The Plight of the Informal Waste Sector (IWS) in the Philippines

ダンプサイトに持ち込まれる大量の 都市廃棄物。その劣悪な環境の中で ゴミを拾い、生計を立てている人た ちがいる。彼らを窮状から救うのが 急務だ。

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Solid waste is an urban phenomenon which has created a new type of employment opportunities that has attracted the rural migrants who come to the city seeking other means of livelihood. Waste-picking offers Abstract income opportunities that can be easily done without the need for documents and employers. Unknown to most, this group of workers have become vital to the recovery of recyclables. All over the world, the wastepickers survive dealing with waste yet expose their very lives to toxics and diseases which are threats to their health.

In the Philippines, they are responsible for removing tons of recyclables from dumpsites. But there is little research on who they are, how they live, and what the government does to help improve their lives. The way they live and survive raises questions about humane treatment of this group of people whose activities contribute to solving the urban problems in solid waste management.

This study presents the profile of waste-pickers as well as local situations and conditions of dumpsites in selected municipalities in the Philippines. The study aims to present some aspects in the lives of waste-pickers and the issues they face such as the threat of losing their jobs in the event of dumpsite closures, as well as the opportunities that they can prevail if they are given proper training. The challenge right now is how to upgrade the status of these waste-pickers to certain level of recognition and improve their livelihood. This paper endeavors to present these scenarios.

Keywords waste pickers, solid waste management, informal waste sector

Introduction

Solid waste here shall refer to those materials that have been discarded from households, commercial establishments, institutions, industries, as well as street sweepings, yard waste and agricultural wastes, which are non-toxic and non-hazardous (RA 9003). These are the common solid wastes which are col-

lected and disposed of as municipal solid waste (MSW) in open dumpsites and engineered sanitary landfills. They are often the result of urbanization of modern societies. Most solid wastes are from manufactured goods, which come in the form of packaging as well as discards from manufacture of packaging products. The general municipal solid

waste composition in the Philippines shows that a huge percentage of these wastes are made up of highly recyclable materials such as plastic, paper, metal and glass (AIT/UNEP RRCAP, 2010) as shown in Fig. 1 below.

These recyclable wastes are often discarded and mixed with other municipal solid waste, which are then dumped in final disposal facilities. This manner of disposal has given opportunities for a new livelihood to a select group of people who do not mind gleaning the recyclables under abject conditions. These people are collectively called the IWS or the informal waste sector, whether they are collecting from dump trucks, households, street corners where garbage are piled, trash bins and the final disposal facilities of cities and municipalities. They are often referred to as waste pickers or, in some places, scavengers. Local terms for them vary depending on the local language being used.

Unbeknownst to many, this group of workers has become vital to the recovery of recyclables. All over the world, waste pickers survive dealing with waste yet expose their very lives to toxic surroundings and diseases which are threats to their health. They often suffer from injuries as a result of their occupation, such as bruises from shards of broken glass, metals, and sharp needles that have been discarded from clinics. Some of them even get bitten by snakes and rats.

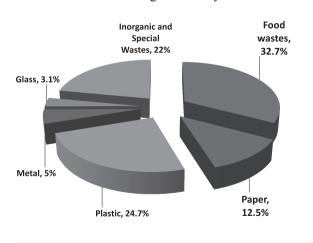


Fig. 1 Municipal solid waste composition in the Philippines (AIT/UNEP RRCAP, 2010)

They live near the dumps in order to be close to their means of livelihood so that they do not have to spend for transportation. Often, they take with them their families, as a result of which children are exposed to the contaminated surroundings they live in and where conditions are most abject. They wear no protective clothing when they work. They work in all types of weather in order to survive so that sometimes workers get caught in trash slides and are buried alive.

Studies have been conducted in many parts of the world,, aiming to help this almost forgotten sector of the society in order to improve their lives. Funding agencies such as JICA and the Japan Social Development Fund (JSDF) through the World Bank/IBRD have been allotting funds to help this marginalized sector have a better status in the society.

