

Wastepickers at the Dandora Dumpsite

Findings from a socio-economic study conducted by the Strategic Sector Cooperation on Circular Economy and Waste Management between Kenya and Denmark in collaboration with Nairobi Recyclable Waste Association



**MINISTRY OF FOREIGN AFFAIRS
OF DENMARK**
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Environmental
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Executive summary

The dumpsite in Dandora is one of the biggest in Kenya. Thousands of people collect, sort and sell valuables from the dumpsite to earn a living. While it is a job with many insecurities, they depend on this job for survival. As waste management policies and the transition towards a circular economy take shape in Kenya – for instance, by introducing segregation at source and extended producer responsibility (EPR) – this brings challenges for the local wastepickers as the new waste management policies result in fewer valuables being disposed at the dumpsite.

The situation calls for actions that can ensure a just, green transition. To design such actions, there is a need to understand the livelihoods and needs of wastepickers working at the Dandora dumpsite. This report contributes in that respect. It presents findings from a socio-economic study of wastepickers working at the Dandora dumpsite conducted by the Strategic Sector Cooperation (SSC) on Circular Economy and Waste Management between Kenya and Denmark in collaboration with Nairobi Recyclable Waste Association during September – October 2024.

Key findings

- **Social background:** Wastepickers working at the dumpsite live in the neighbouring areas. Many of them are single parents with more than three children to cater for. Most of the wastepickers have only completed primary education.
- **Working conditions and health:** Many wastepickers have been working at the dumpsite for more than 10 years. Wastepickers typically work 10 hours per day. Most wastepickers do not use personal protection gear resulting in serious health issues and injuries, such as respiratory problems, infections, cuts and burns. Access to clean water, sanitation, and healthcare is limited. Several wastepickers experience violence, bullying and sexual harassment at the dumpsite.
- **Material flows:** Wastepickers collect, sort and sell plastic, metal, paper, textile, glass, organic waste, electronics and rubber. They sell the valuables to individual farmers, aggregators and companies coming to the dumpsite to buy from the wastepickers.
- **Economic situation:** Wastepickers face economic challenges and income instability due to reduced waste availability and increasing competition at the dumpsite. They struggle to afford basic needs, such as food, rent, and school fees, and need to rely on loans and additional jobs or prioritise food over rent or food over school fees to survive.

- **Memberships, training and skills:** Only one third of wastepickers are members of associations or organisations that can support them. Most wastepickers do not know about the opportunity of membership. Less than half of the wastepickers have received professional training on waste management, safety and health, or entrepreneurship and financial management. Still, wastepickers report to have skills useful in various sectors, such as driving, electronic installations and repair, hairdressing and tailoring.
- **Reflections about the future:** Less than half of the wastepickers see working at the dumpsite as a sustainable path for them in the long run due to different factors, including the reduced waste availability at the dumpsite and the worsening of their health conditions. Many of them dream about starting their own business and/or embark on vocational training and education. Others would like to continue working in the waste management sector as, for instance, operators of recycling facilities.
- **Awareness of regulatory framework:** Wastepickers have little knowledge about waste management policies and laws. While some have received practical training on waste management, safety and health and entrepreneurship, the majority has not engaged in any capacity building activities. Only one third of the wastepickers are members of an organisation or association that help alleviating their daily struggles.

Recommendations

The study findings underscore the need for supporting wastepickers at the Dandora dumpsite to achieve a just, green transition to a circular economy in Kenya. There is a need for:

- **Targeted training, capacity building and skills development** during this time of policy and regulatory changes in the Kenyan waste management system.
- **Access to healthcare** to strengthen the livelihoods of wastepickers.
- **Representation and inclusion of wastepickers** in policy development and decision-making that directly affects them to take into account their needs and concerns.

What the Strategic Sector Cooperation will do

The SSC will use the findings from the study to inform activities in the final phase of the project (2025 – 2027). The SSC is currently designing small-scale initiatives focusing on vocational training of wastepickers from the Dandora dumpsite as well as conducting multi-stakeholder workshops bringing together stakeholders involved in the implementation of the new waste management policies. The workshops will enable discussions on how to mitigate the potentially negative social and economic consequences of the new regulatory frameworks.

Call for further support to wastepickers in Kenya

The SSC welcomes local, regional and international partners, organisations, donors and NGOs to initiate additional initiatives that can support a just green transition in Kenya and hope that the findings presented in this report will help in identifying areas suitable for intervention.



Dandora dumpsite

Dandora dumpsite is one of the biggest in Kenya. It was established in the 1970s by the World Bank. It sprawls over 30 acres and is placed in Embakasi North near the banks of Nairobi River. It is estimated that 2,000 tons of industrial and domestic waste arrive at the dumpsite each day.

Chapter 1: Introduction

1.1 Background and purpose of the study

The study is funded by the Strategic Sector Cooperation (SSC) on Circular Economy and Waste Management between Denmark and Kenya.¹ The main objective of the SSC project is to assist in accelerating Kenya's transition towards a circular economy with a focus on resource efficiency in industrial production and in the waste sector. This is done by exchanging knowledge to support and strengthen the Kenyan environmental regulatory framework focusing on implementation of best practices for waste management rooted in green and circular economy principles.

The SSC was initiated in 2016 with the Danish Environmental Protection Agency (DEPA) as lead partner and funded by the Danish Ministry of Foreign Affairs (MFA). The SSC has supported the development of the Sustainable Waste Management Act (2022) and the Extended Producer Responsibility (EPR) Regulation. The SSC project is now in its third and final phase (2025-2027). Recognising that the new laws and regulations governing the waste management system in Kenya may negatively affect waste pickers who rely on the dumpsite for their daily income, the SSC has included the plight of the waste pickers as one of its focus areas for phase three.

Thousands of people work informally as wastepickers at the Dandora dumpsite. They collect and sort valuables from the dumpsite and sell these to earn a living. While it is a job with many insecurities, the wastepickers depend on this job for survival. The effective implementation of the new waste management policies in Kenya will have social and economic downsides for the wastepickers as fewer valuables will be disposed of at dumpsites, leaving the local wastepickers in a very vulnerable and insecure situation. These circumstances underscore the need for actions that can ensure a just, green transition. To design such actions in ways that are relevant and useful, there is a need to understand the livelihoods and needs of the wastepickers working at the Dandora dumpsite.

