

CASE STUDY REPORT



Study location	<i>Talavera, Nueva Ecija, Philippines</i>
Organization or researcher that developed the case study	<i>ASKI – Research and Development Unit</i>
Dates	<i>July 2024</i>

A METHODOLOGY TO ASSESS THE LIVING INCOME OF WASTE PICKERS

Introduction to the document:

Living income is defined as the required earnings to afford a standard of living with all the components essential for a decent life. This concept acknowledges the right of every individual to earn an income that allows them to meet their basic needs, lead a dignified life, and escape the cycle of poverty. (Source: Fair Circularity Initiative, Systemiq 2024)

The ASKI Research and Development Unit administered a research study to assess the income level of informal waste pickers in Talavera, Nueva Ecija, Philippines. The researchers applied a qualitative approach, conducting interviews using the questionnaire toolkit developed by SystemIQ. The sample size was forty (40) individuals from the informal waste picker communities. Additionally, the barangay officials and ASKI project management group was consulted to provide a broader perspective on the living conditions and challenges faced by these communities. Data was collected through face-to-face interviews with camera, and consent form to properly document the research study. The research was conducted over a period of 20 days, allowing sufficient time to gather detailed data from the target communities.

A – Establishing a Baseline

The waste pickers began their work at various ages, often age between 20-29 (38%) and beginning at their young age (25%). The primary reasons they began waste picking include poverty, the need to support children and family, the search for a reliable income source, and the lack of other livelihood or employment options. Among the surveyed workers, 60% were independent waste pickers, while 40% were part of a cooperative. The main sources of waste for these workers were direct collection from households (33%), street waste picking (28%), landfill or dumpsites (18%), and other sources such as churches, parks, cemeteries, and stores (21%).

A total of 57.5% of waste pickers indicated that waste picking is their only income source, with 42.5% reporting multiple income streams. The average daily earnings for surveyed informal waste pickers (Full Time Worker) is Php 84.53 per hour, with cooperative members earning Php 88.55 per hour and independent workers earning Php 81.84 per hour. Hourly earnings range from a maximum of Php 100.63 to a minimum of Php 60.38. Revenues from plastics make up 25.36% of their income, and all waste pickers have access to vehicles (*kolong kolong*, *tribike*) for work. Additionally, 72.5% know the price of their materials before selling, and 30% have obligations to specific buyers which limit their ability to sell materials to other buyers.

Several reasons were identified for not increasing earnings. These include the presence of competitors, which reduces the availability and pricing of scrap materials, and low market prices for collected scraps. Other factors are the lack of resources to collect materials, insufficient capital to purchase scrap or invest in necessary tools, and adverse weather conditions that impact waste picking activities. Mixed situational factors, such as variability in sellers' willingness to sell and fluctuating waste quantities, also create challenges. Individual effort and initiative, as well as temporary stoppages by scrap buyers, significantly affect earnings.

A significant proportion of surveyed waste pickers face food insecurity and challenges in accessing decent housing. Specifically, 90% are concerned about not having enough food to eat, 92.5% are unable to consume healthy and nutritious food, and 72.5% eat only a limited variety of foods. Additionally, 45% had to skip meals, 42.5% ate less than they believed they should, and 50% of households ran out of food. And, 95% reported that they cannot afford to live without a revenue stream for between a week and a month. In terms of housing, 60% of waste pickers live in houses built with acceptable materials, 82.5% have access to electricity, and 92.5% have light in each room of their house. Furthermore, 80% have access to ventilation in each room, 97.5% have access to safe sanitation, and 57.5% live in housing with sufficient living space. Additionally, 97.5% have sufficient bedroom space, and 82.5% live in a safe outside environment.

B - Living Income Estimate

Applying the Anker methodology, a well-accepted standard for living income calculations, we determine the living income by adding together food costs, housing costs, non-food non-housing (NFNH) costs, and unforeseen costs. This methodology estimates the living income for typical waste picker families in Talavera, Nueva Ecija, Philippines. For a family of four, the living income is Php 23,864 (\$411) per month at an exchange rate of 58. This is the necessary monthly income for a typical family in the study area to live a basic but decent life.

