

# A Research Report on Waste Pickers of Nepal





# A Research Report on Waste Pickers of Nepal

April, 2022



© 2022 Centre for Research and Sustainable Development

**Published:** April 2022

**Authors:** Pratik Bajracharya, Sujata Koirala, Avipsha Rayamajhi

**Disclaimer:** This report presents the finding from an on-the-ground study by the authors; the accuracy of the information and the views and opinions presented in this report rest entirely with the authors and do not necessarily reflect the views of CREASION, which accepts no responsibility for any consequences of their use.

**Published by**

Center for Research and Sustainable Development Nepal (CREASION)  
Baluwatar, Kathmandu Metropolitan City  
House No. 260, Lamington/Sheetal Marg  
Tel +977-1-4520784 / 01-4540085  
P.O. Box: 11772  
info@creasion.org  
www.creasion.org

## FOREWORD

From Nepal's mountains to its lowlands, integrated waste management is one of the country's most pressing challenges. While, thanks to the advent of various app-based recycling firms, the country is making strides toward a greener environment by generating revenue from garbage recycling, waste management remains a sector that needs to better integrate recycling and recycling workers, like waste pickers, into the system. Recycling fits into the larger picture of an integrated system, which includes setting up source segregation, utilizing organic waste, channeling recyclables to recycling facilities, and delivering non-recyclables to private waste management businesses or municipal authorities.

Waste pickers are the unsung heroes of an integrated system. They help reduce waste at landfills, dumping sites, and in the streets. They play a crucial role in expanding the waste circular economy and reducing waste pollution. Still, even though the work of the waste picker is heroic from environmental and macro-economic perspectives, it is often considered suitable only for people in communities that belong to the lowest rank of the socioeconomic ladder. The work itself compounds these workers' vulnerability, exposing them further to health repercussions and the lack of socio-economic security.

In order to shed light on Nepal's waste pickers, this research report includes a detailed breakdown of waste pickers' socioeconomic indicators, their demographics, and the organizations that are involved in waste management. It also discusses the roles that organizations play in improving waste pickers' livelihoods.

CREASION would like to acknowledge all the people involved in producing this research as well as to acknowledge the unsung heroes that play a great role in environmental conservation.

**Aanand Mishra**

Founder and President

CREASION

## ACKNOWLEDGMENT

The authors would like to acknowledge all the respondents for their valuable time and cooperation in carrying out this study, including municipal representatives from Nepalgunj, Rajbiraj, Dharan, Siddharthanagar, Dhankuta, Kathmandu; and private companies, enterprises, and organizations from Itahari, Damak, Hetauda, Chitwan, Butwal, Kathmandu, Lalitpur, Bhaktapur, and Lahan. Special acknowledgement is extended to the Kathmandu Metropolitan City Environment Protection Division, Mr. Hari Shrestha, and Mrs. Janu Dangol for supporting this research. The authors are grateful to Taylor Cass Talbott and Kabir Arora for their valuable input and suggestions.

We further extend our deepest gratitude towards the waste pickers all over Nepal for sharing their insights and experiences with us.

## EXECUTIVE SUMMARY

Waste pickers are part of the informal workforce involved in managing recyclable waste and diverting it away from landfills. Though waste pickers are sometimes integrated into formal employment with access to contracts and social protections, they may still retain the title of waste picker, which highlights the incremental nature of formalization. Despite waste pickers' importance to waste recovery in Nepal, they lack legislative recognition and are not integrated into planning processes. To gain an in-depth understanding of waste pickers in the present context, a qualitative study was conducted with waste pickers and their organizations in 14 districts, which included major cities. The study explores the socio-economic characteristics of these workers and the contribution that their organizations make toward improving their livelihoods. Interviews were conducted at waste pickers' workplaces, including organizations' offices, municipal offices, landfills, scrap dealers, and scrap centers. Convenience sampling was preferred in the research/study, which consisted of all genders, ages, and types of waste pickers, including the affiliated (those employed by an institution) and the unaffiliated (not associated with any institution). The respondents were verbally informed about the objectives of the study before the interview, and their consent for audio recording and photographs was taken.

## KEY FINDINGS

### 1. General

- Nepal's waste picking sector is mostly dominated by waste pickers of Nepali origin (90 per cent). However, waste pickers of Indian origin (10 per cent) can also be found in the Kathmandu Valley and bordering areas. Among the waste pickers of Nepali origin, only 77 per cent have obtained citizenship-proving documents, whereas all waste pickers of Indian origin had documents proving their Indian citizenship, including an Aadhaar card (Unique Identification Number).
- In search of a better opportunity, 59 per cent of waste pickers have migrated from surrounding districts for work, and 7 per cent have migrated from neighboring India. Thirty-five per cent work in their home district.
- A few itinerant buyers of Indian origin travel to Nepal daily for work.
- Women are mostly engaged in non-intensive work as sorters and landfill waste pickers, whereas men engage in all sorts of work in the waste management sector.
- Major ethnic groups involved in the waste sector include Janjati (44 per cent) followed by Madhesi (15 per cent), and Brahmin and Chhetris (18 per cent). Dalits and Muslims were in the minority (7 per cent and 5 per cent respectively).

## 2. Driving force

- Most people joined the waste picking sector because of poverty and illiteracy. Poverty mostly stems from waste pickers having been orphaned at a young age.
- Men tend to become waste pickers due to the flexible nature of the work sector, whereas women tend to become waste pickers because it provides an extra income for their families.
- Affiliated waste pickers are those individuals who are generally employed by a private company, municipality, or social enterprise. It's important to note that affiliation with an organization or company does not mean that the work is formal, since employment doesn't always guarantee a contract, regular pay, or social protection. Most municipalities hire waste pickers without providing them with any contract or a formal monthly wage (Kathmandu Metropolis being one of the few exceptions). Affiliated or not, waste pickers are working primarily as informal workers.
- Unaffiliated waste pickers are individuals who make daily wages by collecting and selling recyclables themselves. Since unaffiliated waste pickers are able to collect and sell recyclables freely (a freedom not all affiliated waste pickers have), they earn higher wages than the affiliated waste pickers.
- Waste pickers who pick recyclable waste from the streets are the most exploited and vulnerable because they are paid unfairly. They often work long hours to make up for their unfair payment.
- Men seem comparatively more satisfied with this profession than the women due to higher earnings and freedom at work.
- For women, job satisfaction and wage are closely linked; thus, those earning lesser wages appear more dissatisfied with the work.
- No cases of discrimination were recorded among waste pickers involved in the study.
- Some of the occupational health vulnerabilities that arise from waste picking include workers' lack of access to social protection and protective gear. Workplace related injuries are also common; several workers had observable cuts and bruises.

## 3. Organizations Involved with Waste Pickers

- Local municipal bodies are mostly concerned with regular waste collection. They give less focus to uplifting waste pickers.
- The Nepal Pollution Control and Environment Management Center (NEPCEMAC) works in the waste management sector for the welfare of its employee waste workers by providing benefits like job security, a Social Security Fund (SSF), and health benefits.
- Not all Solid Waste Management companies (SWM) provide contracts. Pay grades also differ between companies, but all companies abide by the Nepal Labour Act (2017) by providing a minimum of USD 115 per month.
- The social enterprise Doko Recycler helps uplift waste pickers by educating them about bank accounts and by providing food and insurance benefits.
- Initiated by *Médecines du Monde-France* (MDM-F) in collaboration with Green Path Nepal and Sanyukta Sarsafai Jaargarán (SASAJA), the project "Healthy Waste Workers for Sustainable Waste Management" is intended to uplift 300 waste pickers through capacity building and providing entrepreneurship opportunities.
- Balmiki Samaj Nepal and SASAJA are two organizations established by waste pickers to work for the welfare of waste pickers. SASAJA has been able to incorporate 1,000 waste pickers into the organization, whereas Balmiki Samaj Nepal is aspirant, but lacks funding and guidance.

## ACRONYMS

BW2V	Blue Waste to Value
CREASION	Center for Research and Sustainable Development Nepal
FGD	Focus Group Discussion
IWW	Informal Waste Worker
KFBS	Kirtipur Fohor Byawasthapan Sewa
MDM-F	Médecins du Monde France
NEPCEMAC	Nepal Pollution Control and Environment Management Center
NGO	Non-Governmental Organization
NPR	Nepalese Rupee
PAN	Personal Account Number
PRISM	Poverty Reduction of Informal Workers in the Solid Waste Management Sector
SASAJA	Sanyukta Sarsafai Jaagaran
SSF	Social Security Fund
SWM	Solid Waste Management
SWMAN	Solid Waste Management Association of Nepal
USD	United States Dollar
WEPCO	Women Environment Preservation Committee
WIEGO	Women in Informal Employment: Globalizing and Organizing

# CONTENTS

Background	1
1. Introduction	2
1.1 Background	2
1.2 Aims and Objectives	3
1.3 Scope	3
2. Methodology	7
2.1 Preliminary study	7
2.2 Approach	7
2.3 Data Collection	7
2.4 Data Analysis	10
3. Results	11
3.1 Informal Waste Pickers Characteristics	11
3.1.1 Waste Picker Demographics	11
3.1.2 Driving Forces to Waste Picking	15
3.1.3 Years Involved	18
3.1.4 Income and Job Satisfaction	19
3.1.5 Living and Other Expenses	20
3.1.6 Job Satisfaction	21
3.1.7 Job Security and Access to Waste	22
3.1.8 Social Issues Faced by Waste Pickers	22
3.2 Organizational Aspects	25
3.2.1 Role of Private SWM Companies	26
3.2.2 Role of Municipal Bodies	28
3.2.3 Role of Social Enterprises	29
3.2.4 Role of Non-Profit Organizations	31
4. Conclusion	33
References	34

## BACKGROUND

This study was conducted by the Center for Research and Sustainable Development Nepal (CREASION) along with financial and technical aid from Women in Informal Employment: Globalizing and Organizing (WIEGO).