¹ Read more about the SSC project at the website of the Danish Environmental Protection Agency: <https://eng.mst.dk/about-the-danish-epa/global-cooperation/kenyacircular-economy> (last accessed: 1 April 2025).

1.2 Research questions

The SSC study of wastepickers at the Dandora dumpsite has been guided by two research questions:

- 1) What are the socio-economic characteristics of wastepickers?
- 2) How do they work, including what are their challenges and needs?

Both research questions focus on establishing the current state of affairs to lay the foundation for broader discussions regarding existing and future policy and regulatory approaches – discussions that should take into account how the current work of wastepickers relates to a) the waste collection system imagined in the Environment Management and Coordination Act 2015, the Sustainable Waste Management Act 2022 and the EPR Regulations 2024; and b) the barriers that might be preventing wastepickers from becoming part of the formal waste management system; and how these might be overcome, including future options for this part of the population.

1.3 Readers' guide

The report consists of four chapters. **Chapter 1** introduces the study describing the background, purpose and research questions. **Chapter 2** gives an account of the research design and the methods applied for data collection and data analysis. **Chapter 3** presents results from the study. **Chapter 4** concludes the study by summarising key findings as well as suggesting next steps for the engagement of wastepickers in the SSC. One **appendix** is attached, entailing figures and tables that supplement the findings described in the report.



Chapter 2: Methodology

2.1 Research design

The design of the research was informed by existing knowledge about wastepickers in Kenya, including the established insights about key challenges and opportunities for their integration into the formal waste management system.² On this basis, the study was designed as follows:

- The study concentrated on wastepickers working at the Dandora dumpsite to establish knowledge about the livelihoods of one of the most vulnerable groups of the population. The goal was to interview 100 wastepickers.
- Data collection focused on demographics, social conditions, health, working conditions, organisational affiliations, price and flow of recyclables as well as cooperation between wastepickers and aggregators. As findings from the socio-economic study should inform the broader discussion about waste management policy and law implementation in Kenya, it was relevant also to focus the study around experiences of wastepickers with handling products covered by existing policies and legislation, including the EPR Regulation, such as plastic, glass, metal, paper and electronics. Additionally, it was relevant to find out whether the local wastepickers had an interest in formalised jobs, including their needs and priorities related to continuing working in the waste management sector.

2.2 Data collection

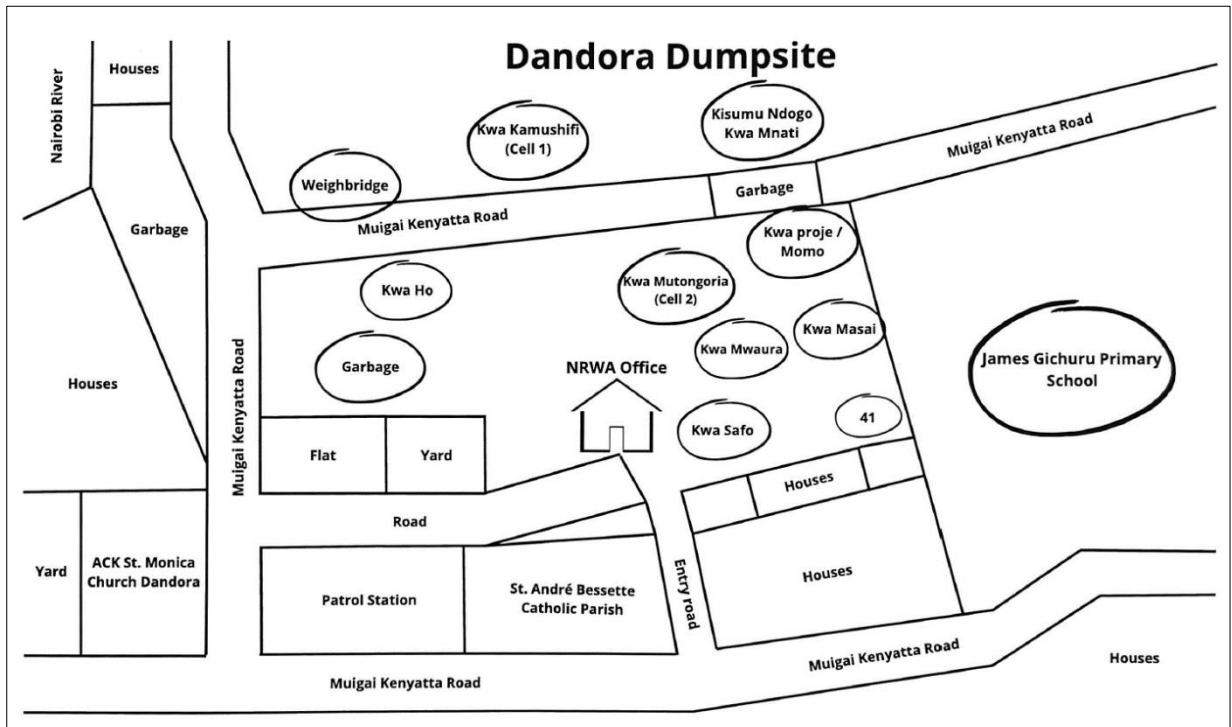
A team of five data collectors (two males and three females) did on-site fieldwork during a period of three weeks from 18 September to 4 October 2024. They applied semi-structured interviews and observations (written notes and pictures) as methods for data collection. The data collectors were chosen on basis of their academic background (bachelor degrees or diplomas in environmental studies and community development) and their prior experience with data collection and working with vulnerable groups in Kenyan society. All five come from Kenya and live in Nairobi. Thus, they knew about the local and social context in which the research was conducted, and, importantly, they were able to translate between English and Kiswahili when needed during the interviews.

