

Myanmar

Waste Picker mapping in Myanmar

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Nwe Ni Win

Co authors: Yamin Thu, Hsu Lai Yee, Friedor Jeske

Thant Myanmar
thantmyanmar.org





WASTE PICKER MAPPING IN MYANMAR



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We would also like to express our sincere gratitude to the waste picker community in Yangon and Hpa-An who participated in this research for their openness and willingness to share their stories.

About the researcher

Since 2014 members from Thant Myanmar were pushing for larger acceptance of waste pickers by showing government bodies (mainly in Yangon and Mandalay) the immense value they are bringing to society and the environment.

Thant Myanmar was formed in 2018 as an activist organization on plastic and evolved from their into an organization working in the midstream and downstream of plastic.

We are working actively with waste pickers since 2019 but mostly refer to the work with them as “community” collectors to avoid the stereotypic discussions with municipalities and communities. The aim in most cases is to allow waste pickers to be control of primary waste collection where they provide a reliable mechanism for collection, source segregation and partly treatment as well as receiving direct fee payments for their service. This requires on one side negotiations with local governance bodies and the community and on the other side we are facilitating the formation of cooperative mechanisms amongst waste pickers to increase their capacity to push back against the authorities.

Abstract

Waste picking is an essential and well-established service for managing resources in Myanmar. Due to the countries decades long political struggle, resource scarcity was common for most material, and the waste picking sector grew organically with the increased use of inorganic materials and the high value reused, repaired and recycled items received on the market.

This study focuses on Yangon and Hpa an (regional capital of Kayin) to take stock of the current situation faced by the waste picker community. 348 waste pickers took part in the research and went through a set of questions which were analysed from two main perspectives: The category of picking (Buyers are purchasing valuables, Collectors collect waste and extract valuables, Pickers extract valuables) and by gender.

The key results for the 3 categories and for gender are summarized in a 20-dimensional space ranging over 6 segments. From the perspective of categories, Pickers face the more challenges: low rate of identification, high child labour, low income, etc. From the perspective of gender, the working environment is more challenges for women in general and women take more often the role of being Picker rather than a Collector or Buyer.

Independently of the challenges of working in the sector it is also a lost resort people can fall back on when they are in crisis. The sector requires little prior knowledge or investment and is open for anyone who is willing to do this work. This workforce of over 300 waste pickers per 100,000 citizens is able to recover 37% of inorganic material going to dump. And here the limiting factor is not the capacity of waste pickers, but the incapacity of producers making package material which carry an inherent value worth enough to be picked.

KEY TAKE AWAYS

- 1. Size and strength:** The waste picking sector is a large with roughly 345 pickers per 100,000 citizens extracting 37% of materials from the inorganic waste stream and earning 50% more than minimum wage.
- 2. Organizational capacity:** Waste pickers operate in most cases in a competitive model against each other, reducing the opportunity to establish them as a strong force.
- 3. Institutional:** Waste picking is formally not allowed in the country, disrupting attempts for collective building as well as building mutual beneficial structures between them and the municipalities. Relations therefore can be built only informally and on the very local level.
- 4. Social:** Waste picking is located at the bottom end of the work hierarchy, resulting partly in accusations and threats by the community and partly in support by segregation and donation of material as well as establishing connections with individual pickers.
- 5. Gender:** Women face significantly more challenges working in the waste picking sector, also ending up more

frequently at the bottom end of the picking hierarchy.

- 6. Children:** Child labour is very common practice in this sector with around 20% of pickers being below 14 years old often supporting the work of their parents
- 7. The last resort:** waste picking is paying well given that neither investment nor initial skill is required and therefore provides a final safety net for those who lost everything.

HOW TO MOVE FORWARD?

1. Working with pickers:

- a. Building cooperative models which encourages supportive mechanisms amongst waste pickers
- b. Develop supportive structure to reduce dept traps, facilitate negotiations between pickers and authorities, small grants or low interest loans so that picker can invest in infrastructure (push carts, storage for recycling, etc)
- c. Capacity building on collective responsibility for the community, source segregation (organic, valuables, rest) methods and tools.

2. Institutional:

- a. Semi-official negotiations between pickers and field officials proved to be the best mechanism to promote the role of waste pickers and their guaranteed access to waste.
- b. Informally establishing waste pickers as primary waste collectors including source segregation raises the acceptance and reliance on their service.

3. Social:

- a. Increase the level of officiality of waste pickers (uniform, same person same area, etc.) as well as their accountability (reliable pick up, disposal not to the environment, etc.)
- b. Promote the narrative of waste pickers being the key to waste reduction and sustainable management.

Contents

1	Introduction	7
1.1	Historical development of the sector.....	7
1.2	Key struggle with municipality and policy integration	8
1.3	Research objectives.....	8
1.4	Methodology.....	8
1.4.1	Classification of the questions	8
	Results	<u>11</u>
2	Waste Picking in Numbers	11
2.1	Categories of waste picking	11
2.2	Size and Scale of the Sector	16
2.2.1	Number of waste pickers	16
2.2.2	Material reliance	16
2.2.3	Source of Materials	16
2.2.4	Value generation	17
2.2.5	Income.....	17
3	Mapping of Waste Pickers	19
3.1	Overview	20
3.2	Life conditions leading to join waste picking	23
3.2.1	Life conditions leading to waste picking: By picking category	24
3.2.2	Life conditions leading to waste picking: By Gender.....	26
3.3	Working situation.....	27

3.3.1	Working Situation: By picking category.....	28
3.3.2	Working Situation: By gender	31
3.4	Business Skills.....	33
3.4.1	Business skills: By picking category	33
3.4.2	Business skills: By Gender	34
3.5	Networking skills.....	36
3.5.1	Networking Skills: By picking category.....	36
3.5.2	Networking Skills: By Gender	39
3.6	Family ability to select another career.....	41
3.6.1	Family ability to select another career: By picking category.....	41
3.6.2	Family ability to select another career: By Gender.....	42
3.7	Positive Attitude on Waste Picking.....	43
3.7.1	Positive attitude on waste picking: By picking category	43
3.7.2	Positive attitude on waste picking: By Gender.....	44
4	Other Socioeconomic Factors	46
4.1	Age	46
4.2	Child Waste Pickers	47
4.3	Ethnicity, Religion and Place of Origin.....	48
4.4	Previous Work of Waste Pickers.....	49
4.4.1	Old Waste Collectors.....	49

1 Introduction

1.1 HISTORICAL DEVELOPMENT OF THE SECTOR

The transition from “old things buyers” to waste pickers:

Material reuse and recycling can be assumed to have been alive in the country since Myanmar started to practice “Socialist Democracy” and cut its communication with the international community in 1962. Due to material scarcity and a high reusability of packing materials, “waste picking” (locally named: *old things buyer*) was a common profession and dealt with most inorganic waste. During that time, households sold materials at the junk shop directly or buyers exchange materials with snack or food or buy from households directly. Later their work extended to “picking” materials on the street and drains as value reduced and material for reuse declined.

Material reuse/recycling have been a common and decently accepted business. Recycling/reuse rates are assumed to be highest during 1962 to 2012, when the country mainly lacked foreign goods import including virgin plastic. Since 2012, together with the country’s opening, more linear material

production factories and materials entered the country. With this the working nature shifted: instead of buying material from household’s waste pickers picked waste out of the disposed waste stream or from streets and drains. This also led to a social degradation of community perception on this work profession.

With the increase of non-reusable/recyclable material in waste, as well as the pushout of livestock feeding on food leftover, garbage was born. With this the municipal service began which slowly increased from centre to the outskirts, claiming the rights on all waste material and therefore declaring a never-ending war on the waste pickers.

Value chain structure

The whole value chain of material recycling is operated by waste Pickers. Buyers, Collectors and Pickers (see 2.1 for definition on the three different terms) collect materials from households, shops, markets, industries, streets and from different stages of waste collection. Junk shops operate as hubs for waste pickers buying anything they can resell for reuse, repair and recycling. They are located densely in the

urban area so that they are reachable by walking distances.

Aggregators are in the major cities: They buy from junk shops from all over the country and sell materials to factories for recycling. Buyers and some pickers take daily advance money from junk shops together with a pushcart (owned usually by the junkshop) and sell the materials daily back to that specific junk shops. In return for the advance, the junk shop has a guaranteed steady flow of input material and often is also able to purchase the material for a lower price. Collectors are sometimes able to store material for some days and sell to larger junk shops bargaining for a better deal.

Based on the type of materials, junk shops sell some materials:

- Directly to factories for example for refillable glass
- Sell back to the community or local businesses when the material can be used as spare parts or can be repaired locally

1.2 KEY STRUGGLE WITH MUNICIPALITY AND POLICY INTEGRATION

Waste picker statement in a Yangon outskirts:

“We have been providing waste collection service since before municipality started waste collection and we will continue waste collection in this area”

In Yangon and other major cities, the municipality took the sole responsibility for waste collection and management. The updated municipal law from Yangon (2018) prohibits parallel waste collection and limit the

activity of waste pickers¹. Myanmar National Waste Management Strategy and Master Plan neglect the contribution of waste pickers in waste management and leave out waste pickers in action plan (2019)².

Furthermore, YCDC dismantles the junk shop infrastructure thorough eviction, refusing to formalize the sector or providing licenses and not recognizing the service of the sector in general derailing possible development support. A reduction in junk shop density makes waste pickers lose outlets for selling materials leading finally to the disappearance of the sector.

Regardless of the law, limited municipal waste collection capacity creates ongoing opportunity for waste pickers to collect in areas without municipal collection. Informal and formal service of waste collection also overlap in some areas. Waste pickers collect mixed waste as an alternate service to municipal

collection and get paid a service fee from the households directly. Recyclable materials are separated and sold while the remains are disposed at transfer stations or sometimes to nature when no agreement can be reached with the local municipal worker. Based on that agreement collectors need to pay a fee for secondary collection.

The exclusion of waste pickers from waste management plans is a missed opportunity. Waste pickers play a valuable role in reducing waste for recycling but in the Yangon and Mandalay case, also provide a service for door-to-door collection and source segregation. Recognizing the traditional role of service provision often even before any municipal structure came to existence is an essential starting point for just transition and the creation of a community led waste collection system.

¹ YCDC Law, 2018. <https://www.ycdc.gov.mm/content.php?law=ydcclaw2018>

² Myanmar National Waste Management Strategy and Master Plan, 2018. <https://wedocs.unep.org/bitstream/handle/20.500.11822/33128/NWMSMP.pdf?sequence=1&isAllowed=y>

[.11822/33128/NWMSMP.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/33128/NWMSMP.pdf?sequence=1&isAllowed=y)

1.3 RESEARCH OBJECTIVES

- Understand the socioeconomic situation of waste picking in Yangon and Hpa-an.
- Estimate the size and impact of the sector on the society and environment.

1.4 METHODOLOGY

The study was conducted through structured interview of 348 waste collectors in 3 townships of Yangon (Centre: Kamayut, Midrange: Dala, Outskirt: Shwe Phyi Tar) and Hpa-an Town: Different categories of waste pickers were included in the study. 232 waste pickers from three townships of Yangon and 115 waste pickers from Hpa-an. Total 190 buyer, 37 collector and 190 pickers join the survey as representative of each group. Most of the informal collectors stay in group and work individually. So, data was collected in the area patches where collectors reside as group.



1.4.1 Classification of the questions

- **Socio economic study**

Age, education, gender, national registration or ID, income, number of family member, origin of stay, ethnicity, reason of migration and previous work were inquired to understand the socioeconomic situation of waste pickers and to understand the relation between socioeconomic status and occupation of waste pickers.

- **Occupational study**

Question related to occupational study of waste pickers included current category of waste picking, reason of joining waste picking, dependency on waste business, willingness to extend in the sector, ability to take day off, working days per week, working hour per day, income, working situation, ability to take rest, relationship with households, municipalities and junk shops.

The full questionnaire can be found [here](#).

Results



2 Waste Picking in Numbers

This study delves into the complex world of waste picking in Myanmar. It unveils the sector's structure, identifies distinct categories of waste pickers, and explains the varying ways they operate. By calculating and describing the size, value, and workforce of the sector, the study paints a comprehensive picture.

It further examines the occupational realities of waste pickers, focusing on the socioeconomic situations of each category. To understand the gender dynamics within this workforce, the study analyses how occupational experiences differ based on socioeconomic factors, particularly through the lens of women's participation. Finally, detailed information about the socioeconomic conditions of waste pickers is provided, offering a deeper glimpse into their lives.

2.1 CATEGORIES OF WASTE PICKING

In Myanmar, the backbone of recyclable waste collection lies with informal workers: waste pickers. Waste pickers can be further divided roughly into 3 categories which often overlap but result in different work dynamics and are therefore evaluated separately: **Buyers, Collectors, and Pickers**. Each group operates at a different level of the waste chain, employing distinct methods to gather recyclable materials.



BUYERS:

Buyers act as middlemen, purchasing recyclable materials directly from households, shops, restaurants, and repair shops. To facilitate their daily rounds, they typically receive an advance payment of 20,000 MMK (7 USD) to 25,000 MMK (29 USD) from junk shops, along with a pushcart. Trust plays a crucial role in this transaction.

