CHAPTER-II

REVIEW OF LITERATURE

Introduction:

Scavenger concept is not a new phenomenon, but what is new is its perception as a big jolt of society. Various ancient Indian studies have described the socio economic conditions of scavengers how they are in families shared the work load of their parents and their existing problems. With the many competing demands on their resources, the developing societies are often unable to do everything that is necessary to give the children their rightful place in the community. The result is that many scavengers in their tender age are exploited for work. There are many studies, scholars, experts of respected subject, government agencies, NGOs etc., conducted research particularly scavengers socio, livelihood, health conditions they are;

Deviprasad B. (2007) in their exploratory study reviews the nature and practice of forms of manual scavenging in different areas in Andhra Pradesh, the castes that are engaged in the practice, their social profile, work conditions, and the impact of programmes taken up to eliminate the practice and rehabilitate the scavengers. The study is based on semistructured interviews conducted with leaders involved with issues of the Safai Karamcharis and other Dalit NGO leaders. A number of respondents were purposively selected from the scavenger communities to obtain first-hand information about their work, living conditions and the problems
confronted by them. This material was supplemented by official statistics drawn from different sources. A scavenger is one who is wholly or partly engaged in the occupation of manually removing night-soil from dry latrines, or the manual handling of the dead bodies of animals and humans. The practice is reported to be still prevalent in both rural and urban areas, and women form the bulk of the workforce. The study begins with a presentation of official statistics on the numbers of persons practicing forms of scavenging as an occupation, a description of the different caste groups engaged in this occupation in Andhra Pradesh (Relli, Madiga, Mala and Yanadi), their work conditions, and the occupational hazards faced by them. This is followed by an outline of government schemes for the removal of scavenging and the rehabilitation of scavengers, and a description of some notable NGOs working in this area. The researcher stresses the need to create awareness among the scavenging communities about the programmes for their benefit; give top priority to education for the children of scavengers; prepare schemes for the rehabilitation of scavengers in consultation with leaders and NGOs; develop women-specific programmes, in view of the high concentration of women in this occupation; improve the work conditions of scavengers by the introduction of modern technologies; and monitor the health status of scavengers, particularly women.

Isely and Alexander (1949), in their study which stimulated current studies in crop analysis of Orthoptera, noted that insects constituted a part of the normal diet of several species of meadow grasshoppers (Conecephala linae). In their
monograph on food selection in Orthoptera, Gangwere (1961) verified this observation and reported finding insect parts in the crops of isolated species in the subfamilies Oedipodinae and Cyrtacantha cridinae. Mulkern et al (1962) stated that they found arthropod parts in the crops of most species of grasshoppers associated with alfalfa fields in North Dakota but had not determined whether ingestion was intentional, incidental, or accidental.

Yogesh D Sabde, Sanjay P. Zadpey (2008) stated in their study that street sweepers play an important role in maintaining the health and hygiene within the cities. This job exposes the street sweepers to a variety of risk factors such as dust, toxins and diesel exhaust pollution, which make them vulnerable to develop certain occupational diseases. Therefore, it was thought necessary to study the morbidity profile in this occupational group. Researcher aimed to study the prevalence of morbidities among street sweepers and comparison group by undertaking a cross-sectional study with a comparison group in Nagpur Municipal Corporation, which included two groups; a study group comprising 273 street sweepers and a comparison group comprising 142 class IV workers working in the office buildings of Nagpur Municipal Corporation, Nagpur. A pretested proforma was used to record the necessary information such as clinical history, sociodemographic factors, findings of clinical examination and investigations performed. Results and Conclusions: The important morbidities detected among street sweepers were the following: anemia (20.5%), hypertension (9.5%), upper respiratory tract infections (URTI) (7.3%) and chronic bronchitis (5.9%). In the
comparison group, important morbidities detected were the following: anemia (20.4%), hypertension (11.3%), hyperacidity (9.9%), URTI (7.0%) and refractive error (7.0%). Chronic bronchitis was detected in two subjects (1.4%) of the comparison group. The prevalence of chronic bronchitis was significantly high among street sweepers than that of subjects of the comparison group. Therefore, it is recommended that further studies with a larger sample size be undertaken to identify the factors responsible for higher prevalence of chronic bronchitis among the street sweepers.

In developing countries, informal waste pickers (known as scavengers) play an important role in the solid waste management system, acting in a parallel way to formal waste collection and disposal agents. Scavengers collect, either from the streets, dump sites or landfills, re-usable and recyclable material that can be reincorporated into the economy’s production process. Despite the benefits that they generate to society, waste pickers are ignored when waste management policies are formulated. The purpose of this study is to integrate the role of scavengers in a dynamic model of production, consumption, and recovering, to show that, in an economy producing solid waste, efficiency can be reached using a set of specific and complementary policies: a tax on virgin materials use, a tax on consumption and disposal, and a subsidy to recovery of material. For example, producing copper from already segregated scrap metals requires only about one-tenth the energy required for production from virgin copper ore. Recycling magnesium results in a 97 percent energy savings, and recycling aluminum results
in a 96 percent energy savings. Using scrap instead of iron ore to make new steel means a 74 percent energy savings (Johnson et al., 1984). Similarly, energy is saved when paper, glass and rubber are recycled.

Recycled waste is an important source of raw materials. In 1984, for instance, the Mexican paper industry used 58.3 percent wastepaper as a fiber source and by 1994 it had increased to 73.8 percent (Medina, 2000). More than half of the waste is collected by informal workers in Cairo (Lardinois and Klundert, 1994). In Santa Cruz, Bolivia, informal collectors serve about 37% of the population (Medina, 2000). In the city of Nuevo Laredo, Mexico, the economic impact of scavenging activities has been estimated at nearly half a million dollars per month (Medina, 2000). In Hanoi, Vietnam, waste-pickers provide no-cost waste reduction in the city of around 23-40% (DiGregorio, 1995). In Surabaya, Indonesia, waste pickers recover 12% of the city’s total waste and 31% of organic recyclables (Taylor, 1999). Jakarta, Indonesia, produces 711,180 tons of garbage per month, which costs the sanitation department US$8.50 per ton for collection, transportation and disposal. 25% of the waste recycled by scavengers saves the city US$270,000-300,000 per month (D’souza, 2001).

