CASE STUDY REPORT
HA NOI - VIETNAM

Study location	*Ha Noi City, Vietnam*
Organization or researcher that developed the case study	*Center for Environment and Community Research (CECR)*
Dates	*July – August 2025*

INTRODUCTION AND APPROACH

The informal waste collector (IWC) or independent collector is commonly referred to in Vietnamese as *"ve chai"* or *"đồng nát"*. This group includes individuals who directly collect recyclable waste, small-scale buying points, as junkshops that resell to larger depots or recycling factories. Their activities mainly consist of collecting from dumpsites and residential areas, then sorting and reselling to generate income for their own and their families' livelihoods.

Currently, in Vietnam, there are no official statistics on this informal workforce. According to estimates, in just two major cities—Hanoi and Ho Chi Minh City—there are around 10,000–16,000 people working in this sector (UNDP, 2022).

To support research on IWC, the SYSTEMIQ has developed a survey toolkit to assess living wages, while also exploring their basic needs and standard living conditions, thereby providing a scientific basis for policy recommendations.

The present research report has been conducted by the Center for Environment and Community Research (CECR), under the framework of collaboration between CECR and SYSTEMIQ, with three main objectives:

- To describe the current livelihood situation of informal waste collectors in Hanoi;
- To identify the living wage level for waste collectors and compare their income levels;
- To draw lessons learned and provide recommendations.

In the course of research, the CECR team used an in-depth interview questionnaire designed by SYSTEMIQ to collect primary data, while also compiling secondary data and documents from reliable online sources.

To reach the informal waste collectors, the research team applied the "snowball" method. This approach proved effective, since workers in this sector often have close and trusted networks, which facilitated recruitment for interviews. Thanks to this, within the two three weeks, CECR was able to secure the required number of participants.

A total of 40 people participated in the interviews, of which 37 were informal collectors and 3 were employees of a formal waste collection company in Hanoi. The gender distribution revealed that 95% of participants were women and 5% were men. To ensure reliability and completeness of the data, the study was carried out in two phases: (1) direct in-person field interviews; (2) follow-up phone interviews to verify and refine information.

In addition to direct surveys, the research team reviewed secondary materials and cross-checked with actual living costs in Hanoi, including housing prices (rapidly rising), food expenses, healthcare, and job-related costs. Field observations showed that income from waste collection is significantly lower than the minimum living costs in a large city like Hanoi. With current earnings, most workers cannot rely solely on waste collection but often need to take on other jobs such as house cleaning, dishwashing, or plant care. As a result, their average working hours usually exceed 8 hours per day, sometimes extending up to 12 hours per day.

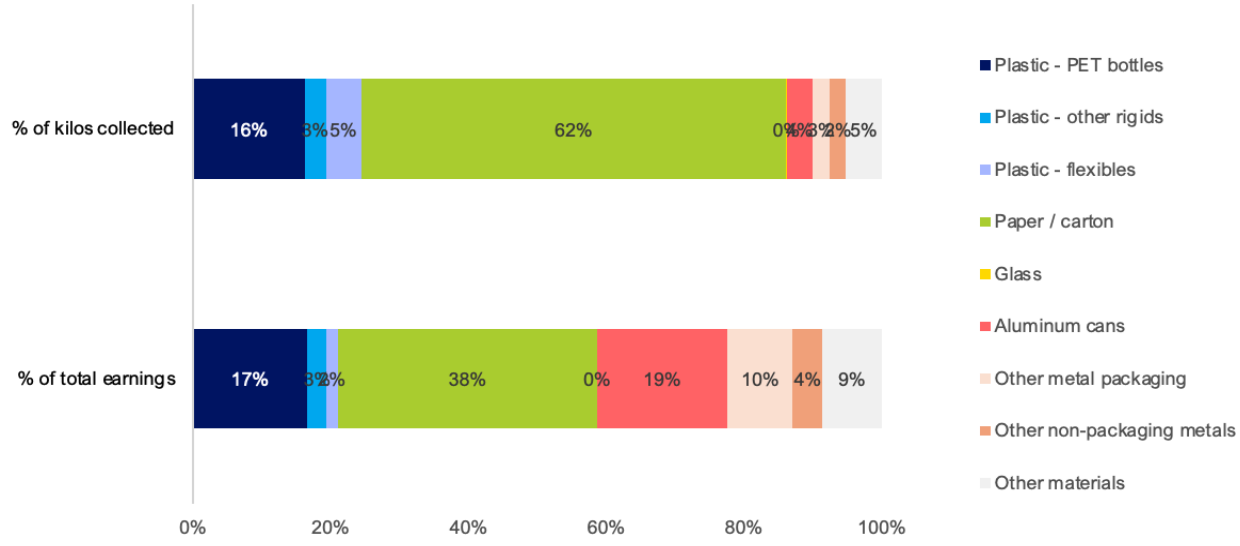
Beyond economic pressure, this informal workforce also faces many other challenges such as: social stigma toward waste picking, gender inequality, unstable income due to market price fluctuations, and especially limited access to social welfare.