² The following studies have informed the research design: Aparcana (2016), Approaches to formalization of the informal waste sector into municipal solid waste management systems in low- and middle-income countries: Review of barriers and success factors, *Waste Management*, 61, 593-607; Gitau (2016), Analysis of the role of wastepickers on Informal Solid Waste Management: A case of Roysambu Constituency, Nairobi County. Thesis submitted to University of Nairobi; Kariuki et al. (2019), Characteristics of Wastepickers in Nakuru and Thika Municipal Dumpsites in Kenya, *Current Journal of Applied Science and Technology*, 37, 1-11; Kuria & Muasya (2010), Mapping of Wastepickers and Organisations Supporting Wastepickers in Kenya, WIEGO.

Before commencing the fieldwork, the data collection team received comprehensive training in qualitative research methods from the study administrator (the Danish Environmental Protection Agency, DEPA), including how to use the interview guides, how to fill out observation schemes, and how to uphold research ethics. Investigating this vulnerable group of the population requires an approach that protects the well-being and rights of the respondents and that minimise any potential harm from the research. To uphold research ethics, the study population was chosen through a random sampling strategy where only those wastepickers willing to take part were included. Before beginning the fieldwork, the data collection team received training about how to ensure that people who participated in the research understood the purpose, aims and methods of the study and freely consented to take part in it. In addition, the data collectors shared an information sheet on the study objectives with the participants before they took part and a consent form for participants to sign.

Through the assistance of Nairobi Recyclable Waste Association, the data collection team visited all zones at the Dandora dumpsite to ensure that wastepickers from the whole site were approached and included in the research. The data collectors only approached informants at the age of 18 or above, hence no interviews with children were performed. The interviews were timed to take place in the morning not to interfere too much with the daily work of the wastepickers characterised by being most busy in the afternoon when new waste is brought to the dumpsite. To understand the flow of recyclables better, the data collection team also talked to some of the aggregators who were buying valuables from the wastepickers.³ After each interview, the data collectors submitted the collected data digitally to DEPA using SurveyXact. To ensure a high level of consistency and quality in the data set, DEPA and the data collection team had daily pre- and debriefing meetings during the fieldwork period allowing data collectors to elaborate about their interview experiences, including potential challenges and needs.

³ As the primary focus of the study is on the livelihoods and needs of wastepickers, the knowledge gained about the operations of aggregators is not part of this report.



Sketch map of the Dandora dumpsite. Data was collected in all zones:

Weighbridge, Kamushifi, Ndogo/Mnati, Mtongoria, Proje, Mwaura, Masai, Safo, and Area 41.

2.3 Data analysis

The data set has been analysed using qualitative coding strategies to provide both overview of the narratives while still allowing in-depth analysis of each individual testimony. Any inconsistencies in the data set was solved through triangulation of findings by comparing interview data with observation data and pictures. The preliminary findings were validated through a workshop held in November 2024 with participation of a sub-sample of the study population (40 respondents). The aim was to ensure that the narrative developed based on the research resonated with the reality of the wastepickers from their perspective. The validation workshop confirmed the robustness of the data set.



Chapter 3: Results from the study

3.1 Social background

Gender and age

100 wastepickers participated in the study: 39 males and 61 females. The ages of the study population were between 18 years and 67 years. More than two-thirds (78%) were below 45 years old.



Education

The highest level of education for 61% of the wastepickers is primary school. 29% have managed to complete secondary school, 9% have no formal education, and 1% have completed college. None of the respondents have completed a university degree.

Place of origin

Less than half of the study population comes from Nairobi (39%). The rest has moved to Nairobi from other counties, such as Kiambu, Kitui, Machakos, Murang'a and Nyandarua. Comparing the years in Nairobi with years of experience with wastepicking at the dumpsite suggests that many of those originating from other counties rather quickly started to engage with wastepicking as their primary way of earning a living. In fact, 19 of the 61 wastepickers originating from other counties (31%) appear to have started working as wastepickers within the first year of arrival. Additionally, the data shows that only 3 out of 61 (5%) worked as wastepickers before arriving in Nairobi.



Accommodation

Wastepickers live in five areas neighbouring Dandora dumpsite: Embakasi North (68% of respondents), Ruaraka (16% of respondents), Kasarani (13% of respondents), Embakasi West (2% of respondents) and Embakasi South (1% of respondents). Every second wastepicker lives in houses made of corrugated iron sheets (50% of respondents). The rest lives in houses made of stones (46%), whereas a few stays in houses made of mud (2%) and carbon fibre boards (1%). Some mention they have access to water, power and sanitation in their house, but several highlight that they have to purchase water outside their household and/or rely on public water taps.

Civil status

More than half of the wastepickers are single (64%), some of them as a consequence of having been divorced or widowed, while around one third (36%) are married.

Children

The majority of the wastepickers have children (88%). Around half of the wastepickers (55%) have three or more children. The age of the children ranges from six months to 42 years old. The average age of the children is 13 years. 70% have children in the school age. The majority of those with children in the school age (84%) tell that all of their children attend school whereas a smaller group (16%) report that one or more of their children have had to drop out as they were unable to pay the school fees.

3.2 Working conditions and health

Motivation for working at the dumpsite

Many wastepickers have been introduced to the work at the Dandora dumpsite by friends and relatives. For the majority, **earning a living** has been the key motivation. Some had to find a way to earn a living from a very early age due to different problems at home, such as alcohol and violence. Others have lost or left their spouse and have had to find a way to earn an income. They stress that wastepicking enables them to have a daily income and thereby to cater for family and friends.

Many wastepickers mention that they had to drop out of school at an early age. With no education completed, wastepicking seemed as **the only option**. Some wastepickers also tell that they lost their job or had to close down their business and then wastepicking was the only job available at the time. A couple of the wastepickers highlight that their health condition and/or physical disabilities make it difficult for them to take up other jobs.

Several wastepickers stress that they experience a **high degree of freedom and flexibility** as they do not have to work with a fixed schedule. The flexible working hours make it possible for them to take care of children and relatives while still earning an income. Many also mention that they are happy about the daily payment compared to monthly payment as it makes it easier to cater for the family on a daily basis.

