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ASSESSING THE IMPACT OF FORMALISATION ON THE LIVELIHOODS OF
INFORMAL WORKERS IN THE WASTE MANAGEMENT SECTOR IN ACCRA:
A CASE OF BORLA TAXI AND TRICYCLE ASSOCIATION (BT TA).

BY

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DECLARATION BY STUDENT – DISSERTATION

I hereby declare that this research is a result of my own original research and that no part of it has been presented for another degree in this university or any other higher education institute. I further declare that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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CERTIFICATION BY SUPERVISOR

This Dissertation/Thesis has been prepared and presented under my supervision according to the guidelines for supervision and formatting of Dissertation laid down by the University of Media, Arts and Communication, UniMAC.

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ABSTRACT

This study examines the economic and social outcomes of formalising informal waste workers in Accra, Ghana, through the case of the Borla Taxi and Tricycle Association (BTTA). Informal waste collectors play a critical role in urban waste management but typically operate without security and are vulnerable to exploitation and exclusion from policy frameworks. This research is situated within the theoretical framework of The Informal Economy Theory. The concept was first introduced by Keith Hart (1973) in his anthropological study of urban Ghana, where he used the term informal sector to describe income-generating activities not regulated by formal institutions. The study employed the use of convergent parallel mixed methods design to combine in-depth interviews and focus group discussions with structured questionnaires to capture both lived experiences and measurable changes in income stability, working conditions, and access to social services among BTTA members and non-affiliated tricycle waste collectors, as well as perspectives from key institutional stakeholders. Findings show that BTTA members understood formalisation primarily as collective organisation, mutual support, and voice, rather than a regulatory process, while non-members perceived it as distant, enforcement-driven, and restrictive. Quantitative results indicated modest economic benefits for BTTA members, including more consistent access to licences and relatively higher income stability; however, both members and non-members continued to face significant gaps in social protection, job security, and pension coverage. The study concludes that formalisation, while it presents a great sense of recognition and collective identity, it has not yet delivered its promise of comprehensive livelihood security. The study, however, proposes that effective formalisation in the waste management sector requires a shift from enforcement-focused approaches to inclusive, worker-centered models are grounded in trusted associations, transparent communication, and tangible livelihood benefits.

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DEDICATION

I dedicate this work to my husband and my daughter, whose unwavering support, patience, and love have been my greatest source of strength and motivation throughout this journey. Your encouragement made every challenge worthwhile and every achievement meaningful.

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LIST OF ABBREVIATIONS

BTTA	Borla Taxi and Tricycle Association
SSNIT	Social Security and National Insurance Trust
AMA	Accra Metropolitan Assembly
TMA	Tema Metropolitan Assembly
ILO	International Labor Organisation
DVLA	Drivers Vehicle License Authority
UNEP	United Nations Environment Programme
SSA	Sub Saharan Africa
FGD	Focus Group Discussion

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Due to rapid industrialisation, urbanisation and population growth, there has been a high and increasing rate of waste generation in many municipalities across the world (Ampong et al., 2024).

With rapid global population growth and urbanisation, annual waste generation is expected to increase by 73 percent from 2020 levels to 3.88 billion tons in 2050 (World Bank, 2023).

In Ghana, about 12,710 tons of solid waste is generated every day, with only 10 percent collected and disposed of properly (Afriyie & Lusigi, 2022). Informal workers, such as waste pickers, are often in the first line of defense against the growing amounts of waste we create within our cities.

Informal waste pickers collect recyclables and reusable materials from streets, dumpsites, and landfills, reducing the overall waste burden and improving the well-being of people living there (Hidalgo-Crespo et al., 2023).

In this paper, we will be examining the impact of Formalisation as a concept of development on informality among workers in the waste management sector in Accra. As a starting point, what does Formalisation mean in the context of development and within the confines of this paper. Formalisation as a concept of development refers to the process of integrating informal economic activities, sectors, or practices into the formal economy (ILO, 2023). This involves bringing unregulated, unregistered, or undocumented activities under the purview of legal and institutional frameworks. Globally, two billion workers representing 61.2% of the world's employed population are in informal employment (ILO, 2018).

The informal economy is defined as all economic activities by workers and economic units that are - in law or in practice - not covered by formal arrangements (ILO, 2023). Work in the informal economy is often characterized as the following:

- (1) Small or undefined workplaces
- (2) Unsafe and unhealthy working conditions
- (3) Low level of skills & productivity
- (4) Low or irregular incomes
- (5) Long working hours, and
- (6) Lack of access to information, markets, finance, training and technology.

To further explore the real issues within the informal sector, the following expands on the characteristics of the informal economy.

Small or Undefined Workplaces

Informal economy activities often occur in small, undefined, or mobile workplaces such as street vending stalls, home-based operations, or temporary market setups. These settings lack formal registration, infrastructure, and oversight, making them difficult to regulate or support through policy interventions (ILO, 2023). The absence of formal premises reflects the low entry barriers and minimal capital requirements typical of informal work, which attracts marginalised populations seeking immediate income opportunities (Verick & Hassan, 2025).

Unsafe and Unhealthy Working Conditions

Workers in the informal economy frequently endure hazardous environments due to the lack of occupational safety standards and enforcement. Without legal protection or

employer accountability, they face risks such as exposure to pollutants, unsafe equipment, and inadequate sanitation (ILO, 2023). These conditions are exacerbated by the absence of health insurance and social safety nets, leaving workers vulnerable to injury and illness (Verick & Hassan, 2025).

Low Level of Skills & Productivity

Informal workers typically possess limited formal education and vocational training, which constrains their productivity and ability to transition into higher-value economic activities. The informal sector rarely invests in skill development due to its transient nature and lack of institutional support (ILO, 2023). As a result, productivity remains low, perpetuating cycles of poverty and economic exclusion (UNDP, 2025).

Low or Irregular Incomes

Income in the informal economy is often unstable and insufficient, reflecting the precarious nature of informal work. Earnings fluctuate based on demand, seasonality, and competition, with many workers earning below subsistence levels (ILO, 2023). The lack of formal contracts or wage guarantees further contributes to income insecurity, making financial planning and upward mobility difficult (Verick & Hassan, 2025).

Long Working Hours

Informal workers frequently endure long hours without commensurate pay or rest, driven by the need to maximize earnings in low-income settings. The absence of labor regulations means there are no limits on working time or provisions for overtime compensation (ILO, 2023). This overwork can lead to physical exhaustion and deteriorating health, especially among women and children engaged in informal labor (UNDP, 2025).

Lack of Access to Information, Markets, Finance, Training and Technology

Informal economic units often operate in isolation from formal support systems, lacking access to market information, financial services, and technological tools. This exclusion stems from their unregistered status and limited networks, which prevent them from benefiting from government programs or private sector partnerships (ILO, 2023). Without access to training or innovation, informal workers struggle to improve their productivity or competitiveness (Verick & Hassan, 2025).