Buyers primarily deal with high-value materials like metal, glass, and electronics, transporting them using three-wheelers, pushcarts, or bicycles. Driven by material availability, they often journey longer distances.



COLLECTORS:

They collect mixed waste as a service provider for the household or business. Next to this main work they also extract recyclable materials from their mixed waste and pick valuables from the street.

They face a limitation compared to buyers as junk shops are often not willing to lend them pushcarts fearing damage, so leaving the collector to either cheat or invest in their own vehicle.



PICKERS:

Pickers, often the most marginalized figures in waste collection, extract materials from roadsides, drains, transfer stations and dumps (informal and formal ones). They mainly use sacks carried by hand but sometimes also have a bicycle or even pushcart.



In the complex system of waste collection, different types of vehicles ranging from pushcarts and bicycles to rickshaws, motorbikes, and three-wheelers are used for waste transportation. Buyers, mostly face less discrimination compared to the other two groups. Most waste pickers additionally to their main task as buyer, collector or picker, also do the work of the other categories when opportunity arises.

Depending on the junk shop's nature, waste pickers are required to pay pushcart rental fee or provide their ID as deposit. When renting a pushcart, the shops normally demand prices below market value for the collected recyclables.

Usually pickers, buyers, and collectors pay a monthly fee (informally agreed upon) to the local municipal workers for the right to collect materials in designated areas. Additionally, collectors incur a secondary waste collection

fee when dropping off materials at communal collection points. Interestingly, municipalities in low-income areas and outskirts often appoint pickers and collectors as "watchmen" at transfer stations. These watchmen manage the collection points, collect secondary fees from other collectors, and receive daily or monthly fees based on their ability to pay. Meanwhile, junk shops renting pushcarts directly pay license fees to the municipality.



2.2 NUMBER OF WASTE PICKERS

The waste picker sector is dominated by pickers (58%), followed by buyers (32%), and collectors (10%). The number of waste pickers for all Yangon was calculated based on the amount of recyclable material in the waste stream. Earning for each category of waste picker from material recycling is calculated from the collected data. The total number of waste pickers currently operating in Yangon is estimated at around 24000 to cover all municipal area excluding industrial zones. This is roughly 342 waste pickers for 100,000 citizens and with this the waste picker community is larger than the formal waste collection workforce.

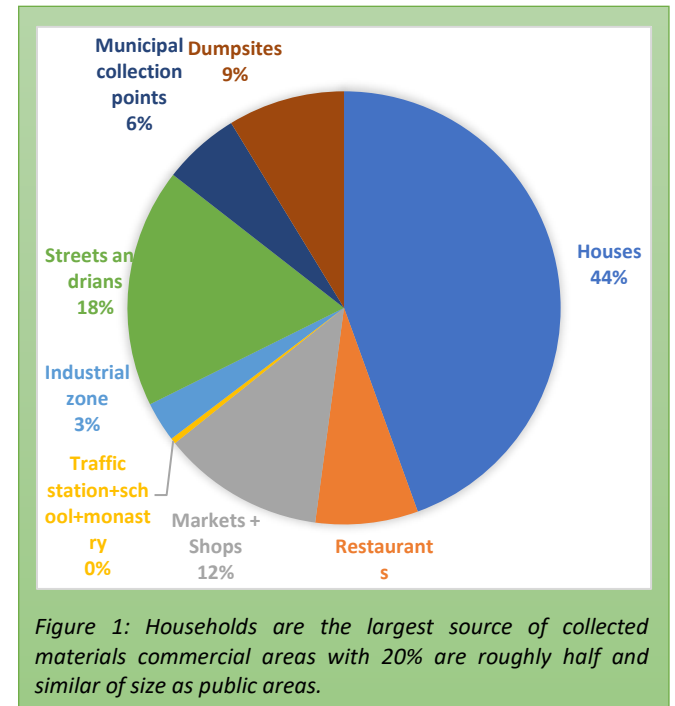
2.3 MATERIAL RELIANCE

Waste pickers are the most effective working group of waste reduction. They handle recyclable materials portion from the waste stream. Total waste generation from urban

areas is around 22,000 tons per day with a *per capita generation of 0.92 kg*. Among them, *12% of the materials is managed by recycling*. Waste pickers are the major working group of recycling. There is no formal waste segregation by municipality. However, municipal workers participate in material recycling by segregating materials during collection, transfer on the truck and disposal which roughly makes 10% of the recycling volume.

2.4 SOURCE OF MATERIALS

There exist significant sources of materials for waste pickers, including air conditioning factories auctioning off broken materials, government departments, ship docks, and others. However, only large junk shops and aggregators possess the necessary investment and access to these sources, while informal collectors typically have access only to smaller sources. Houses represent the largest source of materials for waste pickers, with streets and drains ranking as the second largest due to the



common habit of consuming while walking. Materials from industrial zones primarily consist of general waste generated by workers.

2.5 VALUE GENERATION

Waste pickers generate value from waste by collecting waste collection fee and value from selling recyclable materials. Material prices are defined by junk shops and price differ for different materials. Total value generated from recycling is around 64,000 USD per day with

total workforce of around **24,000 only in Yangon.**

2.6 INCOME

The primary source of income for waste pickers is derived from the sale of recyclable materials. Waste pickers typically earn approximately 30% higher than the minimum wage. Within various categories of informal waste collection,

collectors typically earn the highest income, while pickers earn the lowest. This discrepancy is attributed to the fact that collectors earn income from both waste collection and the sale of recyclable materials, as shown in Table 2. Conversely, the income for buyers and pickers primarily stems from the sale of recyclable materials.

Table 1: Income for buyers, collectors, and pickers: Collectors and Buyers earn similar amount of money, while pickers only make roughly half. All categories make income from picking and collection, but pickers capacity to work as waste collector service provider is very limited as they mostly have no vehicle.

Income	Buying	Collection	Picking
<i>Total Income in MMK</i>	16,300	17,300	9,560
<i>Total income in USD</i>	4.70	5.03	2.77
<i>Income from waste collection in MMK</i>	4,122	8,766	1,230
<i>Income from waste collection in USD</i>	1.20	2.54	0.36
<i>Income from selling recyclable materials in MMK</i>	12,186	8,575	8,330
<i>Income from selling recyclable materials in USD</i>	3.53	2.49	2.41

2.7 SUPPORTING WASTE PICKERS

Waste pickers receive no institutional support in Myanmar and municipalities act mostly hostile or exploitative to these groups. Rules and regulations are structure that they act against informal mechanisms of waste treatment (see introduction).

Also, communities are often not in favour of the picker communities. That Myanmar had multiple projects on community led primary waste collection and in most cases, it was a huge challenge to convince community leaders to make use of the waste picker network rather

then employing someone else. The argument is mostly that the pickers do not belong to the community or that they are untrustworthy.

Support mechanisms from CSOs/NGOs are minimal and mostly in the form of supporting waste pickers as part of supporting vulnerable communities through nutrition or livelihood support. The organization building markets supports junk shops through a coca cola fund aiming at capacity building of the junk shops although not directly dealing with waste pickers.

That Myanmar has currently one active cooperative of Collectors formed in the outskirts of Yangon with which we are working since 2022. Since no real policy work can be done for the time being the current work is to understand the mechanisms required by waste picker groups so that they are willing to work in cooperative models rather than competitive ones. This includes zoning of working area for each picker, negotiating with local authorities for an unofficial license, setting up segregation structures at transfer stations, etc.



3 Mapping of Waste Pickers

This section describes the situational analysis of waste pickers. Firstly, an overview is given where all the data is merged into on graph drawing a general picture of the situation. In the following sections each dimension of the situation will be analysed.



3.1 OVERVIEW

The study aimed to understand the living conditions of waste pickers mapped out into the 3 different categories of waste picking: Buyer, Collector and Picker. Results from the questionnaire are grouped as theme and analysed *the occupational situation, threats and potential of waste pickers*. The analysis was done from two perspectives.

- from the categorical perspective of buyers, collectors and pickers
- and gender perspective of male and female.

This study aims to learn about the lives of waste pickers, exploring their unique occupational realities through the lens of socioeconomic factors. By analysing questionnaire responses, the research paints a thematic picture of their

work, highlighting common challenges and untapped potential. This analysis unfolds across two key dimensions: first, categorizing waste picker based on the responsibility of each group, and second, examining how gender shapes these experiences through a male-female comparison.

The analysis covered 6 themes to understand waste pickers.

- **Life conditions leading to waste picking –**
 - Possession of national ID, Education
 - Started working above 14
 - Ability to Migrate
 - Year of schooling
- **Working situation –**
 - Ability to work within 40 hour per week
 - Ability to work in safe place,
 - Free from stressful working situation
- **Business skills –**
 - Working experience in waste (More than 5 year)
 - Income
 - Material storage capacity and income
 - Investment in necessary materials or assets

- **Networking skills –**
 - Relationship with households
 - Working in group
 - Relationship with municipality
 - Relationship with junk shops
- **Ability to choose another career –**
 - Less than 2 family members working in waste,
 - Underaged family member escape from waste picking
- **Positive attitude on waste picking –**
 - Joining waste picking due to freedom to decide and higher earning than other work
 - Wishing to grow in waste picking sector
 - Livelihood dependency on waste picking

Life circumstances often force waste pickers into the sector, and their working conditions is also challenging. While it provides income and supports families, their lack of soft skills and limited opportunities for advancement hinder long-term development of waste pickers in the

sector. The data reveals to fulfil a big room of development across every theme examined: working conditions, business skills, and networking skills, all falling significantly below desirable levels. Notably, over 10% entered waste picking during childhood, highlighting the need for early intervention and alternative

pathways. Despite some positive aspects like higher income than minimum wage and resource circulation, significant improvements are crucial across all themes to truly empower this workforce and optimize the sector's potential.

Occupational Situation of Waste Pickers for the three categories

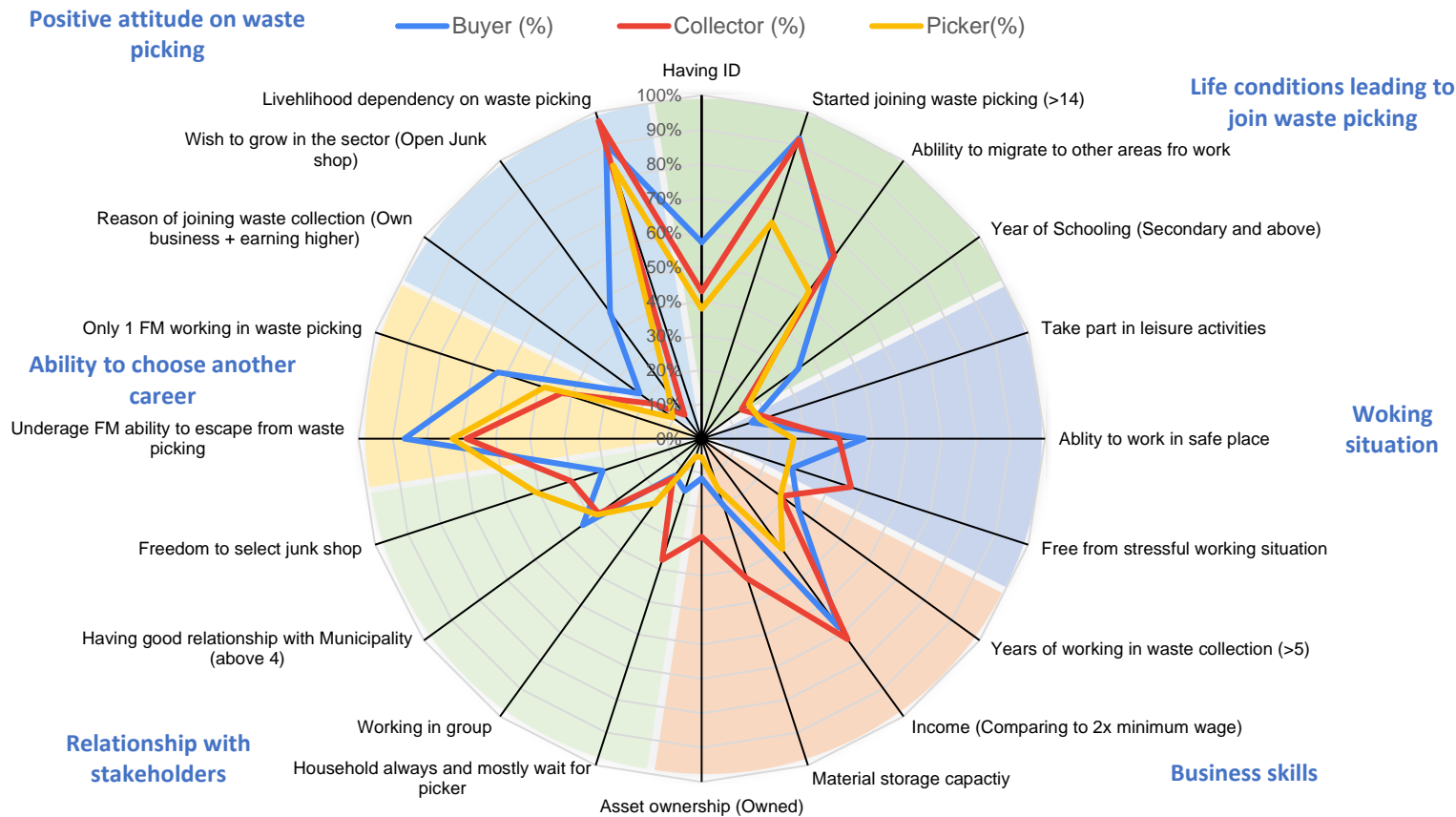


Figure 2: The occupational situation of waste pickers is mapped over 20 different dimensions. 3 to 4 dimensions are combined to 6 segments describing a different area of the waste pickers. The dimensions are mapped in a positive direction, meaning that the higher the percentage the "better off" the group is. Inside this 20-dimensional web the 3 categories of waste pickers (buyers, collectors, pickers) are drawn: In general it can be said that the 3 categories have similar dynamics. However, the buyer category is mostly better off than the other two categories, and the pickers being the most vulnerable (Id, Child labour, safe working space, asset ownership, income).

