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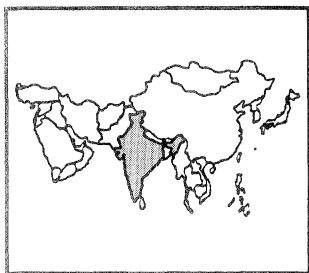
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Waste picking as a survival strategy for women in Indian cities

Marijk Huysman

SUMMARY: *This paper draws on interviews with women waste pickers in Bangalore (India) to describe their work, the returns they receive and the difficulties they face. This includes the extent to which other family members (including husbands, for those who are married) contribute to household income. It also includes a detailed account of a day in the life of a woman waste picker. Despite the low returns and the health risks, waste picking offers one of the few ways in which women from lower castes can earn an income and also meet their household and child-rearing responsibilities. The paper also includes a description of the Garbage Recycling and Segregation Programme (GRASP) in Pune and some conclusions and recommendations for governments and NGOs.*

Marijk Huysman is an urban sociologist who is coordinator of a research project on "Approaches to Solid Waste Management; linkages between formal and informal systems of source separation and recycling." This is looking at solid waste management in Bangalore, Madras and Hyderabad and at the role of NGOs in such management in all major Indian cities. This is a joint project of the University of Amsterdam and the Karnataka State Council for Science and Technology (Bangalore).

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I. INTRODUCTION

ESTIMATES SUGGEST THAT there are 25,000 waste pickers in Bangalore, a South Indian city with a population of 4.1 million.⁽¹⁾ Although a lot of workers in the informal recycling sector are men, street waste picking appears to be done by women and children from the lower castes.⁽²⁾ For these women the ideal of not working outside the household is secondary to the necessity of earning an income: they have to work outside the household to ensure a subsistence income. The opportunities open to them in the labour market are very limited. As a result of their caste background and economic situation these women have to undertake work that is underestimated and poorly paid, as do the men from these castes. Their restricted opportunities for finding work make the circumstances and the effects of this work worse for women than for men of the same caste. Because of the combination of their low caste background, their low level of education, and their child-rearing and domestic responsibilities, working as waste pickers is one of the few income-earning possibilities open to them.

Chitra P. and Irene Colaco for their help in the work on which this paper is based.

1. No formal comprehensive research or studies have been conducted on the total numbers of informal sector workers in the recycling sector of Bangalore. For more information on solid waste management in Bangalore, see Huysman, M. (1994), "The position of women waste pickers in solid waste management in Bangalore" in Ira Baud and Hans Schenk (Editors), *Solid Waste Management: Modes, Assessments, Appraisals and Linkages in Bangalore*, Manohar Publishers, New Delhi, pages 46-105.

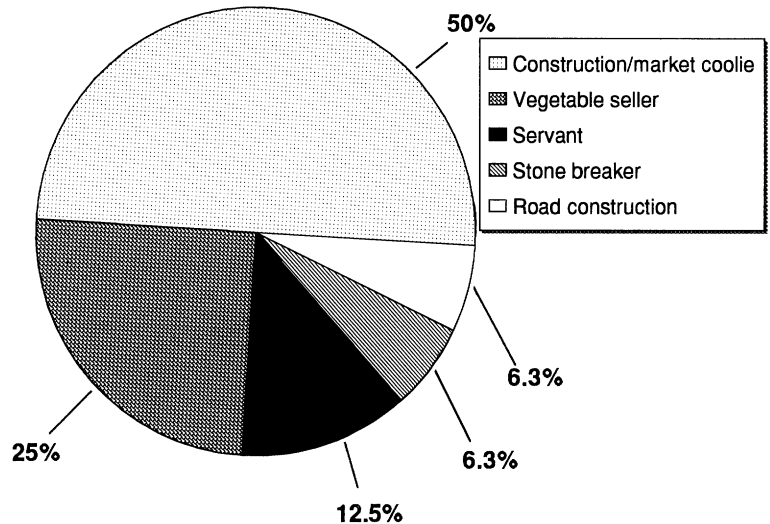
2. The lower castes include the scheduled tribes, scheduled castes and a large segment of the backward classes. There are many castes, sub-castes and communities within this category.

3. Most of the women waste pickers speak Tamil, their native language. Ninety-one women were born in the districts of North and South Arcot in the state of Tamil Nadu and lived in small villages near cities such as Tiruvannamalai, Tirukkoyllur and Kallakurichchi. They stated the following reasons for migration: marriage (30 per cent), lack of employment (29 per cent), drought (24 per cent), came as child with parents (15 per cent) and family feud (3 per cent). Sixty-six women were born in Bangalore but all the parents, with one exception, originated from Tamil Nadu. The remaining four women were born in districts of Karnataka. Even though I discovered that there are also Telegu and Kanada-speaking waste picking street children, I mainly met Tamil women waste pickers.

II. WOMEN WASTE PICKERS IN BANGALORE

WASTE PICKERS USUALLY live concentrated in particular areas of Bangalore. This paper is largely based on interviews with a total of 161 women waste pickers undertaken during 1989 and 1990. Of these, 157 lived in three such areas (Lakshman Rao Nagar, Rajeshwari Nagar and Cement Line) and four lived on the pavement. Their ages varied from 16 to 62 years old. Most of these women are poor migrants or offspring of migrants from rural areas in Tamil Nadu,⁽³⁾ and belong to the Parayar caste. Long before these women worked as waste pickers, they had worked outside the household. One hundred and three of the respondents (64 per cent) undertook different kinds of paid jobs before they began waste picking. They worked as coolies in markets or construction sites, in road construction, as household servants or as vegetable sellers (see Figure 1). These are all jobs in the informal sector, with low wages, without legal protection or job security.