In the Philippines, they are responsible for removing tons of recyclables from dumpsites. But there has not been much research on who they are, how they live, and what the government does to help improve their lives. The way they live and survive raises questions about humane treatment of this group of people whose activities contribute to solving the urban problems in solid waste management. This is why in June 2012, the JSDF, through the World Bank, gave a grant for the provision of Social Inclusion and Alternative Livelihoods of the IWS. This is being implemented by the WB through the Solid Waste Management Association of the Philippines (SWAPP) in order to better understand the IWS and help them achieve a better status by helping them through the social inclusion aspect and providing them with better livelihood opportunities. This project is seen to benefit more than 5,000 waste pickers in 10 chosen sites around the Philippines.

Solid Waste Situation in the Philippines

According to the National Solid Waste Management Commission (NSWMC) of the Philippines, the rate of garbage generation in the country is approximately 30,000 tons daily. Metro Manila, the National

Capital Region, generates about 7,000 to 8,000 tons per day. This amount of garbage costs a lot of money for collection and disposal. In 2004, with a lower generation rate, an annual cost of PhP3.54 billion or roughly Php1,450/ton of garbage was spent (ADB, 2004). A World Bank study has projected the Municipal Solid Waste (MSW) generation for the Philippines in 2025 to be 0.9 kg per capita per day from a total population of 115,878,000 and an urban population of 86,418,000. The projection for the daily MSW generation for 2025 was 77,776 tonnes (WB 2013). Currently, the waste generation rate is 0.3-0.5 kg/day in rural areas and 0.7 kg/day in Metro Manila (NSWMC 2013).

Thirteen years after the Republic Act 9003 (Ecological Solid Waste Management Act 2000) was signed into law, implementation and enforcement remains at a minimum. The law mandates waste minimization and waste segregation at source, following the 3Rs of solid waste management (Reduce, Reuse, Recycle). The residual waste must be disposed of in the final disposal facility, with the engineered sanitary landfill facility (ESLF) as the primary option for final disposal of solid waste. Out of 1,610 cities and municipalities only 55 so far has an ESLF, 61 are still constructing their ESLF, only 565 have solid waste management plan, 331 have controlled dumpsites and 581 still have open dumpsites (NSWMC 2014 data).

Many local government units (LGUs) are still operating open dumpsites and collecting waste without segregation of recyclables. This means that, as of the moment, these LGUs are still collecting and disposing mixed waste in their open or controlled dumping facility, hence the IWS are still actively working in these disposal sites. Also, with more development continuing, such as the construction of housing developments and malls in highly urbanizing cities, more farms are being converted into a different land use such that more farmers or farm tenants are losing their jobs and many are resorting to waste picking as an easier form of livelihoods in terms of availability.

These open dumpsites or even the controlled dumpsites have various negative impacts on the environment and the health of the people. Untreated leachate from these dumpsites contaminates the soil as well as the groundwater and the surrounding bodies of water. Methane is formed during anaerobic decomposition. It is a greenhouse gas that is twentyfive times more potent than carbon dioxide itself, although there is far less of it in the atmosphere (NOAA, 2008). Other forms of toxic chemicals are emitted from the open dumpsites contaminating the air we breathe. These come from the degrading garbage that are made from inorganic and organic materials. Toxic materials from open dumpsites often impact the health of waste pickers. There are 22 human diseases identified by the US Public Health Service, which are linked to improper solid waste management (WB, 1999). Research conducted by Guzman and Guzman (2000) have shown that poor health is related to poor sanitation, particularly environmental sanitation and is directly linked to improper disposal of solid waste. (Fig. 2)

There are other negative issues that are directly linked to improperly managed solid waste. For example, the excessive overflow of water from drainage canals during the rainy season, which causes flash flooding, is blamed mostly on solid waste that has



Fig. 2 Open dumpsite in one of the cities in the Philippines (2012 photo).

been improperly dumped and has ended up clogging storm drainage canals. Also, excessive dumping of garbage causing the pile up in dumpsites causes trash slides and threatens the lives and properties in the surrounding areas. It also threatens the IWS working in dumpsites under such conditions.

