
Urban Poverty: Rag Pickers in Chennai City

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Article History

Received:
15 March 2018
Received in revised
form: 25 April 2018
Accepted:
13 May 2018

KEY WORDS:

vulnerable,
occupational health,
migrants.

ABSTRACT

The present paper intends to present a vulnerability study of the rag pickers of Chennai with focus on the socio-economic and occupational health aspects. This paper makes use of a database, parenting to the socio-economic profile of the rag pickers including the working conditions, and their problems and expectations. This database has been developed through literature review, questionnaire survey and open-ended interviews conducted to generate data on rag pickers in Chennai.

INTRODUCTION

The quantity of municipal solid wastes generated in Chennai has been consistently rising over the years. This can be attributed to the rapid population growth, mass migration of population from rural to urban areas, increase in economic activities in general in the city and the change in lifestyle of the people. According to the Population Census 2011, the urban population in Chennai is increased more than 20 lakh population. There has been a decennial population growth of 46.31% between 2001 and 2011 as against the corresponding All-India level, which is 17.64%. Along with intrinsic population growth the rural to urban mass migration account for additional population pressure on the city. Change in lifestyle of the people has resulted in increased wasteful consumption, leading to a change in the composition and increase in the quantum of solid waste generated.

Urban solid waste is normally a complex mixture of household, construction, commercial, toxic industrial elements and hospital wastes. On an average, Chennai generates 4000 tonnes of municipal solid waste per day. A physical analysis reveals that it consists of about 32% compostable matter. The recyclable components include paper 6.6%, plastics 1.5% and metals 2.5%. Primarily the responsibility of solid waste management is vested upon several public sector agencies. However, various other stakeholder groups, such as waste pickers, waste dealers, recyclers and recycling unit workers play significant roles in the overall scheme of things.

Heggade recognised the major urban problems as the urban poverty and unemployment, growth of slums and housing shortages, congestion and over crowdedness with transport and land inadequacies, qualitative and quantitative inadequacies of urban amenities and environmental pollution. (Heggade, 1998). McMichael had the same opinion. According to him on the debit side of city life, there is health hazards associated with city life, overcrowding, accumulation of human excrement and household waste, occupational

hazards and various forms of social disorder. These adversely affected the urban environment. He also justified that the spread of cities, its effluent and the concentration of human, domestic and commercial discharges put more pressures on urban ecosystem. (McMichael, 1993).

Sandhya Venkateswaran viewed the relationship between urbanisation and solid waste problem. To her the quantum and type of waste generated in any urban center were the functions of the size and character of the urban center (Sandhya Venkateswaran, 1994).

Ammu Joseph identified two parallel systems of solid waste management. The formal system operated by local government and then formal system represented by waste recycling through rag pickers, petty traders, entrepreneurs and workers involved in manufacturing new products from recycled products (Ammu Joseph, 1994). Sudhir had the same concept and he found that informal system consisted many actors such as waste pickers, itinerant buyers, small scrap dealers and wholesalers mainly focused on recovery of recyclable material from solid waste (Sudhir, 1997).

Solid Waste Management in Chennai:

The Municipal Corporation of Chennai (MCC) are responsible for solid waste management in Chennai. MCC alone manage almost 95 % of the total area of the city. The above authorities are supported by a number of other agencies. Apart from the above public agencies there are other important agents who play their part in the overall scheme of solid waste management in the city. They are private sweepers and garbage collectors employed by the people for cleaning privately owned premises, waste pickers, waste dealers and recycling industries, which consume recyclable waste to produce recycled products. The immense increase in the number of rag pickers in the Chennai city is alarming. Even in a particular area of the city we find over 3000 rag pickers. (The number of rag pickers is dependent on the area: residential or otherwise). We have interviewed over 25 rag pickers from Bells Road, Triplicane, Chennai.

Those persons who roam from garbage to pit site to collect some material like plastic bottle, recycle material, metal thing, glass material etc., which in turn exchange with merge sum of money for their livelihood is called rag pickers. It is unfortunate to note that rag pickers are not only small children who are runaways but several families do the job of rag picking. We are worried more about the risks, which they are exposed to while doing this job. Further these rag pickers suffer from several diseases because of their profession. These diseases remain untreated. They sleep in dingy pavements, on the roadsides, amidst sewers, with pigs, and dogs and live a life in the wretchedness of poverty deprived of any material comforts. This has forced us to analyze their problem.

The difficulties faced by rag pickers in Chennai city are multi-fold. They choose this profession for their livelihood due to acute poverty or run away from home or no education, or frustration or it is the only self-employment etc. Once they are in the profession of rag picking, they face still more problems by the police, by the public, by the middle men, by the other rag pickers and so on. Apart from these problems they face acute health hazards, no proper place of sleep, exposure to evils of society (like ganja addiction, alcohol, smoke, sex, etc.), which are forcefully imposed or thrust upon them due to their profession as rag pickers. All the problems associated with them be it social or economic or psychological no one can attribute a specific cause for it, we see the very problem involves lots of uncertainties and

ambiguities so the data associated with this is only an unsupervised one; we are at the outset justified in using fuzzy technique in general.

Urban Poverty:

Urban poverty is seen in urban areas like metropolitan cities, semi town etc. According to World Bank, Urban poverty is a multidimensional phenomenon, and the poor suffer from various deprivations e.g. lack of access to employment, adequate housing and services, social protection and lack of access to health, education and personal security. Urban poverty which is a cruel reality is considered to be the most demanding urban challenge and number one urban problem because it is poverty which leads to many other problems in the urban areas. Taking various dimension of urban poverty into consideration, says that the causes of slum formation and squatter settlements are neither industrialization nor the size of the city but urban poverty. Urban poverty is a complex, multidimensional problem with origin in both developing and developed domains depending upon its nature and extent. In 2001, 924 million people, or 31.6 percent of this world urban population, lived in slum settlements. The majority of them were in the developing regions, accounting for 43 percent of urban population, in contrast to 6% in more developed regions. The quality of life of people is influenced by the phenomenon of urbanisation. World Development Report 2000- 2001, state that nearly half of the world's poor live in south Asia - a region that account for roughly 30 percent of the world's population. In many instances rural to urban migration has been the major factor in increasing urban poverty.