Figure 1: The Former Occupation of Women Waste Pickers (n=103)



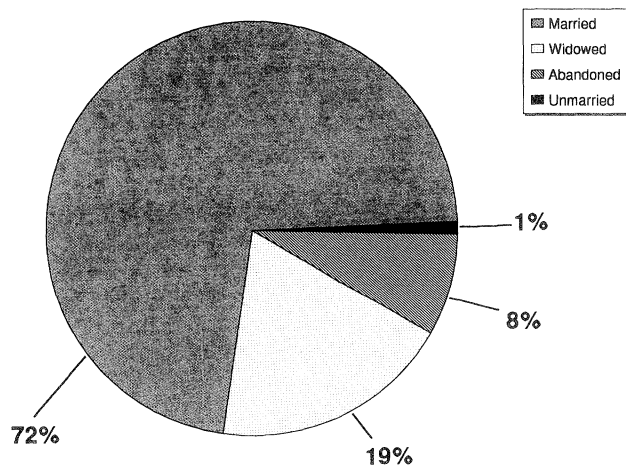
The women who previously had worked as construction labourers gave several reasons as to why they had switched to waste picking: the work was too heavy; they had had an accident at the building site; they could not combine the work with their household duties, or they were breastfeeding their children. The women who previously worked as domestic servants were forced to look for other forms of work which ensured that they had a daily income instead of a monthly income. Among the waste pickers interviewed, 19 per cent were widowed and 8 per cent had been abandoned by their husbands (see Figure 2). Most of the widows and abandoned women stopped their previous activities after their husbands died or deserted them; they also began waste picking because of their need for an assured daily income.

Shilambai and Kuppamma were the first women waste pickers in Rajeshwari Nagar. Before becoming waste pickers, they worked as stonebreakers in a quarry next to the slum. When the quarry closed down 15 years ago, both were too old to find other employment. They started waste picking.

Tayanthi and Pallaniyamma live in Rajeshwari Nagar. Their families have now lived in this area for two years. Previously, they lived near the city market where Pallaniyamma worked as a coolie, and Tayanthi worked as a domestic servant in Shanti Nagar. One day they were evicted by the Slum Clearance Board and their huts forcibly removed. Through this forced removal both women not only lost their work, because they could not afford the 50 ps. (half a Rupee) bus fare, but they also lost their access (through contacts) to the labour market. Finding work very often depends on the contacts one has. As an alternative they started waste picking.

Thus, due to the low, irregular income of former activities, and the lack of other work or the extreme difficulty of combining it with household duties, waste picking is a relatively reasonable alternative for these women. Waste picking is not an occupation of choice but when other avenues and opportunities are lacking it becomes an alternative. It is notable that 27 per cent of the women in the sample are widows or have been abandoned by their husbands (see Figure 2). Their position is often particularly serious. In many cases they bear the responsibilities of earning an income and raising their children alone. In addition, when women are old or have young children it is almost impossible to find a regular job.

Figure 2: The Marital Status of Women Waste Pickers (n=161)



Abandoned women enjoy little esteem since society offers them little respect. Women who have been abandoned and who begin living with their family also face great difficulty. Older and younger brothers often function as the head of the family and decide on what kinds of behaviour are permissible for their sister; Box 1 gives some examples of this.

Box 1: The Difficulties Faced by Women Abandoned by Their Husbands

Kannamma was abandoned by her husband shortly after her first child was born. At present she lives with her family in Cement Line because she could not afford to live alone with her child. Working with her mother, she picks waste from five in the morning until two in the afternoon. At the end of the afternoon she and her sister-in-law clean a sari shop. She is only 22 years old and would like to remarry but her brothers will not allow this. She would also like to stop picking waste and start working as a household servant but her brothers do not allow her to walk on the street alone and want her to continue waste-picking because their mother can keep an eye on her.

The lives of abandoned women in neighbourhoods are difficult but living on the streets is even worse.

Ten women live with their children on Kilariroad.⁽⁴⁾ At night they cook their meals collectively and sleep in two adjacent shop doorways. During the day they leave their belongings in a neighbouring school playground and start waste-picking. Mala, one of the women, and her daughter joined the group a year ago. When she was seven months pregnant, she was deserted by her husband who left her because he did not believe that she was capable of giving birth to a living child. The family had already lost three children, one still-born and two others who died of smallpox and a viral infection. Her husband did not wait for the fourth delivery but returned to his native village and married another woman. After the delivery, Mala travelled to the village to show him his daughter. He refused to accept the child as his own and was unwilling to take Mala back or to bear the financial responsibility for her and the child. Mala decided to return to Bangalore and, very soon, she joined the women of Kilariroad. She would like to marry again and live in a hut instead of on the street. The women of Kilariroad protect and support each other which is necessary because of all the dangers of living or sleeping on the street at night. They give *baksheesh* (payments) to the police to avoid eviction and, very often, they are abused by drunken men.

4. Of these 20 women, four had additional interviews during the research.

5. The demand for waste materials is determined by consumers' preference for recyclables and the supply and prices of virgin materials on the market. Over a period of two years, a fluctuation in the prices of local waste materials has been observed, affected by the import of waste materials. As a result of the increased awareness in the North of the environmental impacts of waste incineration and dumping, waste is now exported from the North to the South. Shiploads of plastic and paper waste enter the harbours of Bombay and Madras. Industries utilizing waste materials prefer the imported wastes because of their higher quality and cleaner state and the fact that there is not much difference in the prices of imported and local wastes. This affects the economics of local resource recovery and recycling. It also means a particularly harsh impact on itinerant collectors and waste pickers.

It is not only widowed and abandoned women, but also a large percentage of married women, who have to provide the primary income. This leads them to become waste pickers since this provides them with an opportunity to survive and they are assured a daily income. Another aspect the women consider positive is that they can, to a certain extent, divide their time between their tasks as mothers, housewives and breadwinners. They have no formal boss or overseer and there are no restrictions on bringing their children with them or having them involved in waste picking. They also do not have to invest money, be educated or have contacts to start waste picking.

The nature of the work as waste pickers creates the illusion that women waste pickers are independent. But a more detailed look at their working circumstances, working relations and living conditions, show that they are far from being autonomous producers. Waste pickers collect materials which form the main input for both small and large-scale recycling operations. Despite this, there is no formal labour contract between the pickers and the factories. Waste pickers do not sell the materials direct to a factory; the materials only reach the factory through a network of dealers and wholesalers. The waste pickers' income is mainly determined by the current prices of the waste materials that they are able to collect. The prices depend upon the rates that the factories give for these materials and these rates are influenced by the market prices for national and international raw materials.⁽⁵⁾

The waste pickers' share in the total profit is very small. This is due to the small amount of material they handle and the fact that they operate within a structure where the limits are defined rigidly. Each link in this chain tries to make as much profit as possible and this is only possible when waste is handled in large quantities. Waste pickers are dependent upon the dealer for the sale of their materials. The dealer tries to enlarge his relatively small profit margin by keeping prices as low as possible, by cheating waste pickers through undercounting when the wastes are weighed or by binding them to him for longer periods of time through loans or other facilities. In times of inflation, falling prices, poor weather and competition, women waste pickers have to suffer the consequences of the decline in their income. They have to work more hours per day or borrow money from the dealer to cover the loss of income. People at higher levels in the structure, such as the wholesalers and the factories, bear no responsibility in this and can handle seasonal adversity more easily because of the large scale of their enterprise and the availability of capital.

