

The Plight of Rag-pickers at Dump yard

Socio - Economic Profile

A Case Study of Visakhapatnam

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Abstract—The unabated population growth and enhanced living standards has encouraged the informal sector of waste collection (rag-pickers) towards the segregation of recyclables from MSW as a source of income generation. Proliferating municipal solid waste and high unemployment are the prime reasons behind the growth of this rag-picking population. There are no estimates of the number of people involved in this unhygienic and intensive work. Rag-pickers are people belonging to the highly vulnerable section exploited both by the fate and the society. Trapped in debts, illiteracy, and lack of skill force these poverty stricken people to pick up this profession. Municipal Solid Waste (MSW) segregation and management has become a critical issue for almost all metropolitan cities worldwide. Though constitutionally, solid waste management is one of the basic amenities that are to be provided by the municipal corporations in India, due to various reasons it is poorly addressed. Undoubtedly the three R concept would solve much of the disposal problem, yet the segregation, transportation and management is going through a critical phase due to unavailability of infrastructure. The present paper is an attempt to focus on the vulnerability, socio-economic status and the health ailments of the rag-pickers at the dump yard. The study was carried out in Greater Visakhapatnam city of Andhra Pradesh one among the industrial cities which is advancing towards a smart city.

Keywords— MSW, rag-pickers, unorganised sector, socio-economic issues, health ailments etc

I. INTRODUCTION

India one among the developing countries is progressing in all the major aspects of technology, education, medicine, research, export and import while still lacking behind with an informal sector of people called waste pickers (Rag – pickers). According to a United Nations Development Programmed survey of 151 mayors of cities from around the world, the second most serious problem that city dwellers face (after unemployment) is insufficient solid waste disposal (UNDP 1997). The estimated quantity of Municipal Solid Waste

(MSW) generated worldwide is 1.7 – 1.9 billion metric tons [1]. In most of the large metropolitan cities of the developing world, approximately 30-50 % of the solid waste is left which is often collected by the informal sector of communities “rag-pickers.”[2].The increasing population and demand of resources for survival is leading to the migration of rural population to the urban areas in majority of regions. On the other side misconceptions and wanting of quality life is one major reason behind this massive dislocation. This migrated population turn out into waste collectors due to lack of proper shelter and livelihood. They work on the streets and in open dumps, where they daily contact with all kinds of waste including hazardous and medical waste poses risks to their health [3]. Rag – pickers work in very unhygienic and filthy conditions for their sustenance irrespective of the dangers they might be encountered to. In spite of this most of the children belonging to their family suffer from malnutrition due to their unhealthy working conditions and lack of minimum nutrition. It is estimated that this informal system results in recycling rates of almost 50% for plastics across the developing world, compared to less than 10% in the United States—which is why waste pickers have been called the “invisible environmentalists [4]. World towards technology and development is generating increasing quantity of waste which mostly consists of scrap metals, plastics etc.; encouraging the sector of rag- pickers living as urban dwellers consider this, an easy money making process. Though both organized and unorganized sectors work on the management of urban municipal solid waste there still lies a gap in getting rid of the total waste generated per day. On the other side poor administration, less number of sanitation workers, poor collection efficiency and lack of proper equipment is one main cause for the increase in this unorganized sector. On per capita estimation, solid waste generation is about 350-400 gms and in large cities it exceeds 500 gms. Of this the collection efficiency is only 60-75% which is a major cause of concern towards the management of municipal solid waste. During 2010 a further emphasize was given stating that the informal activities such as street waste

picking very often take place outside than by the official and formal channels [5]. The unlicensed and untaxed, street waste pickers nevertheless contribute significantly to national economies.