A – Current Status and Income of the Informal Waste Workforce

The informal waste collectors (IWC) are predominantly low-income workers with limited access to formal employment and no social protection. Most are migrants to Hanoi from provinces such as Thai Binh, Nam Dinh, and Vinh Phuc, with limited education and no specialized trade. Women account for about 90% of the workforce, largely because the job's flexibility allows them to both earn income and shoulder family care responsibilities.

The survey was conducted with 40 IWC workers (39 women, 1 man). Their sources of collected waste are distributed as follows: households (37%), streets (35%), informal dumps near their place of residence (17%), and companies, offices, and shops (10%).

The group's income relies mainly on paper scrap (38%); soft/flexible, low-value plastics (21%); aluminum (19%); other metals (10%); e-waste (4%); and other materials (9%). Paper and plastics are relatively easy to collect, widely available, and lightweight, enabling larger loads per trip. In particular, the interview areas' proximity to plastic-recycling craft villages such as Trung Van, along with the concentration of paper-recycling plants in Bac Ninh, creates favorable market outlets and enhances the value of paper recovered in Hanoi. Consequently, paper and plastics have become the principal and relatively stable income sources for IWCs.



Average income: Their average earnings are about ~VND 3.5 million per month. Only 17% of respondents live entirely on income from waste collection; 83% must combine it with other jobs such as house cleaning, dishwashing to cover their daily expenditures.

Working time: 85% of respondents work an average of 7 hours per day, and 15% work 5–6 hours per day; all work 7 days a week and flex their hours depending on free time.

Work equipment: The main means of work are bicycles or hand-pulled carts (83%); only 17% have motorbikes or electric motorbikes.

Key challenges on income include: lack of time (due to caring families, children), seasonal fluctuations in waste volume, declining health, and the effects of extreme weather (heavy rain, heat). About 83% reported often having to borrow money from junkshop owners to purchase recyclables when the collected volume is too large.

Food security and living conditions reflect the high vulnerability of the IWC group. Over 50% frequently worry about food shortages; 60% cannot afford a nutrient-rich diet and mostly repeat a few basic foods. Some 37.5% have had to reduce portion sizes, 30% have experienced having no food left at home, and 7.5% have gone a whole day without eating. Regarding living conditions, most live in houses built with acceptable materials and with access to electricity and lighting; however, nearly half live in poorly ventilated spaces, 25% lack a standard toilet, and 47% live in dwellings under 30 m². This indicates that low income limits not only access to food but also minimum living standards.

Despite their important role in urban waste management and in advancing the circular economy, incomes in the IWC workforce remain low. The reasons lie not only in price volatility and seasonality, but also in inequities along the value chain, unsafe working conditions, and a lack of equipment to improve productivity.

B – Living Income Estimate

- **B1 – Healthy Diets survey.** To estimate the cost of a healthy diet for households of informal waste collectors in Hanoi, with a typical four-person household (two adults and two children) (Statista, 2021), with a primary habit of home-cooking. Using food prices collected from traditional markets and budget supermarkets in several inner-city districts (Hoang Mai, Long Bien), along with information from websites and newspapers (2025), the estimate indicates that the total monthly cost to maintain a minimally nutritious diet for a family of four in Hanoi is about **VND 3,000,000**. Key assumptions include: excluding the cost of eating out and snacks; excluding luxury items; and selecting common, moderately priced foods that still ensure dietary diversity.
- **B2 – Decent housing survey.** In this study, "minimum-standard housing" for informa waste-collectors in Hanoi is defined by the following criteria: a solid roof/structure; sufficient space for a four-person household stable access to electricity and domestic water; and access to essential sanitation services. Under Government of Vietnam regulations, the minimum housing area required to register permanent residence in the inner city is **15 m² of floor area per person**, meaning a four-person household needs at least **60 m²** to meet basic living conditions. However, field surveys show that waste-collector households can typically only afford rented rooms of **10–15 m²** for 2–3 people—far below the standard—leading to overcrowding and a lack of privacy, especially for women and children.

  For the cost calculation, the team referenced market prices and cross-checked Vietnamese rental channels, assuming the household rents a small apartment or room in peri-urban areas with electricity, water, and basic sanitation services. Survey results indicate that the **average total monthly cost for a four-person household (rent, electricity, water, and sanitation fees)** is approximately **VND 10,677,000**. This is considered the necessary cost to maintain basic, safe housing conditions appropriate to everyday living needs.

- **B3 – Healthcare costs.** Access to medical services among scrap/recyclables collectors remains limited. Most only seek care once clear symptoms appear; regular check-ups or full immunization are rare. Survey results show many frequently experience common health issues such as colds, fever, and joint pain, but instead of going to hospitals, they mainly self-medicate by buying over-the-counter drugs when they feel unwell.
  Based on a literature review, the research team estimates that the average cost for one person to access basic, minimum healthcare services—including health insurance, routine check-ups, and necessary vaccinations—is around **VND 185,000 per month** (approximately **VND 2,224,000 per year**). Of this, the **voluntary health insurance premium** under current law

accounts for about **VND 1,000,000 per year**, considered a mandatory expense to maintain access to care within the public health system.
Overall, although basic healthcare costs are not especially high compared to total urban living expenses, they remain a burden for waste-collection workers with precarious incomes. The significant gap between the costs required to maintain health and their actual ability to pay highlights this group's high vulnerability.