Access to working spots which have valuable recyclable waste is therefore of great importance to women waste pickers. At present the women waste pickers who can live close to good sources of waste are doing better in terms of income as well as working hours. Women from Lakshman Rao Nagar work far fewer hours a day than the women from the other two locations but they earn the highest weekly incomes (see Table 1). They live near the commercial centre of Bangalore where a lot of valuable materials are available. They also receive higher prices for

their paper due to the presence of many dealers which implies that they have a choice of whom to sell to. These women do not work more hours to maximize their earnings. They obtain a steady income which enables them to survive within a certain fragile economic stability.

Table 1: Income Levels, Working Hours and Working Days for the Women Waste Pickers From Different Locations

Location	Earnings (Rupees/day)	Number of Respondents	Rupees per hour	Rupees per week	Hours per day	Hours per week
Lakshman Rao Nagar	< 10	30	1.88	47	4.1	25
	10-15	33	1.84	71	6.4	39
	> 15	12	2.34	101	7.2	43
	average		2.02	73	5.9	35
Rajeshwari Nagar	< 10	10	1.15	45	6.5	39
	10-15	36	1.46	73	8.3	50
	average		1.31	59	7.4	45
Cement Line	< 10	16	1.10	44	6.7	40
	10-15	20	1.36	69	8.4	50
	average		1.23	56	7.5	45
Street	10-15	4	1.32	75	9.5	57
	average		1.32	75	9.5	57
All	average	161	1.47	66	7.6	46

6. Editors' note. A Rupee (Rs.) at this time was equivalent to around 2 pence (i.e. with 50 Rupees to £1 sterling) or around 3 US cents.

7. More details of incomes and expenditures of women waste pickers are given in Huysman, M. (1994), "The position of women waste pickers in solid waste management in Bangalore" in Ira Baud and Hans Schenk (Editors), *Solid Waste Management: Modes, Assessments, Appraisals and Linkages in Bangalore*, Manohar Publishers, New Delhi, pages 46-105.

Table 1 shows that the average hourly earnings of women waste pickers is Rs. 1.5.⁽⁶⁾ This can be compared to food prices - for instance a kilo of rice is Rs. 6-8 (depending on quality) while a kilo of flour is Rs. 4.5 and a kilo of sugar is Rs. 11; a litre of oil is Rs. 30. Cheaper prices can be found in government ration shops - for instance, per kilo, rice is Rs. 4-7 while flour is Rs. 2.3 and sugar Rs. 7. But only those who live in shelters with an official house number can apply for a ration card and 36 per cent of female waste pickers did not have a ration card. Ration shops do not sell vegetables, fruits, meat and spices; in 1990, a kilogram of apples cost Rs. 10 while a kilogram of chicken cost Rs. 18.⁽⁷⁾

For waste pickers, access to high quality waste is very limited and is reduced as soon as certain materials acquire sale value and are sold at source. In many Indian households, an increasing number of materials such as plastic milk-covers, newspapers and bottles are stored and sold to itinerant buyers or neighbourhood dealers. Besides, access to waste in general is becoming more competitive with increasing numbers of waste pickers entering the market. In contrast to other studies in different Asian cities, in this case study there was no control of certain territories. Women waste pickers were repeatedly asked whether they demarcated and controlled certain territories. They denied it:

Dhanamma: "We have a belly, the other women who come in this area to collect waste also have a belly. We are hungry but they are also hungry, so why should we object."

For waste pickers, greater access to waste would require more opportunities to sort through materials at the point of generation, before it is placed on the streets, in dustbins or on the dumps. This requires the cooperation of the public and the municipal authorities, to which reference will be made later.

Being bound to a household and its duties, women waste pickers have limited geographical mobility. This sets limits on the times when they can work, the locations where they work, the number of working hours each day, and their dependency on one dealer, all of which have direct consequences on their incomes. Women waste pickers work from early in the morning until the afternoon. They cannot stay away for a whole day because of the need to undertake the remaining household duties. Besides, it is considered indecent or a social taboo and dangerous for an Indian woman to work outside her home alone in the evenings and at night. It is clearly stated by the respondents that there is sexual molestation for those who risk working at night.

Women who breastfeed their children usually work fewer hours per day and are forced to collect materials in the immediate neighbourhood in which they live, where competition can be high and less waste can be found. Men and young boys are known to have more freedom to adjust their working schedule in time and space according to the availability of waste. Due to their physical lack of mobility women waste pickers are often dependent on a dealer close to where they live. This dependency limits their capacity to criticize the dealer or collective action to demand higher prices. For these women, who bear the responsibility for the survival of their households, a good relationship with their dealer is of great importance. In times of distress they need to be able to borrow money. Borrowing money is a financial disadvantage and heightens their dependency but it is the only source of credit that they have. These loans have to be paid back with high rates of interest. So, besides professional factors, the working circumstances of women waste pickers are also determined by factors which are directly related to the fact that they are women with specific role stereotypes.

Waste picking also has consequences for the position of women in the household itself. Women waste pickers earn a daily income which they spend entirely on subsistence. The married women complain that the security of their daily income makes it easier for men to withdraw from their responsibilities. Table 2 shows the employment background of the husbands of married women waste pickers. Most of the men work as coolies and construction labourers and do not have regular jobs. They are casual workers or day labourers who have to look for work each day and are never sure that they will be employed by an entrepreneur. To find work they wait in the early morning on the corner of a street or on a square where employers come to hire

them. They do not get paid if they do not work for reasons of illness or because an entrepreneur has no work for them that day and, on average, they work three days a week. Seventeen husbands are involved in waste picking, ten on a full-time and seven on a part-time basis. The full-time male waste pickers earn Rs. 15-20 daily. They were all working as coolies before and became waste-pickers through lack of sufficient employment opportunities. Husbands who are waste pickers work part-time as coolies whenever they have the opportunity. They regard waste picking as temporary and as the last resort.

