



**SCHOOL OF GRADUATE STUDIES AND RESEARCH (SoGSaR)
FACULTY OF PUBLIC RELATIONS, ADVERTISING, AND
MARKETING**

**EXPLORING COMMUNICATION STRATEGIES FOR ENHANCING
PUBLIC PARTICIPATION IN SOLID WASTE MANAGEMENT
CAMPAIGNS IN ACCRA.**

BY

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**A DISSERTATION SUBMITTED TO THE UNIVERSITY OF MEDIA, ARTS AND
COMMUNICATION-INSTITUTE OF JOURNALISM (UniMAC-IJ) IN PARTIAL
FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MA IN PUBLIC
RELATIONS WITH MARKETING**

December, 2025

DECLARATION BY STUDENT

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 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-Institute of Journalism, UniMAC-IJ.

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December 24th, 2025

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DEDICATION

This work is dedicated to my Wife, whose unwavering support and love, and belief in my dreams have been the foundation of my journey. It is also dedicated to my children and the entire extended family.

ACKNOWLEDGEMENTS

I want to sincerely thank Almighty God for His provision, protection, and direction during this assignment.

Lecturer, Dr Albert Anani-Bossman, has my sincere gratitude for his knowledgeable teaching, helpful critiques, and unwavering support, all of which were crucial to the accomplishment of this work.

I also thank the University of Media, Art and Communication for providing us with the resources, expertise, and knowledge required to complete this work.

My sincere gratitude goes out to my family and friends for their moral and emotional support.

Finally, I acknowledge all lecturers and institutions whose works and ideas laid the foundation for this study, as well as every individual who contributed in one way or another to the completion of this project.

ABSTRACT

This study investigates communication strategies for enhancing public participation in solid waste management (SWM) in Accra, Ghana. Despite various campaigns, public engagement in solid waste management activities, such as proper waste disposal, participation in clean-up programs, and reporting sanitation issues, remains low. Guided by Participatory Communication and Social Marketing theories, this qualitative research engaged 50 residents and 8 institutional stakeholders through interviews and focus group discussions. Findings reveal a critical gap between high campaign awareness and low public participation, driven by a trust deficit in formal institutions, top-down communication, and inadequate waste collection infrastructure. Residents showed a strong preference for trusted, interpersonal channels like community durbars and local leaders over mass media. The study concludes that effective communication requires a strategic shift from one-way information dissemination to a participatory, multi-channel model. Key recommendations include leveraging local leaders, using clear, actionable messaging, establishing feedback mechanisms, and aligning communication with reliable service delivery. This research provides a framework for improving SWM communication in Accra and similar urban contexts.

Keywords: Solid Waste Management, Public Participation, Communication Strategies, Participatory Communication, Social Marketing, Accra.

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LIST OF ABBREVIATIONS

AMA: Accra Metropolitan Assembly

BCC: Behaviour Change Communication

CBOs: Community-Based Organizations

COM-B: Capability, Opportunity, Motivation - Behaviour Model

EPA: Environmental Protection Agency

ESPA: Environmental Service Providers Association

FGDs: Focus Group Discussions

LMICs: Low- and Middle-Income Countries

MMDAs: Metropolitan, Municipal, and District Assemblies

PC: Participatory Communication

PR: Public Relations

SBCC: Social and Behavioural Change Communication

SM: Social Marketing

SMS: Short Message Service

SWM: Solid Waste Management

TPB: Theory of Planned Behaviour

4 Ps: Product, Price, Place, Promotion

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Effective solid waste management (SWM) is a pervasive challenge for cities in the Global South, where rapid urbanization outpaces infrastructural and institutional capacity. In Accra, Ghana, this challenge is acute. While policy and infrastructural solutions are crucial, their success is fundamentally dependent on public participation, which is largely mediated through communication. This study proposes that a critical gap exists between the communication strategies employed in SWM campaigns and their effectiveness in motivating sustained public engagement in Accra. This chapter provides the foundation for the research by presenting the background to the problem, the problem statement, research objectives and questions, the significance of the study, its scope and limitations, and key operational definitions.