- **B4 – Education costs.** Children from waste-collector households mostly attend public schools, from preschool through university. In general, access to basic education is ensured; however, schooling expenses remain a considerable burden for households with unstable incomes. Due to financial constraints, most parents opt for low-tuition public schools rather than private schools or supplementary extracurricular programs.
  Drawing on a general review of documents and fee schedules issued by Vietnam's Ministry of Education and Training, the **minimum monthly cost** to keep a student enrolled in a public school is estimated at **VND 1,600,000**. This figure does **not** include other expenses such as utilities, clothing/uniforms, or additional costs for foreign-language classes, arts/skills (music, drawing, etc.), or extracurricular activities.
  In the calculations, the research team assumes the household's child attends a public school and pays the mandatory minimum amounts noted above. In practice, many IWC struggle to cover these costs fully, leading to limited participation in tutoring or enrichment classes. In 2025, the Vietnamese government issues the policy for free study fee for primary school, this may great opportunities for reducing IWC's burden.
- **B5 – Transportation & Safety Gear Costs.** To maintain minimum safe working conditions, IWCs need basic protective items such as sun-protection clothing, gloves, masks, and boots, while primarily using bicycles for transportation. Practical survey findings show that regularly incurred expenses include: the **average monthly cost** to maintain safe working conditions for a IWC is estimated at **VND 265,000** (equivalent to **VND 3,180,000 per year**). These calculations assume that independent collectors invest only in the most basic equipment and use low-cost personal transport (bicycles). In reality, many cannot afford to replace or fully equip themselves, leading to unsafe working conditions and heightened risks to health and occupational safety.
- **B6 – Savings.** In estimating a living income, the research team treats savings as an essential component to ensure livelihood sustainability. This savings is considered a buffer for unplanned expenses, including funerals, weddings, hospital visits for the sick, or unexpected risks such as accidents.
  Based on assumptions commonly used in international and regional studies on living standards, a household should maintain **at least 10% of total monthly income** as savings. For waste-collector households, this plays a crucial role in reducing vulnerability and strengthening their ability to cope with socio-economic shock

C – Comparable incomes or minimum wage

Based on the available data sources, the study uses the **minimum wage (VND 4,960,000/month)**, the **poverty line (VND 891,183/month)**, and the **extreme poverty line (VND 636,559/month)** as basic reference thresholds, as published by the World Bank and stipulated in Vietnamese law.

At the same time, to better reflect reality, the team also benchmarks against the incomes of several comparable formal workers: **municipal waste collectors (VND 8.2–9 million/month)**, **agricultural workers (VND 7 million/month)**, and **construction workers (VND 10 million/month)**.

Survey results show that the **average income of informal waste collectors** is only **VND 3,436,033 per month**, lower than that of company-employed waste collectors such as those at **URENCO (VND 9,047,619 per month)**. This indicates that informal workers' incomes are not only below the poverty and minimum-wage thresholds, but are also markedly disadvantaged compared with peer groups in the same line of work who have formal contracts and clear benefits.

Key Learnings and Recommendations

The study shows that IWCs in Hanoi play a pivotal role in reducing waste volumes and promoting recycling, yet they operate in the informal sector with precarious incomes, unsafe working conditions, and little to no social protection.

Women make up a large share of the informal waste collection workforce, meaning they simultaneously face gender bias, limited opportunities to improve income, and the double burden of family care. Key factors affecting income and wellbeing include: high urban living costs, dependence on volatile scrap prices, limited access to social welfare, and a lack of essential protective equipment.

Opportunities to improve livelihoods: On the workers' side, interventions can include enhanced training in sorting and recycling skills; expanded access to microfinance to invest in vehicles and protective gear; and encouragement to form groups or cooperatives to formalize, increase stability, improve bargaining power, and reduce reliance on middlemen. Existing practices—such as sharing information on collection points or linking sales to larger depots—should be strengthened and formalized.

Local authorities can play an important role by:

- Conducting comprehensive studies to quantify the current waste-collection workforce nationwide;
- Integrating informal collectors into urban solid waste management systems;
- Supporting access to health insurance and social protection;

- Piloting and scaling “community-led, women-led waste segregration, collection, recycling model” with direct ward/commune support;
- Rolling out vocational training or livelihood transition programs suited to the urban context.

The private sector—especially recycling enterprises, FMCG companies, and waste-management firms—can contribute by:

- Establishing transparent, stable purchasing chains;
- Developing community partnership programs to provide protective equipment and safety training;
- Partnering with social organizations to build sustainable linkage models. Piloted collaboration models have shown scalable potential, helping both to stabilize incomes and to improve the social image of waste collection work.

Overall, improving living and working conditions for waste collectors requires a multidimensional approach, mobilizing coordination across communities, NGOs, government, and the private sector—toward a more inclusive, equitable, and sustainable waste management system.