Profile of the IWS

The IWS belongs to the lowest rung of the social ladder. They are the most invisible among all the sectors dealing with solid waste (Venkateswaran, 1994). Around the world, an estimated 15 million people are making a living out of sorting, collecting and selling recyclable materials that have been discarded by the rest of the population (Inclusive cities 2012). They are perceived as the poorest of the poor and marginal to mainstream economy and society (Medina, 2005). Although in general they are known as scavengers, they are called by many other names in English such as: rag pickers, recyclers, salvager, waste collector and waste pickers. In Latin America, in Spanish they are called *cartonero*, *clasificador*, *minador*, and reciclador and catador de materiais reciclaveis. This term has been beset with derogatory meanings such that the term "waste pickers" was used to replace "scavengers" at the "First World Conference of Waste Pickers 2008" (wiego.org). The IWS are usually found in poor or developing countries where poverty is a huge social problem.

In most parts of the Philippines, the waste pickers are called by names such as "mangangalakal," "mangangalahig," "mambabasura," and "maykayay." In Cavite City, the migrant waste pickers mostly come from the poorer regions of the country (Samar, Leyte, Bicol), some parts of Luzon, Visayas and Mindanao, and have lost homes due to floods, typhoons or left home due to other problems. In Pili (Camarines Sur) and Butuan (Caraga Region), some waste pickers are part-time farmers who spend their time picking waste during periods when plants are waiting to be harvested or who have abandoned farming in favour of waste picking.

The waste pickers are seen either buying recyclable waste from households or collecting waste from households at a price dictated by the source. They can also be seen gleaning from illegal dumpsites, from trash bins and prowling the streets or parks for any recyclable waste material that is littering such places. They form the base chain of the recycling industry although this is rarely recognized.

Although most waste pickers have very little or no education, many waste pickers from the ten projects sites of the JSDF WB project being implemented by the Solid Waste Management Association of the Philippines (SWAPP) were found to have finished proper schooling. Some have graduated from elementary, many have graduated with high school diploma and some even have gone through some college education but dropped out in the middle of it. Others have finished college education altogether. For example, in Butuan City (Caraga Region, Mindanao), profiling of waste pickers yielded 1 college graduate, 47 undergraduates and 5 vocational graduates. In other selected sites such as Naga City, in Camarines Sur (Region 5), for example, there are 22 high school graduates, 4 college undergraduates and 1 college graduate. Similarly, in General Santos City (Mindanao, Southern Philippines), there are 46 high school graduates, 16 college undergraduates, and 3 college graduates working as waste pickers. Surprisingly, many of the waste pickers in the 10 study sites were found to have higher level of education than expected in this type of livelihood (Table 1). No explanation was given, however, as to why these people chose to work as informal waste pickers instead of working in the formal labour force. One reason could be that waste picking is a lucrative livelihood and could give instant cash in just a few hours of gleaning recyclable waste.

The level of education among the informal waste pickers from all the study sites of SWAPP including the informal recycling sector is summarized in Table 2.

The data in Table 2 indicates that there are people who, even though they have obtained a higher level of education and literacy, still prefer the seemingly

Table 1 Level of Education of waste pickers in selected sites (data from results of survey conducted by SWAPP through the JSDF WB Project (2013).