B1 – Healthy Diets Survey

The costs of a healthy diet were determined using Anker data. We adapted a model diet that aligns with global nutrition standards set by the World Health Organization (WHO). The macronutrient distribution of the model diet includes 71.3% carbohydrates, 11.4% protein, and 17.3% fats. This adaptation ensures that the diet meets caloric requirements and WHO guidelines for both macronutrients and micronutrients.

During estimation, the costs of commodities were determined by directly inquiring about current market prices. We visited local markets and spoke with vendors. By averaging the up-to-date price information, we were able to establish a reliable basis for our estimates.

The findings indicate that the estimated monthly cost for maintaining a healthy diet is 97 pesos per person per day. For a typical family of four (4), healthy diet cost is Php 11,841 per month.

B2 - Decent Housing Survey

The housing cost in the context of living income includes the cost of building or renting a decent house and utility costs such as water, electricity, and cooking fuel. Since building costs vary per square meter, we determine housing costs by asking for the rental cost of a decent house, using the parameters in the Anker methodology. On average, the rental cost for a decent house is 3,500 pesos per month.

For utility costs, an acceptable LPG cylinder (11kg) costs 1000 pesos. The Talavera Water District's minimum charge for water supply, effective July 30, 2023, is 180 pesos, but survey interviews indicate an average consumption cost of about 767 pesos. The Nueva Ecija Electric Cooperative Inc. - Area 1 (NEECO II - AREA 1) states that as of July 2024, the electricity rate is 8.4089 pesos per kilowatt-hour before VAT and 8.9245 pesos per kilowatt-hour with VAT. For a typical family, the total electricity cost is around 1,533 pesos. Overall, the cost of decent housing, including rent and utilities, is 7,466 pesos per month.

B3 – Healthcare Costs

Based on existing legislation, The Republic Act No. 11463 known as the "Malasakit Centers Act" covers the (1) Families who are economically disadvantaged, vulnerable, or part of the informal sector, as identified by the DSWD Listahanan, (2) Government employees and contract service workers. (3) Individuals facing crisis situations, as determined by the

assessment of social workers. The DSWD Medical Assistance program provide financial aid to individuals and families facing medical emergencies. It also ensure that vulnerable and marginalized sectors of society have access to healthcare services

We estimated healthcare costs by exploring two options: (1) conducting interviews with insurance providers, and (2) analyzing secondary data from the Philippine Statistics Authority. We opted to use the cost of premium insurance, adjusted by the number of household of 4. This results in a monthly healthcare cost of Php 1533.

B4 – Education Costs

We interviewed parents whose children are studying in elementary and high school to estimate education costs. These costs include tuition fees, parent-teacher association fees, laboratory fees, books, school supplies, other instructional materials, uniforms, socks, and shoes. In public schools, textbooks are provided to students by the Department of Education (DepEd). Additionally, under Republic Act No. 10931, known as the "Universal Access to Quality Tertiary Education Act," students receive free tuition.

Based on our findings, the estimated total cost is Php 2,200 for elementary and Php 3,100 for secondary education. Each level spans 6 years, resulting in a total cost of 13,200 pesos for elementary and Php 18,600 for secondary education. Dividing these costs by 18 years (the total span of childhood), the cost is Php 733.33 for elementary and Php 1,033.33 for secondary per child. Further dividing by 12 months, the monthly cost per child is Php 61.11 for elementary and Php 86.11 for secondary. For two children, this amounts to Php 122.22 for elementary and Php 172.22 for secondary. Overall, the estimated monthly education cost for both levels is Php 294.

B5 – Costs of decent work

For waste pickers in the Philippines, necessary decent work materials include gloves, boots, masks, long sleeves, modified tricycles/tribikes, caps, raincoats, and sickles. We estimated the unit costs by surveying relevant shops. Since the majority of waste pickers use modified tricycles or tribikes, we used straight-line depreciation to calculate these costs. By adding up the total costs of safe work materials and multiplying by the full-time worker equivalent (FTWE) of 1.61, the monthly cost of decent work is Php 559.

B6 – Saving

The final component of living income is the savings for unexpected life event. We included a 10% margin on all expenses to account for this, as recommended in the Anker Methodology. The savings required at household level is Php 2169.51 per month.