The informal sector in Bangalore, India, is claimed to prevent 15% of the municipal waste going to the dumpsite (Baud and Schenk, 1994) while in Karachi, Pakistan, the informal sector reduces municipal waste collection by 10% (Ali, et al., 1993). Seldman (2000) states that from one to three million people live and work as landfill scavengers in the Third World. Based on World Bank estimation,
one to two percent of the population of big cities is supported directly or indirectly by the refuse generated by the upper 10-20 percent of the population (Hogland and Marques, 2000).

Medina (2000) reports that in Asian and Latin American cities, up to 2 percent of the population survives by scavenging. Medina (2000), reports some studies about mortality and morbidity in scavenger population. Mexico dumpsite scavengers have a life expectancy of 39 years compared with the general population’s years. Another study, conducted in Port Said, Egypt, found that scavenger community had an infant mortality ratio of one to three (one death of an infant under one year out of every 3 live births). In Cairo, Egypt, one in four babies born in scavenger communities died before reaching their first year. In Manila, more than 35 diseases have been identified in scavenger communities and areas that lack refuse collection and sanitation.

Economic approaches incorporating the role of recycling in Solid Waste Management (SWM) models Several policies have been suggested to deal with the efficient allocation of solid wastes, including deposit-refund instruments (Fullerton and Wolverton, 2000; Macauley and Walls, 2000), unit pricing as fees per unit of garbage (Kinnaman and Fullerton, 2000; Callan and Janet, 1999), tax-subsidy instruments (Fullerton & Wolverton, 2000), advance disposal fees, recycling subsidies, and recycling rate standards (Walls and Palmer, 1997; Palmer, et al., 1995), as well as their efficiency in different contexts (Calcott and Walls, 2000). Conrad (1999) shows how prevention, recycling and disposal of waste
could be part of a theory of the firm. He derives efficient production functions from production processes with waste as a by-product, and using a dual cost approach, develops a theory of the firm under solid residual management. He shows that since the producer does not bear the full cost of disposal, there will be a bias toward virgin materials and away from recycling. An incentive to recycle is a tax on resources or on waste. In order to determine the tax levels a maximizing welfare problem by the government is proposed subject to the dynamic constraint for decumulation of land fill for waste deposits. The user cost and its time profile for taxing waste disposal or virgin material are obtained.

Bruvol (1998) shows that among the major causes of inefficiencies related to waste are biased tax policies and regulations, which comprise indirect subsidization of virgin materials. She demonstrates that heavier taxation of virgin materials and less taxation of labor contribute to changes in relative factor prices which better reflect the social value of the resources, without increasing the overall costs. Her analysis, based on a general equilibrium modeling approach, illustrates the effects of such a reform on environmental and economic measures, and shows that there is a considerable potential of net benefits, not only from less use of virgin materials, but also from a general reduction in emissions.

Moreno-Sanchez (1997) constructs a dynamic model of disposal and recycling for two recyclable goods in Bogota, Colombia. She shows that waste pickers generate a positive externality to society, and therefore, they should be compensated, while producers of final goods using virgin materials should be
charged, to encourage them to use recovered materials. The model presented in this paper is an extension of the previous work developed by Moreno-Sanchez (1997). Specifically, the model is extended to the case of more than two goods, inclusion of the increasing practice of recyclable-material trade between developed and developing countries. In addition, we analyze the impact of imperfect competition (monopsonistic power) in the market for recovered material.

Van Beukering and Gupta (2000) state that whether international trade in recyclables has positive or negative environmental, economic and social impacts can only be determined case-by-case, and country-by-country. It will depend on the complementarity or substitutability of domestic and imported recycled materials, on the extent to which the informal sector participates in the recovery of waste, and on the level of organization of informal waste pickers to guarantee a stable supply with the quality level required by industry. For the least developed countries, where the production of solid waste is mainly organic-matter based, the level of demand for recycled material may rapidly exceed domestic capabilities, and imports can generate benefits to the economy. In these cases, domestic and imported recycled material can be seen as complements. However, when potential for domestic recycling is high, domestic and imported recycled materials are substitutes. In addition, under conditions of unemployment and poverty there is, as it has been widely reported, an army of self-employed people willing to collect
garbage to survive. Domestic recovery of waste in developing countries is an activity performed generally by people in the lowest income level in society, usually homeless and unemployed people whose only source of income, food and shelter come from recovered material. For that reason, recycling activity plays the role of a buffer for one of the most vulnerable sectors of population in less developed countries. Distributional effects are not considered in efficiency analysis but they indeed matter, giving an additional argument in favor of encouraging domestic recycling in those economies.

Industries that consume recyclables in developing countries encourage and support the existence of middlemen or waste dealers between the companies and the scavengers in order to assure an adequate volume and quality of the materials. As a result, opportunities arise for exercising market power and/or political control over the scavengers, since they must sell their pickings to middleman, who, in turn sell them to industry. Industry demands a minimum quantity from their suppliers and will not buy materials from individual scavengers. Industry usually demands that the materials be clean, baled, crushed, and sorted, processing that the middlemen carry out (Medina 2000). In fact, several authors (Kaseva and Gupta 1996, Medina 1997, Medina 2000, Ojeda- Benitez et al., 2002) have suggested that low prices for scavengers are due to the presence of imperfect competition in the market for recovered material.

Medina (2000) states that scavenger poverty can be largely accounted for by the low prices they are paid for the recyclables by middlemen. In some cases,
intermediaries, especially in monopsonistic markets take advantage of scavengers. For instance, scavengers in some Colombian, Indian and Mexican cities receive as low as 5% of the price industry pays for recyclables.

Dumpsite scavenging, in particular, is susceptible to the development of monopsonistic markets, due to the relative isolation of many dumps, which makes it nearly impossible for scavengers to transport materials to the nearest town (Medina 2000). Castillo (1990) states that in Mexico City, dumpsite scavengers must sell their pickings to their leader, who sells the materials to industry at a mark-up of at least 300% (Medina 2000).