Table 2: The Employment Background and Earnings Per Day of the Husbands of Women Waste Pickers

Profession of husbands	Number	Percentage	Rupees per day
Coolie	53	45.7	15-20
Construction worker	14	12.1	25
Specialized coolie	11	9.5	35
Waste picker	17	14.6	18
Other	6	5.2	
Unemployed/handicapped	15	12.9	
TOTAL	116	100	

Only a minority of the men contribute their full income to the household budget. Many men consume alcohol daily and often to excess, and women are frequently confronted with aggressive drunken husbands. Of the working husbands, 24 per cent contribute most of their earnings to the household income, 20 per cent contribute half and 56 per cent contribute one-third or less. The remaining portion of their earnings is spent on smoking, gambling and drinking.

The use of alcohol creates problems in many households. In or within the surrounding areas of the three locations, an *arrack* shop can be found where cheap liquor is available. Fortunately, liquor in Karnataka, unlike in Tamil Nadu, is not prohibited which means that its quality in *arrack* shops is under state government control and is less dangerous. This does not, however, alter the fact that alcoholic excesses by husbands have extremely serious consequences for women and children.⁽⁸⁾ One of the women waste pickers, Selvi, told of the problem that she faces. Her husband drinks every day. Very often at night she is warned by neighbours because her husband is so drunk that he can no longer stand on his feet. She finds him along the alley or in a drain and brings him together with her children to the hut. The next day he is not able to work and has to sleep to sober up.

The minor financial contribution of men to the household budget puts more pressure on women to earn a daily income and make ends meet. One example of this is Lakshmi who receives only a small proportion of her husband's earnings. She is 35 years old and has lived 15 years in Cement Line. She is married and has seven children the youngest of whom is one

8. Alcoholism in many cases leads to violence towards women and children. During my stay in the three locations I was confronted regularly with women and children who were beaten up by their husbands, fathers or other male members of the family.

and a half years old. Her husband works as a construction labourer four days a week. He earns Rs. 25 daily of which he spends Rs. 10 on the household (Rs. 40 weekly). The remaining portion he spends on his own consumption - *beedies* (very cheap small Indian cigars) and *arrack* (an Indian alcoholic drink). Lakshmi used to work as a household servant but this did not earn enough to feed and clothe her growing number of children. For the last ten years she has been a waste picker. At present she earns Rs. 7 daily (Rs. 42 weekly). She cannot stay away from the home for long periods or cover large distances because of the children. During her absence her six-year old daughter takes care of the baby while the neighbours keep an eye on them. At 11 o'clock Lakshmi has to be back to breastfeed the baby. Her two eldest sons, 20 and 18 years old, rarely visit home. She does not know where and how they make a living. The sons of ten and eight are engaged in waste picking. They leave the house early in the morning and return late in the afternoon. Together they earn Rs. 12-15 daily (Rs. 60 weekly) which they partly use to buy candy. In all, Lakshmi can spend Rs. 20 daily on the household.

Table 3: The Proportion of Household Income Contributed by the Women Waste Pickers According to Family Type

Contribution to household income (per cent)	Type of household				Total	
	Female headed	Nuclear family	Extended family	No	%	
100	12	3	-	15	9	
75.0 - 99.9	1	15	5	21	13	
50.0 - 74.9	16	24	5	45	28	
25.0 - 49.9	5	41	21	67	42	
Less than 25.0	-	3	10	13	8	
Total	34	86	41	161		
Per cent	21	53	26		100	

Table 3 indicates that half of all the women interviewed contribute more than 50 per cent to the household income. If the daily income is insufficient, again it is generally the women who are responsible for obtaining loans and for repaying them. For small amounts they will rely on the dealer but for larger amounts they have to go to the money-lender and the pawnshop (*marwadi*).⁽⁹⁾ In all cases, these loans are very unfavourable for the women although not for the lender; the interest rates are very high and this adds to the women's workloads and dependency.

To a certain extent the living circumstances of women waste pickers correspond to those of other poor women in cities: low earnings, poor quality housing, insufficient facilities, unhygienic

9. *Marwadis* are former money-lenders from Rajasthan, specifically from the city of Marwar, who have been practising the family business of pawnbroking (money-lending) for generations.

10. Waste picking carries many dangers which are illustrated in Section III - for instance rabies from dog bites; a lack of tetanus injections; exposure to hazardous wastes such as hospital wastes.

environments and a lack of access to education and medical care. However, the nature of waste picking entails a unique working environment to which special attention needs to be given. Waste picking activities by mothers have a negative effect on their children. Only a very small minority of the children attend school; their contribution is needed for the survival of the household. Waste picking is well suited to children's participation in terms of collection as well as sorting activities. Girls normally accompany their mother and continue waste picking even after their marriage. Boys work alone or with friends and become influenced by a street culture which has negative effects on their development. Many of them leave home to survive on the streets. They find other employment or continue waste picking and are often victims of drug abuse and illicit liquor consumption. Those who do not run away try to find other means of income in due course.

Waste picking is tiring and heavy work and waste pickers are daily exposed to illnesses and infections which, combined with inadequate washing facilities in the slums and limited access to medical care, form a threat to their health and to that of their children.⁽¹⁰⁾

The public authorities usually have little respect for these women's contributions to the maintenance of the city. Measures taken by the Corporation can have a negative effect on the work and life of waste pickers. They are considered by many to be a nuisance to the environment and a threat to the image of the city. They and their slums have to disappear to the periphery of the city as apartments, shopping complexes and other developments on built on the land on which they formerly lived. However, jobs there are scarce and waste only available in limited quantities. There is also the low status attached to this occupation and the real stigma associated with being a waste picker. They are looked upon by other members of society as filthy and often treated as thieves. The women are abused verbally and considered by men as easy sexual targets. Although some of the women are proud that they have not resorted to begging for survival, many look down on themselves and have low self-esteem. Their work and life is a consolidation of their low status in Indian society. The socio-economic structure in the shape of caste/class relations and gender relations acts as a fundamental base for the establishment, maintenance and perpetuation of this reality. This is also possible because women waste pickers are not organized and lack the external support they badly need.