Occupational Situation of Waste Pickers by Gender

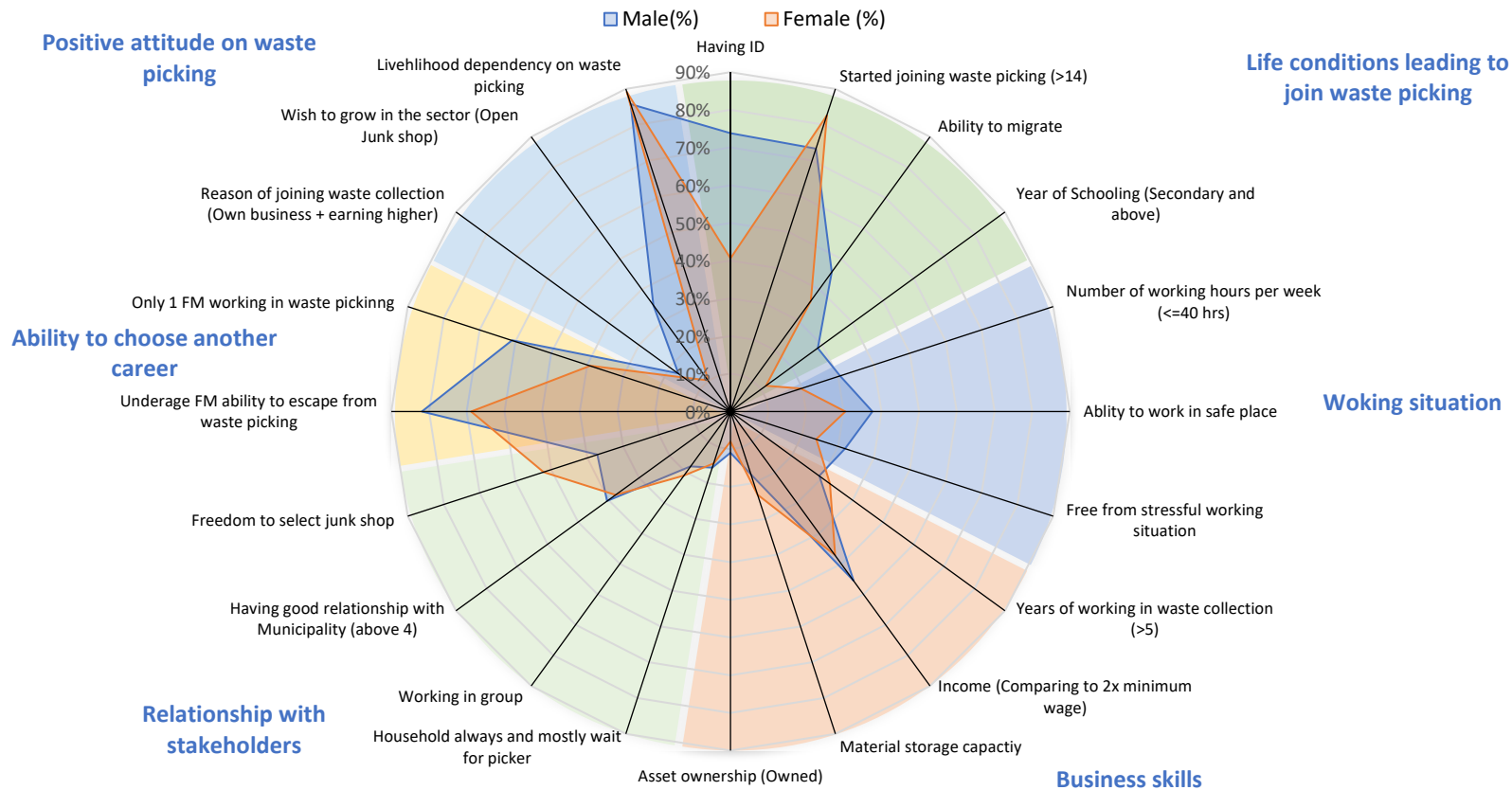


Figure 3: The occupational situation of waste pickers analysed by gender over 6 segments and 20 dimensions.

All 6 segments show that male pickers face more favourable conditions than females except for the business skill and the relationship with stakeholder segment. Here the ability is more balanced.

For nearly all dimensions males are in a more favourable position than females except for working age, where there is a higher tendency for child labour in boys. The advantage to choose the junk shop results mostly from the fact that there are more female than male pickers (see detailed discussion below). The most significant disadvantage for females we see in the possession of IDs (only 42%), education (only 15% made it beyond primary school) and working time (only 20% of women are able to stick to 40 hours working week).

3.2 LIFE CONDITIONS LEADING TO JOIN WASTE PICKING

Waste picking requires direct handling of waste and can be seen as one of the more vulnerable jobs. Thus, people tend to choose this occupation when life circumstances force them to. Life conditions leading to waste picking in this study are determined as possession of national ID, education background, migration/originality of the area and age of started joining waste picking.

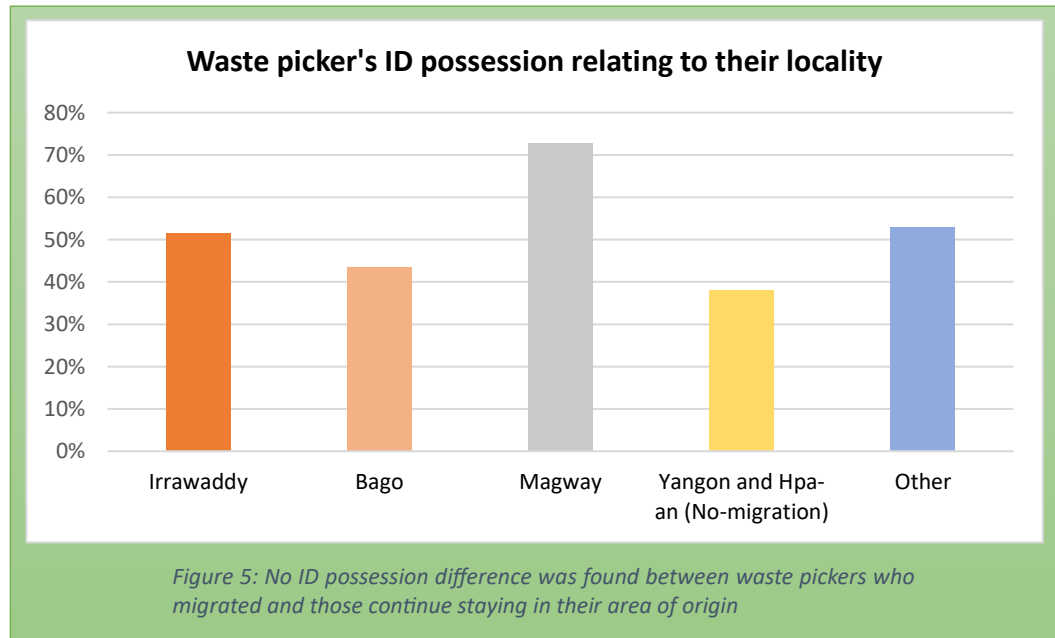
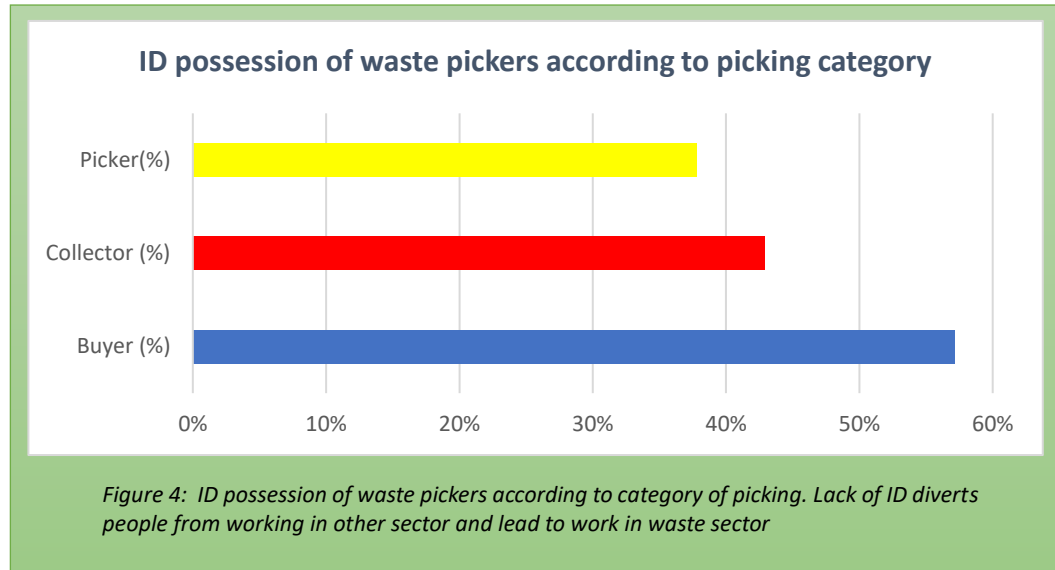
- **Possession of national ID** – Lack of ID possession with partial contribution of low education, skills and investment leads people to work in waste sector.
- **Education (Secondary and higher level)** - Working as staff requires people to have adequate level of education. This study assumes people with education background lower than 8 years could face more challenges to find other work and are forced to work in waste sectors especially if they have no ID, no skilful working experience, low capacity to migrate for work opportunity and/or if they are forced to work in the field early.
- **Migration** – People tend to migrate more if there is less working opportunity in their place of origin. However, people from urban poor setting are more vulnerable of moving back to rural area especially if their fore families moved to urban for working opportunity and normally stack in working in waste sector. This study assume ability to migrate help people to go out of waste sector.
- **Started working age** – Part of the pickers' families join waste picking since childhood (aged less than 14) as assistance to their picker family member. Conversely, some pickers join waste picking since childhood to support part of the family income. Waste picking since childhood leads to continuing in the business and make it difficult to get out of the sector.

3.2.1 Life conditions leading to waste picking: By picking category

Possession of ID – Buyers generally possess more identification documents and are predominantly migrants from both rural and urban areas.

In contrast, pickers, the majority of whom remain in their original area, have the lowest rate of ID possession. It was assumed that ID possession would be higher in urban areas, as rural areas lack access to immigration and health services for obtaining birth certificates. However, pickers, who mostly reside in urban areas, exhibit the lowest rate of ID possession.

The low rate of ID possession among non-migrants suggests that having an ID is another indicator of urban residents joining the waste sector, especially when they have the option of working in other sectors, such as factory workers in textiles and other industries. For people migrating from other areas, possessing an ID is not an indicator of joining the waste-picking sector.



Year of schooling (Secondary and above) – The literacy rate among waste pickers is generally low. It is evident that the majority of all picker groups have only received primary/monastic education or did not attend school at all, implying that lower education levels lead to work in the waste sector.

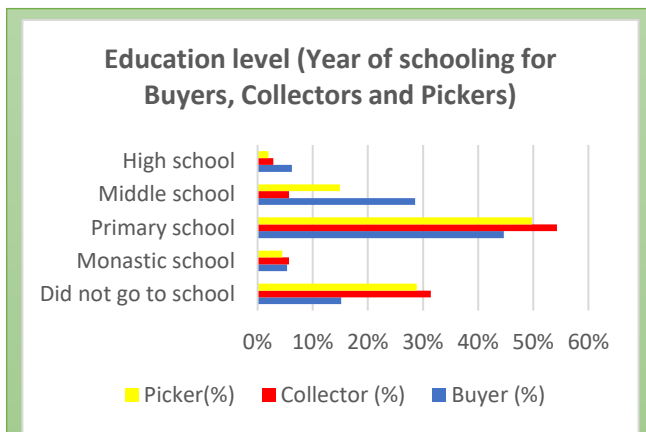


Figure 6: Migration of waste pickers and their origin of stay. Ability to migrate support people to find other work opportunity to survive. Ability to migrate for poor urban community is low and the group stuck in waste sector for survival.

Buyers tend to have attended school for longer periods compared to collectors and pickers. The education levels of buyers, collectors, and pickers are shown in Figure 4. The years of schooling are also partially related to the origins of the pickers. Individuals from rural and urban poor areas tend to have less access to education than those who were born or

originated in urban developed areas. However, rural-to-urban migration is not addressed in this study, and the field remains open for further research.