For many workers in the informal sector, particularly, the waste pickers, they are either faced with one or more of the challenges characterized above and such affects the quality of output on our communities. In Ghana's waste management sector, the Borla Taxi and Tricycle Association (BTTA) offers a compelling case study of Formalisation in practice. The BTTA experience thus provides a unique lens through which we can examine the dynamics of Formalisation and its implications for workers' livelihoods, social protection, and economic security.

By situating the BTTA experience within the broader discourse on informal labor Formalisation, this chapter introduces the study's core objective: to assess the socio-economic outcomes of Formalisation on the livelihoods of informal waste workers in Accra. Specifically, it explores whether cooperative transformation enhances income stability, social protection, and job security, while also interrogating workers' perceptions, levels of trust, and the inclusivity of the Formalisation process. The chapter concludes by outlining the study's research objectives, questions, scope, and significance, establishing a conceptual and empirical foundation for subsequent chapters.

1.2 Statement of the Problem

Based on the above definitions of who an informal worker is by the ILO, this paper defines an informal worker as one who does not have a secure employment contract, usually does not enjoy workers' benefits, social protection or workers' representation and is often employed on a seasonal, casual or temporary basis. In most parts of Accra, the waste collection segment is classified under zones for the formal and informal waste collectors (Boampong, et al 2020). However, waste collection is often undertaken by these waste collectors because they can enter into the nooks and crannies of our communities where the trucks of formal waste collectors cannot.

The Borla Taxi and Tricycle Association (BTTA) is one of the bodies responsible for collection of municipal waste as they are known for their wide reach and ability to enter the nooks and crannies to collect waste from households and business centers.

The evolution of the Borla Taxi and Tricycle Association (BTTA) into a cooperative mark has been seen as a significant advancement in the Formalisation of informal waste management labor in Accra, Ghana. BTTA members primarily made up of tricycle operators engaged in waste collection have historically faced systemic challenges such as lack of legal recognition, police harassment, limited or no access to healthcare, and vulnerability to theft and exploitation. These issues were compounded by the absence of institutional support and marginalization within urban governance structures.

To address these challenges, BTTA partnered with Footprints Africa and participated in its B Corp programme, which provided targeted training in governance, operations, and stakeholder engagement. This collaboration enabled BTTA to engage with municipal authorities, leading to a formal partnership with the Accra Metropolitan Assembly (AMA) and the Driver and Vehicle

Licensing Authority (DVLA). As a result, over 150 tricycle operators received licenses, legitimizing their operations and reducing police interference (Footprints Africa, 2023).

The formal inauguration of BTTA as a cooperative, officiated by the Mayor of Accra, signified a pivotal shift in its institutional identity. As a cooperative, BTTA gained access to donor funding, institutional recognition, and a strengthened collective voice capable of influencing policy and advocating member welfare. This transformation demonstrated the potential of cooperative structures to empower informal workers, promote economic inclusion, and support sustainable urban development. The BTTA case illustrates how leadership, strategic partnerships, and persistent advocacy can catalyze systemic change within marginalised labor sectors.

The Formalisation of the Borla Taxi and Tricycle Association (BTTA) through cooperative transformation represents a landmark intervention in the governance of informal waste management labor in Accra. While the initial outcomes such as licensing, institutional partnerships, and access to donor support suggested promising strides toward legitimacy and inclusion, the long-term economic implications for BTTA members remain unclear. Three years post-formalisation, it is imperative to critically examine whether these structural changes have translated into tangible economic benefits for informal workers, including improved income stability, access to social protection, and enhanced working conditions.

This enquiry is particularly crucial given the International Labour Organization's (ILO) assertion that cooperatives can serve as effective vehicles for formalizing informal work and promoting decent employment (ILO, 2017). Moreover, empirical studies have shown that cooperatives often demonstrate greater resilience during economic crises and can foster inclusive growth (Schwettmann, 2014). However, the success of such models depends heavily on sustained member

engagement, transparent governance, and equitable benefit distribution although areas where recent feedback from BTTA members suggests potential gaps.

Therefore, the current lacuna is this study seeks to assess the economic outcomes of BTTA's formalisation since they became cooperative three years ago on whether it has improved the livelihoods of its members. This would also offer insights into the viability of cooperative models as tools for transforming informal labor sectors in urban African contexts. By doing so, it contributes to the broader discourse on labor Formalisation, social equity, and sustainable urban development.

1.3 Research Objectives

The overall objective of this study is to assess the socio-economic outcomes of formalisation on the livelihoods of informal waste workers in Accra, Specifically, the study seeks to:

1. To assess the socio-economic outcomes of formalisation on the livelihoods of informal waste workers in Accra.
2. To assess the tangible livelihood outcomes of Formalisation initiatives for informal waste workers, such as income stability, job security, and social mobility.
3. To identify motivations that shape their willingness or resistance to engage with formalisation institutions.
4. To integrate qualitative and quantitative findings to provide evidence-based recommendations for designing inclusive and trust-building formalisation policies.

1.4 Research Questions

The research questions include:

1. What are the assess the socio-economic outcomes of formalisation on the livelihoods of informal waste workers in Accra – both members of the BTTA and non-members?
2. What are the lived experiences and perceptions of informal waste workers regarding purpose and implications of formalisation?
3. What motivations shape their willingness or resistance to engage with formalisation institutions?
4. How do informal workers lived experiences influence trust or mistrust in Formalisation initiatives?

1.5 Scope of the Study (Focus)

The study focuses on the Borla Taxi and Tricycle Association (BTTA), which, as of 2023, comprised of over 2,000 members operating across Ghana. Given logistical and resource considerations, the research will concentrate on BTTA members based in Accra. The scope includes both male and female waste workers, although most workers within the sector are predominantly male. The Association leadership and key institutional stakeholders such as the Accra Metropolitan Assembly (AMA) and district assemblies shall be interviewed. This approach allows for a comprehensive understanding of the social, economic, and policy dimensions shaping the Formalisation process within Accra's waste management sector. This study would be undertaken over a period of 3 to 6 months.

1.6 Significance of Study

The informal waste management sector in Accra plays a critical role in addressing the city's growing waste crisis, yet informal workers remain marginalised, facing precarious working conditions, low incomes, and limited access to social protection (Boampong, et al, 2023). Despite

their contributions, they largely remain excluded from formal policy frameworks and labor protections. This study is therefore significant in several respects.

First, this study will contribute empirical evidence to the growing body of literature on labor Formalisation and informal economy transitions in sub-Saharan Africa, particularly within the waste management sector. Secondly, it shall provide insights into whether cooperative Formalisation genuinely enhances economic security and social inclusion among marginalised workers or simply restructures existing inequalities. Thirdly, the findings will offer practical guidance to policymakers, municipal authorities, and development organizations in designing inclusive, participatory Formalisation policies that are responsive to workers lived experiences.

Finally, the study will benefit the BTTA by illuminating members' perceptions of inclusion, trust, and benefit-sharing within the cooperative model, thus informing future strategies for governance and organizational sustainability.