III. A DAY IN THE LIFE OF A WASTE PICKER

THIS SECTION DESCRIBES a day in the life of Susheela. Her story reflects the daily reality of hundreds of thousands of women in India who make their living on the streets of the big cities by picking waste. The day begins before the sun rises and ends long after most people in the city have gone to sleep. It is a day of a particular kind of physical labour that ensures survival,

that makes no guarantees for the future and gives the barest minimum subsistence: ...a little food, a few scraps of vegetables and some rice gruel. Their clothes are always dirty, the children's hair is matted and most of the children have some sort of sore, cut or boil that is usually the result of vitamin deficiencies, accidents in the home or at work and poor hygienic conditions. They live in dark, poorly lit huts with thatched roofs, built with construction waste, gunnybags and oily tarpaulins. They use dry cowdung or firewood which also has to be scrounged. These urban poor have little or no opportunity for upward social and economic mobility due to their particular form of non-structured "piece wage" self-employment.

From a distance I see Susheela with whom I have an appointment to join her on one of her working days. It is half past five in the morning. We made an appointment at a teastall where many men and women have their first cup of tea of the morning before they start work. The women are mostly waste pickers and the men are coolies. The small group of women with whom I drink tea look sleepy, comb each others hair and gossip. One of them complains about the long line of women and children who queue up in the morning at the watertap. There are many household duties which have to be completed before the waste picking begins.

Susheela has already done a lot of work before she has this cup of tea. She wakes up at around half past four in the morning and wakes her mother and her oldest daughter, Parvathi. The younger children are entitled to sleep a little longer. Susheela and her daughter get the empty water vessels and walk to the nearest water tap at the end of the small lane where they live. Here, a long queue of women has already formed. When it is Susheela's turn, she has to walk several times back and forth from the tap to her hut with a full vessel until there is enough water for the rest of the day. Only at the end of the afternoon will there be water available once again; the rest of the day the tap lies idle due to water rationing.

Meanwhile, Susheela's mother, who is too weak to carry full water vessels, is cleaning the dishes and vessels from the last meal. The other children are awake and Susheela helps them get dressed, washes their faces and combs their hair. Because there are leftovers from the previous meal the family can have breakfast. Although it is not much, it is always better than starting the day on an empty stomach. After the food, Susheela cleans her teeth with some ash from the fireplace and scrapes her tongue with a piece of palm leaf. Then she takes her basket and gunnybag and leaves the slum at around 5.30 a.m., together with Parvathi, in the direction of the teastall on J.C. Road. Parvathi is 13 years old and has never been to school. It is not that she did not want to go to school. The family badly needs the daily Rs. 5-7 which Parvathi earns from waste picking. In the end this counts for more than the ability to read and write.

The women have emptied their cups, pay Ps. 80 for the tea and get ready for work. They leave in small groups or alone. We walk in the direction of Cobbunpet, a commercial area full of shops, offices and markets. In the meantime Susheela gathers

waste materials from the street and the dustbins and puts them in the basket which she carries on her head.

Around us the city awakes. People wash themselves, milk a cow, scrub the pavement in front of their door or head for work. We meet a lot of waste pickers, mainly women and children. Most of them carry a gunnybag over their shoulder and they seem to know exactly where to go and what to look for. They work fast as they search the piled garbage heaps and bins, searching for, in their eyes, valuable materials. They have to be fast because the competition is stiff and the faster they work the sooner they can go home. Each day they collect as much as 12 to 15 kilos of material. They not only collect waste paper but also keep a look-out for anything that can be of use to the household. A prized find is coconut shells for fuel.

After a 15-minute walk we arrive at an area of fallow land measuring 10 by 20 metres, in the middle of a busy shopping street. In several corners of this plot I see gunnybags and small piles of paper and plastic. Two women enter the place with full baskets on their heads and walk to a corner. They bend forward and empty the baskets onto the ground. One of them picks up a ball of silk threads which she found outside some small-scale weaving units. She seems to be happy with it and tries to clean the ball by getting out the dirt.

The place seems to be the gathering spot for about 15 women waste pickers and five or six children who store their waste materials here while they walk around with their baskets to collect more. Dhannama, the oldest woman of the group, discovered this place a couple of years ago. It was previously a shop but since the fire, which destroyed the building, nobody uses the site. The spot is hidden from view by a half-eroded wall and the surrounding shop owners do not seem to be bothered by the fact that the women use it. The spot plays an important role for the women. Before it became available, the women had to carry all the waste collected in a morning or leave a pile somewhere on the pavement where the risk of it being stolen or blown away was quite high. During visits to the same location some two years later, I found that the intermediate storage spot was no longer available to the women and that they were looking for a new place. Meanwhile, they had to go back to their old ways of carrying their whole load with them which meant a reduction in daily waste collection. These factors demonstrate how vulnerable waste pickers are to external changes.

A new woman enters the site. Instead of walking she stumbles forward. By the expression on her face, she shows that she is feeling pain with every move she makes. Susheela is surprised to see her and tells us that Pichamma has a large wound under her left foot. Three days previously, she had cut herself on a piece of glass. She was compacting the papers in her gunnybag with her foot and did not see the glass shard hidden in a piece of cardboard. Because she does not have the money to pay for treatment by a doctor, she covered the wound, which is heavily infected, with a dirty piece of cloth. Pichamma's husband died two years ago and the five rupees which her 12-year old daughter earns from waste picking is not sufficient to

buy the daily requirements of rice, dahl and vegetables. She regularly has to borrow money from the retailer, to whom she owes Rs. 30. Staying home is a luxury which Pichamma cannot afford and she has to work whether her foot is healed or not.

Pichamma's case is not exceptional. There are many hazards for those who make a living as waste pickers. Some women have been bitten by dogs while working on the street and have had to visit the hospital for three days to get the necessary injections against rabies. Some women did not have tetanus injections during pregnancy and consequently suffered from serious illness and risked losing their child. Some women are collecting waste from dumps onto which hospital waste is illegally dumped. Exposure to materials such as injection needles, used bandages and even amputated body parts is extremely dangerous to their health. Susheela herself is an epileptic. One day she had an attack while preparing the meal. She fell against the cooking vessel and her leg was covered with hot oil. She shows us an enormous scar. As a consequence, her children have to help her with sorting the materials at home because she is unable to sit on her heels for long periods of time.

