

LOOKING THROUGH PLASTIC

PLASTIC RECYCLING ACTIVITIES IN THE NAIROBI WASTE LANDSCAPE

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How do plastic recycling organizations navigate Nairobi's waste landscape?

This research gains a deeper understanding of the complexity of formal and informal waste management practices in Nairobi.

Objectives:

1. To map the plastic recycling landscape in Nairobi
2. Factors influencing the growth possibilities of local plastic recycling initiatives
3. Challenges facing (local) plastic waste initiatives in Nairobi

Scales

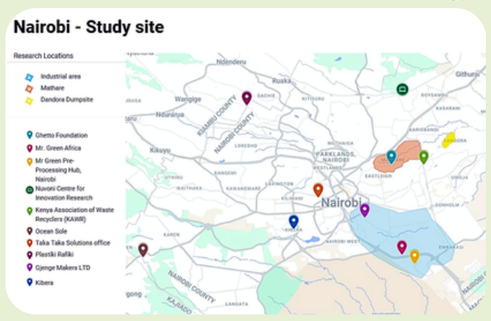
Micro – level recycling	Small-scale households, informal collectors, CBOs, individuals, waste pickers, local initiatives (grassroots organisations).
Meso – level recycling	CBO structures, public holding points (infrastructure), NGOs, buyback centres, and CBOs that collaborate with multiple actors in the neighbourhood.
Macro – level recycling	National policies, County governance, National government (environmental politics), NEMA, national and global plastic market, large-scale waste processors, private industrial recyclers.





Study site

Nairobi
Mathare -informal settlement







Problem statement/context

The negative effects of plastic on Earth and humanity are becoming clearer, especially in the less developed areas of countries, like informal settlements in Africa. Recycling plastic is a sustainable way to tackle this issue. This research is a case study of recycling plastic in Nairobi, Kenya. Nairobi is inhabited by 6 million people. It is hard to confirm with exact numbers, but about 4 million or at least 50% of the population of Nairobi lives in informal or semi-formal settlements.

In Kenya and Nairobi, the waste collection is an interplay of private, public, and informal actors. The actors involved in the informal collections are waste pickers, usually individuals who look around for waste on the street and in neighbourhoods. They are often the poorest in society. There are also small organisations in communities, which are youth groups, just groups, or a Community-Based Organisation (CBO) that try and take care of waste. These small organisations are key actors in this research because in Nairobi, half of the population lives in informal settlements.

Because this big part of Nairobi depends on the small plastic recycling initiatives (CBOs) to recycle plastic, it is a key perspective to investigate the plastic recycling landscape. The small stakeholders then connects to bigger initiatives and recycling companies. Together, they form a complex value chain of plastic recycling

Method

It explores how plastic recycling organizations navigate Nairobi's waste landscape. It is studied through a qualitative method with semi-structured interviews, participant observation, visits, and conversations.

Findings

Transport of plastic (waste)

Waste is a wicked problem, by looking at the transport of waste as a social-material relationship. Transport holds back businesses and is the key to growth in the plastic recycling industry, because transport is too expensive or delayed and there is shortage of trucks.

The findings signify that transport can hold back the development of a neighborhood, because of postponed collection and waste piling up and littering. Besides that, it affects the environment, because is can cause more exposure to hazardous waste and affects health, hygiene, and the image of a place.

Price fluctuations

Micro and meso-scale actors are hit hardest by the price fluctuations of plastic (unsteady income). Further, the difficulty and dependence on external funding reflect the fact that there is no investment climate in this sector.

Although many actors take responsibility for waste, their ability and growth potential is shaped by unequal access to financial support to expand.

Space

Space puts pressure on waste workers and on the sites/houses around waste segregation places. It takes up space, and there is a scarcity of appropriate places to sort waste. Space is also a pushback for the implementation of a multi-bin system, which is related to the potential improvement of the segregation

Space is not merely a logistical concern; it is a structural condition that determines whether organisations can sort, wash, or process plastic at all.

Conclusion

The meso and micro levels gave a bottom-up view that was researched in Mathare informal settlement. This qualitative research exposed the on-the-ground conditions that shape recycling organisations in Nairobi; it identified challenges faced by (local) recycling initiatives and looked for factors that influenced the growth potential to expand or process more plastic. This Kenyan case study contributes to studies about plastic waste, with a qualitative, African perspective that points out how a plastic recycling organisations navigate the fragmented Nairobi waste system

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