II. PRESENT SCENARIO OF RAG- PICKERS

Rag-picking is considered as an inferior job which is recognized neither by the authorities nor by the people who gain benefit from it. From an economic standpoint, informal sector activities are not registered or taxed or reported [6]. This work is generally taken up by the most vulnerable and weaker section of people struggling to meet their basic needs. The informal sector is characterized by small-scale, labor-intensive, largely unregulated and unregistered, low-technology manufacturing or provision of services [7]. Manual waste picking by the sanitation workers is given an identity while an informal sector of waste collection in the dump yards is ill-treated on the other hand. The burden of the family makes the rag- pickers work long hours affecting their lives in several ways and shortening their life span considerably. Rag picking needs no skill and is one source of income to the poor and illiterate section of people. Most of these rag pickers are the people struck by the natural catastrophes, agricultural loss, abandoned and destitute. Rag pickers wander all over the city in search of recyclables and scrap materials. Another study reveals that, in Asian and a Latin American city, up to 2 percent of the population survives by scavenging [8]. The move towards modernization is leading to dust bin free cities which is one prime reason for the waste collectors to concentrate on the dump yards for their activity. Scavenging is associated with high unemployment, widespread poverty, and the lack of a safety net for the poor. It was also observed that, in times of war or severe economic crises, scavenging increases with particular intensity [9]. Waste collection though profitable the poor illiterate rag pickers are exploited in number of ways by the scrap dealers. The challenges faced by the rag-pickers are way beyond their struggle and income. Organising and training informal recyclers into MSEs is a very effective way to upgrade their ability to add value to collected material [10].

This paper is an attempt to bring out the socio-economic profile of the waste collectors (rag-pickers) in Greater Visakhapatnam Municipal Corporation.

III. STUDY AREA

Visakhapatnam the fast growing metropolitan often referred as the 'City of destiny', is one of the biggest municipal corporations in the state of Andhra Pradesh. The Greater Visakhapatnam Municipal Corporation (GVMC) covers an area of 545 km² and with an estimated population of 20 lakhs. The city generates nearly 1000 MT/day of MSW. The study area appears as saucer shape and is bordered by the Bay of Bengal on eastern side. The municipal dump yard is in Kapuluppada village located in Bheemunipatnam of Visakhapatnam district, Andhra Pradesh. Around 50,000 people are residing in and around the villages of the dump yard. The dumping yard is 25kms from the city in about 100 acres. The municipal solid waste generated in the city is dumped in about 85 acres in the dumping yard which is unscientifically managed since two decades. The study area is known for its industries, coastal environment and increasing population trend which is the main point of concern.

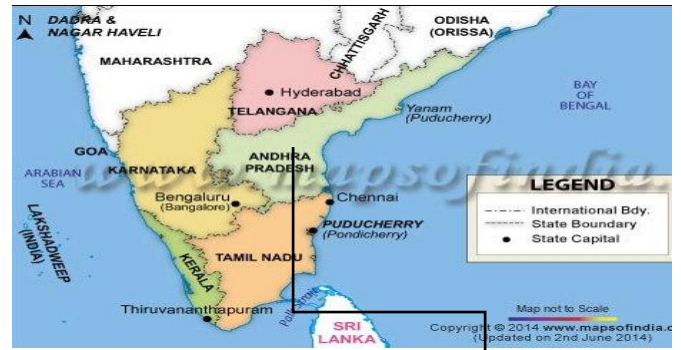


Fig. 1. Location of State in India map

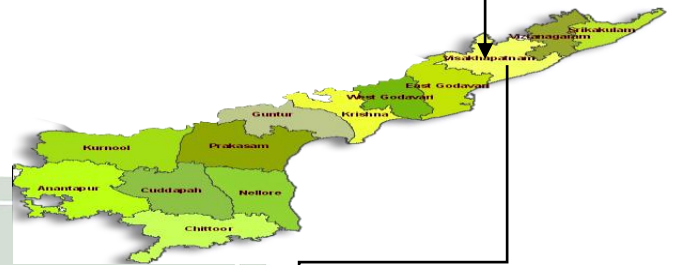


Fig. 2. Location of District

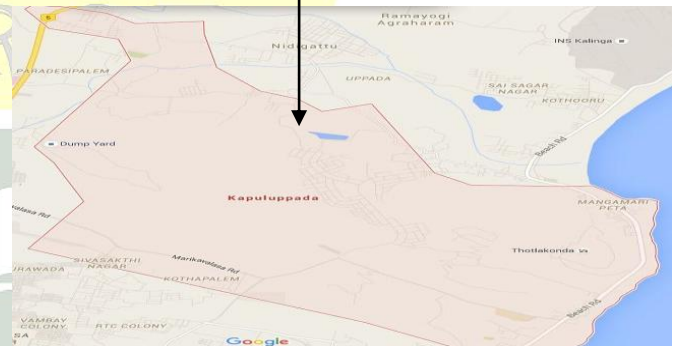


Fig. 3. Location of the study site

IV. METHODOLOGY

The non-probability chain – referral sampling methodology was adopted in obtaining information on the number of population involved in this rag-picking work. This method was adopted due to the reluctance of the subjects in sharing their personal information. Field work was undertaken in and around the dumping yard (Kapuluppada) to obtain qualitative and quantitative information. Questionnaires and group discussions were also adopted to gather a more in depth information of their working pattern and earnings. The city has nearly 500 rag-pickers who are involved in this rag-picking work. Most of them collect the rags from the railway tracks, residential, commercial and industrial zones. There are about 150–200 rag-pickers who regularly rummage through the garbage in the dumping yard, segregating the waste materials such as plastics, paper, metals, glass bottles, and rubber materials which are sold to scrap dealers near to the dumping yard. While few rag-pickers earn income on monthly basis from small scale industries in the city.