Years of experience and working hours

Most wastepickers have been working with collecting, sorting and selling recyclables at the Dandora dumpsite for more than 10 years. In fact, 72% of the study population have been working at the Dandora dumpsite for more than five years, and 22% of them for more than 20 years.

The wastepickers work on average 10 hours per day. The standard as submitted by the respondents seems to be 8-10 hours per day (53% of respondents). However, many estimate to work more than 10 hours per day (42%). Few estimate to work less than 8 hours per day (5%).



Personal protection equipment

Wastepickers use different personal protection equipment to carry out their work at the dumpsite. Top three includes gumboots (64% of respondents), gloves (48%) and hats (46%). Most wastepickers mention that they use only one or two types of equipment, like gumboots and hats. A few wastepickers (15%) stand out by using more equipment than the rest as they use gloves, gumboots, apron and hat – and one of them add to be using masks, eye shades and ear muff as well. A couple of wastepickers mention that they use magnets (16%) or sticks (6%) for collecting valuables, and one respondent tells about using a metal rod to break the collected glass (1%). Around a fifth of the wastepickers are protected only by the textiles they wear (19%).

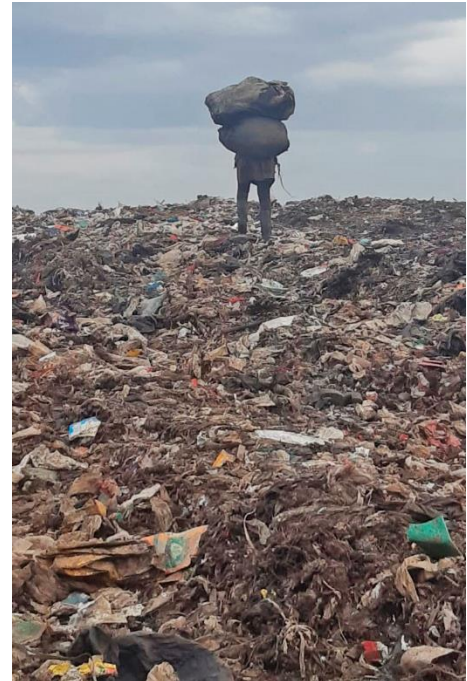
Transportation, sorting and storage of collected waste

Most wastepickers (83%) put the collected recyclables in sacks or bags and then use their back to transport the items to sorting, storage or sales places within the dumpsite. Respondents have two remarks regarding this mode of transport: It “*becomes hard when it rains*” and results in “*injuries and back pains because of carrying heavy loads*”.

Other wastepickers mention trucks and lorries (6%), carts and wheel barrows (2%), vehicles (1%), motorbikes (1%) and the head (1%). A few wastepickers (5%) tell that they do not have to transport the collected material as buyers come to them. For instance, the wastepickers bring recyclables together in huge sacks (*dabra*) placed at the dumpsite which is then picked up by the buyers themselves. One wastepicker explains that she gets assistance from other wastepickers due to her disability (1%).

90% of the wastepickers have access to a place where they can sort the collected items. Some use covered spaces, whereas others sort their material at the ground in the open.

57% have a place where they can store the sorted items.



Working environment

Many wastepickers describe the working environment at the dumpsite as extremely harsh and unsafe. 53% have witnessed or experienced **violence**. According to the respondents, typical situations involve fighting over recyclables or being beaten for showing disrespect or disobedience.

Examples:

“People fight themselves trying to collect valuables from trucks.”

“Some wastepickers mistakenly collect other people’s valuables and thru that people call them thieves and they even get beaten by mobs.”

“I witnessed a young boy been beaten thoroughly almost to death for stealing tyres”.

“The respondent fought with an aggregator because he felt he was exploited by the price he was offered for his recyclable materials.”

“Violence happens when the youth disrespect by the elderly.”

“Men fight women wastepickers when looking for recyclable waste from lorries.”

43% have witnessed or experienced **bullying**. They tell about being subject to abusive words from truck drivers and other wastepickers, or being robbed, e.g. having one’s private property or collected valuables stolen. Newcomers to the dumpsite are particularly vulnerable and exposed to harassment by older wastepickers. Additionally, some male wastepickers bully female wastepickers, demanding them to leave their recyclables to them, or not to engage with the trucks that arrive with waste. Some wastepickers also experience to get bullied because of their physical or mental disabilities.

Examples:

“She reported that her stock were stolen at night and very early in the morning, noting that the isolated dumpsite area lacks adequate security, particularly during nighttime hours.”

“New wastepickers get bullied by older waste pickers.”

“Due to his recent arrival, he is currently restricted from collecting valuable waste materials.”

“Most men are bullying, once you hold on hard plastics and demand to leave it for them. When you resist they start to bully like lifting you up and use abusive words.”

13% of wastepickers have witnessed or experienced **sexual harassment**. The situations reported include men having raped female wastepickers, and men forcing female wastepickers into sexual relationships against their will, for instance, as a prerequisite for the woman to be able to collect waste. Sexual harassment often happens to females that are new to the dumpsite and often at night or in early mornings in specific areas, the so-called “no-go zones”.

Examples:

“Sexual harassment happens on ladies who are new to the dumpsite and at night.”

“She had witnessed women being harassed and raped. This happens mostly early morning from 5 am and late evening around 8 pm.”

Distinguishing the experiences of male and female wastepickers, the data indicates that female wastepickers experience sexual harassment more often than male wastepickers. In comparison, male wastepickers seem more exposed to other forms of violence, such as fights and assaults, than female wastepickers. When it comes to bullying, both genders seem to be exposed to a similar degree.⁴

Health problems

71% of wastepickers experience health problems (80% of the female wastepickers and 56% of the male wastepickers). The most often mentioned health issues are respiratory trouble (32%) followed by joint pain (15%), dust allergies (12%), skin allergies (10%), and asthma (5%). Other health problems include fever, injuries (including cuttings and acid burns), back pain, tuberculosis, ulcers, flu, headache, blood pressure, urinary tract infection, legs and arm pains, dental problems, fatigue, hunger, eyesight problems, diarrhoea, ear pain, stomach pains, malaria, and chest pain (each of these other health problems were reported by 1–2% of the respondents). Many wastepickers stress that the smell, smog and dust combined with limited access to sanitation and clean water cause many of their health problems.