Meanwhile it is 8.00 a.m. and time for work. Susheela has an appointment with a cleaner from an office building on Giriappa Road. While cleaning the offices this man has the opportunity to collect a large amount of waste paper each day. He saves the paper for her, for which she pays him a small amount. After that she proceeds to another building where she has an informal contract with a company to sweep an office room. In return, she is entitled to take the waste paper in lieu of payment. Through these contacts she is assured of a regular amount of materials every day. The restriction is that she has to be there on time otherwise another waste picker will take her place.

I find myself a place in the piles of paper and observe the women who come and go emptying the full baskets. At around 2.00 p.m. the majority of them prepare to go home. They store their materials in a gunnybag, put it on their heads with the empty basket on top and leave the spot. This is only the end of one part of the day; at home there is still a lot of work waiting for them.

Susheela and Parvathi are also ready to return home. Their *saris* are filthy and their hair is full of dirt. Susheela sits down and removes a betelnut, betel leaf and a little bit of white powder from a pouch which is made from the folds of her *sari* around her midriff. With her hands, which are filthy, she makes a pan and puts the mixture in her mouth. After she has chewed on it for a couple of minutes it produces a juice which colours her mouth and teeth red. Parvathi proudly shows us a brochure which she found among the collected paper. It shows pictures of holiday resorts and was probably thrown away by a tourist or a travel agent. The two look at it and ask me if I have been to these places. They have never seen a beach. It is rare for them to find well-preserved books because nobody throws them away. Most people sell them to the *kabadi-wallah* who go from door to door buying the best waste materials for which they get good prices. The paper that waste pickers obtain is generally of poor

quality and consists of bills from shops and restaurants, torn pieces of newspaper, pieces of cardboard, brown, dirty wrapping paper and empty cigarette boxes.

We are on our way to the slum where Susheela, Parvathi and most of the women I met on the spot live. Whilst walking there I ask Susheela if I can carry her bag for a while and she laughs at this. After ten minutes I have had enough and hand it back to her. I try to appreciate how heavy it must be to carry such a load for a couple of hours while you are still miles from home.

As soon as we enter the slum Susheela's children run towards us. They spend the morning playing because they don't go to school. It is a small slum which consists of two small alleys which are built up with houses packed close to each other on either side and which have no front or back yard. From the alley, which measures no more than two metres wide, you enter directly into the one-room houses where whole families live. On their doorsteps some women clean vessels, clean vegetables or wash their clothes. The water they use and the leftovers from the vegetables go into a small gutter in the middle of the alley. In this same gutter children not only play but also relieve themselves. Because of the small size of the houses most of the activities of the slum take place in these two alleys which form what might be termed the "heart" of the Cement Line.

Susheela takes me to her house which consists of one room no bigger than three by three metres. The entrance, which can hardly be called a door, is constructed of planks and palm leaves and cannot be locked. In the corner, beside the entrance, a small kitchen area has been created with a stove, some kitchen utilities and a couple of vessels. Susheela replenishes her stock of fuel, which is piled next to the stove, with some coconut shells she found that morning. The floor consists of a mixture of cowdung and mud which, when regularly daubed and dried, forms an ideal substance. It can be swept easily and provides protection from the damp in the rainy season. Besides, both cowdung and mud are free, which is very important for families who live in these circumstances. On the wall some pictures of her favourite gods are hanging and Susheela proudly shows us the image of Lord Ganesh, the god of prosperity and fertility. There are no beds in the room: Susheela and her family sleep on *pai* ("mats made of straw") and cover themselves, when necessary, with some rags. These are hanging next to some reserve clothes on a rope which is stretched out in one of the corners.

Susheela has bought a packet of tea on her way home and is going to prepare it whilst we squat on the *pai*. She lights the fire, puts some water, some tea and some herbs into a vessel and boils it while adding some unrefined sugar. She then mixes and cools the tea by pouring it from one cup to another a few times. Whilst I have my tea and look around, I realize that this room is much too small to house a family of three adults and six children. Luckily, the weather conditions in Bangalore are so good that most of the activities can take place outside the room.

Meanwhile, it is 3.00 p.m. and time to select the materials. Susheela asks Parvathi and two of her other children to start

and takes us along. Walking through the slum the presence of garbage is striking. Nobody can deny that it is a very unhealthy situation. At the edge of the slum there is a piece of fallow land where all the waste pickers from Cement-Line sort their materials. Each waste picker has a fixed spot and sits on their heels amongst large piles of paper and plastic. The paper is sorted for quality as are the plastic materials. Hard and soft plastic is separated: hard pieces from buckets or toys are much more valuable than plastic bags. Plastic milk covers on the other hand are of a much better quality and fetch a good amount of money for waste pickers.

As an observer, I see the activities and am surprised by the speed at which they work. You must have some experience to sort the materials in this way. Most of the women waste pickers started work as little girls, as did Susheela when she was ten years old. Her parents migrated to Bangalore 32 years ago from a small village in Tamil Nadu. Owing to sustained drought there was no longer work for landless labourers in the village. Her parents left the village with the hope of a better future in the city. Two years later, Susheela was born in the slum she still lives in. Her mother worked as a servant for several households in Shivaji Nagar, leaving Susheela, who was herself still a small child, in charge of the younger children. Her father, who worked as a coolie, had a second wife in the village and left for long periods to spend time with his other family. Over the years, his presence in Bangalore became rarer and rarer, which also meant that his contribution to the household was minimal. One day someone from the same village came to tell them that he had died.

At that time, Susheela had already joined some neighbouring women at waste picking but after her father died she became responsible for taking her younger sister and brother along. When she matured, at the age of 14, her mother made her stop work as she thought it too dangerous to send a young girl on the streets without the guidance of an adult; so Susheela stayed at home to take care of the household. At the age of 15 she left Bangalore for a couple of months to stay with her grandparents while her mother and aunty looked for a suitable husband. Susheela married Murugan when she was almost 16 years old and they lived with her mother. They have six children and Susheela is expecting another child in three months time.