For the first time in India, urban poverty estimates provided by the expert group (Lakdawala Committee) appointed by the Planning Commission, indicated that urban poverty is more severe than rural poverty. According to the group, some 83 million persons in urban India live below the poverty line compared to 229million in rural India. According to the Planning Commission estimates (1999- 2000), around 61 million people are urban poor in the country. India has the largest number of poor living in urban areas compared to any other country in the world. India has a high population density, therefore urban poor face the problem of shelter, adequate supply of water, sanitation facilities, poor drainage and solid waste disposal. Urban poor occupy the lowest rungs of the social hierarchy and deprive of basic services and amenities.

They occupy the marginal positions in the socio cultural system of the communities. Based on the 30 day consumption methodology, the NSSO data reveal that the poverty level dips 10 percent from 36 percent in 1993-94 to 26 percent in 1999- 2000. However, this still leaves a starting 26 crore Indians below the poverty line. It is observed that the percentage of urban poverty has decreased sharply from 49.01% in 1973-74 to 23.62% in 1999-2000 but in the absolute number, it has been increasing since 1973-74 except 1999-2000. These approaches have outlined a focused approach to denying poverty in terms of an inability to participate in society, involving both a low income and a low standard of living.

The work of Amartya Sen offers an alternative perspective on the role of low income in the definition of poverty. Sen used two key terms to express this idea: 'functioning' and 'capabilities'. 'Functioning's refer to what a person actually manages to do or be, they range from elementary nourishment to more sophisticated levels such as participation in the life of the community and the achievement of self-respect. 'Capabilities' denote what a person can do or be, that is, the range of choices that are open to them. The UNDP similarly

distinguishes capability- based 'human' poverty from 'income' poverty (1997-2003). The connection between income and capability is also made more complex by the relevance of relative deprivation. As Adam Smith noted, the social capabilities may depend on a person's relative income vis-a-vis those of others with whom he or she interacts. In India, the first official definition of poverty (based on income) was given in 1962 by a working group consisting of eminent economists.

This pegged the rural poverty line at a monthly family income of Rs. 100 and the urban one at Rs. 125 (TOI, Nov. 17, 2008). In 1971 V. M. Dandekar and Nilakantha Rath used different measure to estimate poverty. They used an average calorie norm of 2,250 calories per capita per day for both rural and urban areas, as a criterion to define the poverty line. The current poverty line was fixed in 1979, when a Planning Commission task force defined the poverty line as the per capita expenditure level at which the average per capita calorie intake was 2400 and 2100 calories for rural and urban areas respectively. According to India Urban Poverty Report 2009, India has shared the growth pattern and rapid urbanization with some of the fastest growing regions in Asia. As per the latest NSSO survey reports there are over 80million poor people living in the cities and towns of India. The Slum population is also increasing and as per the Town and Country Planning Organization (TCPO) estimates 2001, over 61.80 million people were living in slums. The Report also explored that the ratio of urban poverty in some of the larger states is higher than that of rural poverty leading to the phenomenon of 'Urbanisation of Poverty'.

Urban poverty poses the problems of housing and shelter, water, sanitation, health, education, social security and livelihoods along with special needs of vulnerable groups like women, children and aged people. Poor people live in slums which are overcrowded, often polluted and lack basic civic amenities like clean drinking water, sanitation and health facilities. Most of them are involved in informal sector activities where there is constant threat of eviction, removal, confiscation of goods and almost non-existent social security cover. Economic growth is a necessity, but not a sufficient condition for alleviating poverty. Though there is a phenomenal growth of the GDP, the incidence of decline of urban poverty has not accelerated over the years. Urban Poverty is a major challenge for policymakers in our country as the urban population in the country is growing; urban poverty is also on the rise due to various factors. There is an urgent need to develop strategies to develop poverty reduction approaches to attack the multi-dimensional issues of urban poverty.

Stakeholders involved in recycling of Solid waste in Chennai

In the overall sequence of activities, starting from collection of recyclable materials to the final disposal and recycling of waste, significant contributions are made by a range of private stakeholder groups outside the municipal authorities. These stakeholder groups wheel the informal sector recycling trade activities namely segregation, collection, sale and purchase of recyclable materials, and the actual process of recycling at recycling units. Residents and shopkeepers sell recyclable items, such as newspaper, glass containers, tin cans etc. to *waste paper picker* or itinerant waste collectors. The waste pickers retrieve recyclable materials from what is discarded by households, commercial establishments and industries from municipal wastes. Larger commercial establishment and industries sell the recyclable waste (in segregated form or otherwise) to waste dealers in bulk, who then sell it to recyclers. Waste pickers pass on the retrieved materials to waste dealers. Then, there are agents who facilitate transactions between medium or large waste dealers and recycling unit owners.