⁴ See Appendix 1, Figure 13, for the gender comparison.

Injuries

96% have been injured when working at the dumpsite. It is very common to be **cut by glass and metals** (87% report about cuts). Hands are cut when collecting and sorting waste, being pierced by sharp objects such as syringes, razor blades, bulbs and sharp slugs.



Feet are cut through the gumboots, e.g., when stepping on a needle that pierces the foot. Legs are injured when stepping on broken items, such as broken umbrellas. Cuts can also happen when falling down from the hilly and unstable walking paths made of high piles of waste.



Another type of injury is caused by **trucks** that hit wastepickers standing close to them; suddenly moving while wastepickers are still inside the truck body; or that cover them with garbage when offloading the waste (8% report about truck accidents). In addition, wastepickers have their hands and/or feet **burned by acids or heated items** (5% tell about burns, adding that gumboots do not protect against these risks). Some wastepickers also mention having injuries from **fights, dog bites, falling stones and twists** (1-2% mention these types of accidents). In addition, many wastepickers mention the problem of spontaneous ignition causing fires at the dumpsite and adding extreme danger to their work.

Solutions to health problems

To alleviate health problems, wastepickers describe different strategies. Some mention that they visit medical doctors (46% - one elaborates that this is only when she can afford it) or pharmacies (2%) for diagnosis and medication. Others explain that they do self-treatment (18% - one tells that she treats herself by pouring alcohol into the area that has been cut). A smaller group mention self-medication using the medicine they collect from the dumpsite (9%).

Few wastepickers have a national health insurance (13%). In comparison, the majority (77%) have got vaccines against different types of diseases, including childhood vaccines, covid, tetanus, diphtheria, measles, polio and hepatitis B. The top three vaccines are tetanus (mentioned by 47 respondents), covid (mentioned by 35 respondents) and childhood vaccines (mentioned by 8 respondents).

3.3 Material flows

At Dandora dumpsite, the main types of items being collected, sorted and sold by wastepickers include plastics, metal, paper, textiles, glass, organics, electronics and rubber. A few wastepickers add to this list weaves and wigs as well as firewood, nappies and spray perfume containers. In addition, some wastepickers mention that they collect medicine but for personal use only.

Most of the wastepickers collect at least three fractions, such as plastics, glass and paper; plastic, metal and paper; or organics, plastic, metal, and textiles. In fact, only 3% indicated that they focus solely on the collection of one type of waste: plastic, glass and metal, respectively.

In general, wastepickers highlight that they prefer to collect those items that are widely available and that already have a market (e.g. plastics, paper, textiles, and organics) or a favourable price (e.g. metals while highlighting that it is, however, rare to find metals at the dumpsite). There are indications of some gender differences, however. More male wastepickers than female wastepickers collect metals and rubber whereas female wastepickers tend to focus efforts around the collection of glass and textiles to a larger extent than male wastepickers.⁵

The following sections describe experiences of the wastepickers related to each of the fractions, including amounts collected on a daily basis and the prices they usually get for these items.⁶

⁵ See Appendix 1, Table 2, for a gender comparison.

⁶ The exchange rate between DKK and Ksh is app. 1 DKK = 20 Ksh. The exchange rate between USD and Ksh is app. 1 USD = 130 Ksh.

Plastics (*Planyo, Mali, Maziwa, Machupa, Gundu, Gunia, Marondo, Sahani, Farafana, Nywele*)

97% of the wastepickers collect plastics. They collect various types, including plastic bottles (PET), plastic bottle tops and containers (HDPE), plastic food packaging (PP), plastic plates and cups (PS), plastic bags (PP, PE), plastic paper (LDPE), and plastic pipes (PVC). The reported amount ranges between 3–50 kg of plastics each day. When selling the collected plastics at the dumpsite, prices vary according to the type of plastic. For instance, it is typical to get 1-2 Ksh per kg of plastic bags (PE), 5-15 Ksh per kg of plastic paper (LDPE), 15-20 Ksh per kg of plastic bottles (PET), and 25-35 Ksh per kg of plastic containers (HDPE). Some mention that they can get higher prices outside of the dumpsite, for instance, that one can get 15 Ksh per kg of plastic paper inside the dumpsite but 20 Ksh per kg outside the dumpsite.



Metal (*Mali, Chuma, Jest, Chunde, Mikebe, Brasho, Mobutu, Silagi*)

76% of the wastepickers collect metals. They collect aluminium, brass, copper, iron, steel, tin, zinc, gold as well as a mixture of aluminium, copper and steel (*Mobutu*). The reported amount ranges between 1–3 kg of metal each day. When selling the collected metal, prices vary according to the type of metal. For instance, it is common to get 30 Ksh per kg of iron (light iron such as iron sheets), 50-100 Ksh per kg of aluminium, 100 Ksh per kg of the mixture of aluminium, copper and steel called *Mobutu*, 250 Ksh per kg of brass and 800 Ksh per kg of copper. Slug (metal leftovers) is often sold for 20 Ksh per kg. In comparison, aluminium and steel spoons go for 3 Ksh per piece and 10 Ksh per piece, respectively. One respondent adds that weather can also influence metal prices emphasising that during the rainy season, price drops because the metal becomes “muddy and less valuable”.



Textiles (*Mtumba, Guanda, Maguo, Nguo, Ngundu*)

66% collect textiles, including clothes, aprons, shoes, dolls, linens, pillows and carry bags. The reported amount ranges between 2-3 pieces and 30–90 kg sacks/bags of textiles each day. The prices vary. For instance, wastepickers mention to get 10–15 Ksh per piece of clothing or 300 Ksh for a 90 kg sack/bag of clothing; 150 Ksh per pair of shoes; 20 Ksh for a small doll and 50–100 Ksh for a big doll; 50 Ksh for a 90 kg sack/bag of linen; 20-30 Ksh per pillow (fibre filled); and 2–5 Ksh per kg of carry bags. Many wastepickers (27%) do not sell the textiles they collect but wash and exchange these for household items or basins/buckets, or wash and wear these themselves, e.g. for personal protection.