Murugan is a market coolie. He often does not come home in the evening and spends the night elsewhere. He says it is better to sleep near the workplace, so that he has better opportunities of finding a job early in the morning. Besides, he finds the house too crowded with all the children around. Susheela knows better, the truth being that Murugan drinks a lot of *arrack* and is often not capable of working in the morning because of a hangover. At home there would be too much control and his behaviour would cause a lot of unnecessary problems for him.

Soon after their marriage, Murugan started to stay away for one or two nights a week and his contributions to the household were not sufficient to survive on. Nowadays, Murugan spends the entire week away from the house and only visits his

wife and children on Sundays.

Susheela was forced to start waste picking again because other jobs are scarce and unfavourable when you belong to the lowest caste and have small children. Working as a coolie in the market or in the construction business is heavy work and it is difficult to combine with breastfeeding. As a servant she would have to work in different households on any one day and receive a monthly salary. Picking waste gives her at least some freedom to divide her time between the breastfeeding, the household and her work. She does not have to work for a boss who can scold her whenever he feels like it, and she has a regular income. Because of her experience as a child she does not feel ashamed of roaming the streets for an income. In a sense, she has grown with this profession.

When the materials are selected, Susheela's children store them in different gunnybags and leave them on the spot. One of the bags has become torn, after continuous use and the heavy loads carried in it, so Parvathi takes a needle and some thread from a pocket in her skirt and repairs it before we leave. Back at the hut Susheela has already started preparations for the evening meal. She has removed the remaining ash from the stove, has lit the fire and is boiling some water in a vessel. She takes a couple of rupees from the pouch in her *sari* and sends Parvathi to the vegetable seller at the corner of the entrance road.

Meanwhile, she puts some rice in a cane winnow to clean it. The rice contains a lot of little stones and other materials and Susheela complains that even though the quality of this ration shop rice is poor, its price is going up constantly. After cleaning, the rice is boiled and Susheela begins to cut up some onions, tomatoes, garlic and coriander on her doorstep and grinds them all on a big flat stone. Prior to last year, Susheela bought all her ingredients daily from surrounding shops, after she had sold her collected waste to a small retailer in the neighbourhood. Since last year, however, she has found a large retailer who pays a better price for her waste paper but only accepts larger quantities and only on particular days. She now sells her paper once a week and, with this income, she goes to a ration shop and buys a week's supply of rice, sugar, oil, dahl and soap. Every Saturday afternoon Susheela visits Farouk, the waste paper retailer. Together with two other women she rents a pushcart and loads it with her full gunnybags. At Farouk's shop, Susheela has to wait for a while because over time most of the women of Cement-Line have also found their way to him. She is not bothered about waiting because a boy who works for Farouk makes sure that everyone gets a cup of coffee, and all the women are in a good mood and have some fun. Saturday is a happy day because they get the week's money that they have all worked so hard for.

Ramdula, Farouk's brother, handles the weighing machine. He hangs a full gunnybag with paper on a hook, pushes some weights to adjust the scale and shouts a certain amount to Farouk who writes it in a notebook. When it is Susheela's turn, she looks a little dazed because she cannot read or write and

has to trust the two brothers. Farouk helps her out when she has financial problems. Last month, when she needed money to buy medicines for her youngest child, he lent her Rs. 35. Previously, when Susheela sold her paper, her plastic and other materials daily to a small retailer she was often cheated. Her quantities were much smaller and the retailer often complained about their poor quality and the sorting. Whenever he thought it was too bad he used to reduce the total quantity. For someone who is illiterate it is more difficult to calculate all these small amounts and figure out whether the total is correct.

After the weighing ceremony, Farouk hands the money over to Susheela. After deducting Rs. 10, which she still owed him, the total is Rs. 100. Beaming, she puts the money into the pouch of her *sari* and starts homewards.

Tomorrow, it is Sunday and she has the day off. Tomorrow, she will go to the ration shop to buy her supplies for the coming week and also some sweets for the children. Tomorrow, she will stretch a rope across the alley, hang a cloth over it and then she will bathe herself and the children. Tomorrow, Murugan will come and she hopes that he will bring some money to discharge a part of the debt at the *marwadi* shop. Maybe she will make a meat curry because that is his favourite dish. Tomorrow..... she does not have to go waste picking.

IV. A CASE STUDY OF SELF-ORGANIZATION

ALTHOUGH NO FORMS of official unionization were found among the women waste pickers, one could speak of a certain level of organization and collective action among the women of Cement Line. They work at an individual level but through inventiveness and cooperation the women were able to lay hands on a sorting and storing spot next to their slum and on an intermediate spot where they work, allowing them to collect more waste and sell it in greater quantities. Some were able to establish contacts with cleaners and janitors of large institutions and commercial and corporate enterprises, to whom they paid a small amount of money in return for the daily office waste. The weekly sale of their paper to a large dealer brings them a higher income. During the period of this study it was not possible to confirm and conclusively establish by quantitative data that this level of organization was solely responsible for the increase in these women's incomes. Qualitative data, however, points to a greater autonomy, self-esteem and awareness of their position than among the women of the other research locations.

V. THE GARBAGE RECYCLING AND SEGREGATION PROGRAMME (GRASP) IN PUNE

MOST NGOS WORKING with waste pickers in India focus on child waste pickers and only recently has more attention been given to the fact that so many women are involved in this kind of work. Besides the work of the Self-Employed Women's Asso-

ciation (SEWA) in Ahmedabad, which began paper pickers' associations in the 1970s, there is only one other NGO working towards the uplifting of women waste pickers - the Garbage Recycling and Segregation Programme (GRASP) in Pune.

GRASP was started by the Centre for Adult Education and Extension Programmes of SNDT Women's University in Pune in 1991. During the course of their work in the slums, staff from the Centre had noticed a number of children, especially girls, picking waste materials from garbage bins. Many of them did not attend school. Contact was made with these children and it was found that most were introduced to this work by their parents. In many instances, their mothers were also waste pickers. The difficulties for the girl child were particularly notable as, in most cases, waste work was seen as an extension of housework and the girl child was expected to help her mother.

To improve conditions for the children, the project staff decided to organize the mothers by trying to increase their income, reduce their work burden and improve their work circumstances. Given the unhealthy and insecure nature of the work, the immediate need was to develop alternative work patterns that would ensure safe and secure access to waste. If waste pickers could obtain direct access to waste that had been segregated at source, this would be cleaner and would involve less effort.