Migration (Originality of the area) – Half of waste pickers still reside in their places of origin, primarily in Kayin and Yangon. Among the three groups, the picker group has the lowest migration capacity and continues to reside in their original locations. It appears that migration from poor urban areas to developed urban areas or rural areas is comparatively

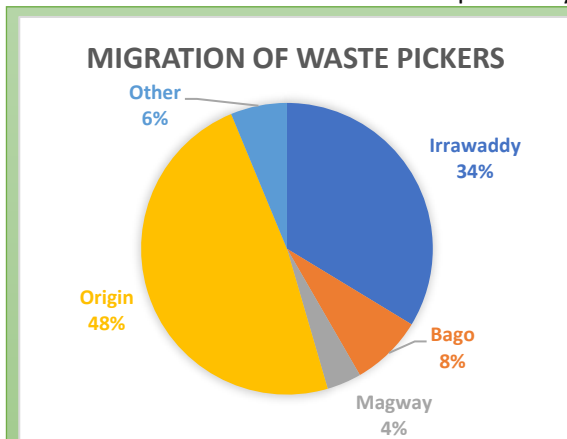


Figure 7: Education level of waste pickers according to school system of Myanmar.

Waste pickers have low education level and percentage of pickers reaching to high school level is the lowest.

difficult due to limited job opportunities and insufficient skills to sustain livelihoods in rural areas, as well as the high cost of living in

developed urban areas. As a result, many pickers residing in outskirts are compelled to remain in their original places and eventually find work in the waste sector.

Started working age (>14 year) – Over one third of individuals in the picker group joined the sector during childhood to support family income. Only 10% of buyers and collectors began waste picking as underage children.

The low rate of schooling years among collectors and pickers, coupled with the higher rate of local residency among pickers, suggests that urban children with limited education are more inclined to join waste picking than rural children, who often start working in the service sector, such as waiters or waitresses in local teashops.

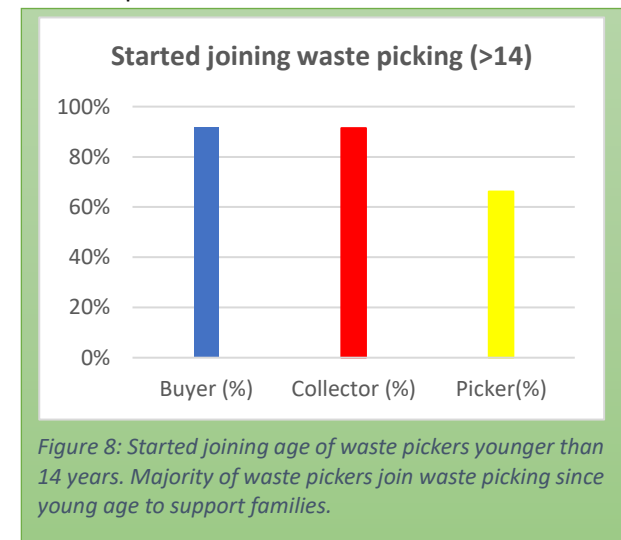


Figure 8: Started joining age of waste pickers younger than 14 years. Majority of waste pickers join waste picking since young age to support families.

Among waste pickers, buyers seem to have the most favourable life conditions and social standing. Their work, like buying and selling in other businesses, is generally accepted and respected within the community, unlike the more challenging realities faced by collectors and pickers. This acceptance likely stems from the perceived "dignity" associated with buying activities. Collectors and pickers share similar living conditions and motivations for joining waste picking, often driven by poverty and limited opportunities.

3.2.2 Life conditions leading to waste picking: By Gender

Possession of ID – The possession of identification (ID) among male waste pickers is higher compared to their female counterparts (74% male, 40% female). Typically, males are regarded as household leaders and are prioritized for obtaining IDs for work purposes. Conversely, females are often perceived as dependent family members and are given lower priority for ID acquisition. The higher rate of ID possession among male pickers directly correlates with the greater number of buyers in the male group, as IDs are often requested for renting pushcarts from junk shops.

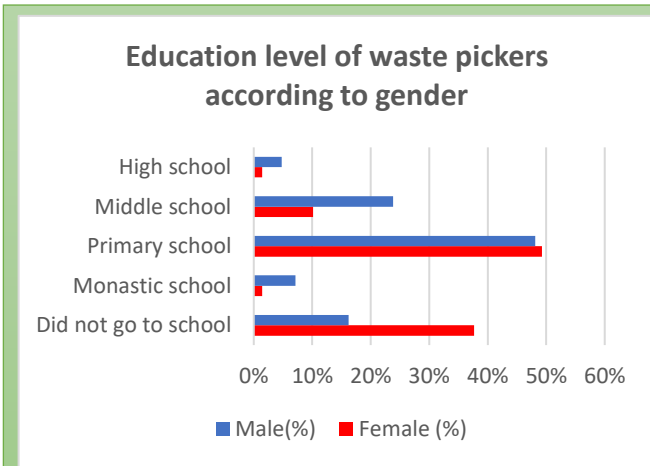


Figure 9: Education level of female and male waste pickers. Female waste pickers have lower access to middle and high school level education than male waste pickers.

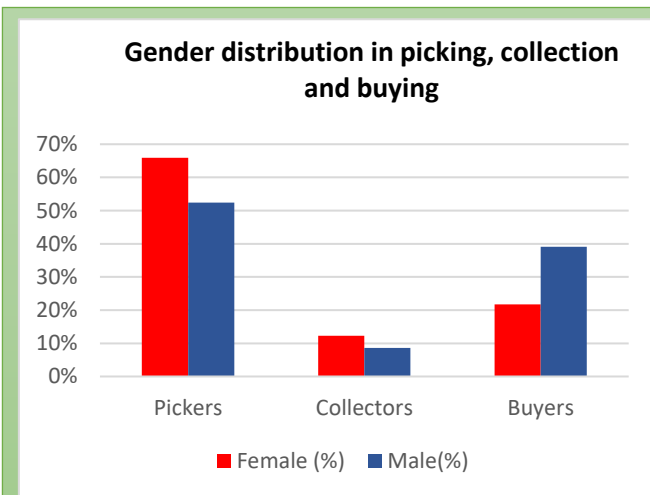


Figure 10: Male and female proportion in different categories of waste picking. Female waste pickers work more in picking and collection while more male waste pickers can be found working as buyers.

Year of schooling – Male waste pickers have spent more time in school than their female counterparts. More than one-third of female waste pickers are illiterate, reducing their opportunities for alternative employment. Within the waste picking sector itself, females are more likely to join picking sector due to a lack of identification and lower educational attainment, while male pickers are more inclined to enter the buying sector.

Migration – Male waste pickers exhibit greater migration potential compared to their female. This increased mobility affords male waste pickers greater opportunities to pursue employment outside of the waste sector or in higher segments like buyer. Conversely, females, with lower rates of migration, are more likely to be compelled to work within the waste sector and tend to do more picking.

Started working age (>14) – A greater proportion of female waste pickers enter the waste sector during adulthood (above 14 years old) compared to males (80% female to 70% male). Females tend to receive more protection from the community during their younger years due to their perceived physical vulnerability. They often turn to waste picking as a means to alleviate family crises, particularly when the primary breadwinner of the household is chronically ill, bedridden, or unable to work.

Consequently, female waste pickers are more inclined to join the waste picking profession during adulthood rather than childhood.

The study reveals gender disparities within the waste picking community. With higher possession of ID, higher literacy rate and higher ability to migrate, male waste pickers have higher chance of working in other sector than female waste pickers who lack ID, mostly illiterate and low migration capacity are push more to work in waste sector. Even in waste sector, man tend to join more to buying sector comparing to female who join picking due to **their lower socioeconomic background.**



3.3 WORKING SITUATION

The working conditions of waste pickers were evaluated based on their capacity to work up to 40 hours per week, their ability to work in a safe environment, and their freedom from stressful working conditions.

Ability to work within 40 hours per week – Waste pickers' schedules adapt to their material collection goals and desired income. This study investigates how many waste pickers fall within the standard 40-hour workweek.

Ability to work in safe place - Waste pickers operate all along the waste chain, ranging from households to all public areas, municipal transfer stations and dumpsites. This study identifies households, markets/shops, schools/monasteries/institutions, and industrial zones as relatively safer workplaces for waste pickers when compared to dumpsites, transfer stations and streets/drains.

Free from stressful working condition – This dimension delves into the work-related concerns of waste pickers, encompassing social, economic, institutional, and environmental and health (EH) aspects. Through interviews and assessments, it investigates the presence and specific nature of these concerns among the waste pickers. In

this context, "no concerns" are interpreted as signifying a stress-free work environment.



3.3.1 Working Situation: By picking category

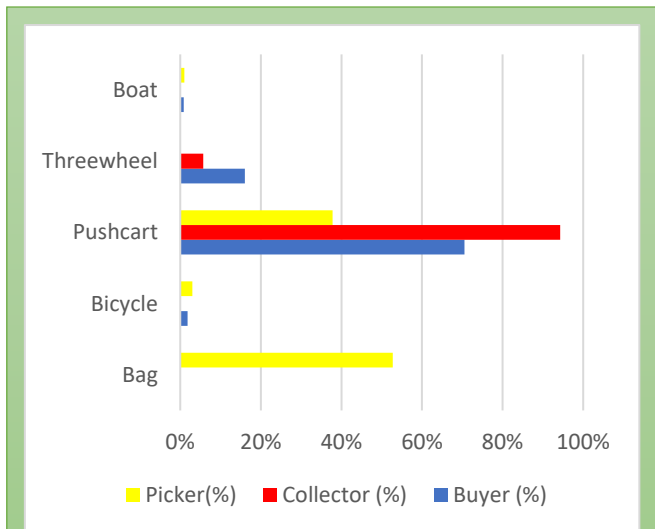


Figure 11: Types of materials/vehicles waste pickers used for transporting materials. Pickers mainly used bag to carry materials.

Ability to work within 40 hour per week – Buyers, with their ability to move across boundaries and enjoy freedom of movement, typically work longer hours compared to collectors and pickers. The working hours of waste pickers are contingent upon their income, which is directly tied to the availability of materials. Collectors and pickers, primarily operating within the confined boundaries of wards or plots, have shorter working hours than buyers. Additionally, half of the pickers

collect materials using bags or bicycles, which have limited capacity compared to pushcarts, thereby restricting their ability to gather materials efficiently. Collectors handle mixed waste, which tends to be heavy due to its high organic composition, limiting their mobility to smaller areas. Figure 9 illustrates the various types of vehicles utilized by pickers.

Ability to work in safe place – Waste pickers dedicate their time to handling waste that is inherently harmful to their health. However, their risks are further compounded by additional hazards such as traffic accidents while collecting materials on the roads, encountering unseen dangers like snakes and sharp objects while collecting from drains and water sources, sustaining injuries from handling materials at municipal transfer stations and dumpsites, and exposure to air pollution from dump fires and other environmental hazards.

In contrast, buyers operate in the safest working environments, as they primarily procure materials directly from their sources, such as households, institutions, monasteries, industrial zones, restaurants, and markets/shops. Collectors face comparatively lower safety levels than buyers, as they must

gather waste from streets in areas where kerbside collection is practiced. However, pickers work in the most hazardous conditions, as they collect materials solely from streets/drains, municipal transfer stations, and dumpsites.

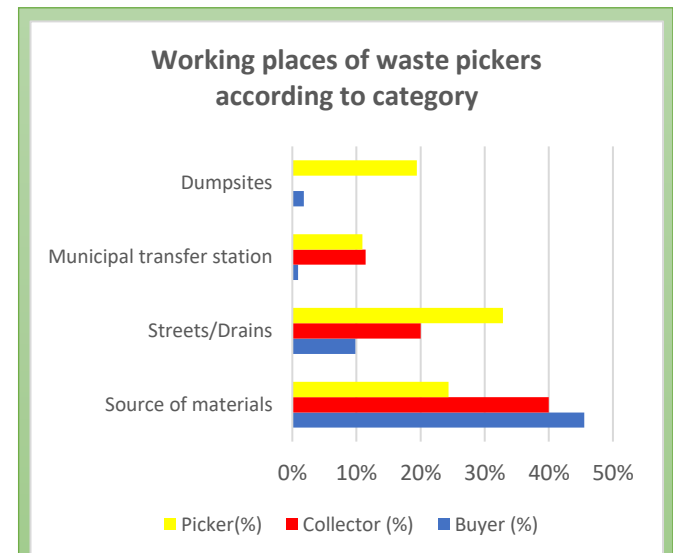


Figure 12: Most common sites of material collection for waste pickers. Waste pickers are spending half of their working time in unsafe places.