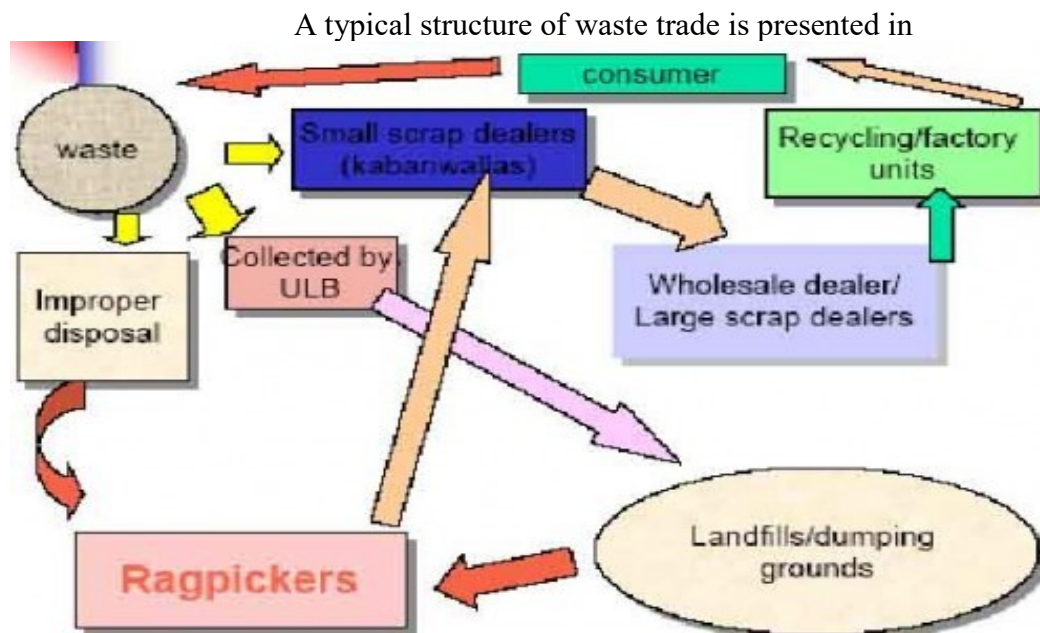
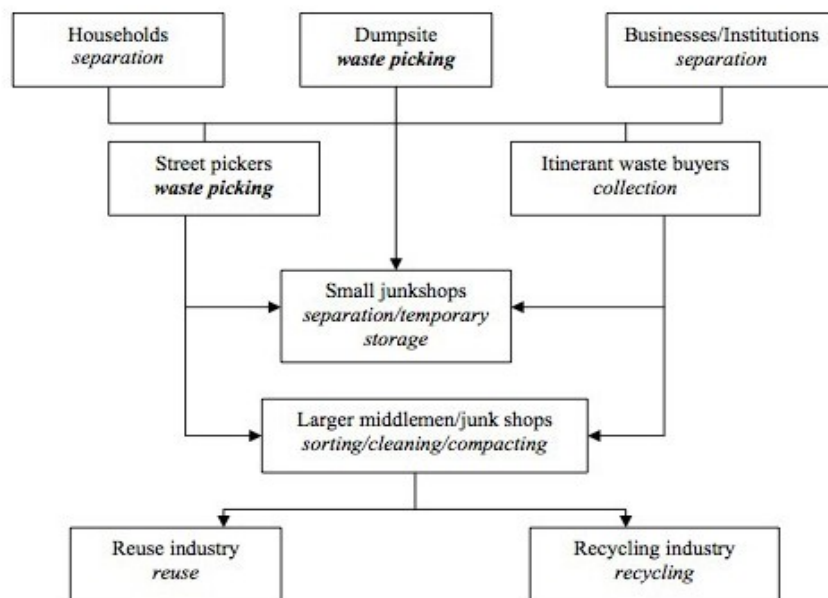


Fig 1. Recycling and movement of waste through the various people involved in the waste trade

The informal waste sector in an average city



Source: Adapted from Marchand, 1998

Fig2. The Informal waste sector in an average city

Waste trade activities performed by these informal sector stakeholders result into very significant waste material recovery and recycling. The waste trade activities in the informal

sector are crucial in the broader framework of urban waste management. It calls for only small capital investment, responds directly to local needs and demands, requires low capital investment, ensures livelihood of a significant number of urban poor and reduces the environmental burden otherwise caused due to the same quantum of solid wastes had it remained uncollected. Unfortunately, not all the stakeholders benefit proportionately from these activities. Amongst all the stakeholders the waste pickers who come from highly vulnerable background, often become victims of exploitation, despite their significant service to the environment and society at large. An attempt has been made here to make use of the findings of a survey conducted by Srishti¹ from Jan 2001 to January 2002 and the short film named “The Cricket Fever” also used as a secondary source and also the primary data collected from the twenty five rag pickers were selected randomly in the Bells Road, Chennai who were interviewed from different streets of the Chepauk, Chennai. The paper attempts to understand to elucidate the socio –economic profile of the waste pickers including their working conditions, and their health problems and expectations from the society, NGO’s, SHG’s and Government side. All their real problems are clearly portrayed in this paper.

HOT SPOT AREAS OF RAG PICKERS IN INDIA:



The above map clearly explains mostly the rag pickers exist in the major and developing cities as like Delhi, Mumbai, Chennai and Calcutta. Because increase of urban population leads to creation of slum and increase in the number of rag pickers too in the cities. This clearly evidence that through the above map, this major cities are having a rag pickers

population of one to two million rag pickers to picking the wastes it may be from streets or it may be of dumping grounds.

SOCIO ECONOMIC PROFILE OF WASTE PICKERS

Most Vulnerable

Waste pickers, scavengers, or rag pickers as they are commonly called, constitute that segment of the people involved in the waste trade who make a living by collecting and selling recyclable materials out of municipal solid waste. Though they play a pivotal role in the larger waste management systems they remain most vulnerable in the urban society. Any effort to categorize them meets with limited success as they represent varied demographic and social characteristic.

Due to the extremely unorganized and scattered nature of the waste picking activity it is difficult to give an accurate estimate of the population involved in waste picking. Rough estimates give the number of waste pickers in Chennai as ranging between 80,000 and 100,000ⁱⁱ. In the absence of a formal census, it is also not possible to ascertain the precise age or the sex profile of this population. The survey found 44% female and 66% male are waste pickers. Overall 45% were above the age group of 25 and 24% below 16 years of age. 31% were between the age group of 16 to 25. The survey results reveal fewer females in the occupation. This might be because most women return to their household chores before noon and the survey was conducted between 10am and 4pm. Again there is a variation in area-wise.

On the whole it is found that either both men and women within the household are engaged in waste picking or only the women are involved. Often the children assist their parents during waste picking. A study conducted by National Labour Institute (NLI) in 1997-1988 found waste picking to be the fourth largest occupation for street children in Chennai. The present study found only 24% of the waste pickers to be children. A possible reason could be that most child waste pickers take up waste picking as a family occupation and collect waste with their parents. It is not possible to arrive at a religious or community profile of the waste pickers in Chennai based on the micro surveys that have been conducted in limited areas. However, the study reveals 92% of the waste pickers were Hindus. Even they allow women and adolescent female members of their family to do waste picking.

Meenakshi (24) a rag picker who lives in this settlement and only collects remnants of shoes. She says that many rag pickers specialize in retrieving specific raw materials, such as glass, paper, plastic, etc. She has been involved in this profession ever since she lost her husband 14 years ago. Rag picking is her main profession, without which she has no source of income. Her young daughter is helping her out with waste picking in a last few years.