Paper (*Katoni, Cotte, Kote, Vitabu*)

66% of the wastepickers collect paper. They distinguish between five types: Brown carton, white carton, brown paper, white paper and colored paper. The reported amount ranges between 2–30 kg of paper each day. When selling the collected paper, prices vary according to the type of paper. For instance, it seems common to get 4 Ksh per kg of colored paper, 7 Ksh per kg of brown paper, 10-15 Ksh per kg of white carton and white paper, and 15-20 Ksh per kg of brown carton. One respondent tells that one can get higher prices outside of the dumpsite mentioning that, for instance, one can get 20 Ksh per kg of white paper outside the dumpsite compared to 10 Ksh per kg inside the dumpsite.

Glass (*Tingli, Vunjika, Chupa*)

65% of the wastepickers collect glass. They distinguish between clear (colourless), brown and green glass. The reported amount ranges between 3–15 kg per day. The prices tend to be 2 Ksh per kg of clear bottles, and 1 Ksh per kg of brown and green bottles. One respondent informs that if the glass is broken into small pieces, the price increases to 3 Ksh per kg.



Organics (*Chirambe, Chilabe, Mahende*)

62% of the wastepickers collect organics, such as food left overs (ugali, beans, rice, spaghetti, fermented foods, fruits, vegetables, white bread, and bones). The reported amount ranges between 50–350 kg per day. Prices seem to depend on the degree to which the organic waste have been sorted. For instance, some wastepickers specialise in selling selected ingredients for dog food (e.g. ugali, rice, and chapatti) and, in that case, the standard price is 5 Ksh per kg. Other types of organic waste are sold for 2-10 Ksh per kg.

Electronics (*Coppers, Orodha, Uradi, Waya*)

51% of the wastepickers collect electronics, including motherboards, phones, cables, switches, sockets, cables, wires, kettles, flat irons, radios, TV remotes, and laptops. The reported amount is 2–3 pieces each day. Wastepickers mention to get, for instance, 10 Ksh per kg of cables, 20 Ksh per charger, 30-50 per feature/touch phone, or 50 Ksh per laptop. However, it is difficult to give a clear picture of the prices as these depend on whether the item can be repaired or not.

Rubber (*Nyarere, Solo, Taya*)

27% of the wastepickers collect rubber, including tyres, shoe soles and rubber mats. The reported amount is 3–7 kg each day. For car tyres wastepickers get between 10–100 Ksh per piece. For shoe soles, the prices are between 2–20 Ksh per kg whereas rubber mats are sold for 15 Ksh per kg. The prices depend on the quality of the piece.



Medicine (*Dawa*)

16% of the wastepickers collect medicine from the dumpsite but for personal use only. They mention amoxicillin, paracetamol, zinc, cetirizine, septrin, panadol, diclofenac, antiseptics, heat therapy drugs, surgical spirit, ambicolog, flagyl, and ibuprofen. They estimate to collect 2 items per week.

Other types

9% of the wastepickers mention that they also collect and sell weaves and wigs (6 respondents) as well as firewood, nappies, and spray perfume containers (1 respondent for each category, respectively). They mention, for instance, to collect 2 wigs per week sold to the price of 50 Ksh per piece, and between 50–100 kg firewood per week, sold to the price of 5 Ksh per kg.



Sales of recyclables

The majority of wastepickers (96%) sell the recyclables to individual/self-employed aggregators or to companies that come to the dumpsite to buy the collected materials. The organic waste is sold to pig, poultry and/or cattle farmers. Some farmers come to the dumpsite – for instance, from Baraka estate in Mowlem Ward – whereas others have their farms within the dumpsite. Wastepickers can sell most items on a daily basis, however, some types (e.g. firewood) are sold on a weekly basis.

Few wastepickers (4%) mention to go outside Dandora to sell the recyclables, such as plastics, carton, and glass. They go to the areas of Canaan, Baraka, Lucky summer, Baba Dogo, Kamongo, Laiti and Korogocho, as well as Central Glass in Ruaraka and Taka Taka Solutions in Njiru.

97% of wastepickers are paid in cash at the point of sale, 2% receive payment through the mobile phone payment solution MPesa, and 1% mention to be receiving both cash payment at the point of sale and through MPesa. None of the wastepickers receive partial cash advances at the start of the day or bi-weekly payments.



3.4 Economic situation

Daily earnings

49% of wastepickers estimate their daily earnings from wastepicking to be 300–500 Ksh. 30% inform that they earn less than 300 Ksh per day. 19% estimate to earn at least between 600–1000 Ksh per day, whereas 2% report to earn more than 1000 Ksh per day.⁷ Many wastepickers emphasise that their daily income varies a lot. Some days they go home with nothing, for instance, if no trucks with new waste have arrived at the dumpsite, or if the waste dumped by the trucks does not have any valuables in it.

Daily earnings vis-à-vis daily living costs

For many of the wastepickers (69%), the daily income from wastepicking do not cover their living costs. They stress issues such as lack of money to pay for food and school fees, for instance, having to prioritise food over rent resulting in significant delays in rent payment, as well as having to prioritise food over school fees, resulting in school drop-outs for their children. Some wastepickers explain that they have to take loans or buy food on credit to get by. Others mention that they have to eat from the waste to survive.

Those wastepickers who experience a match between daily earnings and daily costs (31%) point out that their daily income from the dumpsite covers basic needs, including food, rent and school fees. Only few of them are able to also save up money.

Other jobs

23% of the wastepickers have other jobs in addition to wastepicking at the dumpsite. For instance, they work with art crafts, pigs and chicken rearing, child care, construction, masonry, beauty salons and welding. Some also mention that they work with post-sorting or ferrying for recyclers or earn additional money from driving excavators at the dumpsite.



⁷ The two respondents mention to earn 1,200 Ksh and 20,000 Ksh, respectively, per day. The wastepicker reporting 20,000 Ksh also works as an aggregator which explains his significantly higher daily earnings compared to the rest of the respondents.