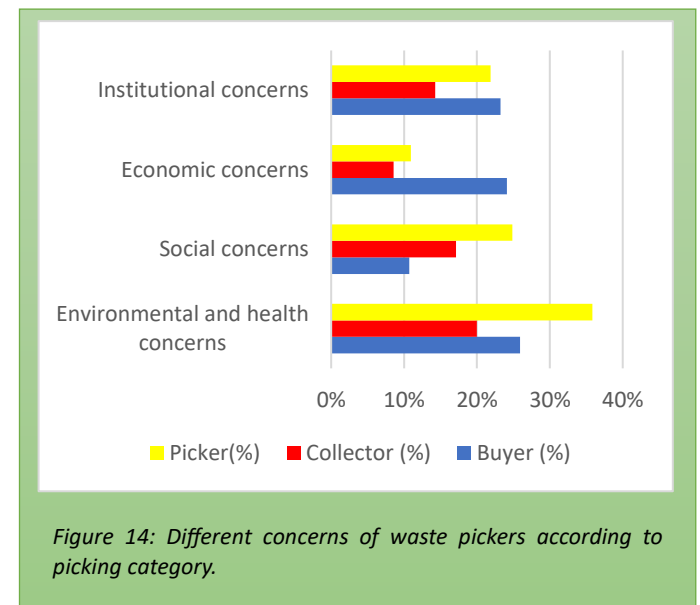
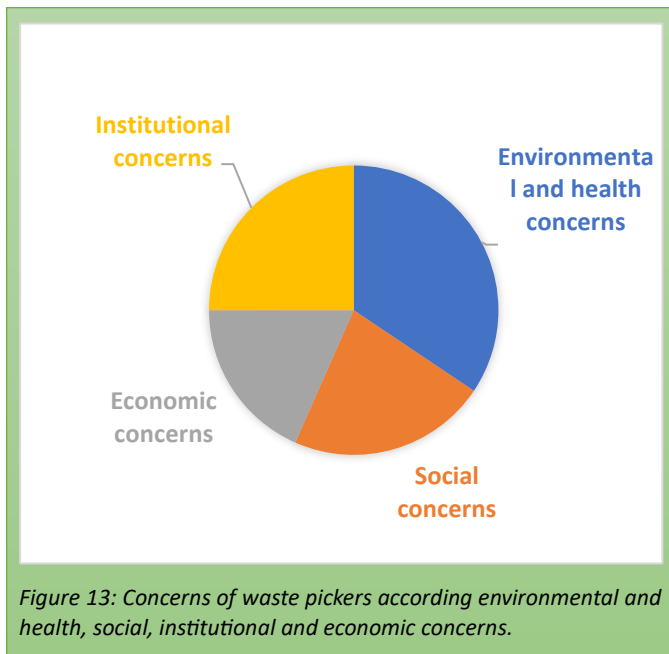
Free from stressful working condition – The labour undertaken by waste pickers entails significant risks, ranging from social threats like harassment and discrimination, to institutional exclusion from the formal systems, confiscation of their pushcarts, and occasional arrests by authorities. Economic challenges also loom large, including issues such as competition from newcomers to the field and fluctuations in material availability and pricing. Additionally, waste pickers face environmental hazards such as extreme weather conditions, as well as health concerns encompassing both

communicable and non-communicable diseases.

Environmental and health considerations are of paramount importance, particularly given the daily outdoor activities of waste pickers who are exposed to the elements without adequate shelter along their routes. Pickers, predominantly operating in hazardous environments as shown in figure 12, are particularly exposed to adverse weather conditions and health-related challenges. Buyers, who travel extended distances outdoors while pushing carts, also face heightened vulnerability to extreme weather conditions (heat or rain) compared to collectors. In contrast, collectors, whose work is confined to smaller areas, are relatively less susceptible to extreme weather conditions and associated health issues.

Institutional concern is another major concern following environmental and health concerns. In accordance with the 2018 municipal law, parallel waste collection is prohibited, with the municipality designated as the sole authority in waste management. Consequently, local municipalities wield the power to confiscate waste pickers' pushcarts and to prohibit their access to municipal transfer stations and dumpsites. Buyers, who rent pushcarts from junk shops and traverse township boundaries,

express the greatest apprehension regarding this issue. In contrast, collectors, who operate within confined areas, are accustomed to interacting with authorities and are able to pay secondary collection fees for waste disposal, thereby feeling more secure in their adherence to institutional regulations.



Social concern ranks as the second highest among waste pickers, as their work is often viewed as the least accepted in society, requiring constant interaction with the community. Due to the absence of an official recognition system for waste picking within institutions, coupled with their low socioeconomic status, waste pickers are particularly vulnerable to discrimination and harassment. Collectors, following waste pickers, also express heightened social concern, while buyers, who are recognized by the community as recyclers, exhibit less concern regarding discrimination and harassment.

Because of the country's bleak economy and significant migration from conflict-ridden regions, an increasing number of newcomers are entering the waste picking sector, further pressuring the livelihoods of the existing workforce. Positioned at the lowest end of the recycling value chain, waste pickers possess minimal capacity for negotiating prices, rendering them more vulnerable in terms of economic stability. In addition to concerns regarding price fluctuations and material availability, their economic anxieties are compounded by inadvertently purchasing or collecting stolen materials within the



community, resulting in losses of their investments.

The level of concern expressed by the 3 groups is linked to their travel distances for material collection and their degree of social acceptance. Pickers express the highest level of concerns, likely due to their lower social status and heightened vulnerability to exclusion by municipalities, local authorities, and the community. Collectors, who possess greater familiarity with the community due to their essential role in waste collection, still encounter threats from both the community and institutions. Waste collection is generally regarded as one of the lowest-ranked professions and is often avoided if possible,

resulting in relatively few newcomers to the field. Consequently, collectors exhibit the lowest level of concern within the economic sector.

Still the indicators of working conditions suggest that collectors fare relatively better compared to buyers and pickers. Buyers and pickers encounter challenges in their work due to their movements across boundaries, reliance on rented pushcarts, and lower social status. In contrast, collectors operate within confined areas with a high degree of social acceptance, enabling them to function effectively despite directly handling risky mixed waste materials.

3.3.2 Working Situation: By gender

Working hours per week (≤40 hour) – Female waste pickers dedicate more time to work than their male counterparts. Due to their generally weaker physical strength, females often spend additional time walking and carrying heavy materials. Figure 13 illustrates the frequency of taking days off and the allocation of leisure time for household chores. *Female waste pickers tend to take fewer days off than males and allocate more time to household activities, indicating that they are more immersed in both paid and unpaid daily tasks.*

Ability to work in safe place – The majority of female waste pickers, who predominantly engage in picking activities, work in riskier environments compared to male waste pickers, who primarily focus on purchasing materials directly from sources such as households, markets, and restaurants.

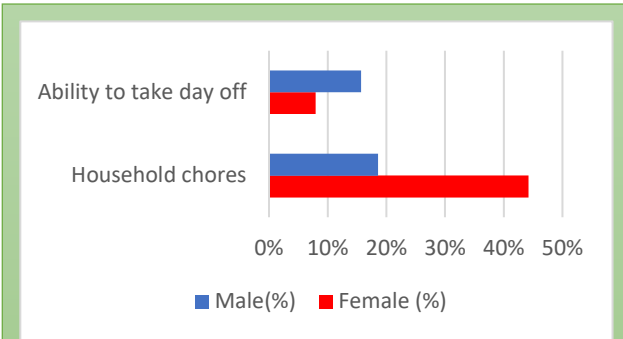


Figure 16: Percentage of male and female waste pickers according to their ability to take day off and spending their day off doing household chores. Time of female waste pickers are packed with income generating works and household chores.

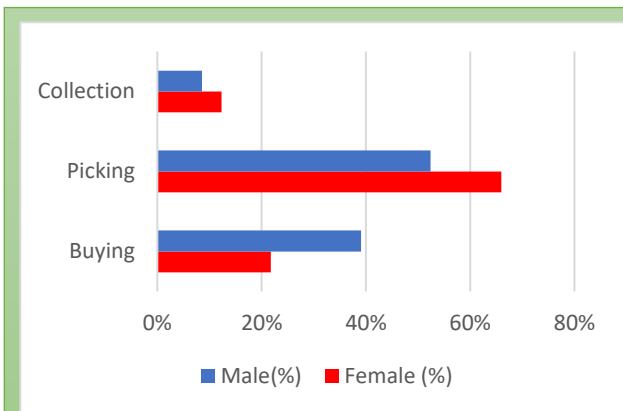


Figure 17: shows higher picker participation in female waste picker group.

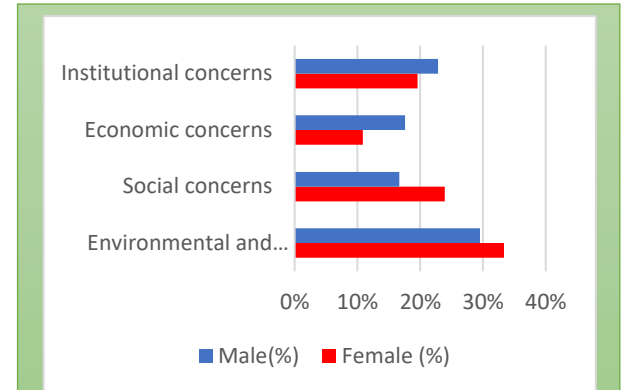


Figure 15: Concerns of waste pickers described from gender perspective. Female waste pickers are more vulnerable to social concerns.

Free from stressful working situation – Male waste pickers exhibit a lower level of concern regarding their work compared to female waste pickers. However, both male and female waste pickers express similar levels of overall concern, encompassing institutional, economic, social, and environmental and health factors. While female waste pickers demonstrate greater concern regarding social and environmental and health issues, male waste pickers are more preoccupied with economic and institutional concerns.

Female waste pickers, often viewed as the primary caregivers responsible for their family's health, face heightened vulnerability to social discrimination and harassment, especially with a high participation rate in picking activities.

Consequently, they express greater concern about environmental health and social issues. On the other hand, male waste pickers, who frequently cover longer walking distances, travel to transboundary townships, and primarily engage in buying activities, are more susceptible to institutional and economic concerns.

In terms of their working conditions, male waste pickers experience better circumstances compared to their female counterparts, including working hours, workplace conditions, and job-related anxieties. Female waste pickers, often lacking sufficient identification documents, are more commonly employed as bag pickers than males. Consequently, female waste pickers spend a greater amount of time in unsafe environments, primarily working as pickers. Therefore, their primary work-related concerns revolve around environmental and health hazards, in contrast to male waste pickers.



3.4 BUSINESS SKILLS

Business skills of waste pickers are examined through experience in waste picking, asset ownership or investment on required materials, material storage capacity and income from waste picking.

Years of working in waste sector – Working experience of more than 5 years is assumed as proficient time to know the sector well.

Asset ownership – Among various tools used by waste pickers, pushcarts often play a crucial role in transporting collected materials. Owning a pushcart can offer several potential benefits, such as reducing dependence on specific junk shops and potentially allowing for greater autonomy in choosing buyers who offer fairer prices.

Material storage capacity – Understanding market value variations for different materials can be valuable for waste pickers, impacting their income potential. This study suggests that some waste pickers practice material storage, holding onto collected materials for more than a week before selling them in hopes of obtaining a better price.

Income – Income of waste pickers in this study are compared with twice the minimum wage

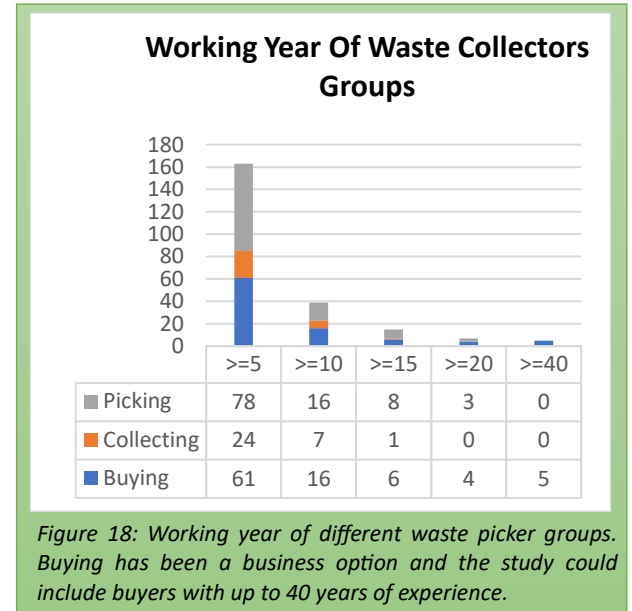
due to current inflation and current political situation.

3.4.1 Business skills: By picking category

Years of working in waste sector – Buyers, engaged in a relatively stable occupation with fewer social concerns, tend to sustain their presence in the industry for longer periods compared to collectors and pickers. Material buying has been a longstanding enterprise in the country, dating back to the era when the nation implemented a closed system in 1962. In this study, buyers exhibit up to 20 years of experience working within the waste sector. Collection and picking by waste pickers are presumed to have commenced concurrently with the expansion of urban settlements and the heightened usage of single-use plastics in Yangon around 1995.

Material storage capacity – Collectors demonstrate greater capacity for storing materials compared to buyers and pickers. Buyers, who rely heavily on junk shops for daily advance fees and pushcart rentals, are compelled to sell materials to these shops daily, resulting in limited material storage capacity. Consequently, owning a vehicle aids waste pickers in storing materials for longer durations. Asset ownership will be further elaborated in the subsequent section.

Pickers rely on selling materials for their daily sustenance and thus possess limited material storage capacity, akin to buyers. Collectors, engaged in both waste collection and material



retrieval from mixed waste, are less reliant on immediate income from material sales and consequently can store materials for longer durations, particularly during periods of higher pricing. The material storage capacity of collectors is also influenced by their ability to negotiate with junk shops. Some collectors, enjoying a strong rapport with junk shops, resort to borrowing money in emergencies and repay them with materials after storing them for a specified period.