Kaseva and Gupta (1996) show that in Tanzania, scavengers, being generally uneducated workers, have very little information on the possible outlets where they can sell the material at better price, and they run the risk of exploitation by middlemen who buy the material at approximately one-third of the normal price and sell to industry. This market distortion can play an important role in the welfare analysis of the proposed model, and, therefore, it is worth introducing this market failure into its structure to see how imperfect competition affects scavenger benefits. Suppose one of the industries buying recovered material and selling final goods is made up of one firm, say firm $j$. It acts as a monopsony buying recycling products, and, therefore, the supply that it faces is no longer perfectly elastic.

Many studies have been conducted abroad on Dalit community. Even some
studies have been conducted on Dalit of Bangladesh (Kamal, Khan and IDS N 2008). A study has been addressed on the nature and extends of untouched ability, decent-based discrimination and social exclusion in contemporary rural Bangladesh. But no sufficient study has found only on livelihood and profession of sweeper. in this study an attempt have been made to focus on sweepers of Chittgong city-their profile, livelihood practices, attitude towards their traditional job, empowerment, education, health-hygiene etc. The study will provide an idea about livelihood of sweeper in Bangladesh.

Iftekhar (2009) aims to find the trend of traditional profession, livelihood situation of sweeper community and causes behind the living in between poverty in Bangladesh. Survey and focus group discussion (FGD) were taken as method. The finding show that all household of the sweeper are being deprived from socio-economic advantages, comparatively with general community. Most of the sweeper's households are burden by excess expenditure over income. They are depending on loan from informal sector. Over the generation, they have not been changing their profession, communities access to same rights and services enjoyed by mainstream society. Immediate action is necessary to uplift and reform their cally due to several causes. Government and non-government sector should take more initiative that ensures sweepers livelihood and profession.

Siddaramu. B. (2013) has discussed scavengers and sweepers still carry out the basic sanitary services in cities and towns. While many are employed by local urban authorities to clean the sewers and sweep the streets, a significant number
still work in their traditional occupation. This means that scavengers are still cleaning latrines by hand and carrying night soil in baskets on their heads. Such socio-economic conditions for scavengers still persist despite various articles in the Indian constitution, which stipulate that the state should promote the economic and educational interests of Scheduled Castes and protect them from discrimination and exploitation. This article talks about the plight of manual scavengers in Indian society. It also cortically analyses the policies and programs of manual scavengers.

Another study conducted by Karlekar (1982) views the impact of rapid urbanization and mixed economy on the sweeper women in Delhi. The empirical evidence in the study shows that 'men are the chief beneficiaries of the modern economy'. However, contrary to established notions, there is no imminent threat of unemployment for the women, especially those employed in caste-based occupation like sweeping. The author suggests that, 'in fact modernization is helped by the continuation of women in traditional jobs which releases men for the new technology.

B.N. Srivastava (1997) to trace the origin of scavengers in India, their social and economic status, caste organizations, cultural heritage and territorial distribution. One of the important findings of the study is that although a large number of sweepers, mostly from northern India, have abandoned Hindu religion and
converted to other religions, no significant change has come about in their occupation or social status.

S.P. Punalekar (1990) provides an overview of the social situation of sweepers and scavengers in rural and urban western India, mainly the state of Maharashtra and Gujarat. He argues that internal awakening and consciousness is basic to the mobilization of a social group for its socio-economic advancement. He points out that it is only in recent years that some efforts towards mobilization and conscientisation have become visible among scavengers.

Chatterjee (1981) focuses her study on the urban community of sweepers of Benaras. It investigates into how sweepers organize their lives and what it is that holds them together as a group distinct from the larger society and methods they use to try and improve the conditions in which they live and work. The study also probes the relationship between men and women and the varying forms that these take in different areas of their social organization. The findings indicate that the pattern of sweepers' life is not changing greatly though the style of behaviour is in some way moving closer to that of the larger society. Social mobility is low and there is rigid segregation of the group from other castes and classes. The study also shows that in spite of attempts by government to raise sweepers from their traditional subservience, occupational mobility is minimal. The study investigates the role and status of women in the community. Though the women are articulate and free in some domains, they do not experience same freedom as men do in all aspects.
As Prashad (2000) has amply demonstrated, 'settling the *Balmikis* in the cities as sanitary workers, and moulding them into accepting this work has been one of the major achievements, first of the colonial administration, and later on, of the state and political parties' (see also Gooptu 1996). Although they are employed in organized as well as in informal sector; the state is the largest agency that employs and pays over a million scavengers as its apparatus (Macwan 2001a). In urban areas all the functions related to sanitation and its maintenance are carried out by this particular caste group and unlike in the villages they act in the cities mostly as the sanitary workers. The other traditional duties they performed in the villages are no more relevant in the cities and towns.

Ramachandran, R. (1989) the study testified that to the perpetuation of the low socio-economic status of Scheduled Caste communities in urban areas (Kosambi 1994). This has been shown, for example, for the Scheduled Caste population in Andhra Pradesh (Kumar and Venkateshwarlu 1980), Punjab (Gill 1987), and Uttar Pradesh (Sinha 1984). In the urban areas there is ample evidence to show that the Scheduled Caste workers are heavily concentrated in low paid jobs in informal sector (D'Souza 1990). Banerjee and Knight's (1985) study of the Delhi urban job market during 1975-76 revealed that ex-untouchables are disproportionately represented in poorly paid dead-end jobs. Thus, those at the bottom of the social order in the village remained virtually in the same position in the city (Ramachandran 1989).
Barwardhan (1973: 203) has shown in her case study of the "Harijans" of Maharashtra that urbanization leads to greater occupational mobility for the Scheduled Castes. Whenever a group of people continues with their traditional occupation in an urban area, it does so because it finds it financially more rewarding. There is a relative absence of ritual compulsions to do the hereditary work in cities. However, she has observed that not all castes performing menial jobs discard their traditional occupations in cities.