Economic situation compared to the past

86% of wastepickers feel that their economic situation has worsened in recent years. They provide the following explanations:

- **Increase in wastepickers.** More people have arrived at the dumpsite resulting in increased competition among the wastepickers.
- **Decrease in recyclables.** The waste brought to the dumpsite entails less recyclables than before due to fact that the waste is increasingly being pre-sorted before it arrives at the dumpsite.
- **Trucks are not arriving as often as before.** Trucks are not fuelled efficiently, or truck drivers are not paid on time, and these circumstances lead to delays in arrivals. In addition, many trucks transport waste to private sorting facilities, thus less trucks come to the dumpsite, as there is less waste to dump.
- **Excavators at the dumpsite are not operating.** Often, the drivers refuse to work due to delays in getting their salaries, or the excavators lack fuel. This leads to scarcity in waste to collect as the excavators are used to move and turn waste providing access to the waste.
- **Lack of payment.** Wastepickers are sometimes told they will be paid later by companies or individual aggregators, however, it happens occasionally that they are never paid.
- **Rising living costs.** Wastepickers experience being paid the same or sometimes even a lower price for the sorted material while they, at the same time, witness higher costs of living caused by the general inflation of prices in Kenyan society. This means that they do not earn enough to pay basic daily needs but have increasing debts and difficulties with saving up money.
- **Health issues.** Wastepickers experience severe health problems which affects the amount of waste they can collect each day and, consequently, their income. Also medical expenses increase as health problems get worse over time adding to the struggle of making ends meet.

9% of wastepickers describe their economic situation as better than before. They tell that they have experienced improvements in their economic conditions as they earn more from wastepicking compared to other jobs (e.g. hawker and mandazi vendor) they have had.

5% describe their economic situation as moderate explaining that they have never tried to have more than they need to cover their basic needs, thus wastepicking is neither improving nor worsening their economic situation. Rather their situation remains unchanged as they have always struggled to survive.

3.5 Memberships and training

Memberships

30% hold membership of an association or organisation for wastepickers. 63% of them are able to name the association or organisation. They mention Nairobi Recyclable Waste Association, Vso, China ya mti, Dandora Safi, Taka Queens, Tim Saiko, Tushirikiane Group, Winners Wastepickers and Mwihangiri dumpsite self-help group. The rest of the respondents refer to unnamed self-help group and faith-based groups as well as associations in the process of being established or registering with the authorities.

Few of the respondents are able to explain how their association is organised. Some mentioned that contributions are based on what one is able to save. Another one elaborates that the association has a “registration certificate and a leadership structure”. A third one describes that the group is “organised with officials and members and meetings” whereas a fourth one summarises it as “We just meet”.

The wastepickers holding membership highlight that the associations or organisations help them getting access to training programmes that help improving skills and knowledge related to waste management. Also several mention that through their membership they get access to loans and savings, which aid in improving their economic situation. In addition, it is also mentioned that memberships enable them to meet with and talk to peers, and – in one case – the membership may pave the way for transitioning to become an aggregator.

70% do not hold membership of any association or organisation. They explain it by factors such as:

- Being new to the dumpsite
- Preferring to start up own group
- Preferring to work on his/her own (example: “*to avoid quarrels and fights*”)
- Lack of awareness of the opportunity (example: “*never been invited or told about*”)
- Lack of trust in the leaders (example: “*support comes but never reaches wastepickers*”)
- Membership fees are too high
- Being too busy
- Lacking help with signing up

Awareness of laws

Few wastepickers (18%) are aware of laws and regulations that guide waste management in Kenya. Some of them mention that they know about the Sustainable Waste Management Act 2022 whereas the majority refer to legislation in more general terms, such as *“regulations that aim to reduce pollution of the environment”* or *“laws against burning of waste”*, while others mention that they have heard something about waste management licences, the ban on plastic bags, and the separation of waste at household level, respectively.

Training

45% of wastepickers have received professional training. The training topics include waste management, safety and health, financial training and entrepreneurship, and have been offered by different companies and organisations, including Nairobi Recyclable Waste Association, Mr. Green, Taka Taka Solutions, Vso, UN-Habitat, PAKPRO, and the Danish Refugee Council.

Skills

88% of wastepickers highlight that they have skills that could be relevant for jobs outside of the dumpsite. They list the following skills:

- Acting, arts, baking, bead making, beauty, boxing, business, carpentry, catering, cleaning, computer, counselling, driving, electronic installations and repair, engineering, farming, football, hairdressing, hotel, interpersonal skills, joinery, knitting, weaving, crocheting, masonry, mechanic, music, panel beating, plastering of walls, plumbing, public speaking, sales, soap making, tailoring, teaching, welding and yoghurt making.

3.6 Reflections about the future

Expectations about the future

90% of wastepickers stress that they play an important role in society when it comes to handling waste. They emphasise that they contribute to the cleaning of the environment, the effective operations of the recycling industry and the local farms and the promotion of sustainable waste management, and that they, in this way, create revenue for the nation. The remaining 10% do not see themselves as having any role in society, pointing out a feeling of being discriminated, disregarded and despised, or, as put by one of the respondents: ***“being seen as a chokoraa”***.⁸

When asked about considerations regarding the future, 40% of the wastepickers answer that they intend to continue working with waste collection at the dumpsite. They provide different reasons, such as needing the job to improve their economic situation and to cater for their family; that this is the only job available; and that they enjoy the independence and freedom characterising the work at the dumpsite. While they intend to continue working with waste collection at the dumpsite, they also identify a number of conditions that would improve their working conditions:

- Consistent and increased flow of recyclables to the dumpsite.
- Improved infrastructure at the dumpsite to provide safe working spaces. For instance, ***“designated garbage trucks for youth, women and older men [to] reduce cases of fighting over trucks by the wastepickers”***.
- Improved roads leading to the dumpsite.
- Fuels for excavators and bulldozers at the dumpsite.
- Fuels for trucks bringing waste to the dumpsite.
- Payment of truck drivers on time.
- Higher prices for the recyclables and more opportunities for selling recyclables.
- Increased access to protective gears, first aid kits and medical assistance.
- Elimination of corruption.
- Elimination of harassment. ***“Owners of trucks to stop harassing people”***.
- Access to financial support such as capital and credit.
- Inclusion of wastepickers in broader projects on waste management.