V. RESULTS

During the field investigation it is observed that the rag – pickers have a very coordinated and collective working pattern. They maintain cordial relation with all the other rag-pickers during segregation of waste materials for plastics, metals etc.; about 750-800 MT/day of waste is dumped in the dumping yard of which 10% is sorted by the rag-pickers (Fig-4). The rag-pickers start their work from early hours of the day initially waiting for the municipal waste collection vehicles to reach the dumping yard. They spend 8-9 hours/day in collection and sorting the waste materials from the heaps. Presently two rag-picking families are residing at the dump yard premises as security during night times with the municipal authority permission.

A. Gender

The field investigations identified that both men and women are involved in this rag-picking work in the dump yard. It is observed that a single male is accompanied by group of females of same family or others. Out of total 150 rag pickers (53%) were females, (22%) were males, and (25%) were children between the age group were children between 10-15yrs (Fig-5).

B. Age group

Rag- pickers are of all age groups where (70%) are most predominantly between 20-35yrs, (5%) are 35-40 yrs, while (25%) are below10-15 yrs of age (Fig-6). It is very unfortunate to see children of the rag-picking families spend time in the dumping yard along with their parents playing on the large waste heaps unnoticed of the hidden dangers they might be encountered to.

C. Caste

Out of 150 subjects 60-70% are people belonging to schedule caste while remaining 30% (Fig-7) are other migrants from nearby state Orissa and even farmers from in and around villages of the study area who are economically devastated.

D. Literacy

During the study it is identified that about 28% are drop outs from the schools while 62% lack even minimum primary education, 10% (Fig-8) are children who work and study in the facility provided by the municipal authorities and a local NGO.

E. Addiction

Out of total 150 subjects it is identified that 70-80% are addicted to smoking and alcohol, while 20-30% are addicted to alcohol (Fig-9).

F. Income

The study showed that on average 60% rag-pickers earn 250-300 RS per day while 30% earn 100-150 RS per day and 10% earn more than 300RS per day (Fig-10).

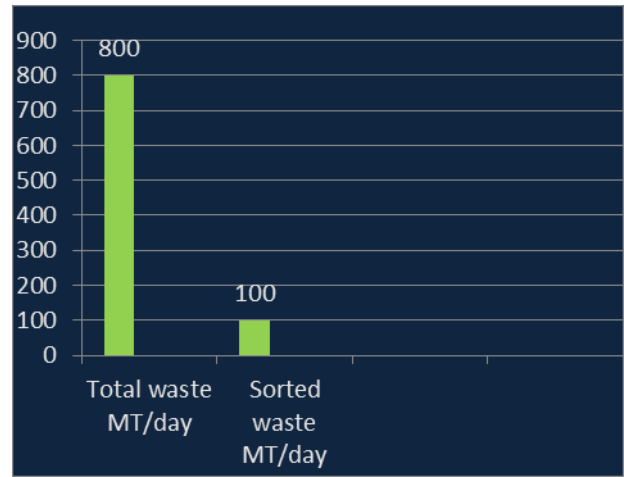


Fig. 4. Total waste collected & segregated.

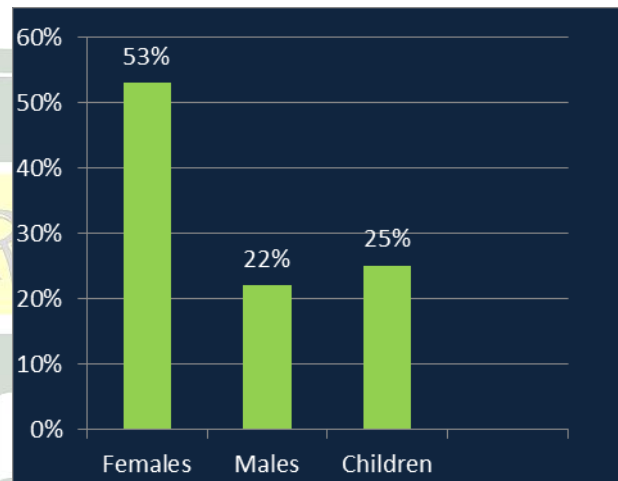


Fig. 5. Gender.