Bhosale Savita G. and Korishetti Vijaya B. (2013) have analysed the existence of child labour in our society broadly indicates social inequity and at the same time, the administrative apathy, of the times we live in. Child labour, and in particular, “child ragpicking” deprives the child of its life. It transcends the barriers of religion, gender, caste and type of family. However, education, structure of family and poverty of the total family do play an important role in the life of child ragpickers. Ragpicking when undertaken as job, by the children, pushes them to the brink of anti-social behavior and illness.

Kuruva Syamala Devi et.al.(2014) the study emphasized that Waste was an unavoidable by-product of human activities. Economic development, urbanization and improved living standards in cities contribute to increase in the quantity and complexity of generated solid waste. If accumulated, it leads to degradation of urban environment, stresses natural resources and leads to health problems. Solid waste management has become a major environmental issue in India. Waste
management, however, remains a major challenge for any society, since all natural processes generate waste. Rag pickers play an important, but usually unrecognized role in the waste management system of Indian cities. They collect garbage in search of recyclable items that can be sold to scrap merchant like paper, plastic, tin...ect. This activity requires no skills and is a source of income for a growing number of urban poor people. The present paper intends to present a vulnerability study of the rag pickers of Greater Hyderabad Municipal Corporation (GHMC) with focus on the socio-economic and occupational health aspects. The 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 information has been developed through literature review, questionnaire survey and open-ended interviews conducted to generate data on rag pickers in GHMC.

Kamat Potpourri (1999) in his article “Ragpickers of India” explores on the exploitation of child ragpickers. In most cases, there are middlemen who engage these children. They are required to collect bottles, plastic, metal parts, glass pieces and alike. The middlemen pocket the major shares of the sales and pay only paltry to them. It is said that ragpickers who clean up dirt and contribute to environment are harassed by both police and municipal workers. They need to bribe municipal workers to forage into garbage bin. Police instead of protecting
them, often beats them and forces them to sweep police station and municipal offices.

In the Article of NGO (1990) “Agape, Bangalore” it is found that ragpickers come from violent and broken homes, perhaps second marriages where the mother has been burnt to death with kerosene, the father demanding further dowry from the wife’s family to feed his drunkenness. The children from the first marriage not wanted (more mouth to feed) beating, starvation and deprivation of security and love are daily occurrences. Some are forced from a very young age to work and earn money, a few are influenced by peer pressure, and some are orphans fighting a daily battle to survive. Boys unable to tolerate the daily beatings and dysfunctional family life run away and become street children. Girls are forced to look after younger family members even have to beg for their own survival and that of the younger child. They are treated as slaves in the home and many are forced into prostitution at a very early age.

SWACHH- (2005) reveals that wastepickers are harassed by police and municipal workers, shunned by society, exploited by scrap traders and money lenders; they are often excluded even in the organizing efforts of NGOs and Trade unions.

Rai (2002) mentions that the parents and other family members fast lose the control nay even the moral authority, over the child labour who soon begins to imitate his adult fellow workers, mistaking them to be their ideals. The illiterate child, having freed himself from the family ties, becomes susceptible to all sorts of
evil influences which may turn him into a heavy smoker, a drug-addict, a gambler, a smuggling operator, a film addict, a thief, a pick pocket, or even a hard criminal, such children are often seen to be in the habit of using filthy and abusive language.

Upadhyay, et al (2005), in their article “Eco Tools for Urban Waste Management in India” describes about the role of ragpickers. A large proportion of recyclable components i.e., paper, plastic, metal etc are collected by ragpickers from the garbage bins, from roadside, or in streets, market places, etc. in metropolitan cities, thus supplying raw material to the flourishing recycling units.

SWACHH (2005) in this article “Alliance of Wastepickers in India” is a group of organizations working with wastepickers in different regions of the country. Wastepickers are a sizeable proportion among the poorest workers in the urban informal economy. They earn their livelihood from the collection, segregation and sale of scrap from recycling. Entry into the sector is largely mediated by caste and gender. Many of them are sole income earners in their families. Wastepickers play a significant though informal role in the management of urban solid waste by contributing to 1) Resource recovery, 2) Environment conservation, 3) Reduction in municipal costs, and 4) The reprocessing industry.

Srivastava Shishir (2008) in his article “Ragpickers in Modern Day India” points out the exploitation of child ragpickers. The Ragpickers scrounge around every day as soon as the waste gets deposited early in the morning at the main garbage centers. But it is not as simple as just finding the stuff and selling it to the
"Kabaadi walla" shops. The garbage picking industry has a hierarchical format with there being several middlemen who make the most of these innocent children, much like the organized retail industry.

Mohammad Aljaradin et al. (2015). Scavengers play a major role in the waste management process in developing countries. This study analyzed the informal recycling activities carried out by scavenger in the Tafila region of Jordan. The results show that scavengers have an important role in the informal solid waste management (SWM) especially in term of waste reduction, minimization and material recovery. Significant values from the scavenged material make the scavenging somewhat a profitable business for poor people and could track more in the future. Socially scavenging tends to be acceptable in the community, especially with the increasing of the poverty and employments rates and became more acceptable in rural areas as it is already in urban areas. Despite the low level of education, the awareness for the negative health effect from working with waste was very high. The organizing of the scavenger work is suggested, since it would improve their working environment, income and living conditions. Therefore it should increase their contribution significantly to resource recovery.

Prasamita Mohanty (2013) has discussed that Right to Education Act is the recent social intervention through which India has chalked out a bright road map towards her future. Undoubtedly, education will empower the two-third of populations who are socially excluded. Social exclusion is a global phenomenon that encompasses a
wide range of ill practices prevailing in the society. Poverty, casteism, gender inequalities, communalism, and regionalism are becoming stumbling blocks for social progress. Fundamental skills and knowledge in the form of education that serve as the basis for enriching life of every citizen is the need of the hour. Designed to examine the educational status of scavengers’ children, the present study revealed significant kinship between social exclusion and educational drop out. Low socio-economic status and low level of parental education are responsible for scavengers’ children to be dropped out from the education system and those who are educationally drop out have become prominent factors for their exclusion.