CREASION has been working in the waste management sector since 2018, beginning with a project with Recycler Saathi, which is Nepal's largest waste PET bottle recovering organization. CREASION has since been supporting the informal waste sector with capacity building assistance, insurance, occupational safety training, mobile health checkups, and food rations. Through this study, CREASION aims to understand the present landscape of the informal waste sector and the organizations working for waste pickers' welfare.



# INTRODUCTION

## 1.1 Background

Because of its growing population and urbanization, consumer behavior, and the lack of proper mechanisms for waste handling and management, Nepal has faced waste management issues for decades. Local bodies are responsible for waste management, but they lack the necessary skills and resources to manage waste adequately (Karki et al. 2019). Thus, many actors are involved in the sector, including private companies, scrap dealers, enterprises, non-governmental organizations (NGOs), and civil society. The organized entities among these actors can be classified as part of organized or formal systems with registered ownership, organized labour, and capital investment (Yoshida 1997). But it's important to note that a formal, registered organization does not necessarily provide formal employment. In Kathmandu alone, there are more than 50 organized entities (>35 private waste management companies, 12 large scrap dealers, and 3 enterprises). In Nepal as a whole, it is estimated there are more than 500 organized entities in this sector (SWMTSC 2016). These entities employ people for collecting, sorting, and recovering valuable items from waste, and for disposing waste that cannot be recycled. Simultaneously, informal waste pickers also collect, sort, and recover waste outside of legal and institutional frameworks (Yoshida 1997). The informal sector plays an important role in waste management, filling the gaps left by municipal and other entities in waste management.

Still, even though informal waste pickers constitute a huge part of the SWM sector, they lack legislative recognition in Nepal's Solid Waste Management Act of 2011 and are less integrated into the system; the government fails to acknowledge their contribution. This is in direct contrast to the situation in neighboring India, where the SWM Act of 2016 defines waste pickers as "a person or groups of persons informally engaged in collection and recovery of reusable and



recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood” (MOEF 2016).

In Nepal, self-employed waste pickers and waste pickers informally employed by scrap dealers are among other workers in a larger informal sector that is defined as workers without any employment security, social security, and work security (Bhaskar 2013). Waste pickers mostly belong to marginalized communities in the low-income bracket, and they are the group that faces the highest risk of health hazards. Their workplace lacks occupational safety and security, is prone to risks, and exposes workers to unsafe conditions. On top of these risks sit other pressing problems like poor hygiene practices and living conditions, lack of protection from hazards, societal stigma attached to the profession, and a lack of access to public services and social networks. Only few organizations composed of waste pickers and other organizations working on waste pickers' behalf to improve these conditions exist in Nepal.

Previous studies have been conducted on the demographics, status, occupational health and safety of waste pickers, but these studies have been limited to smaller geographic regions like the Kathmandu Valley. Nepal's PRISM project, for example, estimated that 15,539 waste pickers are involved in waste management (waste collection, separation, waste rickshaw pulling, sweeping, and waste carrying) in the Kathmandu Valley (Rijal et al. 2014). It is estimated that in 2017 in the Kathmandu Valley, waste pickers (collectors and itinerant buyers) recovered and traded USD 18 million of recyclables. Studies have been comparatively less focused on other geographical areas (Pathak and Mainali 2018).

## 1.2 Aims and Objectives

The main objective of this study is to conduct an in-depth study of waste pickers and to explore organizations working for the welfare of waste pickers.

The broad objectives of the study are to:

- a. assess the current demographic information, socio-economic status, occupational details, and health status of the waste pickers.
- b. explore what forces drive workers to waste picking, what their job security is like, and what their plans are for their futures.
- c. understand the current projects and plans run by different organizations for the welfare of waste pickers.
- d. strengthen the networking processes within existing organizations to ensure the integration of waste pickers into the waste worker category.

## 1.3 Scope

### Who are waste pickers?

A waste picker is a person who makes their living by recovering recyclables from refuse, landfill sites, and elsewhere that they then sell (Theron 2010). Several local terms are used to describe these workers according to the service they provide: kawadi for itinerant buyers; kuchikar for

cleaners and sweepers; and safaikarmi collectively for waste collectors and pickers. Most waste pickers are part of the informal workforce, where some are engaged independently while others collect and sell recyclables to middlemen or businesses. Their roles and functions can be better understood with the aid of figure 1, which maps out the flow of waste from its origin to end-users.

For the purpose of this study, waste pickers can be classified into two broad categories: affiliated and unaffiliated.

Affiliated waste pickers are those individuals employed by private companies, municipal bodies, non-profits, and social enterprises. It is important to note that not all of these employers, including most municipalities (Kathmandu Metropolis being one of the few exceptions), provide a formal contract and formal monthly wages to waste pickers. These workers also lack a social safety net and social protection. In other words, they are technically working in an informal setting despite being affiliated.

Affiliated waste pickers often hold the following types of jobs:

<b>On route collector</b>	Formal collection crews providing door-to-door service who, with permission, segregate recyclables from collected waste to supplement their salaries.
<b>Sorters</b>	Workers selecting and sorting recyclables by type.
<b>Handlers/processors of organic wastes</b>	Workers handling only organic waste for the compost plant.



Unaffiliated waste pickers are self-employed individuals who earn monthly or daily income on their own and are often temporary/seasonal in the field. They make a living by picking or buying recyclables on the streets or in waste dumps and then selling it to scrap dealers. These workers are not connected to scrap centers or recycling centers although they sell the collected materials to these associations (Dias 2016).

<b>Dump/landfill waste pickers</b>	Collect and sell recyclables waste from dumping site.
<b>Street waste pickers</b>	Collect recyclables with jute bags from mixed waste disposed on streets.
<b>Itinerant buyers</b>	Collect recyclables from households/businesses on a fixed route by exchanging recyclable items for payment or by exchanging goods.

### What are the relevant organizations to which waste pickers affiliate?

In this study, organizations considered include social enterprises, non-profits, private waste collection companies, cooperatives, and municipal bodies involved with waste pickers. Each of these types of organizations is defined below:

- A social enterprise is a business that combines social and/or environmental objectives with maximizing profitable opportunities (Charles 2019).
- Non-profits are internationally or nationally established organizations working for the welfare of waste pickers.
- Private waste collection companies work in a public-private partnership model to collect household waste. They employ waste pickers.
- Municipal bodies have either environmental or sanitation departments that work in municipal solid waste in the absence of private waste collection companies.