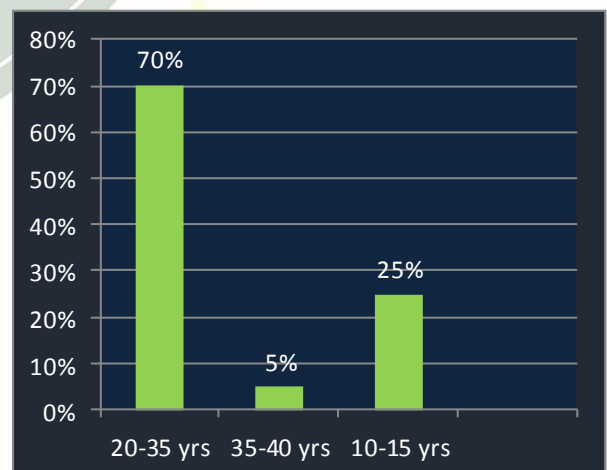


Fig. 6. Age group.

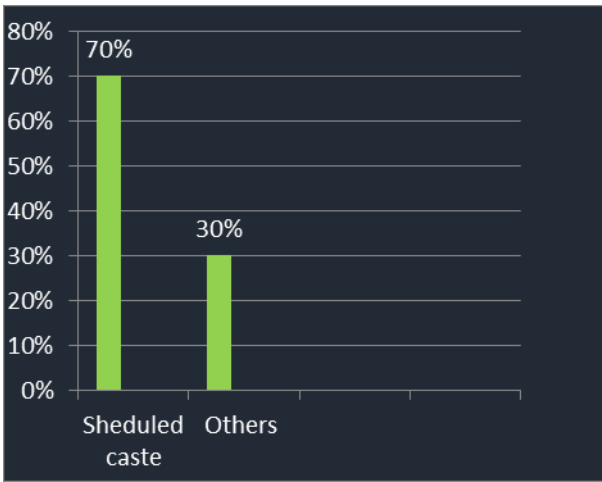


Fig. 7. Caste.

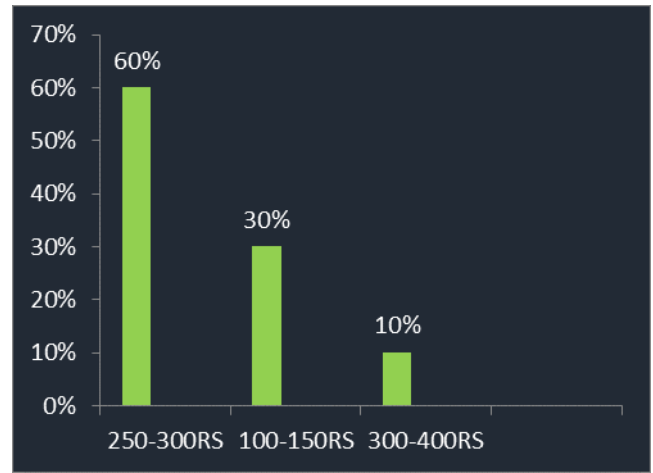


Fig. 10. Income

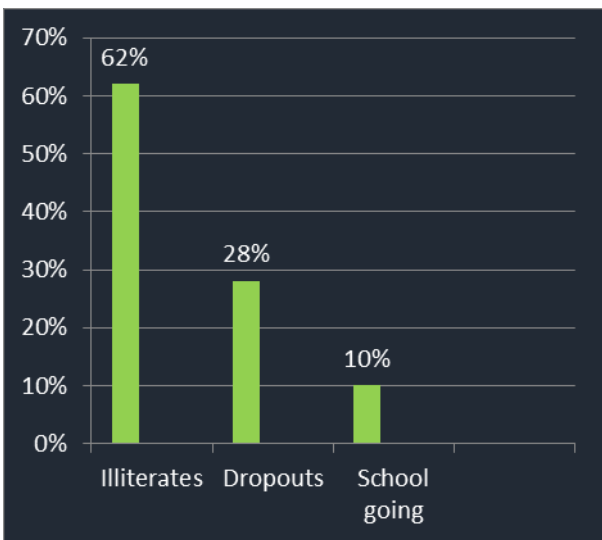


Fig. 8. Literacy.