1.7 Conclusion

This chapter has provided a conceptual and contextual overview of formalisation as a development approach to addressing the vulnerabilities of informal waste workers within Ghana's urban economy. It began by situating the study within the broader global challenge of waste management and highlighting the indispensable yet marginalised role of informal waste workers in mitigating the consequences of ineffective municipal waste management systems.

Through the case of the Borla Taxi and Tricycle Association (BTTA), the chapter illustrated how organised informal worker collectives can leverage cooperative structures and strategic partnerships to navigate the transition toward formalisation. Nevertheless, this chapter also highlighted a critical research gap: while the process of formalisation has produced visible

institutional gains, the extent to which these translate into sustainable socio-economic benefits for individual workers remain uncertain. Questions persist regarding whether formalisation enhances income security, job stability, and social mobility or whether it merely restructures existing inequalities within new administrative frameworks.

Accordingly, this chapter articulated the research objectives and questions designed to investigate these issues through a mixed-methods approach. By integrating qualitative insights into workers' perceptions and quantitative measures of livelihood outcomes of members and non-members, the study aims to generate comprehensive evidence on the economic, social, and psychological dimensions of formalisation.

In summary, Chapter One has established the theoretical rationale, contextual background, and research direction for examining the socio-economic implications of formalising informal waste workers in Accra. It underscores the importance of exploring formalisation not merely as a development intervention but as a potential instrument for promoting social equity, decent work, and inclusive urban development in Ghana's waste management landscape.

CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This literature review examines theoretical and empirical perspectives on the formalisation of the informal waste sector and focuses on understanding how informal waste workers perceive and experience this transition. Drawing from the Informal Economy Theory, the review explores how informal waste collection systems emerge, function, and coexist alongside formal structures in urban contexts such as Accra. It further analyses related studies including Aparcana (2017) and other related works on motivations, socio-economic factors, and barriers influencing formalisation efforts. The aim is to identify gaps in literature, particularly concerning how formalisation affects workers' livelihoods, trust, and inclusion, and to establish the conceptual foundation for this paper's exploration of informal waste workers' lived experiences within the Borla Taxi and Tricycle Association's cooperative status in Accra.

2.2 Related Studies Review

2.2.1 Formalisation of the Informal Waste Sector

Aparcana (2017) explores the approaches to formalising the informal waste sector in developing countries, providing a comprehensive foundation for understanding both the structural and experiential dimensions of formalisation. Her work identifies formalisation as a multifaceted process involving policy reforms, institutional arrangements, and stakeholder participation where informal waste workers are integrated into formal municipal waste management systems. This literature directly informs this paper's focus on how informal waste workers perceive and experience formalisation in the context of Accra.

2.2.2 Perceptions and Lived Experiences of Formalisation

Aparcana (2017) notes that informal waste workers' perceptions of formalisation are often shaped by their historical exclusion from municipal systems and their experiences of marginalisation within urban waste governance. While formalisation is intended to enhance working conditions and recognition, many informal workers perceive it as a top-down process that threatens their autonomy and livelihood flexibility. This aligns with the first research question in the qualitative strand, which seeks to explore the lived experiences and perceptions surrounding the purpose and implications of formalisation. Aparcana's findings suggest that formalisation efforts often fail to adequately consult or represent informal workers, leading to mistrust and resistance.

2.2.3 Motivations and Willingness to Engage

In view of this, Aparcana (2017) identifies motivational factors that influence informal workers' engagement with formalisation, including potential access to social protection, stable income, and official recognition. However, participation is also influenced by perceived risks such as increased taxation, bureaucratic control, and exclusion of unregistered workers. These insights directly inform the second qualitative research question, highlighting the complex motivations that shape informal workers' willingness and/or reluctance to participate in formalisation processes.

2.2.4 Trust and Mistrust in Formalisation Initiatives

Her paper highlights that trust building mechanisms are central to successful formalisation. Where governments and municipalities engage informal waste workers as partners rather than beneficiaries, formalisation initiatives are more likely to succeed. Conversely, where workers are treated as marginal actors, mistrust prevails, undermining collaboration and policy implementation. This perspective relates directly to the third qualitative research question, which examines how informal workers' lived experiences influence their trust or mistrust in formalisation initiatives.

In conclusion, while Aparcana's (2017) study provides a valuable foundation for understanding policy-driven approaches to formalising the informal waste sector, it remains limited in several key areas that this present study seeks to address. Specifically, her analysis lacks an integrated mixed methods approach that links informal workers' perceptions of formalisation to measurable livelihood outcomes, such as income stability and access to social protection. Moreover, the study does not account for intra-sectoral differences among informal actors such as association members, non-members, and leadership whose experiences and motivations toward formalisation may vary significantly. By combining qualitative insights into lived experiences and perceptions with quantitative analysis of socio-economic outcomes, this paper builds on Aparcana's framework to provide a more nuanced, worker-centered, and context-specific understanding of how formalisation processes shape trust, inclusion, and livelihood security among informal waste workers in Accra.

2.3 Socio-economic motivators/factors to Formalisation

Formalisation of the informal economy is often posited as a pathway to improved livelihoods, offering benefits such as access to credit, legal protections, and market opportunities. However, the literature reveals a more complex narrative, particularly in contexts like Ghana, where the informal sector forms a significant part of the economy. Drawing on Moaaz & Mansour (2023) study on a behavioral perspective, they highlighted how bounded rationality and heterogeneous aspirations among informal entrepreneurs influence their decisions to formalize. For instance, survival-oriented entrepreneurs prioritize maintaining informal networks over potential Formalisation benefits, while growth-oriented entrepreneurs are more receptive to Formalisation incentives. This difference highlights how rational cost-benefit models fall short in understanding the complex motivations and challenges that influence decisions around Formalisation.

While such insights provide a valuable framework for understanding Formalisation, they leave critical gaps in assessing its actual impact on livelihoods. The article's focus on intentions rather than outcomes limits its applicability to real-world contexts, as it does not account for how Formalisation translates into tangible changes in income, job security, or social mobility for informal workers. These gaps necessitate further enquiry to evaluate how Formalisation affects the livelihoods of informal workers in Ghana and whether it addresses their immediate needs and long-term aspirations.

In accessing how informal workers understand the issues of Formalisation, Kartal (2021) undertakes a study to map different understandings of the Formalisation of the informal financial sector in South Africa. In his findings, you realize that there are varying understandings of Formalisation among South African informal workers and experts are rooted in conflicting perceptions of its purpose and outcomes. While Formalisation is generally viewed positively, informal workers often misunderstand it as an attempt to dismantle their livelihoods, due to fears of corruption, lack of tangible results, and limited awareness of inclusive policy intentions. Experts working closely with vulnerable communities also share some skepticism. Ultimately, the study highlights that informal workers' decisions are shaped more by moral and social considerations than economic reasoning, underscoring the need for Formalisation efforts to build trust and respond to community values. While this may not be intended with this research paper, an enquiry about this within the waste management sector will be crucial to see if this runs through different sectors across the sub region.