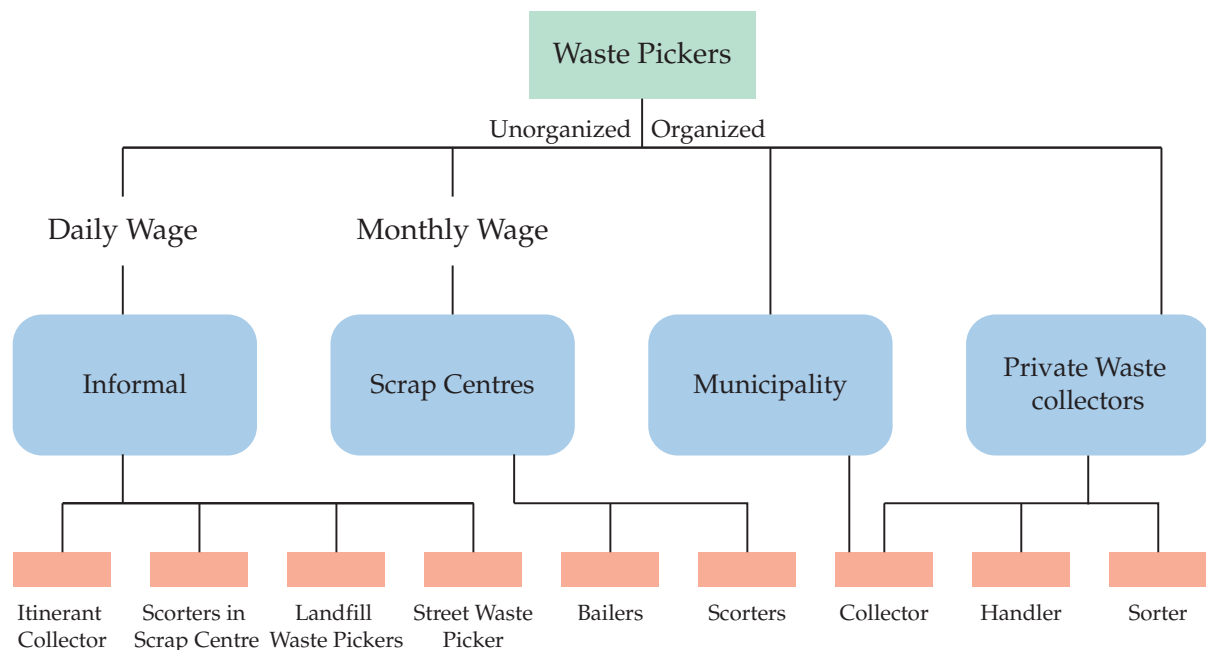


Figure 1 Waste pickers

## Flowchart of waste lifecycle

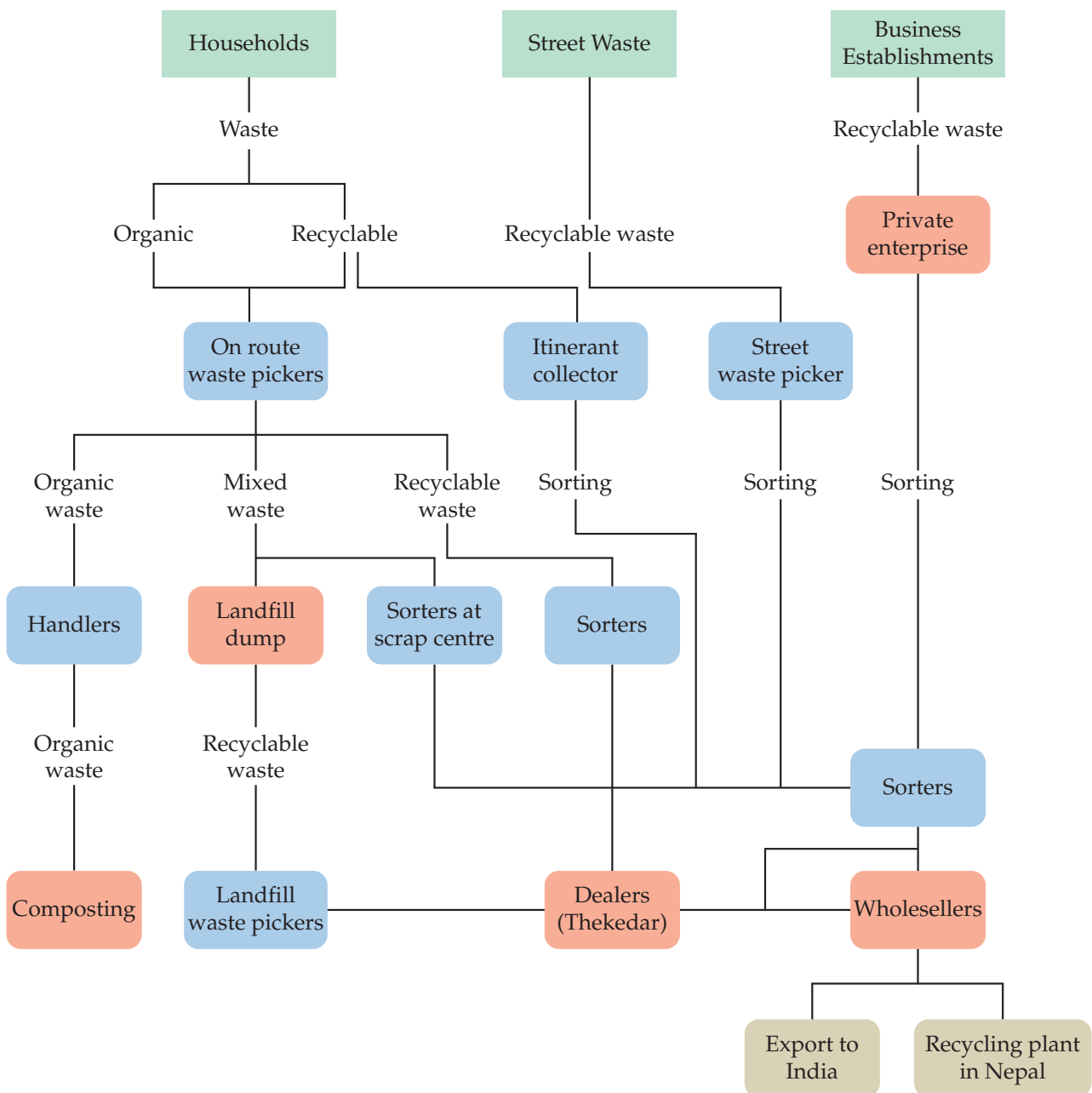


Figure 2 Flowchart of waste

As mentioned, waste pickers either work in affiliation to an organization or are self-employed. Waste pickers, both affiliated and unaffiliated, collect waste directly from the source whether that is a household, a business establishment (restaurants, hotels, shops, etc.), or from the streets. They are at the bottom of the value chain. The recyclable waste is collected and then sorted by 'sorters' at scrap centers or at the private waste management companies. Some companies also choose to hire contractors who then employ daily wage labourers. All the recyclable items end up with small scrap dealers, who also buy from street waste pickers and itinerant collectors. The small scrap dealers then bail the recyclable items and sell them to large scrap dealers or wholesalers. The recyclables are then either exported to India informally or are sold to recycling companies in Nepal, which closes the waste loop.

## 2. METHODOLOGY

### 2.1 Preliminary Study

A literature review was conducted by reviewing all existing documents related to waste pickers and waste management in Nepal. These documents included reports, policies, acts, and factsheets published by organizations, companies, and both the local and national government.

A list of the economically-relevant cities was developed for the survey, and a list of relevant organizations was also prepared.

### 2.2 Approach

In order to gain an in-depth understanding of the present context, a qualitative approach to the study was adopted, including face-to-face interactions with waste pickers and relevant organizations. In consultation with WIEGO, two sets of structured questionnaires were prepared: one for waste pickers engaged in waste picking and sorting; and one for organizations involved with waste pickers. These questionnaires were designed to learn more about the characteristics of waste pickers and the contributions of organizations that supported them.

### 2.3 Data Collection

The study was conducted in major cities all over Nepal, and, since a qualitative approach was adopted, a relatively small sample size was involved (see table 1). Interviews were conducted at affiliated pickers' workplaces i.e., at scrap dealers, landfills, private companies' offices, and, for street waste pickers and itinerant buyers, on the streets. As waste pickers are normally reluctant to give interviews, non-probability sampling (Convenience Sampling) was preferred for the survey; here, samples were selected by the interviewer based on interviewer's judgment and the willingness of the participant. The sample covered gender, age, and types of waste pickers (affiliated and self-employed).

A total of 92 interviews with waste pickers and 24 interviews with organizations were conducted. The field work was conducted in three phases in 2021: in February, the first round was conducted in Western and Central Terai Nepal; from March to April, the second round was conducted in Eastern Nepal; and in mid-April, the third round was conducted in the Kathmandu Valley. The respondents were verbally informed about the objectives of the study before the interview, and their consent for audio recording and photographs was taken. Interviews were conducted in the Nepali, Nepal Bhasa, and Hindi languages. The duration of the interviews ranged between 10 to 30 minutes.

A Focus Group Discussion (FGD) was conducted in one place only due to the unavailability of waste picker interviewees. Similar to the personal interviews, the participants in the FGD were verbally informed about the objective of the study. Their consent for audio recording and photographs was also taken. The FGD was conducted for 25 minutes. The focus group had 20 participants—all of whom were male waste pickers.

The area-wise sample of waste pickers and organizations sorted according to municipality is presented in table 1 below.

Table 1: Sample Size of the Study

Survey area	Sorters	Handlers	Street Waste pickers	Landfill waste pickers	On route waste picker	Itinerant buyers	Organizations
Kathmandu	12				7		7
Kirtipur					5		1
Lalitpur	7	2					2
Hetauda	5			1	2		1
Chitwan	7		2	3		1	1
Nepalgunj	3			2		2	3
Siddharthanagar				2			1
Gaidakot	1						
Butwal					1		1
Rajbiraj	1		1				1
Dhankuta				2	1		1
Biratnagar	11			1			1
Damak			1		1		1
Bhaktapur	3						1
Itahari				1			1
Dharan	1			1			1
Lahan	2						
Total	53	2	4	13	17	3	24