Venkatesh, C.D.(2014) the present study has focused on women scavengers in Bangalore and their health and economic conditions. The study is pertained to the Bangalore Urban district in the state of Karnataka, India. The significance of this study is to focus on the women scavengers who are exposed to the most virulent forms of viral and bacterial infections that affect their skin, eyes, and limbs, respiratory and gastrointestinal systems especially in the urban parts of Bangalore. Hence the study was based to rehabilitate the women scavengers and their economic study. The present study also signifies the present situation of the women scavengers as adequate economic alternative, it is often seen that women scavengers are not able to quit their degrading work. Objective of the studies are mainly understand the Economic and Health status and of the women scavengers and Legal frame work of the Government of Karnataka in bringing different
policies and programmes and other affirmative action’s of the city municipal in the process of rehabilitation of the women scavengers. Researcher use the Methodology followed in the present study will be mainly focused on field work and collection of primary data through interview scheduled. And researcher has taken randomly fifty samples from BBMP. Major findings of the study are most of the respondents suffering from Tuberculosis, skin allergy, eye irritation and limbs, respiratory, back pain, majority of the people economic status are Below Poverty Line (BPL).

Ejares, Jay A. et.al. (2014) have studied that Scavengers being informal settlers are often not provided by the government with basic services. Furthermore, they are often exposed to occupational safety and health hazard and yet they to continue to rely on wastepicking as their major source of income. Upon the implementation of the Ecological Solid Waste Management Act (RA 9003) by the city government of Mandaue, this significantly lowered the income of the scavengers by 62.34%. This indicates a conflict of interest between the scavengers and the implementing body. Hence, a comprehensive environmental and socio-economic policy should be planned to identify the needs of the scavengers and address the interest of both parties.

Seow Ta Wee (2012) the scavenging activities are one of the common phenomena in the Third World Countries. The scavengers are the communities in solid waste management, they are often related to poorness, uneducated and unhealthy groups but they are playing the importance role in the recycling activities in Malaysia.
The article discusses the scavenging activities and the socioeconomic situation of scavengers in Malaysia. The result showed that the scavenging activities could generate the good income for most of the scavengers, there are four types of scavengers in Malaysia, the scavengers did not report their true health information due to the some constraints, 60 percent of scavengers need necessity at their work place, they realize that the activities of scavenging can reduce amount of solid waste, and lastly scavengers are exposed to the hazardous and unhealthy work place environment. The decision maker must consider these communities into the solid waste management policy framework to prevent and provide them the healthy environment work place.

Ebenezer Owusu-Sekyere (2014) has analysed that urban poor in Ghana have invented an endless series of survival strategies to endure the high rate of unemployment and widespread poverty by engaging in occupations such as waste scavenging. Whilst literature is replete with evidence of the economic significance of this livelihood activity, there is scanty empirical work on its health implications. This study examines the health implications associated with the occupation, using scavengers in Kumasi as a case study. The research is based on data collected through 10 key informant interviews with stakeholders in waste management and 30 personal interviews with waste scavengers drawn equally from the three largest solid waste dumpsites in the metropolis. The study reveals how scavengers are exposed daily to a myriad life threatening health problems as they sift for recyclable products. The paper conceded that given the economic implication of
the enterprise, it is important that they benefit from intervention programs that can reduce the adverse health outcomes associated with their job.

Jnanmitra Bhimasha and Chandrakumar. B. Sedamkar. (2015) have studied manual scavenging as a social issue has received national policy attention since India’s independence The Employment of Manual Scavengers and Dry Latrine Construction (Prohibition) Act, 1993 makes provisions for the abolition of this practice, and for the identification and rehabilitation of manual scavengers. A deadline of December 2007 was set by the Supreme Court for necessary actions to be taken by states, but several reports show that this is not the case in Karnataka. In Karnataka those employed as manual scavengers and sweepers are called as pourakarmika/s. The main objectives of this study are to find out the economic status and lifestyle of the respondents. Descriptive research design was adopted in this study. The universe of the population was 100. Out of the 100 population the researcher selected 55 respondents through Proportionate random sampling methods was adapted in lottery method manner. Only Self-prepared questionnaire was used to measure the socio-economic condition among scavengers. Interview schedule method was used for data collection. The study reveals result that only 38.2 percentage of the respondent earn income between Rs.4500 to 6500 per month. 61.8 percentage of the respondent were not having nutritional food. (44.6%) were facing the stigma and discrimination from the society. (54.5%) feel that the society had a bad opinion about their occupation. (72.73%) were getting debt from different finance agencies.
Furedy. C. (1984) the study recuperation and recycling take place at all levels of society in economies of scarcity. For the urban poor, they may be vital to "survival strategies" or may provide important supplements to uncertain and low wages. Currently scholars and planners are reassessing scavengine and waste recovery in developing countries in order to understand the role of these activities in the urban economy. Scavengers in different areas of Calcutta are described: pavement dwellers, municipal dump workers, and squatters in an elite suburb. It is argued that these groups contribute to effective use of waste, but there are severe health and environmental problems associated with their activities. There is need for comparative studies of scavengers to understand similarities and differences across poor but growing cities.

Karthikeyan.P, N.Gayathri and Dheepa. T. (2014) the study estimated 1.2 million sanitary workers in India are occupied in the sanitation work. The working conditions of these sanitary workers have remained virtually unchanged for over a century. Sanitary worker comes under the urban informal and occupational hierarchy at lowest in the context of Indian society. Despite the social atrocities faced by these workers, they are exposed to certain health related problems by virtue of their occupation. Women’s emancipation gained momentum and they were considered equal if not superior to men. But when all is said and done, the status of women in India had been a fluctuating one sometimes encouraging and sometimes discouraging. However, the present status of women in society is quite encouraging but the women in marginalized section deserve careful study.
Evocation of manual scavenging is mostly done by lower caste people and closely linked to the practice of untouchability. Sanitation workers mostly carry out their work in unsafe working conditions without protective gears or other safety gears or other safety devices. The paper discusses about the status of women and manual scavenging in India, it also explores the sanitary conditions in the state of Tamilnadu and the welfare measures that are provided to those workers in the state.