The management of solid waste is a defining challenge of urban governance in the 21st century, particularly in rapidly growing cities of the developing countries. Globally, urban areas generate over 1.3 billion tonnes of waste annually, a figure projected to double by 2050, placing immense strain on municipal systems worldwide (Silpa, Lisa, Perinaz, & Van Woerden, 2022). This crisis is most acute in low- and middle-income countries (LMICs), where challenges of inadequate infrastructure, limited funding, and inefficient collection services are compounded by accelerated urbanization and changing consumption patterns (UNEP, IETC, & CSIR, 2018). The African context magnifies these issues, with the urban population expected to triple by 2050, creating unprecedented pressure on already stretched services (UNEP, IETC, & CSIR, 2018; Odonkor & Sallar, 2021)

Accra, the capital of Ghana, is a prime example of these difficulties. The city produces between 3,000 and 5,000 metric tonnes of waste every day, but it faces challenges with poor collection, widespread illicit dumping, and low public adherence to waste segregation regulations (Amankwaa & Boafo, 2021). Scholarly work on this issue in Ghana has historically focused on technical, logistical, and policy dimensions, often concluding that infrastructural deficits are the primary bottleneck (Oduro-Appiah, et al., 2017; Oteng-Ababio, 2011). However, this technical focus has overshadowed a critical social component: the role of the citizen. In many Ghanaian communities, sanitation is still perceived as the sole responsibility of local authorities, leading to a lack of individual accountability and low participation in sustainable waste practices (Amoah & Kosoe, 2014). This suggests that the waste problem is not merely logistical but also profoundly behavioral.

This is where strategic communication becomes paramount. Effective communication moves beyond one-way information dissemination to foster dialogue, shape perceptions, and motivate sustainable behavior change. Public Relations (PR) theory offers valuable frameworks for this task. (Grunig, 2001) Two-Way Symmetrical Model, for instance, emphasizes building mutually beneficial relationships through dialogue and listening, rather than simply disseminating messages. Similarly, Behavior Change Communication (BCC) focuses on crafting tailored messages that address specific audience beliefs and barriers to change (Dzisah & Diedong, 2025). In the context of SWM, these strategies can reframe waste as a shared responsibility and provide practical, context-specific guidance for action. Furthermore, Participatory Communication models advocate for involving community members in campaign design, ensuring cultural relevance and fostering a sense of ownership that is critical for long-term engagement (Anani-Bossman & Blankson, 2024).

These theoretical frameworks have a lot of potential, but little is known about how well they perform in Ghana's SWM industry. Government institutions like the Accra Metropolitan Assembly (AMA) and private waste management firms like Zoomlion Ghana Ltd. do employ communication campaigns, but these often rely on top-down, mass-media approaches that fail to resonate with the public's lived realities (Nguyen, Nguyen, Phung, & Yên-Khanh, 2023). This has resulted in a persistent gap between campaign efforts and behavioral outcomes, such as consistent waste separation and active community participation. Therefore, this study is justified by the critical need to bridge this gap, applying communication theory to empirically evaluate existing strategies in Accra and propose more effective, participatory, and culturally grounded approaches to public engagement.

1.2 Problem Statement

Despite public awareness campaigns, citizen participation in waste management in Accra remains low. Institutions like AMA, EPA, and Zoomlion Ghana Ltd. have implemented mass media campaigns, community clean-ups, and social media outreach, but household waste separation and active community involvement remain unmet. Several factors account for this challenge. Messages are often poorly targeted and lack cultural sensitivity, while opportunities for feedback and dialogue are limited (Oteng-Ababio, 2011); (Oduro-Appiah, et al., 2017); (Amoah & Kosoe, 2014). Weak trust in the institutions responsible for sanitation further undermines credibility and discourages cooperation (Lissah, Ayanore, Krugu, Aberese-Ako, & Ruiter, 2021). Moreover, much of the existing research and practice has focused on infrastructure and policy, with limited integration of communication theories that explain and influence behavior. At the same time, recent empirical communication research in Ghana and the