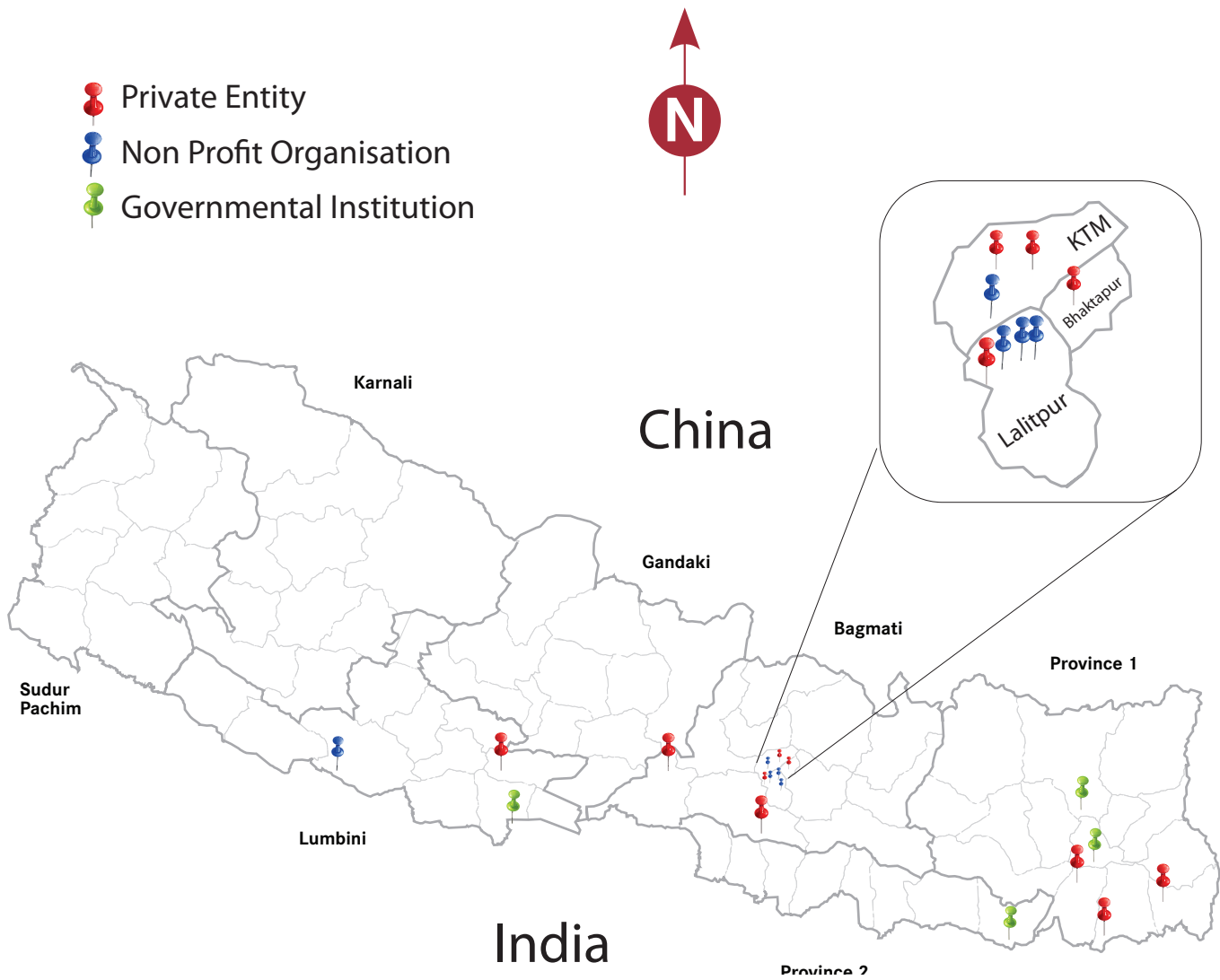


Figure 3: Map of Nepal Displaying Entities Interviewed During Survey

## 2.4 Data Analysis

The audio-recorded interviews and FGDs were transcribed, then English interpretation of the interviews and FGDs was carried out. The obtained data were entered in MS Excel and analyzed in Excel and SPSS.



## 3. RESULT

### 3.1 Informal Waste Picker's Characteristics

#### 3.1.1 Waste Picker Demographics

A total of 92 waste pickers between the age of 14 and 65 were surveyed during the study, out of which 66 participants were men and 26 were women. A detailed tabular description of the demographic and social characteristics can be seen in table 2.

Table 2: Demographics of Respondents

Variable	Group	Male		Female		Total	
		Number	%	Number	%	Number	%
Affiliation	Unaffiliated	46	70%	20	77%	66	72%
	Affiliated	20	30%	6	23%	26	28%
Age group	<16	0	0	1	4%	1	1%
	16-25	18	27%	7	27%	25	27%
	26-35	20	30%	13	50%	33	36%
	36-45	20	30%	2	8%	22	24%
	>45	8	12%	3	12%	11	12%
Nationality	Nepali	58	88%	25	96%	83	90%
	Indian	8	12%	1	4%	9	10%
Citizenship	Yes	49	84%	15	60%	64	77%
	No	9	15%	10	40%	19	23%
Education	Illiterate	7	11%	8	31%	15	16%
	Primary	11	17%	3	12%	14	15%
	Lower Secondary	36	55%	12	46%	48	52%
	Secondary	10	15%	3	12%	13	14%
	Higher Secondary and above	2	3%	1	4%	3	3%

Living condition	Scrap dealer	5	8%	0	0%	5	5%
	Rent	38	58%	16	62%	54	59%
	Slums/ Temporary Shelter	3	5%	1	4%	4	4%
	Own home	20	30%	9	35%	29	32%
Marital status	Single	13	20%	2	8%	15	16%
	Married	52	79%	23	88%	75	82%
	Widowed	1	2%	1	4%	2	2%
Migrant	Internal migra- tion	39	59%	15	58%	54	59%
	No migration	22	33%	10	38%	32	35%
	From India	5	8%	1	4%	6	7%
Involvement years	<1	8	12%	7	27%	15	16%
	2 to 5	22	33%	10	38%	32	35%
	5 to 10	18	27%	5	19%	23	25%
	>10	18	27%	4	15%	22	24%
Type of waste picker	Sorter	34	52%	18	69%	52	57%
	Landfill	7	11%	6	23%	12	14%
	Street	3	5%	1	4%	4	4%
	On-route	18	27%	0	0%	18	20%
	Handler	1	2%	1	4%	2	2%
	Itinerant buyer	3	5%	0	0%	3	3%

## Type

The majority, or 57 per cent, of the respondents were sorters, followed by 20 per cent who were on-route collectors, and 2 per cent who were handlers. Women were generally more engaged in less labour-intensive roles such as sorting while men were engaged in all sorts of waste picking roles, including on-route collection and street waste picking. Twenty-three per cent of women and 30 per cent of men worked in affiliation to an organization, where they sorted recyclables and handled organic waste. Seventy-seven per cent of women workers and 70 per cent of men workers were self-employed; these workers collected recyclables from landfills and sold them to scrap dealers.

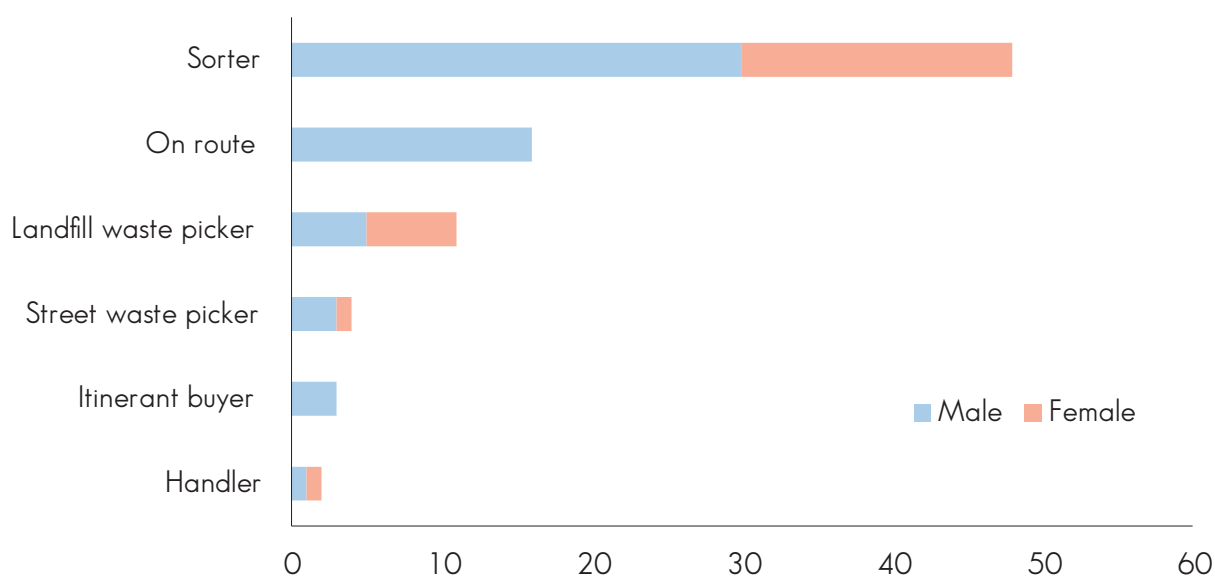


Figure 4: Types of Waste Pickers

## Age Group

While the waste pickers belonged to different age groups, a majority (36 per cent) belonged to the 26 to 35 age group. Fewer respondents belonged to the 45+ age group. One child was observed selling recyclables in the scrap center in the city, but due to the language barrier, the child's responses were recorded by the scrap center owner. According to the response, the child was eight years old and was selling scrap as a way to make extra pocket money.

## Citizen

The waste picking sector is dominated by workers of Nepali origin (n=83) but workers of Indian (n=9) origin were also observed in bordering areas and in the Kathmandu Valley. Waste pickers of Indian origin were found to have actively worked for many years as itinerant collectors, sorters, and landfill waste pickers. Thirty per cent of the respondents of Nepali origin were affiliated to some organization, whereas only three waste pickers of Indian origin were affiliated to an organization. Since most organizations require a proof of citizenship for employment, waste pickers of Indian origin were seldom found working for organizations.

## Identity Card

Most of the waste pickers of Nepali origin didn't have any sort of identity or citizenship card but were aware of the importance of citizenship cards. Since the majority of the respondents were either orphans, runaways, or women who had been married more than once, they hadn't applied for citizenship because, in Nepal, the process of citizenship requires the identification of parents, and it becomes a lengthy process if the parents are not available. Only 77 per cent (n=64) of the waste pickers of Nepali origin had obtained citizenship cards. Not all waste pickers with citizenship cards had acquired Personal Account Number (PAN) cards; only affiliated waste pickers had these cards. These affiliated workers then used their PAN card to transition from the informal to formal economy as it records their tax payment to the government. Waste pickers of Indian origin were quite aware of the importance of citizenship cards and had Aadhar Numbers (Unique Identification Number) and Cards. The Aadhar Card allows the holder to use all the government subsidies and schemes they are eligible for.