Recently, Vijay Anand, a social worker with Exnora, stresses on the importance of resource recovery and estimates that only 5% of our absolute waste would end up in landfills with proper recycling and segregation. He explains that the informal sector is an integral cog to the SWM system, without which resource recovery is extremely low. Accommodations must be made at the policy-making level to recognize the importance of their work and include them within the formal SWM system. Almitra Patel of the Supreme Court committee for SWM recently urged the CoC to formally employ rag pickers to clean up the city. She estimates that waste that is source segregated could potentially earn Chennai up to 1 crore rupees a month. Unfortunately, the CoC is apprehensive about hiring informal sector

workers to do corporation jobs due to their nomadic lifestyles, lack of stability, and because they do not possess identification material, such as ration cards and birth certificates.

Waste pickers as migrants

Most waste pickers are migrants from rural India. Unemployment and poverty are two prime reasons for their migration into urban setups. 97.5 percent of the migrants surveyed revealed that they came to Chennai looking for employment and ended up waste picking as a means to survive. In Chennai, 10% of the waste pickers are found to be immigrants from neighbouring states like Andhra Pradesh and Karnataka. They include Hindu, Muslim and Christians. Once in the city most of them took up waste picking as a means to survive. Moreover, the very nature of the activity, which requires no skill, no investment and no contacts or references, might be other reasons for migrants to become waste pickers.

Income of waste pickers

Adult waste pickers earn meager Rs 200 to 250 per day. A child waste picker earns Rs 80-100 when he is assisting his parents. If he is working independently he earns Rs 100 and Rs 200 as he can then devote more time to his activity. A waste picker with a cycle earns Rs 200- 230/day and one with a tri cycle earns Rs 200-400/day. They usually sell the collected waste to the local waste dealer on a daily basis, as they have no place to store the waste. Since they have little savings they depend on the waste dealer for loans and advances. About 85% of them are illiterate. Even after several years at waste picking they do not acquire any special skills and are hence unable to move into any other occupation. Trapped in the vicious circle of poverty and debt they are forced to continue with waste picking. This are evidenced from the Deva(15), he quoted that their parents are doing the same kind of job, because of his economic condition he dropout the school after his 6th standard. He is assisting his father, still he has interested in education, sports, dance and gymnastics. His remaining siblings like Vinoth and Geetha both are continuing their education in the nearby school. He thanks to the right education act. Still his both parents are illiterate but they are showing interest in sending their children to school despite their economic condition too.

Another case study Annadhi (14), dropout from the school because of their teasing by her friends but she want to be an engineer. Her parents' relationship is broken and his father tied up with other relationship because of this frustration her mother also started to drink. Now she is not ready stay with her mother. Even her mother took one rental house for (Rs.1000/-) her. She still stays in roadside and pavements with her grandmother. Her grandmother used to rag picking, household work and even construction work. Here the question arises out of that security of the girl child. It may be the reason prevalence of child marriage, sexual abuse and prostitution, etc.

Maheswari(35) and Vanaja(32) and others used to do rag picking, household work and flower mat kind of jobs used to do. Many of them are complaining about the lack of housing facilities, lack of identity cards, lack of saving options and even they are not ready to join hands with any self-help groups and non-governmental organisations, because they cheated them. They are not having any good rap over with the government officials and also not aware about governmental programmes. So, still the income level and standard of living conditions all are remaining same. More of social workers, Corporate social responsibility polices has to come down to help them to include them also into developmental activities.

Quantity of different types of waste collected by the waste pickers

The most common waste material collected by the waste pickers is plastic as wide application and is found everywhere. The quantity and kind of material collected depends on the area in which collection is done. In residential areas mostly mixed waste items like plastic, paper and glass are collected. In the market areas mostly packaging waste like cardboard cartons or gatta are available. On an average an adult waste picker collects between 5 and 15 Kg of plastic and 10 to 15 kg of paper and cardboards. Additionally he collects some glass as well. Table 1 gives a list of different recyclable waste materials collected by waste pickers, their colloquial names and prices.

Table 1

Waste material	Colloquial name	Price at which sold waste dealer (Rs)/Kg
PLASTIC		
PET bottles (coke, mineral Water bottles etc.)	Raincoat	2
Plastic thread, fibres, rope, chair cane	Cane	6 to 7
Milk packets	Dudh Mom	6
Hard plastic like shampoo bottles, cans, plastic box, etc.	Guddi	7
Plastic cups and glasses, LDPE, PP	Fresh PP	7 to 8
PAPER		
White paper used in offices/press cutting	Saphed (White)	3
Mixed shredded paper	Raddi	2
Mixed paper	2 NoRaddi	0.50-0.75
Cartons and brown packing Papers	Gatta	2.5
Fresh News Paper	Gaddi	4.50-5.00
Carton sheets	Raddi	4.50-5.00
Tetrapack	Gutta Sheet	2

ALUMINIUM		
Beer and cold drink cans		50
Deodrant, perfume bottles		50
Electrical wires		40
Aluminium foil	Foil	20
Other Metals		
Steel utensils	Steel Bartan	20
Copper wires	Tamba	80
GLASS		
Broken glass	Shisha	0.5
Bottles (Beer)	Bottle	2
PET: Polyethylene Terephthalate		
*Selling prices of all items as on January 2002		LDPE: Low density
Polyethylene		
	HDPE: High density Polyethylene	
		PP: Polypropylene

Source: Recycling Responsibility, Traditional systems and new challenges of solid waste in India, Srishti, 2002

Whatever income earns out of this rag picking, they can't save the money and most of the male in their families are addicted with alcoholism, drugs and tobacco and all. Moreover this they use money for gambling also. Government moved one setup for them, this 2011 census included into the population list and also government has to give preference of Aadhar schemes in this kind of areas. Then, we can include them also in India's inclusive growth.

Living with Silent Hunger and Poverty, but Not BPL

This section highlights the fact that one cannot define and identify poverty just on the basis of 13 indicators and by what is an inhuman process. Actually there is a wide range of social and vulnerability factors, which define the concept of acute poverty and need to be considered for a more realistic identification of the poor. The below poverty line politics does not consider social marginalisation as an important aspect of identifying the poor. As a result, some major categories of people like persons with disability (mental or physical), who very often find it difficult to earn their livelihood and thus fulfill their basic needs, are not considered as poor. Further, communities who have been forced to live a life devoid of self-

esteem and dignity –Rag pickers, manual scavengers and communities involved in caste-based prostitution - are denied the right to be categorised as poor.