According to the UNEP 2025 report on Organizing and Integrating the Informal Recycling Sector in the Solid Waste Management Sector, like Ghana's BTTA cooperative, India implemented the SWaCH cooperative for women waste pickers. The SWaCH cooperative in Pune offers a

compelling case of how waste picker integration within municipal systems can yield both social and environmental benefits. With over 3,900 members (70% of whom are women), SWaCH has enabled decentralized, door-to-door waste collection that reaches over 4 million citizens and recycles around 80,000 metric tons of waste annually. Even more importantly, SWaCH has also transformed the socio-economic conditions of waste pickers, leading to improved earnings, reduced working hours, enhanced social protections, and diminishing caste barriers.

Yet, while the SWaCH model demonstrates that cooperation between informal workers and municipal bodies can be highly effective under certain localized, inclusive, and supportive conditions, it may not easily replicate elsewhere without similar structural and political commitments. Cooperative success appears contingent on municipal will, policy alignment, and meaningful participation of waste workers. Therefore, this research will further investigate the contextual variables that determine when such cooperative models flourish and when they don't, to offer more nuanced insights into Formalisation and worker-led waste governance across diverse urban settings.

2.4 Barriers and challenges faced by informal waste workers in transitioning to formalized systems

The challenges that exist and may hinder informal workers from transitioning to formal sectors vary as highlighted above, however, in Moyo (2022) work that sought to investigate the factors that affected the likelihood of formalizing informal sector activities in 13 Sub-Saharan African (SSA) countries found that firms that are more likely to formalize are young, owned by individuals with high levels of education and, have registered before. This doesn't necessarily apply to all informal work. But for the informal workers under the BTTA, the majority are uneducated and lack the understanding of what benefits formalizing can render to them. Seeking out these

educational disparities is intended with this paper. Moyo also suggests that governments should therefore target firms that are young and provide them with information about the benefits of registration, and if these firms are owned by experienced and educated individuals, the likelihood for them to register would be high. There is no gainsaying the fact that this is unlikely, however assumptions as these need to be tested over a period to be able to discover its possibility considering several governmental failures when it comes to unemployment rates in the SSA region. 80 percent of the Ghanaian workforce is employed in the informal sector. The sector is characterized by underemployment, bad working conditions, uncertain work relationships and low wages. Most people are living with high income insecurity; this doesn't leave out the informal workers within the waste management in Ghana and the various hardships they face.

2.5 Theoretical Literature Review

The Informal Economy Theory provides a foundational lens for understanding economic activities that occur outside the regulatory and institutional frameworks of a country. The concept was first introduced by Keith Hart (1973) in his anthropological study of urban Ghana, where he used the term informal sector to describe income-generating activities not regulated by formal institutions. Hart's work was later expanded upon by organisations such as the International Labour Organization (ILO, 1972), which used the concept to analyze urban employment and poverty in developing countries. The theory challenges the dual notion of modern versus traditional economies by illustrating how informal activities coexist and interact with the formal economy within the same urban space.

At its core, the Informal Economy Theory posits that informality arises from the inability of formal institutions to absorb the entire labor force or provide adequate and equitable livelihood opportunities (Chen, 2012). It recognizes informal work as a rational economic response to

constraints such as unemployment, limited capital, and bureaucratic barriers (de Soto, 1989). In this sense, the informal economy functions as a safety net for many low-income urban dwellers who engage in entrepreneurial or survivalist activities to sustain their livelihoods (Hart, 1973; Williams & Lansky, 2013).

The relevance of this theory to this study lies in its ability to explain the existence and persistence of informal waste collection systems in Accra. Informal waste pickers operate outside formal contracts, yet they play a critical role in maintaining environmental hygiene, recycling materials, and reducing the overall waste burden. Their activities fill a crucial service gap left by formal waste management systems, reflecting the dual structure of Accra's urban economy, where both formal and informal actors coexist within defined waste collection zones. This mirrors the dualism described by Hart (1973), where formal and informal sectors are interdependent rather than mutually exclusive.

Several scholars have applied Informal Economy Theory in studying waste management and urban livelihoods. For example, Medina (2007) draws on this theory to explain how informal recyclers contribute to urban sustainability and resource recovery across Latin America, while Samson (2009) applied it in the South African context to highlight the marginalisation and policy neglect of informal waste reclaimers. Similarly, Alabi and Bah (2020) employed the framework to examine the role of informal waste workers in Nigeria's recycling value chain. These studies emphasize that informal actors, though often excluded from formal planning processes, significantly contribute to environmental and economic outcomes.

In the context of this research, the Informal Economy Theory helps to situate the dynamics between formal and informal waste collectors in Accra as part of a broader developmental and institutional

process. It provides a conceptual foundation for analysing how BTTA's formalisation efforts influenced the livelihoods and well-being of informal waste pickers.

2.6 Conclusion

In this chapter, the reviewed literature reveals that while formalisation is widely advocated as a pathway to improved livelihoods, recognition, and integration, it remains flawed with complexities that are often underexplored in existing studies. Works such as Aparcana (2017) have provided valuable insights into policy-driven approaches and workers' perceptions but fall short of integrating mixed methods that capture both subjective experiences and measurable livelihood outcomes. Similarly, studies by Moaaz and Mansour (2023), Kartal (2021), and Moyo (2022) highlight diverse motivations and barriers but often overlook contextual and intra-sectoral variations among informal workers. These gaps underscore the need for a more nuanced, worker-centered approach that situates formalisation within the socio-economic realities of informal waste pickers.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the methodological framework adopted for this study, which seeks to examine the impact of formalisation on the livelihoods of informal waste workers in Accra, with reference to members of the Borla Taxi and Tricycle Association (BTTA). The chapter provides a detailed explanation of the research design, study population, sampling techniques, data collection methods, instruments, data analysis procedures, and ethical considerations. The choice of a mixed methods approach is justified on the grounds that it will enable the integration of both numerical and narrative evidence, thereby providing a more nuanced and comprehensive understanding of the study. While the quantitative strand allows for measurable assessment of socio-economic outcomes, the qualitative strand captures lived experiences and perceptions that cannot be fully quantified. The combination of these approaches strengthens the validity, depth, and contextual grounding of the research findings.

3.2 Research Approach

This study adopts a convergent parallel mixed methods design, which enables the simultaneous collection and analysis of both qualitative and quantitative data. This is justified because it facilitates triangulation and validation of findings from different sources which enhances the credibility and comprehensiveness of the results. The approach is also complementary in nature i.e., where insights from one method illuminate and explain results from the other, providing a deeper understanding of the formalisation process.

The qualitative strand, involving in-depth interviews and focus group discussions (FGDs), is aimed at exploring subjective experiences, perceptions, and meaning that informal waste workers hold of

formalisation. This approach provides the flexibility to capture detailed narratives that reveal how workers interpret such policy interventions and navigate structural constraints. The quantitative strand, on the other hand, employs structured questionnaires to obtain measurable data on income levels, job security, and access to social services among both BTTA members and non-affiliated tricycle waste collectors. The convergence of these datasets ensures that the analysis reflects both uniformities and individual lived experiences.