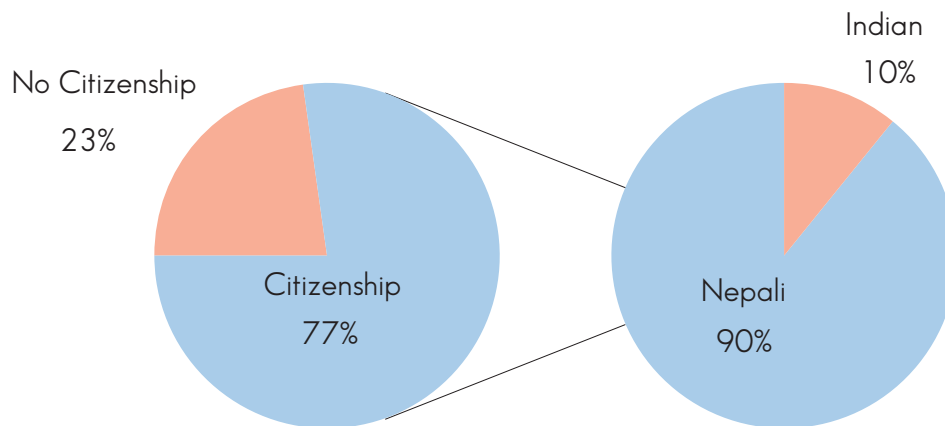


Figure 5: Nationality and Citizenship Card

## Migration Status

A majority (66 per cent) of the waste pickers surveyed were migrants, and of those, 59 per cent were internal migrants and 7 per cent had migrated from India. All the migrant workers were living either in temporary or rented shelters or at scrap centers. Only 35 per cent of waste pickers, none of whom were migrants, had permanent homes. Migration status and the nature of shelter were directly correlated.

## Marital Status

Eighty-two per cent of the respondents were married, sixteen per cent were single, and two per cent were widowed. Fifty per cent of the respondents were the sole earners for their family, which means their family completely depended upon their earnings; these were most often male respondents. Two of the women respondents were the sole earners for their family either because they were widowed or because of the health condition of their husband.

## Ethnicity

Since this study was conducted covering the majority of the country's economic hubs, the respondents were composed of several ethnic groups. The majority of respondents belonged to the Janjati (44 per cent), which include the indigenous groups Magar, Lama, Shrestha, Rai, and Tamang. Madhesis were the second largest ethnic group (15 per cent), belonging to the Terai region but actively working in the Kathmandu Valley and the Terai region. Brahmins and Chhetris collectively comprised 18 per cent of respondents, and these groups worked in Nepal's lowlands. Dalits and Muslims were the least reported ethnic groups, with a seven per cent and a five per cent presence, respectively, in the lowlands. In the valley, the Janjati and Madhesi ethnic groups dominated the informal waste sector. This shows that the sector is representative of all ethnic groups, breaking the common understanding that only Dalits are waste pickers.

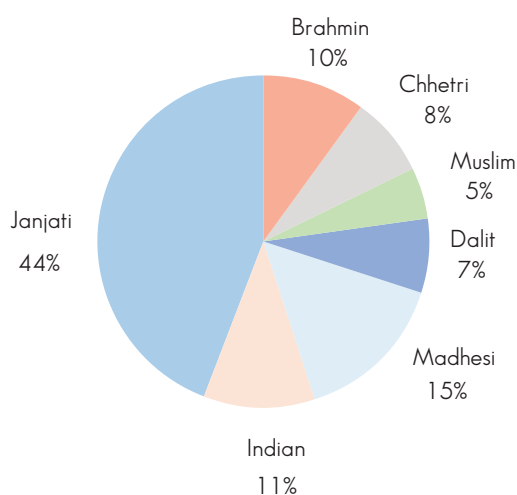


Figure 6: Ethnicity of Waste Pickers

### 3.1.2 Driving force to Waste Picking

The waste picking sector is an open market with easy entry points and flexible work schedules. This sector is seasonal or daily in nature. It is not as well-respected as others, but many of the waste pickers had no issues working within it. The work is easily learned and requires no education (most of the interviewed waste pickers hadn't completed higher secondary) and little training. And, as it is for many of the poorest people around the globe, it is one of their only livelihood options.

The general motivations or driving forces behind respondents joining the waste picking sector are described below:

- **Orphan at a young age:** Three per cent of the respondents' parents had passed away from natural calamity or health issues, so poverty guided these workers towards the waste picking sector for their daily livelihood. They never left this occupation and were involved in it for more than 15 years.

- **Career inheritance:** Waste picking could be an inherited job due to respondents' exposure to collecting and sorting waste from an early age as they were required to fill in for their parents for sick days and leisure. Their parents took them to landfills when they were young, and because of this, respondents returned to the waste picking sector even after being exposed to other jobs. Eight per cent (n=7) of respondents came to waste picking because of this career inheritance, among which six were Nepali citizens who belonged to Indigenous and Muslim groups. An Indian landfill waste picker whose family had resided in Nepal since he was quite young had also been involved in waste picking since his childhood.

- **Flexibility:** Freedom, flexibility, adaptability, and more income in waste picking in comparison to other jobs such as housekeeping, driving trucks, loading vehicles, labouring, and painting drove respondents towards this sector. This field is also seasonal, so respondents were not obliged to work all the time.

- **Poverty and illiteracy:** Lack of education due to poverty also hindered workers' opportunities to get jobs in other sectors. The majority of respondents were either illiterate or hadn't completed secondary education (table 2) due to poverty, a lack of interest in education, and/or getting orphaned at an early age, which meant they had to earn their own living.

### Detailed description of motivation in joining and continuing in waste picking sector

Women worked in the waste sector either because of poverty, lack of opportunity, and/or because they needed an extra income for the family, whereas men were involved because of the freedom and higher earnings the sector offered compared to other available jobs for people with less than a secondary level of education. Almost all respondents followed their friends and relatives into this sector. Detailed reasons for joining the waste picking sector is divided according to age group, gender, and affiliated or unaffiliated status in table 3.

Table 3: Reasons for Joining the Waste Sector

Gender	Age group			
	0 to 15	16 to 45	46 to 63	More than 63
Female	<ul style="list-style-type: none"> <li>• Pocket money/ extra income for the family (n=1)</li> </ul>	<ul style="list-style-type: none"> <li>• Higher pay (n=7)</li> <li>• Lack of opportunity (n=6)</li> <li>• Unsupportive spouse/ financial issue (n=2)</li> <li>• Extra earning for the family (n=6)</li> </ul>	<ul style="list-style-type: none"> <li>• Health issue of spouse (n=1)</li> <li>• Children's not earning (n=1)</li> <li>• Extra earning for the family (n=1)</li> </ul>	<ul style="list-style-type: none"> <li>• Helping hand to family enterprise (n=1)</li> </ul>
Male		<ul style="list-style-type: none"> <li>• Higher pay (n=35)</li> <li>• Lack of opportunity (n=11)</li> <li>• Flexibility (n=14)</li> </ul>	<ul style="list-style-type: none"> <li>• Unsupportive children/ children not earning (n=3)</li> <li>• Daily wage (n=2)</li> </ul>	<ul style="list-style-type: none"> <li>• Extra earning for the family (n=1)</li> </ul>

# Stories of motivation for joining waste picking

"I came to this sector hoping to make more than working as a household worker. I am a widow with no support from any family members. I, therefore have to make sufficient money for raising three children" Asha Singh Thakuri, Nepalgunj

"I've been working as a fish seller for many years. The business was going well but after Covid, the border closed and we were not allowed to buy fish from India. My uncle lured me to this scrap center hoping to make money until the border reopens. There is a need to work as my husband is an alcoholic person and doesn't provide any money for the family." Anita Chauhan, Biratnagar

"Landfill is an open market; I can work all day and earn NPR. 1500 or sometimes I get bored and earn NPR. 500. The flexibility of working in landfill and earning according to the work that has been done, lured me. I have worked as a helper, labourer but I like working where there is freedom" Dipak Singh, Siddharthanagar



### 3.1.3 Years Involved

The length of time waste pickers had been working in the sector according to affiliation and gender are described in the table below. In the case of affiliated waste pickers, 76 per cent of the respondents had been involved for more than two years, whereas 86 per cent of the unaffiliated waste pickers had been involved for more than two years. Twenty unaffiliated waste pickers had been involved for more than 10 years, which suggests their livelihoods have depended on waste picking. The study also shows that more women were self-employed than affiliated to an organization.

Table 4: Years Involved

Involvement in years	Unaffiliated		Affiliated	
	Male	Female	Male	Female
Less than 1	5	7	3	0
2 to 5	14	8	8	2
5 to 10	14	1	4	4
More than 10	16	4	2	0

Waste picking is intensive work, and the respondents said they work from 8 to 12 hours a day. Affiliated waste pickers mandatorily worked from 5 to 9 hours depending upon their shift, with average work hours of eight hours a day, six days a week. Unaffiliated waste pickers' hours varied according to the type of waste picker they were. Their workdays in a week also varied accordingly. Landfill waste pickers normally worked from early morning to noon (seven to eight hours), street waste pickers worked all day, itinerant buyers worked six to eight hours a day, and sorters normally worked eight to twelve hours, but with flexibility. The majority of sorters worked six days per week, and those wanting extra pay worked every day of the week. A graphic representation of the work hours and workdays in a week is presented below.