Asset ownership – Collectors, faced with the inconvenience of renting pushcarts from junk shops due to their involvement in mixed waste collection, exhibit a greater inclination towards owning pushcarts compared to buyers and pickers. Buyers and pickers find it convenient to rely on rented pushcarts from junk shops since they handle cleaner and lighter materials than collectors. Supplementary income from waste collection offers collectors the opportunity to invest in necessary equipment.

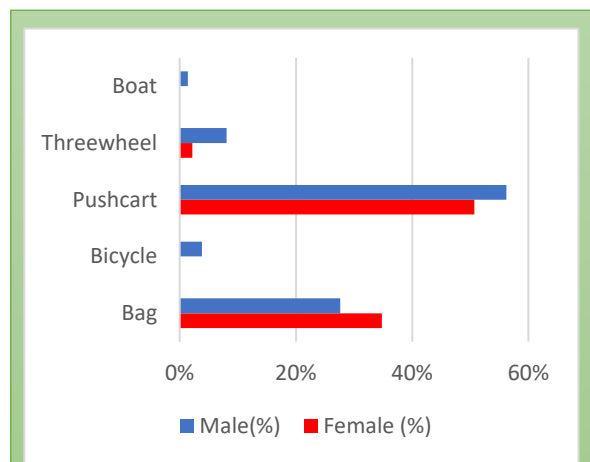


Figure 19: Different types of materials/vehicles used for transporting materials. Pushcart is mostly used vehicles. Investment in pushcart help waste pickers in negotiating with junk shops for materials price.

Income – Due to their extensive asset ownership and extended material storage capacity, collectors enjoy higher income derived from both waste collection and material sales. In contrast, buyers engage solely in the activity of material selling, and they also contend with expenses such as pushcart rental fees or receiving lower prices for materials to offset these costs. Pickers, on the other hand, earn the least among the three groups, primarily due to their limited access to materials compared to the other groups.

Income per day	Buyer	Collector	Picker
MMK	16,300	17,300	9,560
USD	4.70	5.03	2.77

Table 2: Income of waste pickers per day in MMK and USD (see also Table 1)

Waste pickers are earning above the minimum wage, as illustrated in the graph depicting waste pickers' income in comparison to twice the minimum wage. Collectors exhibit the most adept business skills, attributed to their experience in handling mixed waste, despite this aspect being relatively novel in the waste sector. Nevertheless, individuals often opt to leave this line of work overtime, with newcomers entering the field. Buying is the

longest-standing business despite yielding slightly lower income compared to collection.

3.4.2 Business skills: By Gender

Year of working in waste sector – The findings reveal that female waste pickers typically accumulate more years of experience in the waste sector. However, nearly one third of females are employed as pickers, and the tenure of waste pickers generally falls short of that of buyers. Interestingly, within the female group where picker participation is high, the working years are longer compared to the male group. This suggests that female waste pickers have fewer opportunities to transition away from waste picking careers compared to their male counterparts.

Material storage capacity – In general, females demonstrate greater ability to store materials. This is attributed partly to their financial capacity, enabling them to retain materials for extended periods and sell them at higher rates. Additionally, females typically collect less material, making storage more a matter of convenience than a necessity for long-term planning.

Asset ownership – Capacity to invest in required asset is lower for female waste pickers than male waste pickers. Female with majority focusing on picking than buying and collection,

have less urging factor to have required asset due to their ability to survive by using bag for material collection in small neighbourhood. Male waste picker with more urge on owning required asset and have higher asset ownership than female waste pickers.

Income – Income, closely tied to material availability and asset ownership, tends to be lower for female waste pickers, approximately 10% less than their male counterparts. Male waste pickers, benefiting from greater material ownership and availability resulting from their capacity to invest and travel, possess a higher level of necessary assets compared to female waste pickers.

Male waste pickers exhibit superior business acumen compared to their female counterparts, as evidenced by their higher earnings and a greater proportion of pickers who own assets. Conversely, female waste pickers encompass a higher percentage of pickers with longer tenure and extended material storage capacity. However, the extended material storage capacity among female waste pickers could potentially be attributed to their comparatively lower daily material collection capacity, necessitating the storage of materials to generate a reasonable income.



3.5 NETWORKING SKILLS

Waste pickers navigate a multifaceted network of stakeholders in their daily operations. Central among these are households, which supply recyclable materials, junk shops that purchase these materials, municipalities responsible for waste management regulations, and fellow waste pickers. Establishing effective collaboration and communication with these stakeholders is pivotal to the success and welfare of waste pickers.

Relationship with households – Households play a vital role in the waste picking ecosystem by providing recyclable materials. This study investigates the dynamic between waste pickers and households, specifically examining whether households consistently or predominantly await waste pickers to sell and dispose of materials.

Relationship with municipality – As the designated entities for waste management, municipalities play a key role in waste pickers' daily operations. This study examined the relationship between waste pickers and the municipality by using waste picker ratings to municipalities.



Relationship with junk shops – Junk shops hold a pivotal position in the waste picking ecosystem by procuring collected materials. This study investigates the degree of autonomy waste pickers possess in selecting the junk shops to which they sell, rather than solely analyzing the broader nature of their relationship with these establishments. Junk

shops exert influence over waste pickers by renting pushcarts and offering daily advance fees. Consequently, waste pickers are compelled to sell materials to the affiliated junk shop, where they encounter exploitation through receiving lower material prices and experiencing reductions in the actual weight of the materials.

Relationship among waste pickers – Efficient communication and collaboration among waste pickers can yield significant benefits. Sharing information regarding locations abundant in recyclable materials or junk shops offering favourable prices can enhance overall efficiency and potentially increase individual waste pickers' income.

3.5.1 Networking Skills: By picking category

Relationship with households – Collectors serve as vital providers to the community, particularly in cases where municipal waste collection frequencies are irregular or insufficient, or when the waste collection system is inconvenient for residents. They undertake tasks such as collecting waste directly from doorsteps in multistorey buildings and from areas where self-disposal is necessary but the distance to disposal sites is considerable. In addition to waste collection,

collectors also perform household and yard cleaning as part of their service offerings.

Buyers typically don't have as close of a relationship with households, since the collection of recyclables isn't a primary concern for households. However, buyers are prevalent in all neighbourhoods in Yangon, and households may interact with them on occasion. Buyers may foster connections with households by offering higher prices for materials compared to other buyers in the area. However the relationship is stronger with the commercial sector and small industry as there reliable recycling collection is required.

Pickers primarily focus on gathering inexpensive recyclable materials found on streets, drains, municipal collection points, and dumpsites. They tend to have minimal communication with the community, with only a few pickers in their immediate neighbourhoods receiving regular supplies of recyclable materials from local residents. Consequently, their rapport with households is weaker compared to buyers and collectors. As a result, pickers also encounter higher levels of social harassment.

Relationship with municipality – Buyers, despite exhibiting a greater concern for institutional aspects, maintain the strongest

relationships with institutional bodies. This seeming contradiction arises from their nature of engaging in transboundary movement. While they may enjoy good relations within specific locations, this is not necessarily the case in others. In many instances, junk shops

resort to paying bribes to officials to facilitate the unimpeded movement of their fleets within certain jurisdictions. Consequently, buyers feel more assured within these areas, whereas the opposite holds true outside of them.



Pickers who collect materials from streets and drains encounter fewer restrictions from the municipality, particularly bag pickers. However, when picking materials from municipal collection points, transfer stations, and dumpsites, pickers often encounter friction with the municipality. This is because municipal workers also collect recyclable materials from these sites. Therefore, picking from these locations, especially if pickers open bags and scatter items around, cause friction with municipal workers.

The municipality prohibits the collection of mixed waste. However, the inconsistent waste collection in outlying areas provides an opportunity for waste collectors to operate in those regions. To address this issue, municipalities in outlying areas locally permit waste collectors to conduct primary waste collection and accept waste at transfer stations for secondary collection, with a fee imposed. As a result, waste collectors face greater scrutiny compared to buyers and pickers.

Relationship with junk shops – Pickers enjoy greater flexibility in choosing junk shops. However, their options are limited to smaller junk shops, which typically offer lower prices for materials compared to medium and large junk shops. Pickers collect materials and sell them around their neighbourhoods. Some

pickers who reside close to downtown areas gather materials with a bag and sell them at nearby junk shops before completing their work. Consequently, pickers have fewer working hours per week.

Collectors rely heavily on income from waste collection for their daily survival, enabling them to store materials for longer periods compared to pickers and buyers. Once materials are stored, collectors have the advantage of

negotiating with junk shops that offer better terms, given their substantial inventory. Some collectors even have agreements with junk shops to store materials, with the junk shop sending trucks to the collectors' homes to purchase the materials. Consequently, collectors possess a more substantial and effective capacity to select from a variety of junk shops compared to buyers and pickers.



Buyers, relying on rented pushcarts and daily advance fees, must return all materials and fees to junk shops on a daily basis. This dependence on junk shops limits buyers' ability to negotiate higher material prices. In contrast, collectors have the flexibility to negotiate prices or choose junk shops offering higher prices than buyers. Buyers are also more susceptible to exploitation from junk shops, receiving lower material prices and, in some cases, having to pay pushcart rental fees.

Working in group – Pickers exhibit a higher proportion of female workers and express significant concerns regarding social safety issues such as discrimination and harassment. Working in groups is perceived as a means to alleviate these social burdens, and pickers often collaborate in teams rather than engaging in networking activities aimed at sharing information about junk shops and locations abundant in materials.

Group work among buyers and collectors is minimal to prevent confusion among households. Instead, coordination occurs between collectors and buyers through negotiations regarding areas abundant in materials and those with lower availability. To address social concerns, buyers and collectors often receive assistance from family members in material collection and buying. Although

they do not work together, all types of waste pickers typically reside in the same areas and exchange information about junk shops and locations.

In general, pickers and collectors demonstrate stronger networking abilities compared to buyers. However, the networking capabilities of pickers are somewhat constrained due to their limited capacity to select junk shops, lack of interaction with households and institutional concerns, and reliance solely on dealings with junk shops. On the other hand, collectors possess superior negotiation skills with both households and junk shops and can also engage in discussions with municipalities regarding primary waste collection. Buyers, while having less bargaining power or selection capacity for high-price junk shops and engaging less with households and the community compared to collectors, have a better understanding of municipal processes, primarily supported by junk shops.

3.5.2 Networking Skills: By Gender

Relationship with households – Both genders display decreased levels of engagement or reliance on households. Contrary to expectations, female waste pickers demonstrate limited ability to interact with households. There is an expectation that

females would be more actively involved in household waste management, raising hopes for improved relationships between female waste pickers and households. However, the increased participation of waste pickers overall reduces females' capacity to engage with households. Compared to collectors and buyers, waste pickers have fewer chances to interact directly with households. As a result, with greater participation from collectors and buyers, the relationships of male waste pickers tend to yield more favourable outcomes than those of their female counterparts.

Relationship with municipality – Both male and female waste pickers give higher ratings to their local municipality. In terms of institutional concerns, male pickers show greater concern regarding their working conditions during sessions. There is a higher proportion of male waste pickers rating their municipality relation as good compared to female waste pickers, which can be attributed to the number of buyers present within the group.

Relationship with junk shop – As the primary financial managers of households, females typically save money and dedicate more time to locating junk shops that offer higher prices compared to male waste pickers. Male waste pickers, especially those heavily involved with

buyers, are more closely associated with particular junk shops that provide support through renting pushcarts and offering daily advance fees for purchasing materials. Consequently, male waste pickers express less autonomy in choosing junk shops.

Working in group – Female waste pickers tend to operate more frequently in groups because they face greater vulnerability to social discrimination and harassment compared to their male counterparts. As discussed during the waste picking session, working in groups is primarily driven by safety concerns rather than a focus on work-related information for female waste pickers. Nonetheless, collaborating in groups still proves advantageous for female waste pickers as it facilitates the sharing of information about junk shops offering high prices and areas abundant in materials.

Both male and female waste pickers demonstrate limited networking abilities, although female waste pickers exhibit a superior capacity for selecting junk shops and collaborating in groups. Male waste pickers, on the other hand, express lower networking skills across all aspects except for maintaining slightly better relationships with households. Relationships with both households and among waste pickers are notably weak for both genders.



3.6 FAMILY ABILITY TO SELECT ANOTHER CAREER

Engaging in the waste sector is frequently viewed as degrading due to the direct handling of waste and the discrimination encountered from various parts of the community. The family's potential to explore alternative career paths is evaluated based on the involvement of

family members in the waste sector and the capability of underage family members to steer clear of participation in waste picking.

Underaged family members' ability to avoid waste picking – The children of waste pickers frequently get involved in waste picking by helping and aiding their parents. The study evaluates the percentage of these children able to escape this work.

Only 1 family members working in waste picking – Most families of waste pickers depend primarily on waste picking for their livelihood. The study evaluates to which degree only one family member – FM is working in the waste picking sector.

3.6.1 Family ability to select another career: By picking category

Ability to exclude underaged family members from waste picking – Child labour is officially not allowed and accepted working age starts with 14 years old. However, as discussed during the session on the life conditions that lead to waste picking, around 30% of waste pickers (see Figure 20) began their involvement in waste picking during childhood. Waste pickers have expressed their desire to steer their family members away from waste picking as a career. For buyers the involvement of children is 13%. For collectors and pickers the support of their children comes often “natural” especially for women pickers. Their children tag along during the parents work and step by step increasing their support for their parents until becoming a full co-worker of them.