region points to practical, theory-driven approaches that can improve outcomes. Studies applying social marketing and behaviour-change frameworks in Greater Accra demonstrate that attitudes, subjective norms, and perceived control significantly predict household waste disposal behaviour indicating that campaigns should target these constructs rather than only provide information (Tweneboah-Koduah, Adams, & Nyarku, 2020). Local evaluations of Social and Behaviour Change Communication (SBCC) strategies in Accra and other Ghanaian districts show that participatory campaigns including those that engage community leaders, enable feedback, and deploy locally tailored messages are more effective at promoting compliance and sustained participation than one-way mass communication (Heynnor, 2024); (Dzisah & Diedong, 2025). Systematic reviews of participatory research further reveal that community involvement and co-designed interventions lead to better adoption and sustainability of solid waste management practices (Akyiaw et al., 2025; He et al., 2024). Despite this communication focused evidence, such approaches are underutilized in Accra's mainstream waste campaigns, which tend to emphasize top-down information dissemination and infrastructural fixes. This study aims to bridge this gap by evaluating the existing communication strategies in Accra and proposing more inclusive, participatory, and culturally relevant approaches to enhance public participation in solid waste management.

1.3 Research Objectives

General Objective:

To explore and evaluate the communication strategies used in solid waste management campaigns in Accra and assess their effectiveness in enhancing public participation.

Specific Objectives:

1. To identify and describe the communication strategies used by government agencies and private waste management firms in Accra.
2. To assess the extent to which these strategies have influenced public awareness, attitudes, and behaviors regarding solid waste management.
3. To evaluate which communication channels residents both prefer and consider trustworthy for receiving information on solid waste management.
4. To propose improved communication approaches for fostering sustained public participation in waste management initiatives in Accra.

1.4 Research Questions

1. What communication strategies have been used in solid waste management campaigns in Accra?
2. How effective are these strategies in influencing public awareness, attitudes, and participation in waste management practices?
3. Which communication channels and formats are most preferred and trusted by residents for receiving waste management information?
4. What improvements in communication strategies can enhance public participation in solid waste management in Accra?

1.5 significance of the study

This research will contribute to the body of knowledge in development and environmental communication by applying and testing established communication models, such as the Two-Way Symmetrical Model and Social Marketing Theory, within the under-researched context of urban waste management in Ghana. It seeks to

fill a notable theoretical gap by providing empirical data on how these frameworks can be adapted to foster public participation in low- and middle-income countries (LMICs). In addition, the findings will be vital for policymakers and public institutions, including the AMA and the Ministry of Sanitation and Water Resources. By identifying the strengths and weaknesses of current communication efforts, the study will provide evidence-based recommendations for designing more inclusive, culturally appropriate, and effective public engagement strategies, ultimately supporting broader urban sanitation goals.

Furthermore, for public relations practitioners, municipal authorities, and NGOs engaged in sanitation campaigns, this study offers actionable insights. It will guide the design and implementation of communication campaigns that move beyond raising awareness to actually motivating behavior change and fostering long-term civic partnership in solid waste management.

1.6 Scope and limitations of the study

1.6.1 Scope

The study will focus on the city of Accra, Ghana's capital, where waste management challenges are most pronounced. It will analyze SWM campaigns initiated by key stakeholders, including the AMA, EPA, and Zoomlion Ghana Ltd. The research will examine the design of campaign messages, the channels used for dissemination, and the subsequent public response, particularly in terms of participation levels, compliance, and perceived behavior change. The study targets both urban residents in Accra as the primary audience and communication practitioners as the campaign initiators.

1.6.2 Limitations

- The study relies in part on self-reported data from residents, which may be subject to recall or social desirability bias. This will be mitigated by triangulating survey results with interviews and, where possible, existing campaign documentation.
- Confidentiality issues could restrict access to institutional data on communication tactics and campaign funds.
- Local socio-cultural and infrastructure variations can make the results not applicable to other Ghanaian cities.

1.7 Operational Definitions

Communication Strategies: The planned use of communication methods and tools (e.g., media, messaging, stakeholder engagement) to achieve specific behavioral or informational outcomes in public campaigns.