3.3 Research Design

The research design is a case study, focusing on members of BTTA to explore their socio-economic improvements since the association became a cooperative in 2023. A case study design is chosen because it allows for an in-depth, contextual analysis of a community, providing a detailed understanding of the lived experiences to ensure these outcomes. The case study approach involves gathering data from various sources, including interviews with members of BTTA, leaders, as well as non-members to assess themes such as the effect of formalisation on their livelihood's outcomes, trust for the leadership, willingness and motivation to be committed to the association. This design is particularly useful for studying complex social issues like worker's wellbeing, where multiple stakeholders and perceptions processes are involved

3.4 Study Population

A study population refers to the entire group of individuals who possess the characteristics relevant to the study objectives (Saunders et al., 2019). The population for this research includes three main categories: members of the BTTA operating under the Accra Metropolitan Assembly (AMA), non-affiliated tricycle waste collectors, and key informants such as BTTA executives and municipal waste management officers. The inclusion of these groups is justified by the need to obtain diverse perspectives from both formalised and non-formalised actors, as well as from institutional

stakeholders responsible for policy design and implementation. This ensures that the analysis captures multiple dimensions of formalisation that are from policy conception to lived experience.

3.5 Sampling and Sampling Techniques

Sampling involves selecting a subset of a population to participate in the study (Kothari, 2004). This research employs a combination of purposive and convenience sampling techniques to ensure both representativeness and practical feasibility. Purposive sampling was chosen because it enables the deliberate selection of participants who have direct experience with the study. Approximately 15 to 20 BTTA members will be selected for interviews and FGDs to ensure diversity in gender, age, and location. Additionally, five key informants comprising of the executives of BTTA and officials from AMA will be purposefully chosen for their institutional knowledge and strategic perspectives.

Convenience sampling will be employed for the quantitative component to identify approximately 15 to 20 non-affiliated tricycle waste collectors who are easily accessible. This approach is justified by the fact that informal workers are mobile in nature and not stationed in one place. The researcher may be required to visit the landfill sites in hopes to get sample indicated. Overall, a total of about 35 to 45 participants will be engaged, a size deemed sufficient for triangulation and comparative analysis while maintaining depth of inquiry.

3.6 Data Collection Methods and Instruments

Data collection refers to the systematic process of gathering information relevant to the research questions (Bryman, 2016). A set of different instruments and techniques will be employed to ensure the validity and reliability of data. The qualitative methods allow for exploratory insights, while the quantitative tools facilitate measurable comparisons.

For the qualitative component, semi-structured interviews will be conducted with BTTA members and key informants to explore their experiences with and perceptions of formalisation. Focus group discussions will also be organised, each consisting of about five participants, to capture collective views and community-level dynamics. These methods are justified because they foster interaction and co-construction of meaning, which are critical in understanding social processes like formalisation.

The quantitative component will utilise a structured questionnaire administered to non-affiliated tricycle waste collectors. This instrument will collect data on socio-economic indicators such as income stability, working conditions, and access to social services. The use of a structured questionnaire ensures standardisation and comparability of responses. Instruments include: an Interview Guide, FGD Guide, and a Structured Questionnaire.

3.7 Data Analysis Procedures

Data analysis involves organising, interpreting, and synthesising data to draw meaningful conclusions (Miles, Huberman & Saldaña, 2014). The study will employ separate but complementary analytical procedures for qualitative and quantitative data, integrating the results during interpretation.

Qualitative data from interviews and FGDs will be transcribed verbatim and analysed thematically using manual coding. Thematic analysis is justified because it allows for the identification of recurring ideas and patterns that capture each participant's lived realities.

Quantitative data will be processed using descriptive statistical analysis using *Pivot tables* to generate frequencies, percentages, and average comparisons. This provides a quantitative

grounding for observed trends and differences between formalised and non-formalised workers. The two datasets will be integrated during interpretation to achieve convergence in the findings.

3.8 Ethical Considerations

Ethical considerations refer to the moral principles that govern the conduct of research to protect participants' rights and ensure the credibility of findings (Israel & Hay, 2006). This study adheres to the principles of informed consent, confidentiality, voluntary participation, and non-maleficence. Participants will be informed of the study's purpose and their right to withdraw at any time without consequence. To protect the identities of all participants, pseudonyms will be used, and data will be securely stored. A letter of participation will be sent to leadership of BTTA to seek approval before fieldwork commences. These measures ensure that the research upholds integrity, respect, and transparency.

3.9 Conclusion

This chapter has presented and justified the methodological framework guiding the study. The adoption of a convergent parallel mixed methods design was justified as the most suitable for capturing the multifaceted nature of formalisation in the informal waste sector. The chapter elaborated on the study population, sampling strategies, data collection tools, analytical procedures, and ethical safeguards. Together, these methods provide a rigorous and comprehensive foundation for investigating how formalisation shapes the socio-economic realities and lived experiences of informal waste workers in Accra.

The next chapter presents the results and analysis of the data collected...

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter interprets the raw voice of participants from the field study that was undertaken into meaningful understanding to address the research question – assessing the socio-economic outcomes of Formalisation on the livelihoods of informal waste workers in Accra. To begin, the chapter lays out the socio-demographic characteristics of the respondent groups, perception of formalisation and its impacts on them. The findings go on to juxtapose the thematic areas of such effect on their livelihood's outcomes, trust for the leadership, willingness and motivation of members of the Borla Taxi and Tricycle Association and non-members.

The researcher undertook 12 structured interviews and focus group discussion with members and interviewed 3 leaders of the Borla Taxi and Tricycle Association and administered 11 questionnaires to non-members towards understanding the disparities between the two groups against the research topic. The following presents findings from the field.

4.2 Socio-demographic characteristics of the members of BTTA

Table 1: Ages of respondents

Age Range	Male (M)	Total
38 - 39	8	8
40 - 44	3	3
45 – 49	1	1
Total	12	12

Source: field data, 2025

The data in the table above represents a homogeneous sample consisting of all males (100%), with the majority (66.7%) grouped in the 38-44 age range. This suggests majority of the members of BTTA, at least within this study's sample, are middle-aged men, potentially reflecting the prevalent demographic in this occupational sector. Future research may need to explore if the association faces challenges in recruiting or retaining female or younger members.

Table 2: Duration of Membership

This table summarizes the reported years of being a waste collector and the year they joined the BTTA. The association was formed in 2018.

	Minimum (years)	Maximum (years)	Average (Approx.)
Started Waste Collection	4	19	9
Joined BTTA	4	7	6

Source: field data, 2025

According to the table above, respondents have a highly varied amount of experience as waste collectors with a range of 15 years (19 - 4). The average of 9 years suggests that they have been doing this job for a very long time. Since the inception of the association in 2018 (7 years ago), the data suggests that majority members of the BTTA joined the association right around that time.

4.2.1 Motivation for joining

The most dominant theme identified across the responses was the need for protection and security stemming from the associated risks and nature of working in the waste sector. Members viewed their motivations as mechanism for dealing with professional vulnerability.