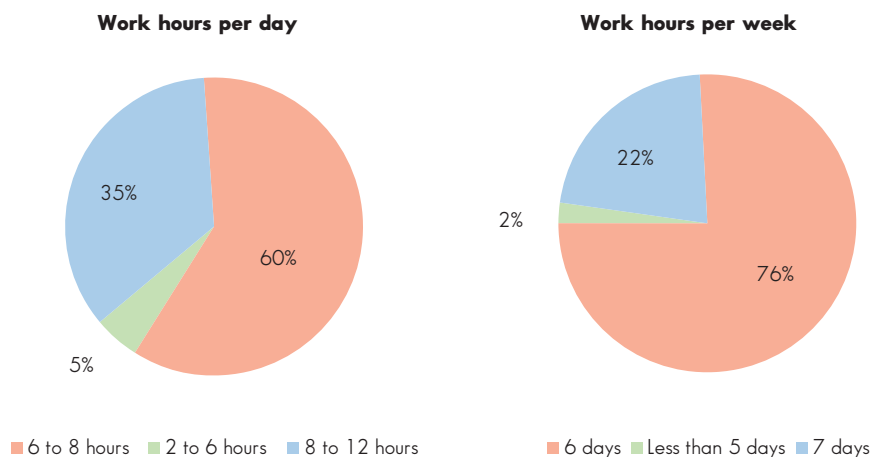


Figure 7: Work Hours per Day and Workdays per Week

### 3.1.4 Income and Job Satisfaction

Table 5: Monthly Wage of Respondents

Amount in NPR	Number	Unaffiliated			Affiliated			
		Min	Max	Average	Number	Min	Max	Average
<10,000	6	3000 (26\$)	9000 (77\$)	6800 (58\$)	-	-	-	-
10,000 to 20,000	34	10000 (86\$)	20000 (171\$)	15156 (130\$)	14	12000 (103\$)	20000 (171\$)	13942 (119\$)
20,000 to 30,000	26	21000 (180\$)	30000 (257\$)	27136 (233\$)	12	22000 (188\$)	28000 (240\$)	24454 (210\$)

The average monthly income of unaffiliated waste pickers was higher than that of affiliated waste pickers. On the other hand, affiliated workers had a higher minimum wage as institutions are obliged to provide a bare minimum of NPR 13,942. Unaffiliated waste pickers worked extra hours and collected and sorted more recyclables, and they were paid according to the number of materials collected, which means they could earn a higher income than the affiliated waste pickers. The sorters at scrap dealers' shops and landfill waste pickers earned a slightly higher income than the affiliated waste pickers. Those working on a daily wage payroll earned NPR 400 to 1,500 per day to a maximum of NPR 45,000 if they worked for one month continuously. Whereas those on fixed monthly payroll contract earned between NPR 9,000 to 28,000.

Street waste pickers' wages were the lowest in the sector because scrap dealers bought the recyclables which they collected at a lower margin than the market value. For example, a waste picker gets paid NPR 5 per kg of PET bottles, whereas the market value rounds off at NPR 25 per kg. The scrap dealers exploit street waste pickers in terms of their understanding of the gap around market value and their vulnerability.

Respondents affiliated with organizations on a monthly basis earned NPR 12,000 to NPR 28,000. Organizations such as Nepsemyak, Next Era Energy, and Dhankuta Municipality provided waste pickers with Social Security Fund (SSF). This provides sources of savings for workers' futures and easy loans at a low interest rate.

Women's wages varied from a minimum of NPR 9,000 to a maximum of NPR 25,000, with the average wage of NPR 14,315. Most women, whether they worked on a daily basis or a monthly contract, were paid poorly in comparison to men in majority of the cities.

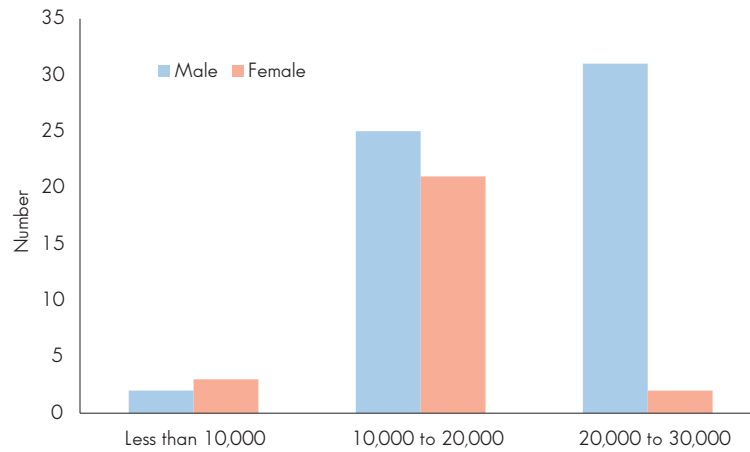


Figure 8: Salary of Respondent According to Gender

### Wage variance

"If the workers are lazy then, they get monthly salary which is fixed and low. If the workers are hardworking they get paid on a daily basis or on a collected weight basis. Two of the waste pickers in Syambhu are on monthly payroll as they were lagging behind. Whereas, rest of the 10 waste pickers earn decent amount of money." Nepsemyak supervisor, Syambhu.

### 3.1.5 Living and Other Expenses

Most respondents indicated their average expenditure was high. In Nepal, fifty-nine per cent lived in rental housing and 32 per cent owned their own homes (table 2). The majority of respondents (66 per cent) had migrated for work due to reasons like separation from family, running away from home, and searching for better opportunities and environments. They migrated from rural parts of the country to the urban areas and economic hubs where living expenses are comparatively higher. Other expenditures included children's education, debts, health services, food, and basic utilities. Respondents were living below means in order to save money for future purposes.

Three respondents in the Terai belt travelled to Nepal from India for work on a daily basis. Their living expenses were similar to that of the Nepali respondents without any extra travel expenses as they used a bicycle for work.

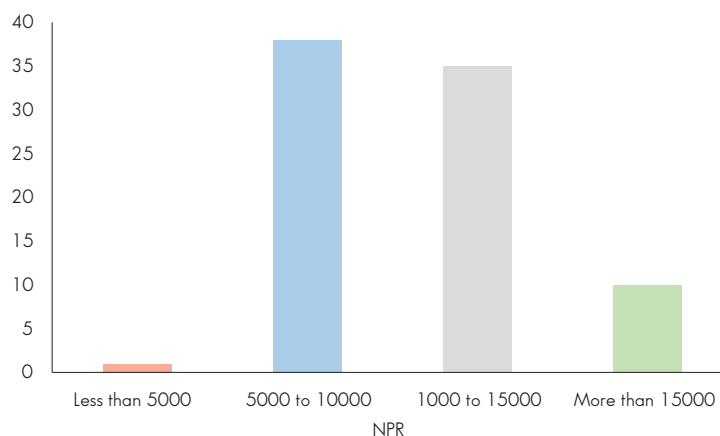


Figure 9: Expenditure of Respondents

### 3.1.6 Job satisfaction

Male waste pickers seemed comparatively more satisfied with their jobs than the women. Women worked in this field due to poverty, lack of opportunity, and the need to earn an extra income for their families, whereas men worked in the sector because it offered autonomy and higher earnings. For women, job satisfaction and wages were directly proportional; women were unsatisfied because they received lower wages. Most of the men (95 per cent) were either satisfied or had neutral feelings about the waste picking sector and about their earnings. Very few men reported being unsatisfied with their work in the waste picking sector.

Table 6: Job Satisfaction

Satisfaction	Unaffiliated		Affiliated	
	Male	Female	Male	Female
Satisfied	18	5	8	0
Neutral	26	11	11	3
Unsatisfied	3	3	0	4

Table 7: Evaluation of Satisfaction by Gender

		Satisfaction			
		Unsatisfied	Neutral	Satisfied	
Gender	Female	Count	7	13	6
		% within Gender	27	50	23
	Male	Count	3	37	26
		% within Gender	4.5	56.3	39.3
Total	Count	10	50	32	
	% within Gender	10.9	54.3	34.7	

P value = 0.008

The p-value of a chi square test between gender and satisfaction level is less than 0.05 (0.008), thus the null hypothesis that gender and satisfaction are not correlated is rejected.

### 3.1.7 Job Security in future and access to waste

Just over twenty-seven per cent of respondents answered that waste picking was a secure job, but men were comparatively less worried about finding another job. A sense of job security was higher in men than in women in both the affiliated and unaffiliated sectors. The sense of job security according to gender and affiliations are shown in tabular format below.

Table 8: Job Security

	Unaffiliated		Affiliated	
	Male	Female	Male	Female
Yes	16	4	9	0
No	31	15	10	7

Men were less worried about alternatives because the majority had experience in other fields, which means they seem to have other options like working in the labour field or migrating to Gulf countries for work. Women seemed either unclear or would prefer to join agriculture or run small businesses (table 9).

Table 9: Alternative Job Possibilities

Male	Female
Gulf countries	Running small business (Shops, tailoring)
Driving	Continuing old business (Fishmonger)
Working as labour	Agriculture and poultry
Running small business	Household worker
Any job that they get	Any job that they get

### 3.1.8 Social Issues faced by waste pickers

**Discrimination:** Discrimination against waste pickers was not reported by respondents during the study, but ten years ago waste pickers faced discrimination based on ethnicity in the Kathmandu Valley. This discrimination reduced after awareness campaigns and an increase in literacy. Respondents also did not report harassment and discrimination in the workplace from coworkers. That said, one female landfill waste picker reported that waste pickers were vulnerable to exploitation.

# Exploitation of vulnerability

"A year ago, I had fever so my younger daughter (age=13) went to the landfill instead for recyclable collection. But unfortunately, that day, she was raped by truck driver in the jungle besides the landfill. With the help of all waste pickers in landfill and organization, the culprit is behind bars. My daughter got an offer of marriage after the incident and due to embarrassment, I married her off." Maya Shrestha Magar, Bharatpur



**Bias:** Gender segregation was observed in terms of roles for workers affiliated to private SWM companies, where women had roles with less physical work and lower wages. For unaffiliated workers, both genders had equal role responsibility; women were observed using heavy machinery in scrap centers and negotiating with other waste pickers and buyers, which showed the active participation of women in this field. But even in these cases, women were paid poorly in comparison to the men in majority of the cities.