Public Participation: The active involvement of citizens in planning, implementing, and sustaining solid waste management practices, including compliance, volunteering, and civic advocacy.

Solid Waste Management (SWM): The process of collecting, transporting, treating, and disposing of solid waste generated by households, institutions, and commercial entities in an environmentally sustainable and health-conscious manner.

Public Relations (PR): The strategic communication process that builds mutually beneficial relationships between organizations and their publics, particularly through dialogue and engagement aimed at fostering understanding and influencing behavior.

1.8 Chapter Summary

This chapter has established the foundation for the research by introducing the critical role of communication in addressing Accra's solid waste management challenges. It

outlined the global and local context of the problem, highlighting the gap between technical solutions and the need for public participation.

The problem statement identified the gap between existing campaigns and low public participation. The objectives and research questions were set out, followed by the academic, policy and practical significance of the study, scope, limitations, and key operational definitions. The following chapter will present a comprehensive review of the literature related to this study.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter provides a critical review of literature central to the study's objective: exploring communication strategies for enhancing public participation in solid waste management (SWM) in Accra, Ghana. The review is structured to move from the theoretical underpinnings of communication to the specific contextual challenges in Accra. It examines key communication theories such as Participatory Communication and Social Marketing, and their application in waste management campaigns globally and within Africa. The chapter then synthesizes the barriers to and motivators for public participation, with a dedicated focus on the urban Ghanaian context. By highlighting the gaps in current communication practices, this review establishes the foundation for investigating more effective, participatory, and contextually relevant communication strategies for SWM in Accra.

2.1 Theoretical Framework

The success of waste management campaigns is heavily dependent on the communication theories that underpin them. This section outlines the primary theoretical frameworks that inform strategies for fostering public participation, with a focus on those most relevant to the socio-cultural context of Accra.

2.1.1 Participatory Communication Theory

Participatory Communication Theory is a paradigm that radically reorients the relationship between communicators and communities. Evolving from critiques of top-down development models, such as the Dominant Paradigm of the 1950s-60s, it states that sustainable social change cannot be imposed but must emerge from within the community itself (Servaes & Servaes, 2021; Waisbord, 2008) Its philosophical roots

are in the work of (Freire, 2020) , who, in his seminal *Pedagogy of the Oppressed*, condemned the "banking concept" of education, where knowledge is deposited into passive recipients. Instead, Freire advocated for dialogue as a means for communities to critically analyze their world and act to transform it. Participatory Communication operationalizes this philosophy, framing communication not as a tool for transmission but as a process for collective conscientization and empowerment (Huesca, 2002). In this model, the community shifts from being a target to being a partner. (Servaes & Servaes, 2021) emphasizes that this approach prioritizes collaboration, mutual understanding, and the empowerment of local people, ensuring that communication strategies are context-specific, culturally relevant, and responsive to local needs. This involves a cyclical process of dialogue, action, and reflection, where external facilitators (e.g., waste management authorities) and community members co-create knowledge and solutions (Mefalopulos, 2008). The core principles include:

- Voice and Access: Ensuring all community segments, including marginalized groups, have the opportunity to express their views.
- Dialogue: Fostering horizontal communication where all participants are both speakers and listeners.
- Self-reliance and Ownership: Building local capacity and ensuring the community feels a sense of ownership over projects, which is crucial for long-term sustainability (Tufte & Mefalopulos, 2009).

In the context of waste management, Participatory Communication is critical for moving beyond technical fixes to address the socio-cultural dimensions of waste. Waste disposal practices are deeply embedded in daily routines, cultural norms, and economic constraints. A top-down campaign promoting recycling may fail if it does not account for local perceptions of cleanliness, the economic realities of the informal waste sector,

or the logistical challenges of specific neighbourhoods. As (Jacobson & Storey, 2004) argue, participatory approaches are uniquely suited to uncover this "situated knowledge," leading to interventions that are not only more effective but also more equitable.