- i. Mitigation of risk: several respondents framed membership as an essential safety net against occupational hazards and external scrutiny. For example, one respondent stated the association would "have our backs when other non-members throw off their refuse along the roadsides, and it was usually blamed on members".
- ii. Addressing job-related issues: member responses frequently referenced the difficulties associated with their profession: "The nature of our jobs is coupled with a lot of issues." Joining the association was therefore a proactive measure to ensure access to assistance in "the event of anything you're supported" and "in joint problems like an accident".
- iii. Solving collective problems: the principle of strength in unity was frequently mentioned, such as, "When you come together, when something happens, you can come together again to solve them." This underscores the association's function as a mutual aid structure.
- iv. Immediate Assistance: The expectation of support during specific difficult periods, such as an accident, was a clear motivator: "When I joined, we helped each other. If you get into problems, like an accident, they provide for you."
- v. Learning and Training: The association provided a learning environment, enabling members to "learn from joint problems" and ensure they "take right things to do."

4.2.2 Understanding and perception of Formalisation

When respondents were asked what their understanding of Formalisation was and their perception of the concept within their work. Members presented their understanding as associated with the benefits of an organised cooperation – what they stood to benefit – rather than the administrative or standardising processes. For example, the concept formalisation was overwhelmingly perceived by respondents through the lens of collective action, mutual support, and gaining a unified voice. Members expressed the concept as a process of bringing people together for mutual benefit and protection, focusing on its role in creating collective strength and support structures for members. Specifically, respondents define it as "bringing together under one umbrella" and achieving "togetherness". This collective unity is valued for creating a "caring or protection" structure where members "can support and protect each other," ensuring "securing protection". Furthermore, formalisation is seen as the essential means to "have a voice," ensuring members are "able to be heard". The interview responses and Aparcana's findings (2.3.3 Lit Review) on informal waste workers show a clear difference in perspective on formalisation. The respondents view it as a bottom-up strategy for self-empowerment, focusing on gaining collective strength and a unified voice to secure protection. Whereas Aparcana (2017) highlights that informal waste workers often view formalisation with mistrust and resistance, seeing it as a top-down imposition from municipal assemblies that threatens their existing autonomy and livelihood flexibility due to historical exclusion.

4.2.3 Experiences with Formalisation

The cooperative transition seems to have generated multiple sets of experiences for the members, primarily revolving around themes of formal recognition, internal cohesion, and overcoming operational hurdles. A key finding is the perceived increase in external validation, especially from

the governmental and municipal assemblies, which has legitimized the cooperative's function and secured recognition for the members' contributions to the nation. BTTA's formalisation is further evidenced by the benefits members attracted such as acquiring driving licenses. Simultaneously, members report a tangible improvement in internal support and solidarity, highlighting the mechanism of mutual aid where members proactively assist one another during roadside breakdowns, fostering a sense of community. Finally, the role of the cooperative's leadership emerged as a critical benefit, acting as advocates to manage recurring external issues, such as securing permissions and managing access during landfill closures, thereby actively supporting the members' daily work.

4.2.4 Motivation and Willingness to Engage

Member motivation to continue supporting the cooperative is rooted in a fundamental need for security and collective problem-solving, viewing membership as a crucial "form of protection" and an implicit insurance against unforeseen personal or operational risks. This commitment is often reinforced by past experiences of support, such as the association assisting a member through a year-long absence following an accident, leading one member to state, "I am not leaving the association." The key benefits derived from membership are multifaceted, encompassing the peace of mind that "should anything happen I am covered" and the intangible social benefit of feeling "part of a community." Furthermore, the cooperative structure provides a formal mechanism for financial welfare through dues and contributions. However, membership is accompanied by risks, including external pressures from non-members ("Foreigners") who are "disrupting our work," and internal strain related to the difficulty in collecting member contributions. This financial difficulty has led to the discontinuation of previously provided welfare items, such as protective clothing, representing a key risk to the retention of tangible benefits.

4.2.5 Trust and Governance in the BTTA Cooperative

The relationship between BTTA members and their leadership is characterised by a strong internal trust, stemming from the leadership's demonstrated commitment to advocate for their needs and provide tangible support. Members overwhelmingly "trust the association leadership to represent their interests" because the leaders actively "take up our problems" and have "our best interests at heart". In contrast, the members held a skeptical view of external government institutions like the Accra Metropolitan Assembly (AMA) and the Tema Municipal Assembly (TMA), who are highly criticised for their "empty promises" and failing to address the needs of members. However, they acknowledged the role of the AMA for driving formalisation. The BTTA leadership is however perceived as the essential cushion for providing the reliable support and protection promised by the "provisions of Bylaws that protect all of us" and provision of PPEs like "gloves were given to members".

4.2.6 Livelihood Outcomes

Table 3: Livelihood outcomes

Highlighting income stability, job security, and access to social protection of members

	Min Income GHS	Max Income GHS	After Expenses	SSNIT	Health Insurance	License Status	Job Security
R1	500	500	No	No	No	Expired	Not secure
R2	300	400	Yes	No	No	Valid	Threatened
R3	150	200	No	No	Yes (Self)	Valid	Secure
R4	300	300	No	No	No	Renewed (Self)	Not secure
R5	400	600	No	Yes (Self)	Yes (Self)	Valid	Not stated
R6	500	600	Yes	No	No	Expired	Not secure
R7	600	700	No	No	No	Expired	Not secure
R8	500	1500	No	No	No	Expired	Declining
R9	1000	1000+	No	No	Yes (Self)	Expired	Temporarily secure
R10	700	800	No	No	No	Expired	Not secure
R11	400	600	No	Yes (Self)	Yes (Self)	Valid	Not stated
R12	500	500	No	No	No	Expired	Uncertain

Source: field data, 2025

In the table above, the data reveals an indirect picture of the impact of "formalisation" on the members of BTTA, as captured through the lens of income, social protection, and overall livelihood outcome.

4.3 Socio-demographic characteristics of the Non-members of BTTA

Table 4: Ages of Non-members

Age Range	Male (M)	Total
18 - 20	4	4
21 - 24	4	4
25 - 32	3	3
Total	11	11

Source: field data, 2025

The dataset shows that most surveyed tricycle operators are younger adults who are not currently members of the BTTA, indicating that they operate independently rather than through the association. This pattern prompts inquiry into why these younger informal workers might resist formal control or association membership. Similarly to members of the BTTA, the findings reveal that all respondents are male which strongly confirms the sector's male-dominated nature, necessitating exploration into potential factors such as the perceived physical requirements of the job that may render it unsuitable to female counterparts.

Table 5: Years worked as a tricycle operator

	Minimum (years)	Maximum (years)	Average (Approx.)
Started Waste Collection	0.5 years	10 years	3.5 years

Source: field data, 2025

In the table above, the average number of years recorded was 3.5 years while the minimum number of years non-members indicated they have spent engaging in this job was less than a year and this was because they mentioned they had relocated to Accra from the North not too long ago. The maximum number of years, being 10 years, represents non-members who indicated they had been doing the waste collection job since they were teenagers.