Aida H. Z, Firuza B. M, Fauziah S.H. (2011) have concluded that that, 72% of the active scavengers in the study area are foreigners, mostly Indonesians and they are full time scavengers. 85% of them choose to scavenge waste in landfill because they lack qualification for other job opportunities. On the other hand, 15% choose to be involved in scavenging activity because it generates higher income for them compared to other jobs. Higher income from their point of view likely means the collection of recyclable material, as recyclable materials are relatively expensive. Besides, the profit they make is immediate, as cash is given directly after the materials are delivered, compared to doing other jobs which requires waiting for a paycheck once a month. These scavengers admitted that their involvement in scavenging activities is mainly due to their socio-economic factor rather than for the love of the environment. Most of these scavengers (82%) work in groups based on family relationships. They collect the material individually, gathered to a substantial amount and finally sell it off to generate income for the family. This helps in increasing the family income as a whole instead of profiting
only as an individual. From the observations, the landfill management does not provide proper personal protective equipment (PPE) to the scavengers nor strictly enforce the usage of PPE despite the knowledge that PPE is a good method in reducing health risks among the scavenger. Also, the management in all types of landfill does not provide the necessary technical training for the scavengers. It seems that the most important thing to the management is profit, important enough that they ignore the potential hazards and risks faced by the scavengers in their daily lives. Thus, the authorities should have better policies and legislations in landfill management in regards to the involvement of scavengers.

Shaheda Niloufer, et al. (2013) their study discussed compostable waste, the municipal waste consists of inorganic materials such as glass, metal, rubber, plastic and other miscellaneous items that could be recovered by the way of recycling. The involvement of an unorganized sector consisting of waste pickers, scrap and waste traders in recycling and all together assisting in translocating waste to processing factories is very common in developing countries. Several studies on the involvement of rag pickers in waste collection and disposal have been published from India and abroad (Beede and Bloom, 1995; Reddy and Galab, 1998; Agarwal and Gupta, 2002 so on). A similar but extensive study was made in Vijayawada and Eluru corporations with attempts to assess the role of waste collectors in the recovery and reduction of solid waste and also to evaluate their indirect involvement in waste segregation, collection, reduction and disposal
through reuse and recycling including the occupational hazards which were least attended.

The rag pickers played a part in solid waste management in their own way by channelizing the recyclable materials. They could reduce the expenditure of the corporation. As the rag pickers collected mostly materials like plastic and metals, the sorting of solid waste became easier to the municipal workers in both the cities. Rag picking also provided livelihood to them and it was virtually a form of self-employment. Besides that rag picking is one of the most dangerous and inhuman activity where the rag pickers are exposed to harsh weather conditions surrounded by stray animals and infectious solid waste that may induce them with many diseases. At the same time they were also nuisance for certain reasons: Children were forced to undertake rag picking activity; As the rag picking was centered on recyclables, it led to spreading of waste dumps; some of them got involved in anti-social activities; and They sometimes encroached into the landfill sites and set fire to waste dumps. Considering the strength of rag pickers active in both the corporations and their potential to effectively dispose about 2.5 tones of solid waste/day, it is suggested that steps should be taken to improve the working condition of the rag pickers. The corporations shall register the rag pickers involved in work and issue health cards to them so as to enable them to get treatment from ESI hospitals. Their work should be given support by the corporations in every city by providing them some income to work near the dumpsites, helping in segregation and other activities like bio-decomposition of
organic wastes near to the dump sites and manure production, using this manure produced to grow small nurseries and maintain these nurseries which can provide livelihood not only to individual families of rag pickers, but to some group of families. If such integrated approaches are followed at the dump sites in association with rag pickers not only their living conditions can be improved but it would be a holistic approach to municipal solid waste management.

Kuntala Lahiri-Dutt. (2001) had analysed that in the beginning, the coal mining industry employed women from the adivasi and lower caste communities in various stages of production. Their role continued to be significant as long as technology remained labour-intensive and collieries were small and surface-bound. The expansion of the industry and increasing mechanisation saw a decline in women’s participation. This paper based on research in the Raniganj coalbelt in eastern India describes how the work of resource extraction becomes gendered, the growing marginalisation of women, and their increasing alienation from access to environmental resources and their transformation into illegitimate and invisible beings.

Rajeev Kumar Singh and Ziyauddin. (2009) this study dealt with the problem of manual scavenging in India as a form of caste and occupation based social exclusion. It tries to explore the causes and reasons for the continuance of this social evil in India with a case study of Ghazipur district in eastern Uttar Pradesh. The practice of caste-based exclusion and discrimination thus necessarily involves failure of access and entitlements not only to economic rights, but also to civil,
cultural and political rights. It involves what has been described as “living mode exclusion”; exclusion from political participation and exclusion and disadvantage from social and economic opportunities. The caste-untouchability-based exclusion thus reflects the inability of individuals and groups like that of scavengers to interact freely and productively with others and to take part in full economic, social and political life of the community.

Samuel SathyaSeelan (2013) has studies that the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act 2013 does not give the same rights to those who manually clean drains and septic tanks in urban areas. This is also manual labour and involves the use of hands in cleaning excreta. Workers have to enter manholes to physically clean blockages. Government bodies have brazenly ignored court orders on mechanisation and bans on manual cleaning of sewage pipes. Unfortunately, the much-awaited new law also ignores the plight of sewage workers.

Rajnarayan R. Tiwari. (2008) has estimated 1.2 million scavengers in the country are involved in the sanitation of our surroundings. The working conditions of these sanitary workers have remained virtually unchanged for over a century. Apart from the social atrocities that these workers face, they are exposed to certain health problems by virtue of their occupation. These health hazards include exposure to harmful gases such as methane and hydrogen sulfide, cardiovascular degeneration, musculoskeletal disorders like osteoarthritic changes and intervertebral disc herniation, infections like hepatitis, leptospirosis and
helicobacter, skin problems, respiratory system problems and altered pulmonary function parameters. This can be prevented through engineering, medical and legislative measures. While the engineering measures will help in protecting against exposures, the medical measures will help in early detection of the effects of these exposures. This can be partly achieved by developing an effective occupational health service for this group of workers. Also, regular awareness programs should be conducted to impart education regarding safer work procedures and use of personal protective devices.