Evidence of its efficacy is found globally. In a slum-upgrading project in Nairobi, Kenya, the use of participatory video allowed residents to visually document and communicate their waste management challenges to city officials, leading to more responsive service delivery and increased community-led clean-up initiatives (Mitullah, 2004). In Latin America, (Waisbord, 2008) documented how cities like Curitiba, Brazil, and Lima, Peru, integrated participatory communication into their waste management policies by establishing community forums where residents, waste pickers, and officials collaboratively designed recycling programs, which significantly improved waste diversion rates and social inclusion.

In the Ghanaian context, the applicability of this theory is pronounced. Studies have consistently shown that SWM campaigns in Accra have historically failed due to their top-down nature, failing to incorporate the views and lived experiences of residents (Oduro-Appiah et al., 2017; Oteng-Ababio, 2011). A participatory approach could directly address this trust deficit. For instance, rather than simply broadcasting messages on radio, authorities could facilitate community mapping exercises where residents identify illegal dumping hotspots and co-design solutions, such as the placement of communal bins or the scheduling of collection times. This process, as demonstrated by (He et al., 2024) in their study of peri-urban Ghana, fosters a sense of shared responsibility. By integrating traditional leadership structures and local communication channels, participatory campaigns can transform SWM from a

perceived external imposition into a tangible collective action for community benefit, thereby enhancing both immediate participation and long-term resilience.

2.1.2 Social Marketing Theory

Social Marketing Theory, developed by (Burrows, 2009), applies commercial marketing principles to influence behaviors that benefit society. The goal is not to sell a product but to "sell" a behavior change, such as recycling or waste segregation. The core of this approach is a deep understanding of the target audience's needs, barriers, and motivations, leading to tailored interventions.

The "4 Ps" of marketing provide a useful framework for designing SWM campaigns:

Product: The desired behavior (e.g., using a new recycling bin).

Price: The perceived cost of participation (e.g., time, effort, inconvenience).

Place: Ensuring the means to perform the behavior are accessible (e.g., conveniently located recycling facilities).

Promotion: The communication strategies used to promote the behavior.

In Ghana, SWM campaigns have largely focused on promotion through awareness-raising, without adequately addressing the other "Ps" (Oduro-Appiah et al., 2017). Social Marketing offers a more strategic approach by identifying and lowering the "price" of participation. For example, by simplifying waste separation rules or offering incentives and ensuring the "place" is convenient. Studies show that incentive-based programs and community-based social marketing, which directly involves the target audience, are highly effective in fostering sustainable behavior change (Ankamfio M., 2017.; McKenzie-Mohr, 2000; Petrescu et al., n.d.). For Accra, this could translate to campaigns that offer tangible rewards for consistent recycling or that use gamification

through mobile apps to make participation more appealing, thereby moving beyond mere awareness to actionable engagement.

2.1.3 The Two-Way Symmetrical Model

Two-Way Symmetrical Model of communication by (Grunig, 2001) emphasizes balanced dialogue between organizations and their publics, where feedback is used to adjust strategies for mutual benefit. While this model is foundational in public relations, its application in this context is largely encompassed by the more community-centric principles of Participatory Communication. The core idea of fostering dialogue and using feedback, as highlighted by (Grunig, 2001), remains a valuable component of effective engagement but will be integrated into the discussion of participatory strategies and feedback mechanisms rather than treated as a standalone framework for this study.

2.2 Communication Strategies In Waste Management: Global And African Perspectives

This section examines how communication strategies are applied in waste management, drawing brief insights from global contexts before focusing more deeply on African and Ghanaian experiences.

2.2.1 Global Context: Lessons in Behaviour Change Communication

In developed countries, communication strategies have evolved to sophisticated behaviour change campaigns. In the United Kingdom, the Waste and Resources Action Programme (WRAP) utilizes social marketing and clear messaging to significantly improve household recycling rates (WRAP, 2020). Germany's success with its Green Dot recycling system was bolstered by extensive public education that emphasized environmental benefits and simplified participation (Wiedemann & Femers, 1993).

These cases underscore that effective communication combines clear information with strategies that reduce barriers and align with citizen values. The key lesson for contexts like Accra is the need to move beyond information dissemination to a more strategic, audience-focused approach that makes the desired behavior easy and socially desirable.