To obtain pre-sorted waste, a pilot project was developed in a residential area. First, contacts were made with the women waste pickers through the Centre's existing literacy projects. A workshop in 1991 presented the waste pickers with information on the dangers of their present working patterns and on the concept of source separation and recycling. A newly developed residential area in Pune, Kalyani Nagar, was selected for the pilot project. Households were asked to separate glass, plastics and paper that was then collected by the project's waste pickers. Many households objected to this scheme - because, for instance, they felt that such waste segregation was dirty and time consuming and because they considered waste pickers to be dirty thieves who should not be allowed into their homes. This problem was addressed by asking the Municipal Corporation to issue a letter of authority and identity cards for waste pickers, and by using volunteers who helped to motivate their fellow residents. Another problem arose when the servants and watchmen in Kalyani Nagar began competing with the waste pickers for the sale of the materials recovered from the wastes. An interim evaluation after one year found that the waste pickers had not had an appreciable increase in their income.

To create a larger, more positive effect, the Centre expanded its activities to the city level. In 1992, a collective of waste pickers was registered and schemes for the separation and collection of household wastes were extended into four more areas. Campaigns were organized to promote the schemes and members of the collective were given identity badges, signed by GRASP, and had a resident representative. Contacts were also established with women waste pickers in other areas and women who became members of the collective were organized into col-

lecting the wastes from the five neighbourhoods. After a further 18 months, GRASP waste pickers had registered an increase in their income and had achieved shorter working days.

The collective had to face additional problems:

- * Some entrepreneurs with access to new technologies such as vermi-composting tried to drive the waste pickers away. They promised the residents that they would get rid of the waste pickers and would collect the mixed wastes so that households no longer had to pre-sort them. Attempts to convince the entrepreneurs to integrate waste pickers into their scheme failed.
- * In some areas, the Municipal Corporation had privatized the collection and transport of household wastes and, since the contractors were paid according to the weight of wastes collected, they prevented pickers from collecting wastes.

GRASP staff tried to protect the interests of the waste pickers in discussions with Corporation officials. While the Corporation talked of the need to rehabilitate the pickers, it was not willing to oppose private entrepreneurs and the private firms who were collecting waste. Its position was that in a free market, it cannot show special concessions to any group. Women waste pickers organized a protest against the appropriation of municipal waste by private entrepreneurs, while project staff sought to convince households to hand their wastes to waste pickers. A union was formed (the waste paper people's *panchayat*) to help tap the end-use market, and its members included many small waste buyers who, having the same caste background as the women waste pickers, were in favour of unionization. Most of the waste wholesalers resented the union and refused to pay advances to small buyers in the week after the union had been formed. The pickers were most affected by this as they depend on this income for day to day subsistence.

Union membership grew to include 2,000 waste pickers from 44 different settlements. It meets every two weeks to discuss issues such as the right of access to waste, identity cards, fair prices for segregated wastes, protection from police, and integration into civic garbage disposal programmes. Other issues such as domestic violence, children's problems, literacy, savings and diversifying the union's economic activities are also discussed. The union has also taken up several cases of police harassment, the physical abuse of members by watchmen, and domestic violence. A mobile van is also used for providing health services.

Plans for the future include non-formal education classes for the children of waste pickers, health services, and the provision of short-term credit. GRASP plans to develop a relevant and self-sustainable economic system for waste pickers by establishing a series of cooperatives in waste materials, credit, production and marketing. The production of paper bags is also planned, along with an extension of home based work for women waste pickers whose mobility is affected by injury or illness. There are also plans to make school exercise books and writing

11. Recently, private companies and contractors have been given the opportunity by municipal corporations in several Indian cities to collect, transport and recycle waste. This could mean that there will be greater efficiency in the management of waste at the local level which may make it impossible for waste pickers to retain their livelihoods.

12. Note should be taken of the activities of socially oriented NGOs such as the Waste Wise project in Bangalore and Bosco in Madras which focus on improving the working and living conditions of waste pickers and trying to get recognition for the fact that they are caretakers of the urban environment. The paper by Christine Furedy on "Garbage: exploring non-conventional options in Asia" in *Environment and Urbanization*, Vol. 4, No. 2, pages 42-61 includes a description of the Waste Wise project and other such socially oriented projects.

pads out of waste from computer print-outs and to make use of organic wastes. With the help of the Municipal Corporation, there are plans to develop plots in certain areas for vermi-composting, with the compost sold back to the Corporation to maintain its parks and gardens.

VI. CONCLUSIONS

WITH THE IMPETUS of privatization, which is the current trend in government policy regarding solid waste collection and management by the municipal corporations, it is possible that, given the experiences of Bombay and cities such as Pune and Madras, there could be a far more streamlined and efficient waste disposal and recycling system in the formal sector.⁽¹¹⁾ In certain areas, it is quite possible that there will be displacement of informal waste pickers. It is also possible that, given the current activities of certain environmental NGOs who promote waste separation at source and active public participation, this sector will be further marginalized because other actors will take over certain parts of the civic management of the city. Under the circumstances, large-scale interventions may be required, both by the government and well-organized NGOs, to replicate the experiences of limited success by the women mentioned above, in self-organizing, self-assertion and looking for group alternatives to improve their working and living environments. However, the big question still remains: what will happen to these women when these national and local policies create sweeping changes at the micro level?

Some recommendations can be made based on this research. They include the need for facilities such as clinics to ensure regular medical check-ups, clean water, washing places and safe storage places for collected materials which should be provided through NGOs working with waste pickers. They also include the integration of groups of waste pickers into small-scale, community based solid waste management schemes such as door-to-door waste collecting which deserves much more attention and experimental space than has been given to date; and training to women in marketing and bulk selling, together with more public awareness about the role of waste pickers.⁽¹²⁾ A more responsive government initiative is necessary to make this effective at city level.

It could be that a higher status and a better income for waste pickers leads to a flow of new waste pickers, mostly men and members of higher castes. Research in other fields has shown that all too often, men push women out of employment or income opportunities, if conditions improve. A gender differentiation and attention for women in this occupational group is therefore necessary. When the government wants to improve the position of waste pickers, it is very important that it recognizes that women form a special group of workers, also in the recovery and recycling sector. Acknowledging this differentiation in practice can have important implications for analyzing existing conditions as well as for formulating suitable policies.