Level of Education	Number
Butuan City	
High school graduate	101
College undergraduate	47
College graduate	1
Cabanatuan City (Nueva Ecija)	
Vocational graduate	12
College undergraduate	16
General Santos City	
Vocational graduate	1
High school graduate	74
College undergraduate	16
College graduate	3
Legazpi City (Region 5)	
High school graduate	46
College undergraduate	13
College graduate	10
Naga City (Region 5)	
High school graduate	22
College undergraduate	4
College graduate	1
Polangui (Albay, Region 5)	
High school graduate	26
Vocational graduate	2
College undergraduate	9
Tabaco City (Albay, Region 5)	
High school graduate	15
College undergraduate	3

Table 2 Summary of the level of education of IWS in SWAPP study sites including the informal recycling sector (data from results of survey conducted by SWAPP through the JSDF WB Project (2013).

Level of Education	Number
None	60
Elem Undergraduate	1358
Elem graduate	575
HS undergraduate	1316
HS graduate	453
Vocational undergraduate	135
Vocational graduate	28
College undergraduate	251
College graduate	21
No data	336

lucrative nature of picking recyclable waste because it earns them quick money on a daily basis.

The IWS also have diverse backgrounds in terms of religion and ethnic groups. For example, in General Santos City, Southern Mindanao, Philippines, many waste pickers come from the Indigenous People's tribes such as T'boli and B'laan. These ethnic tribes are protected under the Indigenous People's Act.

Most of them come from the rural areas although some of them have grown up in the cities. In Cagavan de Oro City, many waste pickers come from the neighbouring towns. They have been attracted to the lure of city life, looking for better opportunities but ended up with no means to acquire better jobs, so that working in the dumps is their only choice of livelihood. Waste picking does not require documents in order to be employed and it is the fastest way to earn money. Although the conditions are abject, some people gravitate towards waste picking because it provides an easy form of livelihood. These men, women and children (some are even below 14 vears old) all suffer from marginalization and live in informal settlements, often excluded from social services, often neglected by their own governments.

Cities and municipalities condone waste picking because it provides some employment to poor migrants and informal settlers in their constituent areas. Also, since the LGUs find it difficult to enforce waste separation at source, they depend on the IWS to do the separation without cost to the LGU. Although most waste pickers earn an average of PhP120.00 per day many of them earn lower than Php100.00 to about Php1,000.00/day on lucky days. From time to time, some waste pickers would even get luckier, finding treasures among the waste, such as gold and jewelry, discarded by mistake by their owners. Again, some would even find a huge amount of money wrap in plastic bags, perhaps also discarded by mistake. Although this does not happen often, such stories of finding real treasures are what lure most people to waste picking as an attractive occupation. (Fig. 3)



Fig. 3 Waste pickers in one of the dumpsites in the Philippines.

Waste picking Livelihood: From Rural to Urban

As previously mentioned, many of these waste pickers come from rural areas looking for livelihood opportunities in the cities. However, since most of them come from farming communities, they lack the necessary skills required for jobs in the city. Not only that, many of them lack documentation, which are requirements for gainful employment. Lacking skills and without the necessary documents, they are thus eliminated from the formal labor force and resort to informal jobs. Waste picking is the easiest way to gain work in the city, and does not require skill or schooling. It only requires a tough stomach to be able to handle malodorous and dirty trash. Waste picking is thus, a more lucrative choice as it yields immediate profit, sometimes more than other formal menial jobs. Although they have no formal benefits such as social security and health care programs from the government, they own their time and can work on the hours that they desire or go off whenever they want.

Types of Waste Pickers

All over the world there are different types of waste pickers. In the Philippines, the Informal Waste Sector (IWS) is classified under various categories:

The *itinerant waste buyers* are those waste collectors who go from house to house to buy recyclable waste.

The *garbage truck waste pickers* are those who recover recyclables from the dump truck while collecting garbage from house to house.

The *street waste pickers* are those who prowl the streets to look for discarded materials littering these places.

The *informal waste collectors* are those who collect garbage from the source and are paid depending on the whim of the person who gives out the garbage.

The *dumpsite and street waste pickers* are those who pick waste from the dumpsites and sometimes from the streets.

