitary landfills

This set of activities involves designing the disposal site to include a separate sorting 'receiving area' at transfer stations and landfills, so that the pickers work on a clean, dry, surface while diminishing the risks to their health and safety from disease or accidents involving waste vehicles. This is ideally to combine with regularising the status of landfill-based pickers by giving them a franchise or contract to extract and process materials. In some cases this can be combined with improving the water and sanitation facilities at transfer stations and landfills, and/or providing clean places for pickers to eat and rest.

The relatively well-organized Hungarian Roma community has been able to negotiate for continued access to waste materials after modernisation: Roma entrepreneurs (many of them women) in at least two cities, **Gyor** and **Debrecen, Hungary** pay a concession fee for the right to scavenge the landfill (Scheinberg, 2002).

In **Lima, Peru**, three recycling cooperatives set up by IPES and municipality pay a concession fee to the municipality, to be able to scavenge the dumpsite. They divide the time, so that each works 10 days per month on dumpsite (Price & Castro, 2004).

In **Tashkent, Uzbekistan**, a private firm operating a recycling centre at the landfill has registered waste pickers as employees, and provides them with facilities to sort and store waste (Bernstein, 2004).

#### 5.2.3 Supporting better market leverage and/or diversification of activities through cooperatives and associations

These measures are meant to strengthen the relationship between waste pickers and recycling markets through marketing co-operatives or the formation of multi-actor alliances like recycling platforms or unions. This gives pickers "strength in numbers," by creating focused collectivities that can make available a collective storage and sorting area, enable collective negotiation, selling materials for higher prices, collective purchasing of equipment or transport, and advocacy. These can ultimately lead to higher income and status for members (Bernstein 2004). In certain cases it may also make possible

individual benefits to members, such as health insurance, life and accident insurance, access to credit, access to training, scholarships, legal protection (Medina, 1998a in Bernstein 2004).

The oldest and most dynamic of these cooperatives can be found in Colombia. The cooperative movement is also strong and growing in among others Brazil, Mexico, India, Indonesia, and the Philippines (Arroyo *et al.*, 1998; Bernstein, 2004).

There are some examples of projects that specifically support diversification (as opposed to exit). These initiatives have offered pickers access to credit, training in business skills, and the like. Already in the 1980s in **Cairo, Egypt**, Christian ‘zabbaleen’ – semi-formal waste collectors – received assistance to start small-scale pre-processing and recycling industries, which have been instrumental in improving incomes for a large number of them (CID, 2001; Volpi, 1996).

One of the most successful waste picker associations in Latin America is Recuperar in **Medellín, Colombia**. Recuperar was established in 1983 as a joint initiative of the municipality, a private company, an NGO and 30 waste pickers. Reason was the closing of the local disposal site and building of a sanitary landfill, which provided a livelihood to 320 waste pickers. Originally the cooperative was only engaged in recovering recyclable materials, but since 1995 it has diversified its activities into cleaning and gardening services, pre-processing and recycling, trade in byproducts, and the like. Through access to credit it has been able to continually improve its activities and obtain its own land and building (2,400m<sup>2</sup>). In 2003 it reported having 1,385 members and making US\$ 33,286 net profit. The cooperative annually promotes recycling competitions in the city and is recognized as an important actor in solid waste management (Price & Castro, 2004).

In **Batangas Bay, Philippines**, the UWEP programme supported small informal sector recyclers to form a marketing co-operative, which gave them a base of operations, a collectivity capable of purchasing a truck, and, through these, access to more markets for more materials (UWEP Programme Progress Reports 2001).

In **Dar es Salaam, Tanzania**, a UNIDO-funded project built a recycling centre to serve the micro and small collection entrepreneurs, together with CBOs and the Association that represented the waste pickers at the two landfills.

#### 5.2.4 Opening channels of communication with formal stakeholders and decision-makers and into the planning process

There are also interventions which focus on facilitating communication and bridging the gap between the formal waste management sector and informal waste pickers and recyclers. Waste platforms have integrated waste pickers with other stakeholders in **Bangalore, India**, in the work of the Swabhimana Platform. From within the platform, the pickers can make their concerns known.

In **Blagoevgrad, Bulgaria**, a recycling project started in 2000 gave, for the first time, Roma waste pickers on the municipal landfill an opportunity to check with the municipality as to whether the junk shop that they were selling to had the “monopoly” it claimed to have (it did not).