2.2.2 African Context and Communication Gaps

In many African cities, rapid urbanization and strained infrastructure exacerbate SWM challenges (UNEP et al., 2018). Communication campaigns in these contexts often fail due to a lack of cultural resonance, poor community engagement, and a one-size-fits-all approach (Oduro-Appiah et al., 2017). For example, in Accra, despite initiatives by the Accra Metropolitan Assembly (AMA) and private entities like Zoomlion, campaigns relying on radio and television have had limited impact on long-term behaviors because they often fail to address underlying barriers such as lack of facilities, perceived inconvenience, or low trust in authorities (Amankwaa & Boafo, 2021; Oteng-Ababio, 2011).

The role of the informal waste sector further highlights the communication gap. Informal waste pickers are crucial to Accra's recycling chain, yet they are rarely integrated into formal communication or policy frameworks (Amankwaa & Boafo, 2021). A participatory communication strategy that includes these actors could enhance system efficiency and equity, recognizing their role and improving their working conditions.

2.3 Public Participation And Behaviour Change In Waste Management

Public participation is the cornerstone of sustainable waste management, transforming it from a mere municipal service into a shared civic responsibility. This section delves into the theoretical underpinnings of behaviour change, the specific motivators and

barriers within the waste management context, and the strategic role of communication in influencing social norms and sustaining engagement.

2.3.1 Theories of Behaviour Change

Understanding why people adopt or reject new behaviours is critical for designing effective communication campaigns. While the Theory of Planned Behaviour (TPB) (Ajzen, 1991) provides a robust framework, it is valuable to situate it alongside other complementary models.

Theory of Planned Behaviour (TPB): As established, TPB states that behaviour is influenced by three factors: (1) Attitudes (the individual's positive or negative evaluation of the behaviour); (2) Subjective Norms (the perceived social pressure from important others to perform or not perform the behaviour); and (3) Perceived Behavioural Control (PBC) (the perceived ease or difficulty of performing the behaviour, reflecting past experiences and anticipated obstacles) (Ajzen, 1991). In waste management, a resident's decision to segregate waste is thus a function of whether they think it is beneficial (attitude), whether they believe their neighbours and family expect it (subjective norm), and whether they have the time, knowledge, and a bin to do so (PBC). A meta-analysis by (Mannetti et al., n.d.) confirmed that TPB is highly effective in predicting recycling intentions, with PBC often being the strongest predictor, highlighting that making the behaviour easy is paramount.

The COM-B Model: A more recent and comprehensive framework is the COM-B model, developed by (Michie et al., 2011). It states that for any behaviour (B) to occur, an individual must have the Capacity (psychological and physical), the Opportunity (social and physical), and the Motivation (reflective and automatic). This model is the basis of the widely used Behaviour Change Wheel. In Accra, a resident may have the capacity (knowledge of how to recycle) and the motivation (desire to help the

environment), but without the opportunity (a reliable collection service or accessible recycling bins), the behaviour will not happen. This model forces a holistic diagnosis of the problem beyond just knowledge or attitudes.

Community-Based Social Marketing (CBSM): Building on these theories, (McKenzie-Mohr, 2000) developed CBSM as a pragmatic approach to fostering sustainable behaviours. CBSM moves beyond information campaigns to focus on directly removing barriers and enhancing benefits at the community level. Its steps include: selecting a specific behaviour, identifying the barriers and benefits, developing strategies to overcome these barriers (e.g., commitments, prompts, norms), piloting the strategy, and evaluating its impact. This approach is highly relevant for Accra, as it advocates for localized, evidence-based interventions rather than broad, generic campaigns.

2.3.2 Motivators and Barriers to Participation

A nuanced understanding of what drives and hinders public action is the foundation of any successful waste management campaign. These factors are often context-specific and can be categorized as internal (psychological) and external (structural).

Motivators: These are the levers that communication can pull to encourage participation.