Fig. 11. Rag-pickers at dump yard

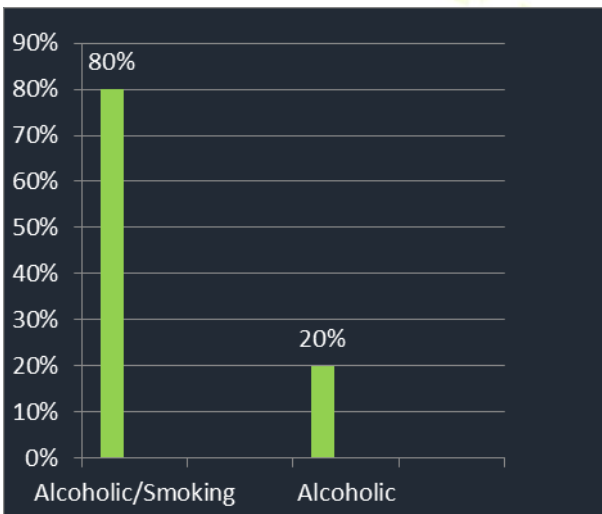


Fig. 9. Addictions.

VI. DISCUSSION

The survey conducted on the role played by the rag-pickers at the dumping yard in Greater Visakhapatnam Municipal Corporation has revealed not only the socio-economic condition of the rag-pickers but also an insight to the struggles faced by them in their day to day life. Though many studies earlier proved that majority of rag-picker population is males the present study identified that females dominated at the dump yard by working in group with a single male in sorting the waste materials. According to a study conducted on scrap collectors, scrap traders and recycling enterprises in Pune about 90 per cent of scrap collectors were women in the age group of 19 to 50. The study identified rag-pickers of all age groups sorting the scrap materials, plastics, glass etc.; in the dump yard. A similar study revealed as many as 20,000 scavengers who live and work in Calcutta's municipal dumps [11]. During the study it is observed that most of the rag-picker children are facing malnutrition. While a recent study in 2014 showed that malnutrition is more acute in India than in many sub-Saharan countries due to poor level of sanitation [12]. The Greater Visakhapatnam Municipal Corporation has rag-pickers of all age groups but most predominantly the active age group who could work for long hours. The study revealed that the rag-pickers mostly belong to the economically backward caste

which brings out the social responsibility of the society in lending a hand to the uplifting of these down trodden. The field investigations observed that the rag-pickers struggle nearly 8-9hrs per day in the dumping yard to earn their daily meals. A situational analysis of rag-pickers in Nepal reveals that of the 100 street children 89 were migrants from rural areas [13]. While the present study reveals that the corporation has rag-pickers who are mostly the migrants from the nearby State and surrounding villages. The present study shows that about 60% of the rag-pickers lack minimum basic education with no other skill which is the prime reason for them to indulge in this activity. During the group discussions it is revealed that the majority of the rag-pickers though forced to enter this unhygienic work would still continue, as the work needs no skill and yet it earns their daily bread. Though majority of the rag-pickers earn 250RS/day, these are the people who are widely exploited by the scrap dealers due to their born slavery nature, lack of knowledge, and social inhibitions. The study revealed that in all situations the rag-pickers are forced to work at the dump yard due to their poor economic condition and debts. These rag-pickers spend hours in the dump yard collecting the rags yet ill-treated by the society. Though the corporation provided personal protective equipment to both the sanitation workers and rag-pickers at the dump yard it could not extend to all. On the other side these rag-pickers could not anticipate the future health ailments due to illiteracy and knowledge.

CONCLUSION

It is a pity to consider our cities as modernized where a section of people like rag-pickers are still struggling and working putting their lives to danger for survival. Municipal solid waste management is one of the greatest challenging aspects of any city, metropolitans etc.; Strict law should be enforced on the minimum age of the rag-pickers to enter this activity and a proper security at the dumping yard should be insisted on the corporations from avoiding any illegal activities. This awful condition of the rag-pickers can be made better to certain extent by providing identity cards by the corporation which could possibly avoid child labor. Strict timings for rag-picking in dumping yard should be enforced which reduce the accidents these people sometimes encountered to. The corporation should provide authorized scrap dealers at the

dump yard to reduce the exploitation of the rag-pickers. The present study deciphers the economic status, working conditions and health ailments of the deprived rag-picker population at the dump yard.

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