C – Compiling Benchmark Incomes

To establish benchmark incomes, we utilize a combination of indicators and comparisons:

- **Extreme Poverty Line and Poverty Line Benchmarks:** We reference the Extreme Poverty Line and Poverty Line benchmarks provided by the World Bank. These benchmarks offer a foundational comparison for understanding the income levels required to avoid extreme poverty and general poverty.
- **Average Earnings of Formal Waste Workers:** We use the average earnings of formal waste workers, as reported by local government salary data, to gauge the income of individuals in similar roles within the waste management sector.
- **Income from Comparable Sectors:** We also consider average incomes from comparable sectors, such as agricultural laborers and construction workers. This comparison helps to contextualize the income levels within a broader economic framework.
- **Family Composition and Employment:** Our benchmarks take into account a reference family size of four members and the typical number of full-time workers in such a family, which is 1.61. This approach ensures that the benchmarks reflect realistic family structures and employment scenarios.

Benchmarks Incomes

	(Local currency/FTWE/month)
Extreme Poverty Line (World Bank) \$2.15 ppp/day	2034
Poverty line (World Bank) \$3.65 ppp/day	3454
Minimum wage	15677
Average Earnings of Formal Waste Workers	14820
Average Income from agricultural labourer	12541
Average Income from construction worker	16502

Observations & Lessons Learnt

- Most of the waste pickers earn below the living income benchmark. Their earnings are unstable due to competition, market prices, and other situational factors, leading to food insecurity and limited access to decent housing.
- Waste pickers often lack adequate safety equipment, which can affect their health and ability to work effectively. This highlights the need for improved access to protective gear and better working conditions.
- A large portion of waste pickers depend solely on waste picking as their primary income source, indicating a lack of alternative livelihood opportunities. This dependency makes them vulnerable to fluctuations in the market and economic instability.
- Limited education and skills make it hard for waste pickers to find other types of work. To help in diversifying income sources and improving life quality, vocational training should be provided to.
- Waste pickers face social stigma and are often excluded from formal economic systems. The provision of social support services and integration into formal waste

management systems would improve both their status within society as well as economic stability since it helps them get more involved in these activities.

Recommendations:

- **Income Augmentation Program:** Implement programs to increase the earnings of waste pickers, such as providing microloans for purchasing equipment or modified tricycle, establishing fair pricing mechanisms, and supporting waste picker cooperatives. However, this should be embedded first with basic financial education that cover essential topics such as budgeting, saving, and debt management.
- **Personal Protective equipment for Waste Picker:** Provide waste pickers with essential safety equipment, such as gloves, masks, boots, and protective clothing. Regular health check-ups and access to healthcare services should be facilitated to ensure their well-being.
- **Provide Opportunities for other Livelihood:** Develop vocational training programs to equip waste pickers with new skills, enabling them to explore alternative livelihood opportunities such as backyard gardening and small scale animal raising (chicken and ducks). If a waste picker is unavailable to participate, consider engaging their spouse. Through these approaches they become self-sufficient with respect to meals hence improving their lives generally
- **Social Integration Program:** Encouraging them by engaging in formal waste management systems, appreciating their contributions while dealing with their social exclusions can integrate them better into society.

Actions for Local Governments and Private Sector

- **Integrate Waste Pickers into the Formal System:** Register the waste pickers, give them ID cards, and regularize their activities. This integration will provide them better access to services and benefits.
- **Public Awareness Campaign:** Launch campaigns to highlight the important role waste pickers play in recycling. These campaigns can help reduce the social stigma they often face.
- **Awareness campaign for waste segregation.** Despite existing Local Government Unit (LGU) policies on waste segregation, many households are still non-compliant on segregation. Conduct awareness campaigns to educate people on the importance of separating their trash.
- **Partnerships and Collaborations:** Form partnerships with waste picker cooperatives and associations to create sustainable and fair supply chains.
- **Ensure Fair Pricing:** Create transparent pricing mechanisms so waste pickers can earn a stable and fair income for the materials they collect.
- **Skill Development Programs:** Invest in skill development programs for waste pickers to enhance their capabilities and provide opportunities for career progression within the recycling and waste management sectors.