- **Environmental Concern and Altruism:** A general desire to protect the environment for future generations is a powerful, though sometimes abstract, motivator (De Young, 2000)
- **Community Well-being and Public Health:** In dense urban settings like Accra, this is often a more immediate and potent motivator. Framing waste management as a direct action to reduce disease, eliminate pests, and create a cleaner, more pleasant living environment for one's family and community can be highly effective (Cialdini, 2003)

- **Intrinsic Rewards:** Some individuals derive personal satisfaction, a sense of duty, or feelings of competence from "doing the right thing" (De Young, 2000).
- **Extrinsic Incentives:** Tangible rewards, such as reduced waste collection fees, cash for recyclables, or public recognition, can provide a strong initial impetus for behaviour change (Burrows, 2009).

Barriers: Identifying and dismantling these barriers is the primary task of a strategic communication campaign.

- **Lack of Knowledge and Awareness:** This is the most commonly cited, but often overemphasized, barrier. It includes not knowing what to do, how to do it, or why it matters (Oduro-Appiah et al., 2017).
- **Structural and Infrastructural Deficits:** This is a critical barrier in many LMICs. It encompasses the lack of reliable waste collection services, the absence of separate bins for different waste streams, and the physical inaccessibility of recycling centres. No amount of communication can overcome the absolute barrier of non-existent infrastructure.
- **Perceived Inconvenience:** This relates to the "Price" in Social Marketing. If waste segregation is seen as time-consuming, messy, or complicated, participation will be low (Schultz & Oskamp, 1996).
- **Weak Social Norms and Lack of Models:** When individuals do not see their peers, community leaders, or local institutions practising proper waste management, they are less likely to do so themselves. The behaviour is not perceived as socially expected or normal (Cialdini et al., 1991).
- **Distrust in Authorities:** A history of poor service delivery and corruption can lead residents to believe that their segregated waste will not be handled properly, making their effort feel pointless (Oduro-Appiah et al., 2017).

2.3.3 The Role of Social Norms and Peer Influence

Social norms, the unwritten rules about what is considered acceptable behaviour in a group are one of the most powerful drivers of human behaviour. (Cialdini et al., 1991)

make a crucial distinction between:

Descriptive Norms: What most people actually do (e.g., "Most of my neighbours dump their waste illegally").

Injunctive Norms: What most people approve or disapprove of (e.g., "My community believes littering is wrong").

A common mistake in campaigns is to highlight a negative descriptive norm (e.g., "9 out of 10 people litter") in an attempt to shock people, which can inadvertently reinforce the undesirable behaviour by making it seem common. Effective communication should instead amplify positive descriptive norms ("A growing number of families in your area are now segregating their waste") and activate injunctive norms ("Your neighbours appreciate it when the community is clean").

Peer influence can be strategically leveraged through:

Commitment Devices: Asking people to make a small, public commitment (e.g., signing a pledge to recycle) increases the likelihood of follow-through, as people desire to be consistent with their stated values (McKenzie-Mohr, 2000).

Utilizing Opinion Leaders: Engaging respected community figures such as religious leaders, local chiefs, or popular market women to champion and model proper waste disposal can legitimize the behaviour and trigger widespread adoption through social networks (Rogers, 2003).

2.3.4 Feedback Mechanisms and Sustained Engagement

Initial behaviour change is one challenge; sustaining it is another. Feedback mechanisms are critical for closing the loop and maintaining motivation. Drawing from

(Grunig, 2001) two-way communication and principles of cybernetics, feedback provides the information needed for learning and adaptation, both for the public and the authorities. The types of Feedback include:

Individual Feedback: Informing households about their own performance, such as the amount of waste they have diverted from landfill, can be very reinforcing (De Young, 2000). Smart bins or collection systems that provide digital feedback are emerging technologies in this area.

Comparative Feedback: Showing a community how its performance compares to other similar communities can leverage descriptive norms and foster healthy competition (Schultz et al., 2007).

Outcome Feedback: Demonstrating the tangible results of collective action is powerfully motivating. This could be communicating that "the recyclables from our neighbourhood last month were used to build X number of park benches" or showing photos of a cleaned-up area that was previously a dump site.