Education and Inequality:

The Constitution is committed to improving the educational level of the weaker sections through preferential policies. The commitment has found expression in a variety of schemes including reservation of seats in educational institutions, lowering eligibility conditions for admission to various courses, scholarship programmes, exemption of fees, free supply of study and dress materials and provision of hostel facilities and other amenities.

Underlying the policy of special help is the conviction that the underprivileged should educate them for secular employment and move away from stigmatised traditional occupations as well as low-paid agricultural labour, where the bulk of them are employed.

The implementation of the preferential policies and the extent to which the weaker sections have actually availed of the benefits are thus matters of considerable significance.

Illiteracy:

Illiteracy as a matter of socio-economic fallout, in that families have an idea of how to record family expenses or accounts, because they are frequently indebted to money lenders despite the fact that many of them have a regular income from household works and private works (contract basis). The de-linked relationship has not happened between the money lenders and rag pickers. In this 5% respondents were studied up to higher secondary, within this many of the respondents even not completed third standard. Their economic conditions forced them to move out of the regular education system. This the major reason for increasing dropouts among these communities. Moreover, in higher education system, the Government hiked almost all fees and that hampers the access to education for the under privileged. Still the Government provides free education and special scholarship for scheduled castes but that not available for adequate numbers and more than this lack of awareness about this schemes to this concern groups. Many of the respondents are like to spend money for their children's education, but incapable economic condition and lacks the awareness about the education is the major cause among the rag picker's children's in Bells Road, Chennai.

There are education, politics, social status and its caste classification has determines the socio-economic condition of the rag pickers and manual scavengers. Here it reveals that their poor economic condition and inhuman work kept them aside from society, not only the rag pickers but also their family members are also victimised a lot.

Working Conditions and Occupational Health Hazards

The different kinds of waste pickers in the city of Chennai

Primarily there are four different kinds of waste pickers.

◆ Who carry a sack on their back and collect whatever has any resale value.

These street waste pickers move in their respective localities and pick up waste from streets, drains, and municipal bins and open dumping. Some waste pickers go to landfills and collects waste. They usually carry a magnet fitted with a bamboo or wooden handle to gather ferrous metals.

◆ Who carry a huge sack slung in two partitions across a bicycle and keep the items separately.

They collect only specific items like glass bottles, plastic etc. and sell them separately.

◆ Who use a tricycle and collect over 50 kgs of waste per day.

They collect mixed waste and usually travel long distances for selling the waste.

◆ Who works for the waste dealers?

These waste pickers are committed to sell their daily collection to the wastedealers who employ them. Often they also sort the waste for the waste dealer. Inexchange they get food and a place to sleep. Sometimes they also get a paltry sum of Rs 50 – 100 depending on the waste they collect. Waste pickers have a well-coordinated method of working. They enjoy an informal and camaraderie method of working relation and good comprehension for operating by area. For waste collection some kind of territorial boundary exists. The waste pickers of one particular area do not encroach into other areas. Almost all the waste pickers interviewed collect waste on a daily basis and 85% said that they had no option but to do so as it was their only source of livelihood. Those who collect waste from markets or industrial areas take off the weekly closure day.

FACTORS PREVENTING OCCUPATIONAL MOBILITY:

➤ Rag Pickers have suffered human indignities throughout the ages. Because of their socially degradation. They have been compelled to live life as socially disadvantaged persons. Besides social and economic backwardness, most rag pickers familiar to live in utter poverty because of both structural and personal factors.

➤ Most of the respondents were illiterate and thus educationally backward. So, they just follow their hereditary occupation; so they are not aware to take alternative jobs. The Government have taken lot initiative schemes that only benefits goes to urban literates, so the illiterate cannot able to mobile the occupation. Even, there are no rehabilitation schemes but it lacks the occupational mobility options. Maximum of the time, the rag pickers are illiterates and they are not aware about the schemes and welfare measures. The policy makers should understand the problem of lack of awareness they should to plan for appropriate methods to reach them. These reasons for the rag pickers have bulk to be unwilling to empower themselves.

➤ Almost all the respondents opined due to corruption, a section of them failed to avail of government benefits. Those who avail of it has to approach the officials concerned many times as well as they are forced to grease their plans. As a result, this economy is disturbed and job security is at stake.

➤ The main reason for the migration took place in the rag pickers in fathers of grandfather's time, but mobility of traditional occupation even not start from this generation. Rag pickers with their children to continue with their new job or even better job but no one thinks to go back in the degraded work of ravaging in any of the adverse conditions, because waste paper picking is somewhat better economic conditions to them. They are engaging because they did not get jobs anywhere else. Reason behind It is lack of education and training for their alternative job. The respondent engaged in the non-caste activity agreed that their prestige has increased due to occupational mobility. But they don't want to leave their municipal job as it ensures them job security and other benefits.

Health Hazards

The occupational health hazards of waste pickers arise from two aspects –poverty and their occupation itself. Since they belong to the poorest and most deprived section of the urban population, under nutrition, growth retardation, anaemia, tuberculosis and other bacterial and parasitic diseases are very common amongst waste pickers. These make them all the more susceptible to occupational health hazards. In the hope of discovering some saleable item the waste pickers rummage through putrefying waste heaps including toxic medical waste using their bare hands and feet and hence come in direct contact with waste material. Infections and infestations results due to such contact with human and animal excreta, sputum, dead animals and potentially infectious hospital waste dumped in refuse dumps. This makes them highly susceptible to a number of health hazards.

This evidenced from Elumalai (45), he is suffering from Tuberculosis, he is isolated from their family members, he went for treatment in Tambaram TB Research Centre. He started treatment over there but because of addiction to alcoholism he discontinued his medicine course and started continuing drinking. Another case study with Maheswari (35), she suffered from Malaria and Typhoid. After her illness, she can't able to continue her work again. So, her daughter discontinued studies because of financial condition of the family. This case study clearly explains us because lack of banking facilities whatever they earn they cannot save for the future or during illness time. They have to borrow money from the waste paper dealers for higher interest. Afterwards, they have to simply pay the interest only not able to hope up with the basic needs like food and shelter.