Preeti Soni.(2014) This research was an endeavor to closely study the situation of rag picker girls. An effort was made to understand their work conditions, impact of the present occupation on these girls and the problems faced by them. In other words, this study provides an overview of their lives in totality. The researcher looked at the situations these girls faced in everyday life and understood that everyday was a struggle for them and they had to survive in such unfavorable environment for livelihood of themselves and their families. Total of 100 girl rag pickers were interviewed from the central Delhi. The high density of rag pickers was found due in the central area of Delhi due to industries and market. Therefore the data was collected from Chandni chowk, Old Delhi railway station, Lajpat Rai market, I.S.B.T, Red fort and Petti market. The findings highlighted that most of the rag picker girls belong to the age group of 10-12 years. Majority of the children (98 per cent) fell under the category of ‘on the street’, in which 7 per cent of the girls had single parents. Majority of the children were illiterate, and the
level of literacy was found very low in those cases who had attended school. Early involvement in the economic activity and apathy towards girl’s education by the parents were the main reasons of high dropout and illiteracy among girls.

Reginald Dennis Gwisai et.al.(2014) this study was to examined that respiratory and common health ailments of scavengers and landfill employees in a Municipal Solid Waste (MSW) disposal site in Lobatse, Botswana. Data were collected through questionnaires, observations at the landfill site, and key informant interviews. The results of the study revealed a high prevalence of respiratory symptoms and a wide range of occupational health problems among landfill employees and scavengers and this could be due to lack of protective clothing. Respondents who have worked at the landfill for at least 1 – 5 years suffered from most ailments. Poor safeguards against diseases, lack of toilet facilities for scavengers, atmospheric dust, offensive odours, and absence of soil cover material contribute to low health conditions. A waste management and disposal system that is environment friendly and conscious of the health and wellness of the urban dwellers is an essential element of sustainable built environments.

David C. Wilson et.al.(2006) many thousands of people in developing country cities depend on recycling materials from waste for their livelihoods. With the focus of the Millennium Development Goals on poverty reduction, and of waste strategies on improving recycling rates, one of the major challenges in solid waste management in developing countries is how best to work with this informal sector to improve their livelihoods, working conditions and efficiency in recycling. The
general characteristics of informal recycling are reviewed, highlighting both positive and negative aspects. Despite the health and social problems associated with informal recycling, it provides significant economic benefits that need to be retained. Experience shows that it can be highly counterproductive to establish new formal waste recycling systems without taking into account informal systems that already exist. The preferred option is to integrate the informal sector into waste management planning, building on their practices and experience, while working to improve efficiency and the living and working conditions of those involved. Issues associated with integrating informal recycling into the formal waste management sector are discussed.

Tulika Tripathi.(2012) the study conducted in Uttar Pradesh government has a scheme to appoint rural sanitation workers. Open to all castes as government jobs are, this was intended to break the link between caste and occupation, especially in sanitation and manual scavenging works. However, a close look at the operation of this scheme in select districts of the state demonstrates the ways in which caste hierarchy and occupations overwrite the best of policies and continue the practices which these are meant to destroy.

The field experiences reveal that the work of sanitation and sewerage is still being done by persons from the same caste group in most places. The upper and middle caste persons who have managed to get employment as government safai karmis appoint the local Bhangis as proxies for doing their work. And in return the actual cleaners are given a meagre amount of money. If they refuse to work on these
terms it results in loss of income (which is already low) and the very real possibility of violence. In most of the cases we found that the actual cleaners are paid less than one fourth the salary that the formal government employee gets. All field stories clearly point out that this scheme of appointing safai karmis at the village level has not altered or broken the caste barrier at all. Rather, this has been a competitive fight for cornering a relatively scarce commodity public employment – among members of the powerful social groups. Politically and economically strong caste groups have gained in proportion to their strength making a negligible impact on the caste-occupation link in sanitation and cleaning. Rather, this scheme has led to further exploitation of lower castes by the dominant castes. The dominant social groups have taken these jobs because of the various benefits associated with government employ. In reality the notion of pollution and purity is still intact and the work of cleaning is still being done by the same people as has been done historically.

Intikhab Alam, et.al.(2011) the present study was conducted during 2009 to probe the socio-economic conditions of scavenger children and to know their contribution in family income. The universe of this study was limited to Board Bazzar, Peshawar Development Authority, and Karkhano market of District Peshawar. A sample of 80 scavenging children was selected through purposive sampling. The study found that 68% respondents belonged to age group 11-20 years, 61% were male, 65% had family size from 10-20 persons, 66% were from joint/extended family type, and 87% were among the first three elder children of
their parents. Parents of 50% respondents were alive, out of which 68% of parents were illiterate, living father of all the respondents were employed. Monthly income of 55% respondents was in range of 500-1000 per month from scavenging. Useful waste was collected by 81% respondents from commercial markets. Sense of security was lacking in 84% respondents and 59% did not have leisure time for themselves. Peer group was source of introduction of 59% of respondents, to this profession, parents of 81% respondents wanted them to work for financial support and all of the respondents helped supporting their family. 55% of respondents did not like that profession, while 56% did not want to leave this profession as they felt they could not do any other job. A majority of 72% respondents were scavenging either to support their major earner or themselves were the major earner as their earning members had died or were disable, 44% were still willing to support their families while 40% were tired of this lifestyle. The recommendations made in light of study were, giving formal and non-formal/religious education and vocational trainings to scavengers for their skill enhancement and moral upbringing, financial support to their families in form of small and large credit loans, health awareness programmes through Government and NGO’s, recreational facilities to the children, job opportunities to the parents of these children, light work permission from the government in light of existing law of the country.

Ravichandran B. (2011) has emphasized that recent incident where some people belonging to the “Bhangi” community smeared human excreta to protest the
Karnataka government’s plan to evict them from their homes brings out in stark relief the failure of reformist initiatives to end the manual clearing of human excreta. This article argues that part of the reason for these failures has been the inability to imbue the “Bhangi” with political agency, while our ideological and literary imaginations have only tried to see this issue in terms of caste or class.