Only one family member joins waste picking – Among waste-related activities, buying



requires the least amount of workforce compared to collection and picking. Due to their heightened social insecurity, pickers often require family members to accompany them.

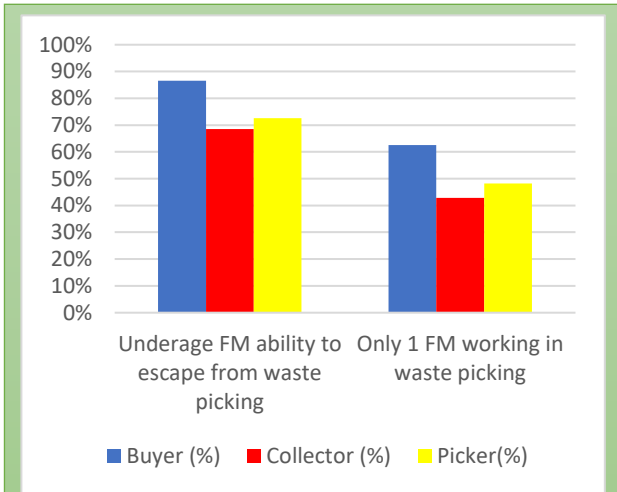


Figure 20: Family members – FM of waste pickers join waste picking to support in lift heavy materials and to protect waste picker from social and institutional concerns. Children of waste pickers also join waste picking due to lack of care taker at home.

Family members of collectors join waste picking to aid in waste collection tasks. They assist by removing waste from households, helping to push and control pushcarts, and keeping a lookout on the way, as the primary collector's view of the road ahead may be obstructed by the waste mounted in the pushcart. Therefore pickers and collectors involve family with

around 45% in comparison to buyers with only 35%.

The participation of underage family members in waste picking tends to be lower in comparison to adult family members entering the profession. Buyers, who often come from more privileged backgrounds compared to pickers and collectors, strive to discourage the next generation from entering the waste picking industry. Conversely, collectors and pickers, grappling with issues such as low income, limited education, and inadequate parental support, are more inclined to involve their children in waste picking alongside them.

3.6.2 Family ability to select another career: By Gender

Ability to exclude underage family members from waste picking – As discussed in the preceding session, underage children of female waste pickers often join waste picking due to the absence of caretakers at home (32% of children join their mothers and 18% their fathers). Consequently, they accompany their mothers in waste picking activities. Additionally, the lower income and socioeconomic status of female waste pickers may also compel underage children to participate in waste picking as a means of employment.

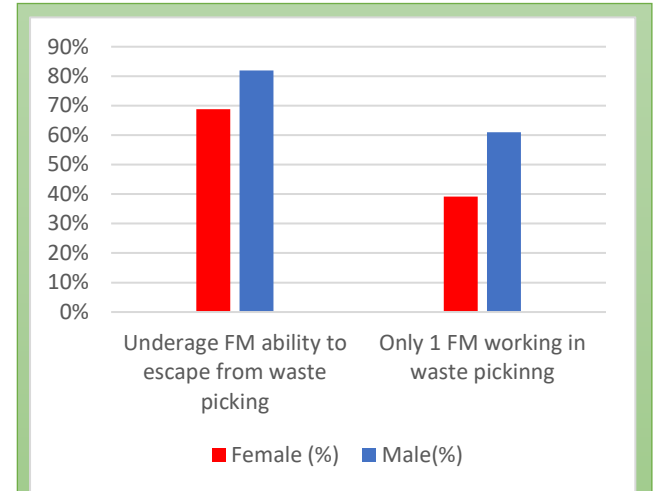


Figure 21: Female are more vulnerable to social concerns and need more assistant from family members.

Only one family member join waste picking – Similar to underage participation, adult family members of female waste pickers are more likely to join waste picking compared to male



waste pickers. Female waste pickers often enlist their family members to join them in waste picking to mitigate social risks associated with their work and to address safety concerns, given that females are perceived as vulnerable by society and are subject to a higher likelihood of encountering other threats according to prevailing social norms.

3.7 POSITIVE ATTITUDE ON WASTE PICKING

Waste picking is typically regarded as one of the lowest ranked income activities, and waste pickers themselves often perceive it as a demeaning job. A positive attitude towards waste picking can be assessed by several factors, including whether pickers enter the waste sector due to the prospect of higher earnings, dependence on waste picking for livelihood, and aspirations to advance and grow within the sector.

Join waste picking due to own business nature and earning higher – Some pickers opt to work in the field because of the freedom it offers in terms of working hours. Additionally, they find that the income from waste picking constitutes a net gain compared to other available employment options.

Livelihood dependency on waste picking – Waste pickers normally earn higher than minimum.

Wish to grow in the sector – The waste sector offers some chances to grow, for example owning your push cart, opening a junk shop, etc.

3.7.1 Positive attitude on waste picking: By picking category

Join waste picking due to own business nature and higher earning – The main positive reason for people to join the sector is that it is generally open to everyone/

Buyers, whose work resembles other forms of buying and selling, see more the potential of owning their own business and making more money. The business also has a 30% chance to move from one generation to the other without requiring too much chillador.

Pickers on the other hand are driven to large degree (48%) by a crisis situation which force the family to take up this work.

Livelihood dependency on waste picking – Irrespective of the specific business model, nearly all waste pickers indicated that their livelihood is contingent upon waste picking, highlighting the essential role of material circulation in supporting grassroots

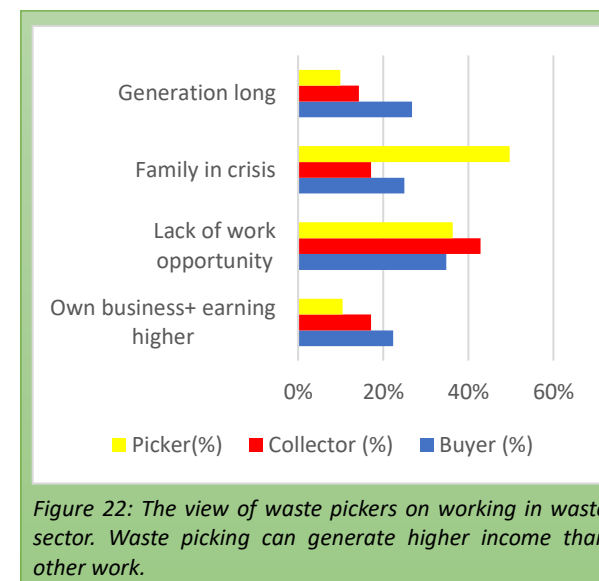


Figure 22: The view of waste pickers on working in waste sector. Waste picking can generate higher income than other work.

communities. The high level of dependency on waste picking for livelihood also suggests the enduring presence of the sector.

Wish to grow in the sector – The establishment of a junk shop is considered the pinnacle of the waste picking hierarchy. Buyers exhibit a strong inclination towards opening their own junk shops. Those buyers situated close to existing junk shops are acquainted with the operations and advantages associated with such establishments.

Pickers also harbour aspirations of opening their own junk shops, viewing such endeavours as beneficial and reflecting their positive outlook on the waste sector.

In contrast to buyers and pickers, collectors exhibit less enthusiasm for opening junk shops. Instead, their interest in expanding within the sector lies in collecting waste from a greater number of households and a wider area, rather than in establishing their own junk shop. As anticipated, buyers hold a more favourable perspective on waste picking due to the nature of their work and express a willingness to

sustain and expand within the sector. The positive outlook of collectors towards their work may be attributed to the higher income it provides. Conversely, pickers exhibit the lowest positive view on their work, which may be linked to their heightened work-related concerns and limited business and networking skills.



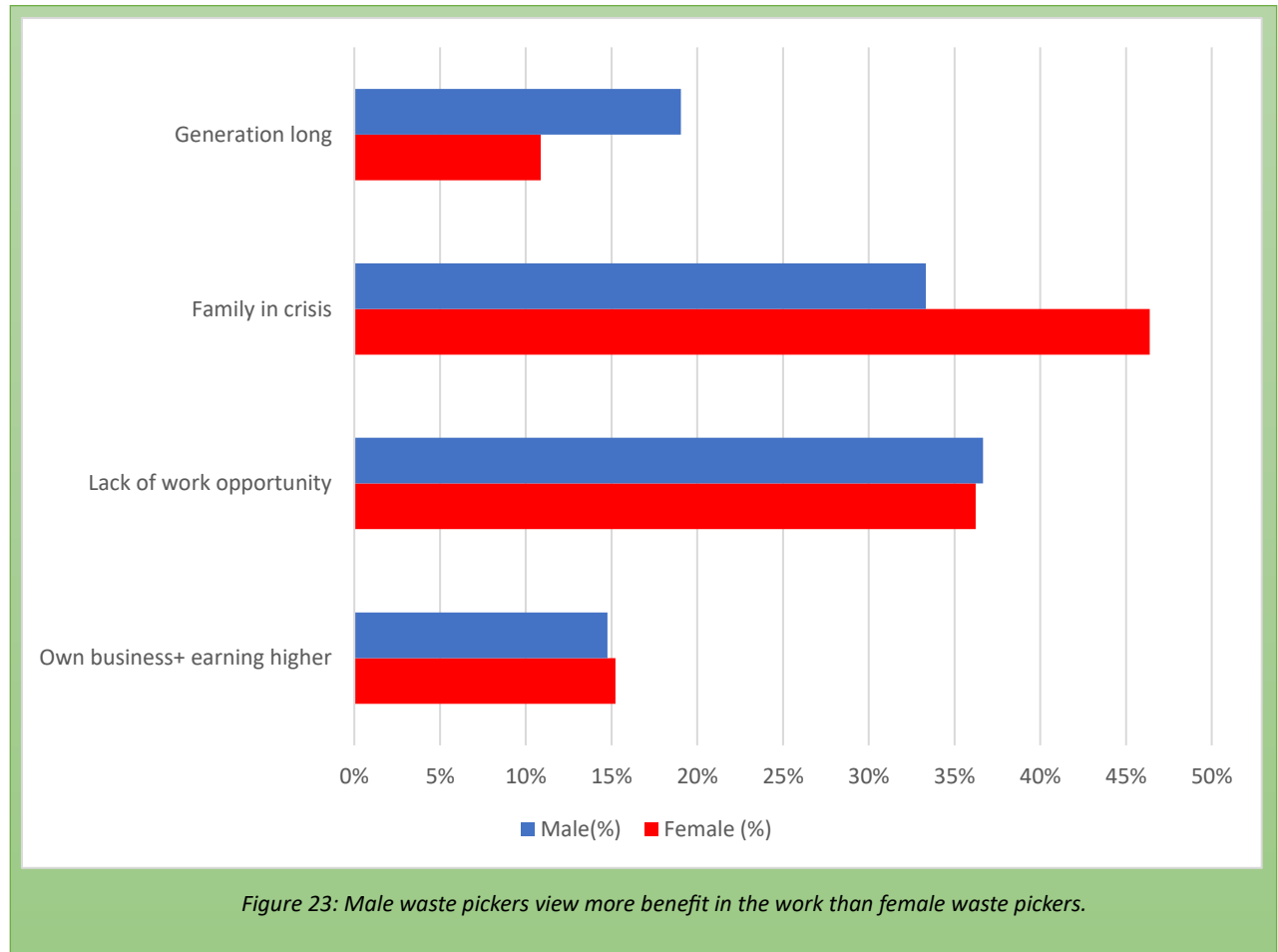
3.7.2 Positive attitude on waste picking: By Gender

Join waste picking due to own business nature and higher earning – Male waste pickers, particularly those with increased engagement from buyers within their group, indicated their participation in the waste sector is driven by entrepreneurial inclinations and the allure of higher income. In contrast, female waste pickers, often hailing from unemployed backgrounds, are more compelled to work in the waste sector due to familial crises.

Livelihood dependency on waste picking – As highlighted in the category session, both male and female waste pickers exhibit a high degree of livelihood dependency on waste picking. Given that the majority of waste pickers join the waste sector due to factors such as family crises, limited job opportunities, and generational business traditions, it underscores that most join the waste sector out of necessity for survival. Consequently, their livelihood dependency on waste picking remains significant.

Wish to develop in the sector – Male waste pickers, who hold a slightly more positive view on waste picking, aspire to advance within the sector. In contrast, fewer male pickers compared to females cited family crisis as the reason for their involvement in waste picking, suggesting that they perceive waste picking as a regular business venture and express less concern for social issues while emphasizing institutional concerns. Therefore, it can be inferred that male waste pickers view waste picking as a legitimate business endeavour, whereas female waste pickers regard it as a means of survival.

Male waste pickers, who express a greater desire to advance in the sector, can be presumed to harbour a more positive view of waste picking compared to females. Despite their livelihood depending on waste picking, female waste pickers appear to hold a less positive view of the occupation, likely due to the heightened social pressure they face in their work.