⁸ *Chokoraa* means street child or street urchin and has a negative, derogatory connotation.

60% do not intend to continue working with waste management at the dumpsite. Most of them dream about starting their own business (e.g. hardware, grocery, tailoring, cosmetics, secondhand, cereals, clothing sales, butcher, fast food, bakery, restaurant, recycling, rental property, farming) (40 out of the 60 respondents). A smaller group (12 out of the 60 respondents) plans to take a course or an education to get certifications and licenses enabling them to start up own business or getting employed in a company (e.g. plumbing, mechanical engineering, and driving). The rest plans to search for jobs in other sectors (e.g. construction, beauty salons, transport, and farming) (8 out of the 60 respondents).

When asked what it would take for them to consider continuing their work as wastepicker at the dumpsite, they mention some of the same conditions as listed above (e.g. consistent and increased flow of recyclables to the dumpsite, fuels for excavators and trucks, higher prices and more opportunities for selling recyclables, and access to financial support) while adding to the list a wish for:

- Being able to operate recycling machines in the dumpsite.
- Having access to training and capacity building (e.g. through sponsorships).
- Getting contracts with companies.

Perspectives on contractual employment

Wastepickers have different perspectives on contractual employment. In general, most of them (79%) stress that they would like to get a job with a contract and an employer. When asked to elaborate, the following benefits of contractual work are highlighted:

- Good salary and payment made on time.
- Good human relations.
- Safe and clean working space.
- Career opportunities.
- Skills development.
- Job security.
- Health insurance and pension.
- Support to employees with disabilities.
- The option of leave days or ways to ask for sick leave.

The 21% who do not have an interest in taking up contractual work explain their position in this way:

- Not like being ordered around.
- Employers are very strict when it comes to time.
- Preferring to start up own business:
“It is better to be self-employed than being employed”.
- Being too old.
- Because of disabilities.
- Having a lot of daily needs making it difficult to wait for a monthly salary.



Chapter 4: Conclusions

4.1 Key findings

The study investigated two research questions focusing on the case of the Dandora dumpsite:

- 1) What are the socio-economic characteristics of wastepickers?
- 2) How do they work, including what are their challenges and needs?

The key findings can be summarised as follows:

- **Social background:** Wastepickers working at the dumpsite live in the neighbouring areas. Many of them are single parents with more than three children to cater for. Most of the wastepickers have only completed primary education.
- **Working conditions and health:** Most wastepickers have been working at the dumpsite for more than 10 years. Wastepickers typically work 10 hours per day. Many wastepickers do not use personal protection gear resulting in serious health issues and injuries, such as respiratory problems, infections, cuts and burns. Access to clean water, sanitation, and healthcare at the dumpsite is limited. Wastepickers experience violence, bullying and sexual harassment at the dumpsite.
- **Material flows:** Wastepickers collect, sort and sell plastic, metal, paper, textile, glass, organic waste, electronics and rubber. They sell the valuables to individual farmers, aggregators and companies coming to the dumpsite to buy from the wastepickers.
- **Economic situation:** Wastepickers face economic challenges and income instability due to reduced waste availability and increasing competition at the dumpsite. They struggle to afford basic needs, such as food, rent, and school fees, and need to rely on loans and additional jobs or prioritise food over rent or food over school fees to survive.
- **Memberships, training and skills:** Only one third of wastepickers are members of associations or organisations that can support them. Most wastepickers do not know about the opportunity of membership. Less than half of the wastepickers have received professional training on waste management, safety and health, or entrepreneurship and financial management. Still, wastepickers report to have skills useful in various sectors, such as driving, electronic installations and repair, hairdressing and tailoring.

- **Reflections about the future:** Less than half of the wastepickers see working at the dumpsite as a sustainable path for them in the long run due to different factors, including the reduced waste availability at the dumpsite and the worsening of their health conditions. Many of them dream about starting their own business and/or embark on vocational training and education. Others would like to continue working in the waste management sector as, for instance, operators of recycling facilities.
- **Awareness of regulatory framework:** Wastepickers have little knowledge about waste management policies and laws. While some have received practical training on waste management, safety and health and entrepreneurship, the majority has not engaged in any capacity building activities. Only one third of the wastepickers are members of an organisation or association that help alleviating their daily struggles.

4.2 Next steps

The study has focused on establishing a better understanding of the livelihoods, needs and challenges of wastepickers working at the Dandora dumpsite to lay the foundation for broader discussions regarding existing and future policy and regulatory approaches. Discussions that should take into account how the current work of wastepickers relates to a) the waste collection system imagined in the Environment Management and Coordination Act 2015, the Sustainable Waste Management Act 2022 and the EPR Regulations 2024; and b) the barriers that might be preventing wastepickers from becoming part of the formal waste management system; and how these might be overcome, including future options for this part of the population.

The study findings underscore the need for supporting wastepickers through several different activities. First of all, **targeted training, capacity building, skills development, and access to health care** are needed to strengthen the livelihoods of wastepickers during this time of policy and regulatory changes in the Kenyan waste management system. Furthermore, there is a need for ensuring the **representation and inclusion of wastepickers** in policy development and decision-making that directly affects them to take into account their needs and concerns.

The SSC will use the findings from the study to inform activities in the final phase of the project (2025 – 2027). The SSC is currently designing small-scale initiatives focusing on vocational training of wastepickers from the Dandora dumpsite as well as conducting multi-stakeholder workshops bringing together stakeholders involved in the implementation of the new waste management policies, to discuss how to mitigate the potentially negative social and economic consequences of these new regulatory frameworks. The SSC welcomes local, regional and international partners, organisations, donors and NGOs to initiate additional initiatives that can support a just, green transition in Kenya and hope that the findings presented in this report will help in identifying areas for interventions addressing the nexus between poverty reduction, job creation and green transition.



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