**Health Condition:** The respondents did not identify any chronic health problems from working in the waste sector. However, injuries like cuts from metal and glass scraps, needle-stick injuries, road traffic accidents, and dog bites were commonly reported. After injuries, waste pickers normally got tetanus shots from health practitioners, but they rarely consulted doctors. A few of the waste pickers had never received a tetanus shot, but, surprisingly, most reported to be in good health. Minor health issues like coughs, cold, diarrhea, and fever were less reported.

**Working Condition:** The majority of respondents reported their workplace was in a poor state, with pungent smells, sickening toilets, and roaming flies. In addition, landfill waste pickers, itinerant buyers, and sorters work in scorching sun with very little protection during the summer. Respondents, even those affiliated to organizations, brought food and water to their workplace. Respondents observed that they infrequently used personal protective equipment (gloves, masks, and protective clothing) because of the inconvenience. Women reported using shawls as face coverings and wearing boots as forms of protection.

### Workplace Satisfaction

“The owner of this scrap center is very helpful. I get paid for overtime along with lunch and drinking water. Even the toilet is clean and everyone here respects me. This is comparatively a better working place than other scrap centers. Previously, I used to work at a paper factory but my friend pursued me to work in this sector. I really enjoy working here as I’m getting basic facilities and a higher wage than my last job.” Rita Magar, Bharatpur

**Child at Workplace:** Women with small children brought them at workplace to look after even though the workplace was unhygienic. Since the majority of these workers were migrants, there was no one else to look after their children. With both the husband and the wife working, two of the women brought their children to workplace during school holidays. The remaining women (42.3 per cent) didn’t prefer to bring their children to the workplace.

### 3.2 Organizational Aspect

Table 10: Institutional, Private Sector and Non-Profit Actors Involved with Waste Pickers

Type	Sub type	Name	Location
Institutional Actors	Sub-metropolitans	Nepalgunj Sub-Metropolitan	Nepalgunj
		Dharan Sub-Metropolitan	Dharan
	Municipalities	Siddhathanagar Municipality	Siddharthanagar
		Dhankuta Municipality	Dhankuta
		Rajbiraj Municipality	Rajbiraj
Private Sectors	Private SWM companies	Batawaraniya Sundar Nepal	Butwal
		Waste Management Group	Biratnagar
		Next Era Energy	Damak
		Waste and Environment Management	Itahari
		Green and Clean City Service	Hetauda
		Green Nepal City	Bharatpur
		NepsemyakSewa	Kathmandu
		KirtipurFohorBywasthapanSewa	Kirtipur
Service Providers	Social enterprises	Khalisisi	Kathmandu
		Biocomp Nepal	Lalitpur
		Blue waste to value	Kathmandu
		Doko Recycler	Bhaktapur
	Cooperative	SanyuktaSarsafaiJaagaran Savings and Cooperative Ltd	Kathmandu
Nonprofit		Medecins Du Monde France (MdM France)	Kathmandu
		BalmikiSamaj Nepal	Nepalgunj
		Nepal Pollution Control and Environment Management Centre (NEP-CEMAC)	Lalitpur
		SamyuktaSafaiJagaran (SASAJA)	Kathmandu
		MdM France, Green Path Nepal	Kathmandu
	Women Environment Preservation Committee (WEPCO)	Lalitpur	

The above table represents the lists of organizations interviewed for the study. These organizations are involved with waste pickers either through employing them or working for their welfare.

In Nepal, municipal bodies are responsible for the management of solid waste within the municipality. While some municipalities handle waste management themselves, many provide tenders to third party private companies. These companies provide door-to-door collection or provide a collection point system. Social enterprises also work in recyclables collection through an online platform interface. All these entities directly employ waste pickers as collectors, sorters, and handlers. Scrap dealers also employ waste pickers, but scrap dealers fell outside the scope of this study.

### **3.2.1 Role of private SWM companies**

Private SWM companies were mostly involved in waste collection as a form of business enterprise. Companies were established by sole proprietors, shareholders, or a merger of many SWM companies, each with an equal stake in the company. These companies hire 5 to 200 waste pickers on a monthly wage basis of NPR. 8,000 to NPR. 30,000 (USD 68 to USD 257). These companies do not hire anyone in the age group of above 50.

#### **Hiring, Contract and Permanency**

Waste pickers are mostly hired through referrals, and the waste pickers may or may not be provided with contracts. Next Era Energy, Nepsemyak and KFBS provide contracts and agreement papers. Since most of the waste pickers were known and dedicated to this field and have been working in this field for a long time, the rest of the organizations do not have much concern about the contracts. In terms of permanency, Nepsemyak is the only organization in Nepal that provides permanent jobs to waste pickers. Nepsemyak also happens to be one of the largest SWM companies in Nepal.

#### **Wage and Other Benefits**

According to the Nepal Labour Act (2017), the minimum monthly wage of any employee should be NPR. 13,450 (USD 134). Most of the organizations (seven) studied did pay wages according to the Nepal Labour Act, but the wages themselves varied depending on the gender of the worker and the type of work, or it was determined by management. The minimum wage offered was NPR. 8,000 and the maximum wage was NPR. 30,000. Wage was also determined by whether the company sells the recyclable waste itself or if it allows waste pickers to sell the recyclable waste. When waste pickers were allowed to sell recyclable items, they were able to earn an extra NPR 20,000 (USD 171) per month. When employed waste pickers were allowed to sell waste, companies paid them only minimum wages. Green and Clean City Service was the only company that provided a minimum salary but didn't allow waste pickers to sell recyclables.

Men and women had different sets of work in private SWM companies. Women had comparatively easier jobs like sweeping, so their pay grade was lower than that of men, who were involved in heavier jobs. These salaries were provided as hand cash because most waste pickers do not have a bank account. However, giving out hand cash reduces transparency during salary distribution.

Table 11: Benefits Companies Extend to Workers

Private entities	Health Check Up	Food Allowance	Insurance	Safety Kits	Social Security Fund (SSF)
			COVID	Health	
Batawaraniya Sundar Nepal			✓		✓
Waste Management Group					✓
Next Era Energy	Planning	✓		✓	✓
Waste and Environment Management					✓
Green and Clean City Service					✓
Green Nepal City					✓
NepsemyakSewa	✓		✓	✓	✓
Kirtipur Fohor Bywasthapan Sewa					✓

Nepsemyak provided its employed waste workers with discounts in a nearby hospital for checkups and treatment. This was the only entity that provided health insurance and COVID insurance up to 2020. Next Era Energy is a new SWM company that is providing welfare for its waste workers by offering health insurance and a food allowance. All the surveyed companies provide uniforms, ID, and PPE (gloves, boots, masks, and caps). Nepsemyak, the only company that hires waste pickers as permanent workers, provides a Social Security Fund (SSF) as well.

### Social and livelihood upliftment

Besides providing monthly wages, two companies provided counselling sessions for the reduction of alcohol consumption among waste pickers. Two of the companies are planning to offer free education for children. These companies have been providing waste pickers with a sense of security with regular pay, motivation, and capacity building.

### Helping hand from organization

“Normally, waste pickers are from marginalized backgrounds and are orphans. They do not have citizenship or any form of identity. A few years back, I tried to get the citizenship card of one of my employee waste pickers. I went to Sidhupalchowk, did all the legal procedures and got him his citizenship card. But, after obtaining his citizenship he left the job after 2 months. I came to know he made passport and went to Gulf country for work” Jenson Maharjan, BW2V.

### Formation/alliance formation willingness

The umbrella alliance, Solid Waste Management Association of Nepal (SWMAN), which is Kathmandu-centric, focuses on reducing conflicts among companies during tender, running awareness campaigns, and advocating to the government. In terms of equity, several private SWM companies collaborated to form new private SWM companies such as the Waste Management Group and Green Nepal City to operate in other parts of the country, which demonstrated an alliance of this extent is possible.

### Waste pickers representation in the company

None of the waste pickers were provided with a stake in companies as companies are profit-oriented. However, the company management addressed the voice of waste pickers through their supervisors. Issues such as flexible working hours and fair pay had been coming up for some time and the supervisors finally addressed the waste picker’s issues to the management. As a result, those issues and concerns were respected and solved through mutual agreements.

## 3.2.2 Role of Municipal Bodies

The environmental and sanitation department of municipalities overlook municipal solid waste. In these departments, an environmental chief supervises waste pickers and waste management. These departments in each municipality primarily work in collecting and dumping waste and generally hire 18 to 150 waste pickers on a monthly wage basis.

### Hiring, Contract and Permanency

Municipal bodies hire most of the waste pickers on a temporary basis. The Nepalgunj sub-metropolitan and Dhankuta municipalities were the only municipal bodies that provided job permanency, but only for a few (one to three) waste pickers. Here, permanency depended upon the waste pickers’ service time. Municipalities mostly hired waste pickers through referrals and according to the municipality’s needs. Only the Nepalgunj sub-metropolitan municipality provided contracts. The Nepalgunj sub-metropolitan municipality requires waste pickers to hold a Nepali citizenship card.

### Wage and Other Benefits

The municipal bodies pay according to Nepal Labour Act (2017), which is NPR. 13,450 (USD 115) as the minimum monthly wage. The wage actually offered varied between the minimum NPR. 13,450 and maximum NPR. 30,000 (average NPR. 18,568). Since most municipal bodies only collect waste materials, the waste pickers are allowed to sort and sell the recyclable items on their own, which adds extra income. However, the Nepalgunj sub-metropolitan municipality doesn't allow workers to sell recyclables because the municipality itself keeps the profits from recyclables sold to scrap dealers.

Men and women had different sets of work within municipalities. Women had jobs like sweeping, so their pay grade was lower than men's, who were involved in "more physical" jobs. These salaries were provided as hand cash because most of the waste pickers do not have bank accounts. However, paying salaries as hand cash reduces transparency.