Schenck, R. & Blaauw, P.F. (2011). High levels of unemployment are a permanent feature in the urban areas of many developing countries. South Africa is no exception in this regard. Poverty and hardship caused by unemployment force many participants in the labour market to venture into the urban informal economy in order to survive. The activities of the waste pickers fall within the urban informal economy. In spite of the fact that waste pickers are a common sight in the urban areas of Pretoria and other South African cities, remarkably little is known about them and scant attention is paid to them. The aim of the study was to establish a socio-economic profile of the street waste pickers in Pretoria and to describe the social interaction and relationship dynamics between the waste pickers and their families, each other, the community and buy-back centres. This was done by conducting the first ever empirical study of the street waste pickers in Pretoria. The results revealed that the role of street waste pickers in the broader waste management system is an important public issue that requires urgent attention and appropriate policy responses from policy makers.

Mohd. Shahid & Gyanendra Mishra. (2011). The article maps the initiative of dry toilets conversion and rehabilitation of manual scavengers in Badaun district and
the scope of scaling up in other parts of country. The strategy of Dalila Jalao has invigorated the suppressed agency of manual scavengers and could be promoted as counter-hegemony strategy. Initiative in Badaun to eradicate manual scavenging provides frame for the macro level understanding on two major counts. Firstly, initiative has triggered the suppressed agency of manual scavengers. The strategy of Daliya jalao represents counter-hegemony notion. This agency and consciousness of manual scavengers ‘in effect disrupts and disturbs the creation of an illusion of equality which is the basis of any political action’ (Ravichandran, 2011). It is the ‘beginning of the end’ (EPW, 2010). Secondly, multi-pronged approach of the initiative had strong inter-sectoral linkages across the government departments. This aspect needs to be investigated further for developing a frame for holistic district development planning.

Kalaiyarasan.M and Suresh Kumar.M. (2014) the scavenging activities are one of the common phenomena in third world countries. According to Rajnarayan et al (2008) an estimated that 1.2 million scavengers in the country are involved in the sanitation works of our surroundings. A scavenger is one who is wholly or partly engaged in the occupation of manually removing night-soil from dry latrines, or the manual handling of the dead bodies of animals and humans. And In India today, scavengers and sweepers still carry out the basic sanitary services in cities and towns. Ibbeston, (1916) have found Scavengers “Socially they are the lowest of the low, even lower perhaps than the vagrant Sansi and the gipsy Nat. according to Hindu society, scavengers are treated as untouchable, even by other
untouchable castes. This discrimination also means that scavengers have extremely limited job opportunities that they live in acute poverty in segregated communities and have extremely low level of literacy and job mobility. The main objectives of this study are to find out the economic status and life style of the respondents. Descriptive research design was adopted in this study. The universe of the population was 529. Out of the 529 population the researcher selected 55 respondents through Proportionate random sampling methods was adapted in lottery method manner. Only Self-prepared questionnaire was used to measure the socio-economic condition among scavengers. Interview schedule method was used for data collection. The study revels result that only 38.2 percentage of the respondent earn income between Rs.4500 to 6500 per month. 61.8 percentage of the respondent were not having nutritional food. (44.6%) were facing the stigma and discrimination from the society. (54.5%) feel that the society had a bad opinion about their occupation. (72.73%) were getting debt form different finance agencies.

The present study found that scavenger having low socio-economic status because of their job nature and their society views for occupation status also they are having very limited job and getting very low salary from their working places. Health wise scavengers are poor because their eating very limited nutritional food so the government, nongovernment and social worker should initiate program and services such as (i) create awareness among the scavenging communities about the programs for their benefit; (ii) give top priority to education for the children of
scavengers; (iii) prepare schemes for the rehabilitation of scavengers in consultation with leaders and NGOs; (iv) develop women specific programs, in view of the high concentration of women in this occupation; (v) improve the work conditions of scavengers by the introduction of modern technologies; and (vi) monitor the health status of scavengers, particularly women.

Vimal Kumar. (2014) this paper engaged with various intervention programmes and strategies by state pertaining to the lives of scavenger community. It identifies government regulations and unravels their implications on the lived realities of members of the community. While contextualizing the same from an emic perspective, the article attempts to critically analyze these intervention programmes hoping to shed new light into the plight and impediments faced by the scavenger’s community in India.

It concluded that, the issue of the scavenger community is sidelined within current discourse and policy debates in India and is thus ignored by the policy makers, International development agencies, political parties and NGOs. Contestations by social movements working for the eradication of manual scavenging argue that the program for rehabilitation of manual scavengers contains many grave problems of a fundamental nature; therefore they recommend new formulations with modifications to the present Act of 2013. Till date the exact number of manual scavengers is not known and the new survey of manual scavenging is still in the process of being conducted. These unfortunately are clear indications of a lack of seriousness of purpose from those agencies concerned in ameliorating the situation
of scavengers and the concomitant brutalities of scavenging which paradoxically goes into allowing its unhindered continuation in Indian society.

Bikramaditya Kumar Choudhary. (2003) waste-pickers are not aware of the forward linkages of the waste recovery process, but thanks to globalisation are affected by the movement of market prices. They are mostly very poor, face social and economic exploitation and have little say in the formulation of policies that directly affect them.

To understand the economics, the process of waste-picking is assessed in the historical perspective in which Indian society has developed. Every new society emerges from the womb of another. Each society differs from another in various aspects of social organisation and organisation of power and production. Waste-picking is a comparatively new phenomenon and has been concentrated in urban areas. The actors here are from diverse social strata. However, a majority of waste-pickers in Delhi are from the lowest social section, i.e., dalits. They hardly have any real share in the power structure and political set-up. Traditionally, they have worked as cleaners in the social space as well as individual space and have been denied the basic minimum dignity. They have been oppressed in society but rituals have often made them feel like a part of the social structure. In an effort to provide an ideological basis for their policies of oppression, the ruling classes in ancient India (brahmins) misled the masses to believe that inequality, intellectual, moral, as well as material, were an unshakeable, sacred principle. In this backdrop, wastepickers are the oppressed rural people who remain subjugated even after
moving to the large metropolitan cities. They are economically marginalised and are affected by policies at the national and international levels but have no share in the formulation of those policies.

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