After the economic crisis of **Argentina** and the huge increase in numbers of waste pickers since August 2002, the local government of **Buenos Aires** took measures to improve the lot of waste pickers. This included establishing a ‘Dialogue Table’ between formal and informal stakeholders. This table is formed by independent waste pickers, cooperatives, associations of charity societies and various local and national government institutions, ranging from citizen participation, to healthcare, social communication, security, urban hygiene, and enterprise development. Also some invited organizations participate such as the company Tetrapak (Price & Castro, 2004; (<http://www.buenosaires.gov.ar/>)).

In **Brazil** street waste pickers have been included in various cities in selective waste collection systems. The number of city governments carrying out selective waste collection has grown in Brazil from 81 in

1994 to 237 cities in 2004. Over 500,000 waste pickers are estimated to earn their living in this way. Due to the size and cultural diversity of the country, this model varies from region to region. In general, programs are maintained through shared responsibility among the community, street waste pickers, cooperatives, industry, distribution and sales networks and local authorities. It has significantly improved their situation (CEMPRE, 2004).

Finally, a waste or recycling planning process that invites scavengers or their representatives to participate as stakeholders can have a strong effect in terms of integrating the concerns of pickers into formal plans for managing solid waste in a modernised system, as well as in the formulation of municipal and national SWM policies.

This needs considerable awareness-raising of local and national governments and policy makers to change their perception of waste pickers, by convincing them of the value of waste picking to the economy, and to encourage them to perceive waste pickers and stakeholders and incorporate them into the SWM planning process.

### 5.3 Barriers to implementing the system approach

While the system approach may have promise, it is not always possible, and even when implemented, it does not always succeed. Some development practitioners have tried some of the steps described above in other cities or countries, but they have not always been successful. There are multiple reasons for this difficulty to establish really sustainable systems:

1. A system approach needs long-term commitment from supporting organisations. In Latin America religious organisations often provided support that lasted more than a typical 3-4 year development project.
2. Real in-depth knowledge of the economics of the local waste sector is needed. There is a limit to the number of cooperatives that can collect the same materials. Diversification of services and materials is a must. Otherwise there is also the risk that when the disposal site or landfill is closed, cooperatives of dump pickers fall apart (FACET, 2004).
3. It is always discouraging that only small numbers of waste pickers are helped with selective collection schemes and other system-based measures. For example Sao Paulo, Brazil has an estimated 20,000 waste pickers of whom 'only' 1,200 are organised in 70 groups and two cooperatives. However, through diversification the numbers can grow, as the case of Recuperar (Medellín, Colombia) demonstrates: it has on its own 1,385 members, about one quarter of all the waste pickers in the city (Price & Castro, 2004).
4. In some cases it is necessary to strike a balance between participation of waste pickers and working with the willing. Sometimes waste pickers are not willing to participate in activities that are meant to help them finding new niches, for example because they lack trust or because they have difficulties collaborating for a common goal (Zekrie, 2003; Stanev *et al.*, 2004).
5. Measures like selective collection are complex; they need to be combined with extensive citizen education, training of waste pickers, often formation of associations, and the like.
6. Strong, existing patron-client relationships can make setting up cooperatives and work on the emancipation of waste pickers difficult, as has been the case in Mexico (Price & Castro, 2004) and in Turkey (Bijvanck, 2005).
7. It has been argued that formalising informal systems is usually at the disadvantage of women (Scheinberg *et al.*, 1999; Volpi, 1996). However, so far, evidence to support this for measures to improve waste picking, i.e. the change to selective collection systems, is scant.
8. Installing separate sorting areas and water and sanitation facilities increases the cost of landfills and is only feasible when the landfill has a minimum of 10 years life span (Bernstein, 2004).

## 5.4 Summary

The system approach stands for a wide range of practical interventions that can strengthen the role of waste pickers in waste management systems, and in the process avoid the risks associated with many interventions. Not all of these are without problems. Some of them have been tested, others are extrapolations, but they all operate from the idea that pickers are professionals within the waste system, and that improving their lives and livelihoods works best in the context that recognises this.

## 6. Conclusions: Learning from waste picking in relation to the MDGs

The differences between the welfare, development, and rights approaches on the one hand, and the system approach on the other, rest primarily on the principle of **contextualisation**. If we as practitioners de-contextualise waste pickers and treat their problems as disembedded from the waste system in which they operate, we and they miss opportunities for genuine and sustainable improvement in their lives and livelihoods. If, on the other hand, we look at larger processes of modernisation in the solid waste system, we can identify niches and new possibilities.

It seems highly likely that the same is true of other “poor people” who might be the “targets” or “beneficiaries” of interventions to achieve the Millennium Development Goals.

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