- **Injuries in form of cuts and bruises**

Hazardous working conditions lead to frequent injury in the form of cuts and bruises from glass, metal sharps, broken bottles etc. 28% waste pickers reported experiencing such injuries often while 61% said that they got injured once in a while.

- **Injuries from medical waste**

The survey reveals that there exists an illegal nexus between waste dealers and hospital staff. Either the staff calls the waste pickers through the waste dealers or dumps the waste at a place convenient for the waste pickers to collect. 27% of the waste pickers who collect medical waste sustain injuries from syringes, sharps and broken bottles and ampules. Often proper medical attention is not given to these injuries, which leads to non-healing ulcers. Injuries sustained from medical waste are all the more dangerous because the waste pickers maybe unknowingly get infected by Hepatitis B and C or HIV or other bacterial infections through contaminated sharps and needles. Many of them admitted that they were aware that buying and selling of medical waste was illegal yet they indulged in the trade as there was more profit to be made from the recyclable items collected. Since most of the plastics in medical waste are of good quality it fetches higher price compared to other items collected.

- **Injuries caused by animals**

In search for saleable waste material waste pickers often visit landfills and open dump yards. Hungry animals like dogs and pigs foraging for food also frequent these places. Rodents are attracted to dumpsites from surrounding areas or maybe delivered to the site in load of wastes where they multiply rapidly. There is a high prevalence of the waste pickers being

bitten by rodents, snakes, dogs and bites and stings from other vermin. These animals transmit a variety of infections either by themselves or through the vectors they carry.

- **Air borne diseases**

During long dry periods the surface of landfills and open dumping grounds becomes dry and very dusty. The waste pickers are exposed to air borne dust which makes their working conditions all the more unpleasant. Under these conditions infections and allergic disorders, especially of the respiratory tract, are common.

- **Chemical Poisoning**

Chemical poisoning includes pesticide poisoning. Waste pickers often come across empty containers of chemicals, which they sometimes use for storing food or water or burning such containers as source of heat in winter. Several anecdotal pesticide poisoning cases have been documented in children who have used discarded pesticide tins as glass for drinking waterⁱⁱⁱ, lead poisoning in families where discarded lead battery containers were used as fuel have been documented.

- **Other Diseases**

Tuberculosis, scabies, multi-system allergic disorders, asthma, respiratory infections, ophthalmic diseases, ulcers and stomach problems are other commonly reported diseases. The problem is acute because waste pickers are not protected by occupational health and safety measures. None were found to use any kind of protective gear like gumboots, plastic aprons, masks or gloves. Moreover, waste pickers do not come within the purview of any labour legislation. Hence they are not entitled to any benefits or security of livelihood.

- **Waste pickers who also work as waste sorters**

Some of the waste pickers also work as waste sorters for the waste dealers, segregating different recyclable components of the waste. Most of the waste pickers who work as sorters do their work in open spaces. Almost all the sorters reported occupational related health problems. 30% said they had respiratory ailments. 51% had fever and skin diseases. 19% said that they experienced all three problems. Sometimes there are sharp metal objects attached to the plastic or cardboard. So cuts and injuries are routine. At times, waste materials maybe contaminated with various hazardous substances like chemical residues, pesticides, used syringes etc. Only 17% of the waste pickers said that the waste dealers either provide them with the doctor fee or some basic first aid.

- **Waste pickers are victim of several vices**

The dull monotonous work and extremely poor working conditions with no hope for a better future makes the waste pickers long for some means of escape. So, they easily fall prey to several evils like drinking, smoking, taking drugs, gambling etc. The survey reveals that even women and children as young as six years old can be victims of such vices.

GOVERNMENT INITIATIVES AND POLICES:

Employment requirements of increasing numbers of urban poor and management of vast quantum of solid waste generated are the key factors that have combined to create the increasingly growing occupation of waste picking. Though the waste pickers play a significant role in the entire process of waste management yet their services go unnoticed and issues concerning their livelihood go unaddressed. Government approaches to the needs

of the waste pickers are too compartmentalized and fails to have a holistic view of their problems and requirements. It is imperative that policies be so designed that they are more responsive to the needs of the waste pickers.

In the present section an analysis has been done of the government policies and programmes on the main factors that have contributed towards the growing occupation of waste picking.

1. Employment opportunities of the urban poor:

The number of urban poor has increased over the last three decades in contrast to the decreasing rural poverty in India. This can be attributed to the fact that the Indian policy makers focused on rural development. Urban poverty alleviation got sidelined as it was assumed that urban poor had greater access to opportunities in urban areas and hence had less insecurity to cope with. As urban systems and poverty within it grew, urban poverty could no longer be ignored. However, so far there is no segmentation of the urban poor to determine the size of the waste pickers in urban setups for enabling exclusive interventions.

Employment integrated into overall planning process and Employment Oriented Urban Poverty Alleviation Programmes. Urban poverty as a priority area occupied the attention of the planners only in the Seventh Five Year Plan (1985-1990) when urbanization was realized as an integral part of economic development⁶.

In the seventh plan emphasis was given to urban employment generation as a means to tackle urban poverty. Self-employment programmes, namely, Self-Employment Programme for the Urban Poor (SEPUP) was introduced in 1986 and Nehru Rozgar Yojana (NRY) was introduced in 1989. SEPUP was the first urban poverty reduction programme with emphasis on employment. It was a standalone, one-dose small credit intervention programme. NRY was a more comprehensive employment programme with increased number of interventions like widening the employment base for the skilled as well as unskilled workers^{iv} including women, through promotion of micro-enterprises (ME). Thereafter, other poverty alleviation programmes were also introduced.

The informal sector, as a component of the development process in the economy, was first recognized in the Eighth Five Year Plan (1992-97).

The Government of India's regional planning agency, has accepted the informal sector employment generation route as one of the policy strategies to develop towns around Chennai and to decrease unemployment of increasing migrated population in Chennai. In the nineties, two micro enterprise oriented programmes, were introduced interview of the growing urban poor. The basic objectives of these new Programmes were employment generation, community empowerment and environmental improvement giving attention to the informal sector, which was growing at a rate of 6% against the tardy general employment growth.