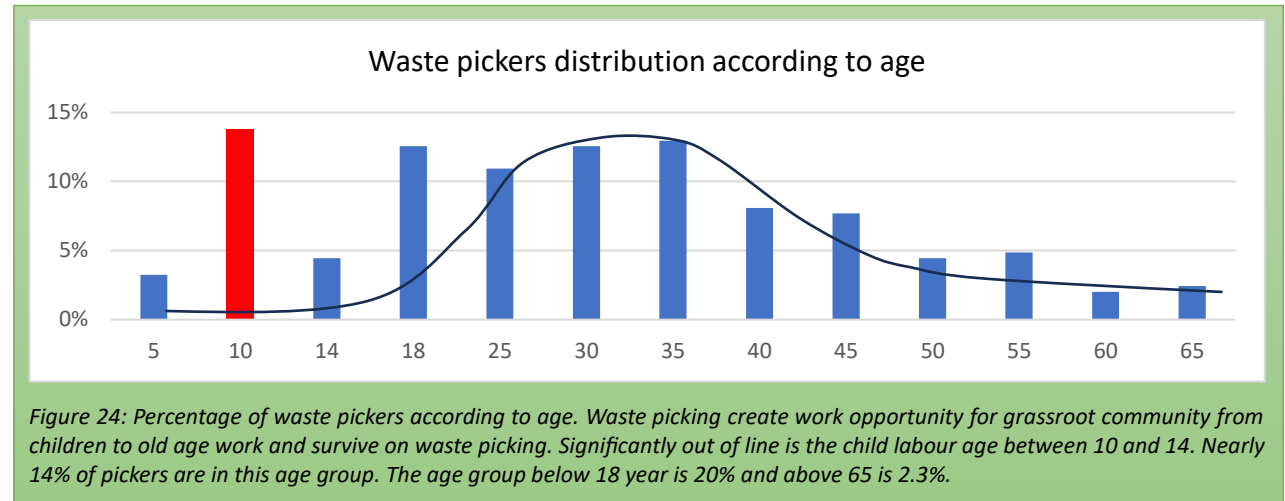


4 Other Socioeconomic Factors

4.1 AGE

Age is often a limiting factor in many livelihood activities; however, engaging in waste collection transcends age barriers. This study revealed the presence of young collectors as young as 7 years old and aged collectors as old as 67 years old. The most common working age group falls between 25 to 40 years old, largely due to the physical demands of waste collection, such as long-distance walking and occasional heavy lifting.

Child collectors under 18 years old and elderly pickers over 65 years old also contribute significantly to the business. Children waste pickers under 14 years old predominantly participate in waste collection, driven by family crises and the comparatively better income offered by waste picking compared to other job opportunities. Waste pickers over 65 years old remain in the business due to limited alternative employment opportunities.



4.2 CHILD WASTE PICKERS

In this study, child waste pickers are defined as individuals aged 14 and younger, with the understanding that this group is considered highly vulnerable and ideally should still be in a learning environment. Consequently, the circumstances of child waste pickers were examined separately.

Half of child waste pickers are migrated to the currently working area together with parents. Working as helpers in teashop and restaurants are typical work for children who come to work in urban area alone from rural area. Children without accompanying by parents come from rural to urban area and need to work under the supervision by the teashop or restaurants owners. The situation is different for urban kids. The data shows that half of the child waste

pickers are not migrated. Half, not answered migrated, seems to be migrated together with parents and lead to working in waste sector.

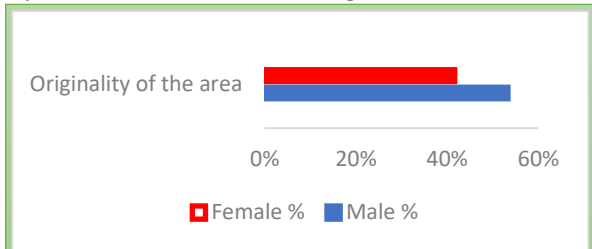


Figure 25: Originality of child waste pickers. Children originated in urban poor area join waste picking higher than children migrated alone to work in urban area.

In Myanmar's education system, transitioning age from primary school to middle school is 10 years. The percentage of children under 10 in this study is low. Thus, percentage of children with education of middle school level should be high. Only few children join middle school indicating a high school dropout rate among waste picking children after primary school.

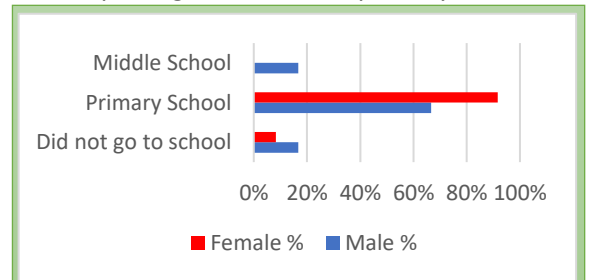


Figure 26: Education level of child waste pickers. Children between 10 to 14, join waste sector mostly. Most of the child waste pickers should reach middle school level but only few could reach that level with majority dropping out of school.

Physical strength, lack of trust by junk shops and lack of ID are the causes of high bag pickers among children waste collectors. The results show that around one third of children waste pickers are transporting materials using pushcart. Apart from renting pushcart using ID, junk shops also rent pushcart to waste pickers if one trusted picker guarantee another picker. Child waste pickers especially those picking materials in group can have access to pushcart through this mechanism of guaranteeing by one adult picker.

Child pickers work in waste collection business to alleviate crisis of the family. Child waste pickers are making around 34% (2.2 to 2.6 USD) of twice minimum wage per day and half of family of child pickers are relying on the income of the child pickers.

Higher income comes with higher working hour. Only half of child waste pickers can work within 40 hours per week limit. Another half is working longer than that worsening the already broken child right among child waste pickers. Child waste pickers are also vulnerable to social and institutional threats as well.

Child waste pickers are at higher related to social threats such as being accused as thief while working. Child waste pickers also mentioned about their concern regarding institutional threats which includes threat from administrative bodies and worry about kidnapping with the intention of trafficking while working.

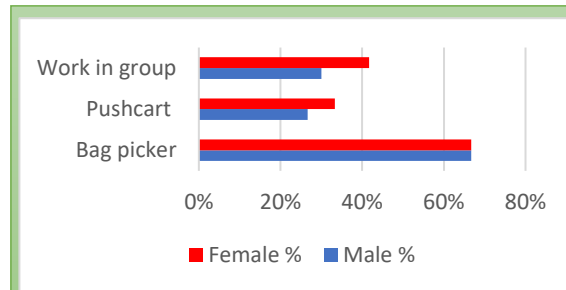


Figure 28: Children waste pickers mainly work as bag pickers.

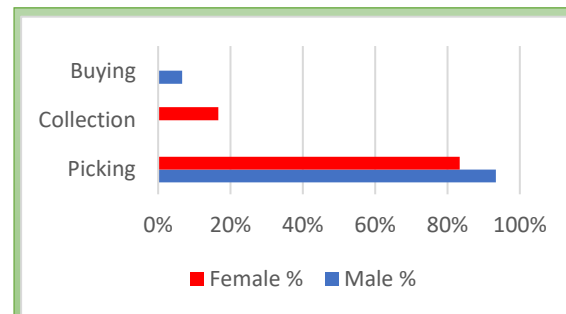


Figure 29: Children mainly join the waste sector as pickers.

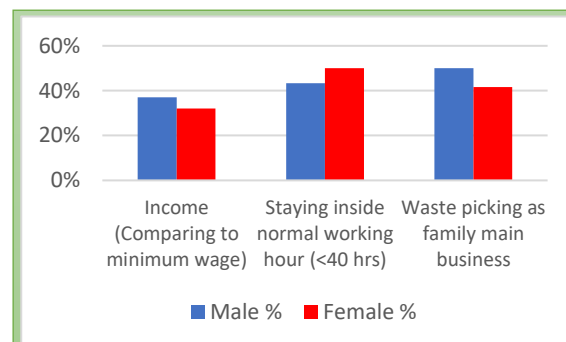


Figure 30: Child pickers make 36% of two times minimum wage and with this earn similar with their adult counterparts. This makes them a very valuable member of the family work force resulting in long working hours (only 40% stay in a 40 hour/week).

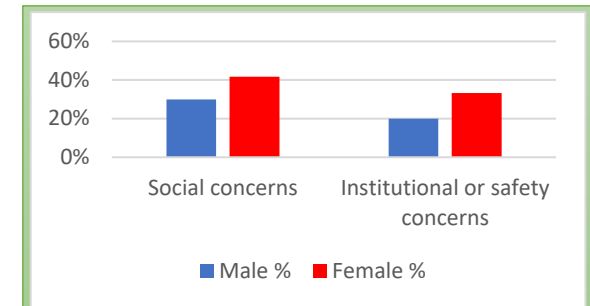


Figure 27: Girls face significantly more threats by the community but also by authorities and other dangers (child trafficking)

4.3 ETHNICITY, RELIGION AND PLACE OF ORIGIN

The study examined the place of origin, ethnicity, religion, and reasons for immigration among informal waste collectors.

The general majority of pickers are of Burmese ethnicity, Buddhist, and hail from the regions of Yangon and Irrawaddy.

Burmese Indians and Muslims constitute 7% of the informal waste pickers. Traditionally, Burmese Hindus and Muslims have been involved in the recycling business and they still dominate the buyer category with 68% of representatives, while not playing a large role in collection and picking. The strong presence by this group in the buying category results also

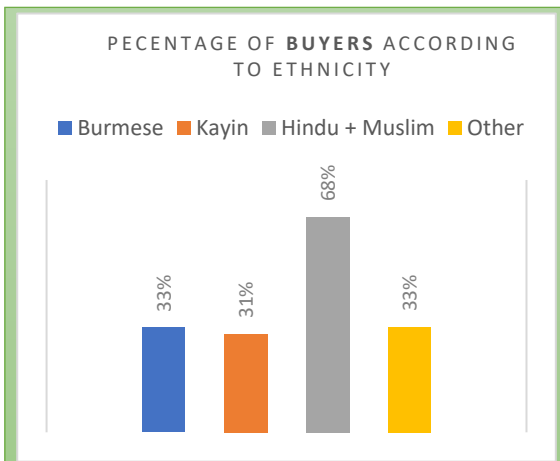


Figure 31: Ethnicity of waste pickers. Regardless of ethnicity, all waste pickers faced the same fate relating to social concern.

from the fact that still many junk shops are in the hands of Hindus and Muslims.

Concerns related to work and experiences of discrimination are consistent across all ethnicities and religions.

4.4 PREVIOUS WORK OF WASTE PICKERS

In the interviews, the prior employment history of waste pickers was examined to discern patterns of transitioning into waste picking. Approximately 40% of buyers, collectors, and pickers had previously worked as manual labourers, undertaking tasks such as construction work, carrying goods as daily labourers, and serving as drivers or bus attendants. Previous occupations of waste pickers also included roles as sellers and

agricultural labourers. The majority of these previous occupations outside the informal waste collection sector did not necessitate specific skills or significant investments; rather, physical strength was the primary requirement. Given that waste collection does not typically demand specialized skills or significant financial investment, it presents an attractive employment option for individuals with such backgrounds.

4.5 OLD WASTE COLLECTORS

One third of the waste pickers in this study are age 55 years old and above which of them half joined waste picking longer than 5 years. Another half join waste picking as newcomers to the field.

Previous works of old aged newcomers are low skill works such as manual worker, seller and farmer. Such background left people with no saving to working in waste sector.

Reduction of physical strength also force old age waste pickers to work in picking rather than buying and collection. Among longer working (more than 5 years) and aged waste collectors, more than 60% is still working as picker and their working rank or status does not develop together with working years.

Recycle material buying business has been existing as a long-standing business in comparison to collection and picking which developed only with increase in plastic consumption. The number of collectors and pickers are rising in the last 5 years.

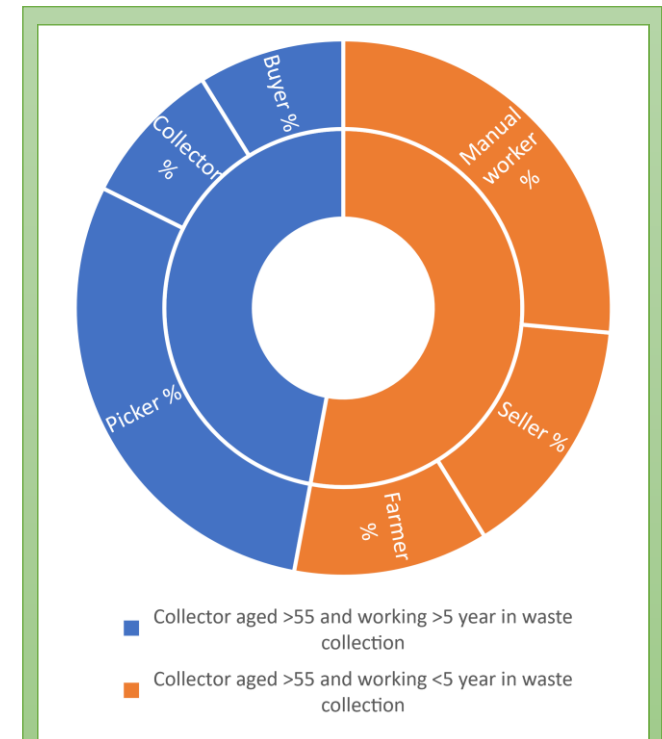


Figure 32: Work category of old waste pickers. Previous work of old waste pickers who join waste sector as a new comer to the field.