4.3.1 Perceptions of Formalisation

When non-members were asked about their perceptions of formalisation, whether or not they knew the BTTA and the work they do as a cooperative within the section, respondents answers reveal a strong generalized state of detachment and awareness of the association without understanding what they did. Three respondents stated they had received no information or did not know what the BTTA does. For example, R1 and R6 both explicitly said, "No, no one has informed me about the BTTA and questioned what they did exactly." R3 gave a similar, concise "No" response. Four respondents expressed awareness of the BTTA that was primarily linked to enforcement or transactional interactions. R5 and R10 both reported, "I only hear of them when they are coming to conduct operations to check the stickers on tricycles, but I don't know what they do." R2 and R7 were aware of stickers and paying for them to "reduce harassment" but stated, "I don't know about what they do." Two respondents (R4 and R11) were aware of the BTTA, citing that "They made us download an app some time ago and I used it, but it has deleted from my phone," indicating a failed attempt at digital formalization.

4.3.2 Motivation to join

When respondents were asked about their willingness to subsequently join the association, out of the 11, 10 explicitly stated their preference to 'work independently' or 'don't want to work under any association'. Their main motivation for this independence is the desire to operate freely, work

on their own schedule "so that I can go anywhere." This strong preference for autonomy suggests that they value flexibility, profits over external control, and any unrestricted movement more highly than the perceived benefits of association membership, such as regulated control or collective support.

4.3.3 Livelihood Outcomes of Non-members

Table 6: Livelihood outcomes of non-members

Highlighting income stability, job security, and access to social protection of non-members

	Min Income GHS	Max Income GHS	After Expenses	SSNIT	Health Insurance	License	Job Security
R1		600	No	No	Yes (self)	No	Not secured
R2	150	300	Yes	No	No	No	Not stated
R3		300	Yes	No	No	No	Secure
R4	200	300	Yes	No	No	No	Not secured
R5	150	200	Yes	No	No	No	Not stated
R6	300	600	Yes	No	Yes (self)	No	Not secure
R7	200	300	Yes	No	No	No	Not secure
R8	150	300	Yes	No	No	No	Engaged in other work
R9	250	500	Yes	No	No	No	Not secure
R10	500	1000	Yes	No	No	No	Not secure
R11	150	300	Yes	No	No	No	Not stated

Source: field data, 2025

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The preceding chapter presented and analysed the raw data collected through structured interviews and self-administered questionnaires to address three key research questions to explore informal waste workers' perceptions of formalisation, to measure how these perceptions affect their livelihood outcomes and explore ways qualitative narratives of livelihood impacts align with, or diverge from, the quantitative measures of income stability, job security, and social mobility. The current chapter draws insight from chapter four to draw conclusions and provides key recommendations for the study.

5.2 Summary

The findings reveal that informal waste workers' lived experiences fundamentally shape how they understand and interpret formalisation. Members of the Borla Taxi and Tricycle Association (BTTA) largely conceptualised formalisation process of collective organisation, social protection and voice and not as a rigid administrative or regulatory system. Their shared lived experiences positioned formalisation as a mechanism for mutual support, safety and recognition, which they associated with being "brought under one umbrella." For these workers, the implications of formalisation are tied to stronger internal solidarity with one another, and improved capacity to negotiate with external actors. In contrast, non-members experienced formalisation as distant, unclear and largely enforcement driven. The findings reflected limited knowledge of formalisation initiatives and framed such processes as external impositions primarily associated with compliance checks and excessive control.

Motivations to engage with or resist formalisation were strongly shaped by workers' everyday vulnerabilities and aspirations. Association members expressed willingness to participate in formalisation as a survival strategy rooted in the need for security, collective problem-solving and risk mitigation within a high-risk occupation. Past experiences of receiving support during accidents, disputes or illness reinforced their long-term commitment to the association. Conversely, non-members articulated strong resistance based on their desire for independence and operational flexibility. Their preference to "work independently" reflected a fear that formalisation would impose restrictions, reduce mobility, and threaten profit-making opportunities. These contrasting motivations demonstrate that willingness to engage with formalisation is less about the abstract concept itself and more about how workers anticipate its impact on their control over work and livelihood stability.

Trust emerged as a critical lens through which formalisation was evaluated. Members shared lived experiences of responsive and protective association leadership fostered high levels of internal trust, as leaders were perceived as active advocate for members' interests and provided tangible support. However, experiences with municipal institutions such as the Accra Metropolitan Assembly (AMA) and Tema Municipal Assembly (TMA) were characterised by frustration and skepticism due to unmet promises and inconsistent engagement. This duality produced a pattern of trust in internal governance structures and mistrust of state-led formalisation. For non-members, minimal engagement and limited information about formalisation initiatives contributed to detachment and mistrust, reinforcing their reluctance to participate in collective or governmental imposed structures.

Socio-demographic and occupational characteristics were found to be significant predictors of these perceptions. Workers who were older and had longer experience in waste collection,

particularly those within the ages of 38 - 45 and with an average of nine years in their occupation, were more likely to perceive formalisation positively. While the younger folks, typically aged between 18 and 32 years and with an average of 3.5 years of work experience, were more likely to express resistance or uncertainty. Membership status within an association or not emerged as a strong predictor of perception, indicating that such affiliation mediates how workers interpret the risks and opportunities associated with formalisation.

Participation in formalisation initiatives through BTTA showed a modest but observable relationship with economic livelihood outcomes. Members displayed relatively higher income ranges and more consistent access to valid driving licences compared to non-members. Some members reported self-enrolment in health insurance schemes, while the majority of both groups lacked formal pension coverage such as SSNIT. Despite the perceived benefits, quantitative evidence indicates that formalisation has not yet translated into comprehensive livelihood security, as many members continued to report income instability, weak job security and limited social protection. Non-members demonstrated more volatile income patterns and consistently weaker access to formal social protection mechanisms, reinforcing their structural vulnerability.

Leadership figures within BTTA were viewed by members as credible intermediaries who could negotiate with authorities and resolve conflicts, highlighting an internal legitimacy structure that did not extend to external governmental institutions. These differences underscore the fragmented nature of trust and engagement across hierarchical levels of the sector.

The integration of qualitative and quantitative findings provides a deeper explanation of workers' perceptions and livelihood outcomes. Qualitative insights relating to trust, moral obligation, solidarity and collective identity help to explain why quantitative data show more positive perceptions of formalisation among association members. Workers' narratives of belonging,

mutual care and leadership accountability translated into measurable patterns of opportunity-oriented perceptions and relatively higher livelihood stability. Conversely, qualitative accounts emphasising autonomy, fear of control and historical exclusion illuminate why younger and independent workers were more likely to view formalisation as risky in the quantitative strand.