To provide sustenance to programmes of income generation, the Urban Basic Services for the Poor (UBSP) was implemented as a centrally sponsored scheme during the Eighth Five Year Plan. Its main objective was to meet the basic physical and social needs of the urban poor through community organisation, mobilisation and empowerment.

In the Ninth Plan (1992-97), it was recognized that rapid economic growth was most important to increase employment opportunities. Public intervention for employment generation was considered crucial and the necessity of achieving full employment was a

major determining factor in setting up of the growth rate of the Indian economy during the nineties. The Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP) was launched in November, 1995. It was basically an employment generation programme which sought to address the problems associated with urban poverty by building up community based organizations (C BO) as the center of the development process and by facilitating direct participation of the targeted groups.

Towards the end of the nineties, another programme, Swarna Jayanti Shahari Rozgar Yojana (SJSRY) was introduced that included all the urban programmes in existence. The programme seeks to alleviate urban poverty by converging employment components of the earlier schemes and seeks to provide gainful employment to the urban unemployed or underemployed poor through encouraging the setting up of self-employment ventures or provision of wage employment. The two schemes under SJSRY are the Urban Self Employment Programme (USEP), and the Urban Wage Employment Programme (UWEP).

The Tenth Plan (2002-07) also provides a high priority to employment growth and it has been a central issue in determining the growth rate of the economy. Even in the twelfth plan (2012 – 2017) mostly they focus for the self-employment and micro and small enterprises.

2. Government Policies towards management of the huge quantum of waste generated:

At the national policy level, the Ministry of Environment and Forests has legislated the Municipal Waste Management and Handling Rules, 2000. It gives details of the practices that are to be followed by the municipalities for managing urban waste. Though the rules recommend recycling they do not say how to follow it or give any direction towards promoting recycling. Indirectly waste to energy technologies are encouraged through the formulation of technology standards.

Other policy documents include:

- Manual on Municipal Solid Waste Management, prepared by an expert committee constituted by Ministry of Urban Development, GOI, January 2000.
- Recycled Plastics Manufacture and Usage Rules, Ministry of Environment and Forests (MOEF), GOI, September 1999.
- Solid Waste Management in Class I Cities in India. Committee constituted by Honourable Supreme Court of India and headed by Mr. Asim Burman, Municipal Commissioner, Calcutta Municipal Corporation, March 1999.
- National Plastic waste Management Task Force. Committee constituted by MOEF, GOI, August 1997.
- Report of the High-powered Committee on Urban Solid Waste Management in India, headed by Prof B.S. Bajaj, Member, Planning Commission. Constituted by Planning Commission, GOI, 1995.
- Waste to Energy Policy as promoted by the Ministry of Non-Conventional Energy sources (MNES), 1995.

The policies lack a holistic approach towards management of waste in urban India. The waste management as it presently occurs involves many people for whom it is a source of livelihood. Hence policies should be so directed as to integrate the employment requirements

of the urban poor with managing waste in an environment friendly manner. Clear policy directions towards recycling will not only help in resource conservation but also strengthen the role played by the waste pickers ensuring their livelihood.

FINDINGS:

- Lack of housing facilities.
- Lack of education.
- Lack of aware about family planning.
- Lack of aware about governmental programmes and does not have any wrap with the government or any NGO's.
- The previous experience of cheated by the Self-help groups, they fear to join new ones but now facing money laundering related issues.
- Male members are mostly addicted with Alcohol, smoking and others. Even few of female members from the family also addicted with alcoholism for this reason family collapse and children's education dropouts increasing.
- Lack of governmental identification leads to not able to access any governmental schemes or any welfare programmes. For this also few people cheated to getting money from them to get identity cards.
- No one has bank accounts because lack of identity.
- The police exploit the rag pickers, for they find it easy to register petty cases of theft etc., falsely.
- The health hazards faced by them are very acute. Most of them suffer from seasonal fever, malaria (due to mosquito bite) and other skin ailments due to very bad hygiene and sanitary conditions.
- These children become easy victims of all bad habits and become real criminal due to misuse and bad relationships.

Unless some sympathetic/understanding social workers help them with good guidance and protection they will die at an early age for they are unaware of any health problems they face due to their profession. They do not know the means to save or use properly the money they earn by rag picking. Unless public and government take a sympathetic stand and help them nothing much can be achieved.

RECOMMENDATIONS:

- **Institutionalizing waste picking**

The waste picker's requirement for employment and decent lifestyle needs to be properly integrated with the existing system of waste management and recovery of material for recycling. Taking cognizance of the extremely poor working conditions, very low monetary returns, exploitation and harassment faced and the potential of the waste pickers to make better contributions towards urban waste management there seems a need to legitimize their role. Institutionalizing their activities would enhance the scope of their work and at the same time provide better working conditions. They could be organized with the help of civil

society groups around micro enterprises related to recycling. This would also help restore their self-esteem apart from assuring their livelihood.

- **Integrated approach towards waste management**

Institutionalizing waste picking would necessitate a change in urban waste management practices. There is a need to build up public awareness on the social and environmental component on waste management. Only then will the waste pickers get their due recognition in the society. There is a need for information dissemination and creating awareness on the importance and need to recycle. This awareness would generate changed waste handling habits of households. An approach towards changed waste dealing habits could be achieved through providing households with monetary incentives for segregating waste. Presently such a practice exists for glass bottles and newspapers. It can be implemented for all recyclable materials. The waste pickers can then directly collect the recyclable waste materials from households who will in turn benefit from practicing segregation. The working conditions of the waste pickers would then automatically improve.

- **Dual role of collection of both recyclable and biodegradable waste**

A possibility of the services provided by the waste pickers may be explored by engaging them in the collection of the biodegradable component of municipal waste as well. They can then play an active role in facilitating decentralized composting in specific urban pockets. Such an approach will not only ease the burden of municipalities but also legitimize their work providing them with social and economic security.

- **Encouraging recycling**

Recently, waste to energy technology propagated by private industries is slowly gaining a foothold as a method to manage increasing urban waste. This will replace traditional systems of waste management based on reuse and recycle and threaten the livelihood of waste pickers. The waste to energy policy with the objective of promoting waste solely as an energy source, supported by the Ministry of Non-Conventional Energy Sources (MNES) needs to be reviewed. There is a need to encourage recycling as a viable option of waste management through subsidies on recycled products. This will in turn safeguard the livelihood of the various stakeholders involved in the waste trade, most importantly the waste pickers.