Dumpsite waste pickesr and informal waste collectors are those who sometimes glean waste from the dumpsites but double as waste collectors from household or commercial establishments using their own pushcarts.

Dumpsite waste pickers are those who recover recyclable waste at the disposal facility only.

The photo below shows an informal waste collector disposing waste at the Angeles City Transfer Station. (Fig. 4)



Fig. 4 Informal waste collector dumping at the Angeles City Transfer Station

Global Perspectives on the Common Aspects of Waste Pickers

According to Women in Informal Employment Globalizing and Organizing (WIEGO), the following are the common aspects of waste pickers:

- 1. Although waste picking appear to be chaotic, it is actually very organized.
- 2. The number of waste pickers fluctuates depending on the economic conditions and urban process.
- 3. Waste pickers are often not part of public solid waste management systems; they are socially invisible and seldom reported in official statistics (hence, informal).
- 4. Waste picking is easily learned and usually does not require literacy. However, when working in a collective endeavour, some activities (for example, administrative tasks) do require literacy.
- Non-organized waste pickers are often recruited by middlemen.
- 6. Workers are often subjected to social stigma, poor working conditions, and oftentimes harassed.
- 7. Waste picking is a family enterprise. It offers flexible working hours and a high level of adaptivity.
- 8. In some cities, most waste pickers are migrants, while in others, they are from the marginalized sector and are excluded from global economic processes.

Issues of Waste Pickers in the Philippines

Like other sectors in the labour force, the waste pickers also have to contend with a number of issues related to their lives and livelihood. They are often migrants from rural areas who find work in deplorable working conditions, such as dumpsites. They are exposed to toxic surroundings (where carbon dioxide, methane and other toxic gases are released in huge quantities). They cannot afford decent housing so they live in shanties, in cemeteries, along the coast or near the dumpsites. They lack access to decent sources of water and to sanitation. There is often no garbage collection in their communities so

they dump garbage anywhere or bring it to dumpsites themselves (or burn their trash).

In their work area, they do not have any means of obtaining protective clothing and shoes to wear when doing their recovery and salvaging activity. The weaker ones suffer from chronic coughs due to inhalation of smoke and other toxic fumes but are unable to meet their medical expenses due to lack of benefits from health care insurance.

Livelihood Opportunities: Mainstreaming the IWS

In order to provide the IWS with better opportunities and improve their livelihood, they must be provided with the right tools for social inclusion and empower them to be able to find better jobs away from garbage dumps. The SWAPP-administered JSDF WB project is helping them by conducting training to provide them with various social and trade skills for gainful employment so that they will have decent jobs once the dumpsites are closed upon full implementation of RA 9003. As such, they are being provided with opportunities to become involved in formal solid waste management services, skills training and education, organizing them into cooperatives or associations for better collective business arrangements, partnering them with existing companies or with LGUs.

In other places (not part of SWAPP Project), they are being given assistance from the government through loans and other micro-financing schemes for alternative livelihood management.

Conclusions

Open dumpsites are not only breeding grounds for vector organisms; they are also breeding grounds of waste pickers. Unsegregated waste being disposed in these facilities attracts waste pickers. As long as recyclable wastes are disposed in the dumpsites and as long as dumpsites are open, the IWS will remain picking recyclables since selling recyclables is the easiest form of livelihood.

Rural migrants who have no skills and have little education find waste picking the easiest choice for livelihood. However, waste pickers can improve their livelihood if given opportunity and proper training by the government.

Developing programs for integration of waste pickers into the mainstream is possible. Training and capacity building can help equip them with the proper tools to handle their own micro-enterprise or become gainfully employed in other businesses. Micro-financing for livelihood opportunities can be attained through cooperative business enterprising. Improvement of livelihood of waste pickers can contribute to economic growth. Also, better waste management can be achieved through employing skilled SWM workers, the IWS.

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