5.3 Conclusion

The findings highlight a substantial convergence between workers' qualitative narratives and their measured livelihood outcomes. Members' stories of improved recognition, collaboration and support aligned with quantitative indications of better access to licences and slightly more stable incomes. Non-members' narratives of isolation and self-reliance aligned with lower levels of job security and weaker access to social protection. However, an important divergence emerged in relation to perceived security. While members qualitatively described a strong sense of safety and belonging, quantitative evidence revealed continued gaps in formal social protection, especially regarding pension and insurance coverage, highlighting a disparity between subjective and objective security.

Taken together, the integrated findings suggest that successful formalisation strategies in Ghana's waste management sector must move beyond regulatory compliance and enforcement. Rather, inclusive pathways should be grounded in existing trusted worker-led structures, prioritise transparent communication, and actively address the livelihood priorities of informal workers. Strengthening tangible benefits such as social protection, income stability and legal recognition is essential to building trust and reducing resistance. These insights provide an evidence-based foundation for designing formalisation processes that are more responsive, participatory and capable of enhancing both trust and livelihoods in the sector.

5.4 Recommendations

- i. Empower association-led formalisation pathways: to improve engagement and trust, formalisation processes should be established through existing, trusted worker-led associations such as BTTA rather than imposed through purely top-down municipal systems. Government agencies should formally recognise and partner with these associations as intermediaries in policy implementation, licensing, training and enforcement. This approach would leverage the high levels of internal trust already present within worker organisations, reduce resistance from informal workers, and create a sense of shared ownership over formalisation processes. Not only giving them recognition but ensuring that associations are embedded into the formal governance fabric that can transform from a coercive process into a collaborative pathway.
- ii. Establish communication platforms: communication gaps should be addressed through the creation of structured, two-way communication mechanisms between informal workers, associations and municipal authorities. This includes regular community forums, feedback clinics and participatory dialogues where workers can openly express concerns, access accurate information and co-design solutions. Digital tools introduced in the past should be redesigned using co-creation principles to ensure usability, trust and relevance. Clear, consistent communication will reduce misinformation, improve transparency, and enable informal workers to understand the practical benefits, responsibilities and protections linked to formalisation.
- iii. Develop worker centric policy frameworks: policy reforms should shift from enforcement-dominant approaches to incentive-based, worker-centred frameworks that directly improve livelihoods. Formalisation should be linked to tangible, visible

benefits such as subsidised licensing, access to health insurance, guided SSNIT enrolment, occupational safety equipment and microcredit facilities. Policies should be differentiated to account for the needs of younger, mobile and independent workers by offering flexible registration models that preserve elements of autonomy. By prioritising livelihood gains alongside regulatory goals, policy can motivate voluntary participation and build long-term trust in formalisation initiatives.

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APPENDICES

7.1 Data collection Instruments

QUALITATIVE DATA COLLECTION INSTRUMENTS

1. In-Depth Interview Guide for BTTA Members

Introduction

Dear Respondent. My name is Priscilla Okumo, I am a student at the University of Media, Arts and Communication, Institute of Journalism (UniMAC-IJ). I would like your opinion on this research which aims to explore the impact of formalisation on informal waste workers' livelihoods.

It will take you about 30-40 minutes to complete this interview. If you are currently working as a member of the BTTA, then you qualify. All your responses are confidential and will only be used for the purposes of this research so please be very objective in your responses.

Thank you in advance for taking the time to participate in this research.

Section 1: Background Information

1. How long have you been working as a tricycle waste collector?
2. Are you currently a BTTA member?
3. Why did you choose to join/not join BTTA?

Section 2: Understanding and Perceptions of Formalisation

4. What does “Formalisation” mean to you in the context of your work?
5. When you first heard about BTTA becoming a cooperative, what did you think?
6. How has the transition from affected your work?

Section 3: Lived Experiences with Formalisation

7. Describe any changes you have personally experienced since the cooperative was formalised two years ago?
8. Have you encountered challenges in adjusting to the system? If yes, what challenges?
9. How would you describe the recognition and support you get now compared to before when BTTA became a cooperative

Section 4: Motivation and Willingness to Engage

10. What motivated you to continue supporting your membership with the association even after it became cooperative?
11. What benefits or risks do you associate with being part of a member?

Section 5: Trust and Governance

13. Do you trust the BTTA leadership to represent your interests? Why or why not?
14. What are your thoughts on the role of institutions like the AMA or government agencies in driving formalisation?
15. What main factors influence your trust or mistrust in these agencies mentioned in Q14?

Section 6: Livelihood Outcomes

16. How has your income changed since BTTA's formalisation?
17. Describe how your access to healthcare, social protection, or job security improved?
18. What aspects of your livelihood have remained the same or worsened?

Section 7: Recommendations

19. What changes would you recommend improving BTTA's efforts?
20. How can the cooperative or the AMA better support waste workers like you?

1. Key Informant Interview Guide (Leadership, AMA, Footprints Africa)

Section 1: Institutional Role

1. What role did your organisation play in the BTTA formalisation process?
2. How did the partnership with BTTA begin?

Section 2: Policy & Governance Perspectives

3. What challenges complicate formalising informal waste workers in Accra?
4. What strategies have worked well so far?
5. How inclusive is the process in terms of gender, education, and participation?

Section 3: Livelihood and Social Outcomes

6. What changes, if any, have you seen in income stability or overall worker welfare among members?
7. To what extent do members receive access social protection (NHIS, pensions, insurance, etc.)?

Section 4: Sustainability, Trust & Power Dynamics

- 8. What issues of mistrust or conflict have emerged?
- 9. How does leadership ensure transparency and fairness?

Section 5: Recommendations

- 10. What is needed to scale or improve formalisation in Accra?

QUANTITATIVE DATA COLLECTION INSTRUMENT

3. Structured Questionnaire for Waste Collectors (Non-Members)

Section A: Socio-Demographic Information

- 1. Sex: Male Female
- 2. Age:
- 3. Education level:
 No schooling Primary JHS SHS Tertiary
- 4. Years worked as tricycle operator:
- 5. Are you a BTTA member? Yes No
- 6. Main source of income: Waste collection Other (specify).....

Section B: Perceptions of Formalisation

Awareness

- 7. Have you heard of formalisation?

Yes No

8. Do you understand what BTTA as a cooperative does?

Yes No Partially

Section C: Motivation and Willingness

9. Would you prefer to work independently/continue to work independently?

Yes No Not sure

10. What motivates you to be a member? (Tick all)

Income stability

Safety/security

Avoid police harassment

Access to NHIS

Training

None

11. What discourages you?

Taxes

Fees

Fear of control

Corruption

Lack of information

Section E: Livelihood Outcomes

12. Average weekly income as a non-member (GHS):

13. Do you have access to any of these?

NHIS

Safety gear

Training

Pension

None

14. How would you rate your job security now?

Very secure Secure Not secure

Section F: Open Responses

15. What major benefits have you seen from the association (if any)/ working independently?

16. What challenges do you still face as a waste collector?

17. What should be improved in the association/ increase your likelihood of joining?

7.2 Pictures from field data collection