- **Setting up of co operatives**

Presently though waste pickers contribute substantially towards recovery of recyclable materials they work and live under extremely unhygienic conditions. It is essential to improve their living and working conditions. The waste pickers could be organized to set up cooperatives with the help of NGOs. The waste pickers could then collect waste directly from households instead of foraging in garbage dumps. This will reduce the occupational health hazards providing them with better working conditions and also better economic returns. In the process their contribution towards waste management will be recognized in the society.

- **Educational:**

- ◆ Create special quota for Rag pickers in initially in short-term courses like Teacher Training Institutions, Hotel Management colleges and Nursing schools etc.

- ◆ Start Residential Schools for Rag picker's children.
- ◆ To encourage 5th passed girls to continue their education along with the above provisions their parents have to be given incentives to prevent them to engage their daughters again in rag pickers.
- ◆ Give monthly maintenance amounts/scholarships and for hostels (linked with inflation DA).
- ◆ Undertake measures to improve the standards of education through providing special coaching to the children from secondary school.
- ◆ Start special coaching centres to teach rag picker's children. Appoint volunteer teachers drawn from the community.
- ◆ Creating a cell for anti-discrimination, in the same way of anti-ragging cell.
- ◆ Sarva Siksha Abhyan should give more focus on rag picker's and manual scavenger's children.
- ◆ Start Residential and vocational canters for rag picker's youth (Girls and Boys).
- ◆ Improve vocational skills through training to access Government schemes.
- **Rehabilitation and Employment:**
 - ◆ Family must be considered as a Unit for rehabilitation.
 - ◆ SHGs have to be given special focus.
 - ◆ Association with cooperative movement should be established.
 - ◆ Regular review of the project cost.
 - ◆ Strategies to deal with economic exclusion must be explored.
- **Health**
 - ◆ Regular health camps should be conducted in weaker communities.
 - ◆ Free medicines should be given to rag pickers.
 - ◆ For women periodic gynaecium tests should be conducted.
 - ◆ De-addiction camps should be organized.
- **Special programmes for Women Development**
 - ◆ All welfare/ development schemes must have special focus on girl children and women.
 - ◆ Campaign must be conducted against the brutal violence on women and girl children.
 - ◆ Vocational trainings: special design for girls, keeping in view their needs and situation.
- **Recommendation to create awareness in civil society through the electronic and other media:**

There is a need for basic amenities for another world that is weaker sections. Such a campaign should address issues of self-esteem and human dignity, highlighting the humanistic and legal aspects of the rag pickers. Media is the best instrument to create awareness about the governmental programmes to the masses easily.

CONCLUSIONS:

A dynamic socioeconomic system is full of shifts and changes. Individuals and institutions must accommodate themselves to the requirements of the dynamic system with ingenuity, flexibility, and speed. The problem of poverty arises because not all individuals or institutions are capable of the required adjustments. Urbanization is an aspect of shifting resource allocation, as well as an ingredient of cultural change. Where there are shifts and changes, there are lags and gaps. Urban insular poverty is a gap between the individuals' or households' resources and the cost of housing of adequate standards. Behind this is the lag between the individuals' or households' employment capability and changes in the occupational structure of a dynamic economy.

Though industrialization has created jobs, the increase in employment opportunities in urban centers has failed to maintain a balance with the increased labour population. Despite various government programs and policies directed towards poverty alleviation in urban areas, lack of gainful employment even in the informal sector still remains a key area, which needs immediate attention. Rather than a holistic approach the thrust of urban policies so far have been disjointed and compartmentalized.

A typical example would be the management of Solid waste in Chennai involving various stakeholders. The most vulnerable among them are the waste pickers who are engaged in this occupation with abysmal working conditions solely as a means to survive. In the process they address the basic need of the society and environment of waste management by removing waste from the waste stream thereby substantially reducing the amount of uncollected waste. This saves on municipal expenditure and minimizes the environmental impacts of uncollected waste. Their contributions remain unacknowledged and they continue to languish due to various occupational health hazards arising out of abysmal working conditions. Moreover they receive extremely low economic returns and are victims of harassment from the police, municipal workers and the general population.

End Notes

ⁱSrishti is an environmental group registered as a society, involved in issues regarding environment, waste, toxicity and communities. For the past several years Srishti has been working primarily on waste and waste trade issues.

ⁱⁱStudy conducted by Chintan an NGO in Delhi working with waste pickers.

ⁱⁱⁱRamachandran, 1986

^{iv}NIUA, 1990

BIBLIOGRAPHY

1. Edward, Robert and Rachel Kellet. (2000). Life in Plastics. Goa: The Other India Press.
2. Venkateswaran Sandhya. (1994). The Wealth of Waste – Waste Pickers, Solid Waste and Urban Development, New Delhi: Friedrich Ebert Stiftung.
3. Action Points for Managing Municipal Solid Waste. Central Pollution Control Board (CPCB)
4. Management of Municipal Solid Waste, CPCB.
5. Manual on Municipal Solid Waste Management (First Edition January 2000) prepared by Expert Committee, Constituted by Ministry of Urban Development, Government of India.

6. Municipal Solid Waste (Management and Handling Rules), 2000.
7. Recycled Plastics manufacture and Usage Rules. (199). Ministry of Environment and Forests, Government of India.
8. Recycling Plastics in Delhi. (1998). A Srishti Report.
9. Recycling Responsibility. (2002). Traditional systems and new challenges of urban waste in India. A Srishti Report.
10. Report of the High-Powered Committee on Urban Solid Waste Management in India, Planning Commission, 1995.
11. Solid Waste Management in MCD Area. (1996). Nagpur: National Environmental Engineering Research Institute (NEERI).
12. Strategy Paper on Solid Waste Management in India, (NEERI), Nagpur.
13. The Waste Situation in India. (1995). Ravi Agarwal and BhartiChaturvedi. A Srishti Report.
14. What a Waste?. Solid Waste Management in Asia. (199). World Bank.