### Benefits

- The Nepalgunj sub-metropolitan and Dhankuta municipalities provided COVID insurance during the first wave of COVID-19. No other form of insurance is being provided by the local bodies.
- All local bodies provided PPE, including caps, gloves, and boots.

### Livelihood Upliftment

Local bodies did not work towards livelihood upliftment. Waste pickers were supported by the municipal bodies in case of accidents or injuries, but specific capacity-building programs have not been held.

### 3.2.3 Role of Social Enterprise

Social enterprises were mostly Kathmandu Valley-centric and performed pick-up services based on an online application (web and mobile apps). These social enterprises generally employed 9 to 19 waste pickers on a monthly wage basis.

These Social enterprises were formed by a group of people wanting to bring about changes in the environment and improve the circumstances of waste pickers

### **Hiring, Contract and Permanency**

Like private SWM companies, social enterprises mostly hired waste pickers through referrals. All social enterprises provided contracts to waste pickers although they did not provide job permanency. Blue Waste to Value, a social enterprise based in Kathmandu, had to reduce staff, including waste pickers, due to the COVID-19 pandemic. Doko Recycler and Biocomp Nepal have been running their operations despite the pandemic. Social enterprises require their workers to be Nepali citizens. Khalisisi is an enterprise that doesn't hire waste pickers; it is, rather, an online platform for connecting waste generators to waste entrepreneurs.

### **Wage**

Social enterprises pay wages according to the Nepal Labour Act (2017), with a minimum wage of NPR. 13,450 (USD 115) per month up to a maximum wage of NPR. 30,000 (USD 257). Wages also depend on the worker's experience and time served in the company. Unlike private SWM companies and local bodies, social enterprises have informed their workers about bank services, and their salaries are deposited in the bank.

### **Benefits**

- Doko Recycler is the only enterprise that provides food for its workers. The other enterprises did not provide food or food allowances.
- Doko Recycler and Biocomp Nepal provided health insurance.
- Doko Recycler, Blue Waste to Value, and Biocomp Nepal provided COVID insurance.
- All social enterprises provided uniforms, ID, and PPE (caps, gloves, masks, and boots) unlike at private SWM companies and local bodies, the workers were observed wearing PPE at work.

### **Livelihood Upliftment**

Enterprises have been working towards empowering their workers through training sessions and motivation. Doko Recycler teaches principles of saving to their workers for their future.

### **Waste pickers representation in the company**

Management respected and addressed waste pickers issues. These were also profit-making organizations; waste pickers were not represented on their board.

### 3.2.4 Role of Nonprofit Organizations

Seven non-profits were interviewed during the study, five of which were based in the Kathmandu Valley and two in Nepalgunj.

Since 2018, MdM-France, an NGO, has worked on behalf of waste pickers' health and the increased sanitation of their working conditions in Nepalgunj and Kathmandu. It has offered monthly training to workers of the sub-metropolitan on sanitation through community mobilizers. To date, it has trained 370 waste pickers. The waste pickers in scrap centers were reluctant to join the sanitation training; they do not value such training and would rather spend their time on collecting waste as it would earn them extra income. In Kathmandu, MdM-France has also been working for the safety and health of informal waste pickers in landfills. It is also leading and funding the "Healthy Waste Workers for Sustainable Waste Management" project, which aims to establish six non-profit enterprises and help 300 waste pickers in three different areas of the valley. This project is following in the footsteps of the PRISM project's recommendation, which has emphasized the need of assistance to set up small scale enterprise along with skill development training for the welfare of waste pickers and vulnerable groups.

The collaboration of informal waste pickers resulted in the formation of two non-profits: Balmiki Samaj Nepal and SASAJA. Balmiki Samaj Nepal is an aspiring new organization (est. 2019), but it has not been able to work actively due to lack of funds and guidance. It is currently in the process of collaborating with MdM-France Nepalgunj to carry out welfare and livelihood activities. Balmiki Samaj Nepal has outlined the following objectives to focus on: child marriage, education, health, livelihood, and sanitation. SASAJA, one of the outcomes of the PRISM project, is a non-profit and cooperative established in 2014 by a group of waste pickers in support of INGOs and NGOs. Since its establishment, SASAJA has been actively working in advocacy, training, and bringing members to the organization. SASAJA has more than 900 members in both its cooperative and non-profit enterprises. As a cooperative, SASAJA has been teaching waste pickers about savings and credits, providing loans, and forming coalitions. As a non-profit organization, SASAJA has been handling projects for the welfare of waste pickers. SASAJA is not involved in providing waste management services. Currently, SASAJA is working as a community mobilizer for the "Healthy Waste Workers for Sustainable Waste Management" project funded by MdM-France. SASAJA intends to add 300 more members to its organization and cooperative.

The Women Environment Preservation Committee (WEPCO) is the oldest non-profit established by women in the field of waste management in the Kathmandu Valley. Though a non-profit, WEPCO is the only organization providing waste management services in Lalitpur. Thus, WEPCO has been actively working with waste pickers. At present, there are no active projects in WEPCO,

but in the past, WEPCO had worked on the establishment and training of workers in a compost plant, a biogas plant, in the upcycling of waste, and capacity building for formal waste pickers. According to Bishnu Thakali of WEPCO, she tried to incorporate informal waste workers into the organization, but they declined due to a sense of losing freedom and not being able to work according to their needs.

Green Path Nepal and NEPCEMAC work in the field of environment and social service. NEPCEMAC, being a non-profit, isn't legally allowed to conduct profitable activities, thus it formed a sister private SWM company called Nepsyemak. NEPCEMAC does social work such as capacity building, awareness campaigning, community mobilizing, running educational campaigns, and providing health and education services. At present, NEPCEMAC is not running any projects. Green Path Nepal works as the business development partner for MdM-France's "Healthy Waste Workers for Sustainable Waste Management" project. Through the project, Green Path Nepal helps to develop green entrepreneurs and non-profit enterprises for waste pickers.

## 4. CONCLUSION

Waste pickers are a valuable asset in the solid waste management chain. Without them, waste management would be a significant challenge for all local governmental bodies. Yet, a majority of the waste pickers are poor and illiterate. They are stuck in the vicious cycle of earning and living below the poverty line.

On the whole, this survey demonstrates that Nepal's waste management sector lacks good policies, infrastructure, and public awareness. Waste pickers are not recognized by law and are not included in planning processes. Few institutions employing waste pickers actually extend to them the protections and benefits that would improve their lives. Few organizations exist to strengthen waste pickers, dignify their work, and improve the quality of their lives. All of these conditions make waste pickers vulnerable to poverty and discrimination. It's the authors' belief that if government, the private sector, and the public would work together to form inclusive policies and extend rights and benefits to all waste pickers, these workers would be able to come out of the poverty cycle.

## References

- Bhaskar A. Social Protection for Informal Waste Workers in India and Recommendations for Nepal. 2013; Available from: [https://www.academia.edu/27079203/Social\\_Protection\\_for\\_Informal\\_Waste\\_Workers\\_in\\_India\\_and\\_Recommendations\\_for\\_Nepal](https://www.academia.edu/27079203/Social_Protection_for_Informal_Waste_Workers_in_India_and_Recommendations_for_Nepal).
- Charles G. Sustainability of social enterprises involved in waste collection and recycling activities: lessons from Tanzania. *Journal of Social Entrepreneurship*. 2019; 1-19.
- Dias S M. Waste pickers and cities. *Environment and Urbanization*. 2016; 28(2): 375-390.
- Karki J. Sapkota S. Pohl G. Baral Y R. Makai P. Adhikari S. et al. Qualitative Study: Perceptions of Risks and Risks Mitigation Strategies in Waste Workers in Nepal. *Médecins du Monde*. 2019; Available from: <https://drive.google.com/open?id=1Qq6DAhgfClfDQ3ux2yM2wnFOeGNB3olv>
- MOEF, Ministry of Environment, Forest and Climate Change. Solid Waste Management Rules, 2016. Available from: <http://moef.gov.in/wp-content/uploads/2017/08/SWM-2016-English.pdf>.
- Pathak D, Mainali B. Status and Opportunities for Materials Recovery from Municipal Solid Waste in Kathmandu Valley, Nepal. *Environmental Science and Engineering*. 2018; 436-443.
- Rijal C. Atreya K. Adhikary A. Bhattarai N K. A Study on the collection of Waste PET Bottles in the Kathmandu Valley. Himalayan Climate Initiative. 2014; Available from: <http://www.himalayancclimate.org/images/projectMultipleSubPage/GaHteA%20Study%20%20on%20Waste%20PET%20Bottles%20-%20internal%20doc1.pdf>
- Solid Waste Management Technical Support Center (SWMTSC). Nepal SWM OBA - Draft Solid Waste Management Service Improvement Plan (SWM-SIP) - Lalitpur. 2016; Available from: <https://lalitpurmun.gov.np/sites/lalitpurmun.gov.np/files/SIP-LSMC%20-%20Jan%2019%202016.pdf>
- Theron J. Options for Organizing Waste Pickers in South Africa. WIEGO Organizing Briefs. 2010.
- Yoshida Y. The practice of informal waste recovery and solid waste management in Kathmandu, Nepal. The University of British Columbia. Vancouver, Canada. 1997.



**CENTER FOR RESEARCH &  
SUSTAINABLE DEVELOPMENT NEPAL**

Lamington / Sheetal Marga, Baluwatar, Kathmandu  
P.O. Box: 11772, House No: 260  
Tel.: + 977 1 4540085, 4520784  
Email: [info@creasion.org](mailto:info@creasion.org)  
[www.creasion.org](http://www.creasion.org)