In Accra, these mechanisms could be implemented through low-tech and high-tech solutions. Simple, community-level feedback could be provided through public scoreboards in neighbourhoods or reports in local community radio announcements. Digitally, SMS updates or social media groups could be used to share progress reports and celebrate community achievements. As (McKenzie-Mohr, 2000) emphasizes, effective feedback is immediate, clear, and relevant. When residents can see the direct connection between their actions and a positive outcome, their sense of efficacy and commitment is strengthened, making long-term participation more likely.

2.4 Communication Challenges In Accra

The effective implementation of the communication strategies and behaviour change theories discussed previously is critically hampered by a complex web of contextual challenges unique to Accra. These are not merely communication problems but are deeply rooted in infrastructural deficits, socio-political dynamics, and institutional frameworks. Understanding these challenges is essential for designing communication campaigns that are not only theoretically sound but also pragmatically viable.

2.4.1 The Infrastructure-Communication Paradox

A fundamental challenge is the "infrastructure-communication paradox," where communication campaigns promote behaviours that the existing physical system cannot support. This creates a cycle of frustration and erodes the credibility of future messaging (Oteng-Ababio, 2011) Key aspects include:

Unreliable Collection Services: In many low-income and peri-urban neighbourhoods of Accra, formal waste collection is sporadic or non-existent. When households are urged to "bag and bin" their waste, but collection trucks fail to arrive for weeks, residents are left with no rational choice but to resort to illegal dumping, open burning, or using unauthorized dump sites (Owusu-Sekyere et al., 2015). This reality makes top-down messages about proper disposal seem tone-deaf and punitive.

Lack of Segregation Infrastructure: Promoting source separation and recycling is futile without providing households with separate bins for different waste streams and ensuring a parallel collection system that keeps the segregated waste apart. The current commingled collection system effectively negates any household effort to segregate, sending a powerful implicit message that the authorities do not take their own directives seriously (Lissah et al., 2021).

Spatial and Access Issues: Rapid, unplanned urban expansion has created densely populated informal settlements and remote suburban areas where waste collection vehicles physically cannot navigate narrow alleyways. The communication challenge here is not just awareness but also one of spatial justice and logistical planning, which pure media campaigns cannot solve (Grant & Oteng-Ababio, 2016)

2.4.2 The Trust Deficit and Institutional Credibility

A profound lack of trust between citizens and state institutions fundamentally undermines the reception of official communication. This deficit stems from several factors:

Historical Legacy of Broken Promises: A history of inconsistent service delivery, unfulfilled political promises regarding sanitation, and perceived corruption has bred deep-seated public cynicism (Amoah & Kosoe, 2014). When the Accra Metropolitan Assembly (AMA) launches a new campaign, it is often met with skepticism, as residents question the government's genuine commitment and capacity to follow through.

The "Civic Duty" Framing Mismatch: Framing waste management solely as a "civic duty" can be counterproductive when citizens feel the government is abdicating its own responsibilities. This framing is perceived as legitimate in contexts where the state delivers reliable services, but in Accra, it can be interpreted as shifting the burden of state failure onto the populace (Obirih-Opareh & Post, 2002). Effective communication must, therefore, frame participation as a collaborative partnership rather than a one-sided obligation.

Lack of Transparency and Accountability: The absence of clear feedback channels and accountability mechanisms means that when services fail, residents have no recourse. This powerlessness fosters resentment and disengagement. Communication is

perceived as a monologue rather than a dialogue, further widening the trust gap (Tarigan et al., 2020).

2.4.3 Fragmented Governance and Uncoordinated Messaging

The institutional landscape of SWM in Accra is characterized by fragmentation, which leads to disjointed and often contradictory communication. It involves multiple actors, including the Ministry of Sanitation and Water Resources (MSWR), the AMA, other Metropolitan, Municipal and District Assemblies (MMDAs), private waste management companies like Zoomlion and Jekora Ventures, and numerous NGOs and CBOs. These actors often operate with different mandates, resources, and communication strategies without a central coordinating mechanism (Oduro-Appiah et al., 2017). This fragmentation results in a cacophony of messages. One agency may promote a specific recycling programme, while another focuses solely on general cleanliness, and a private company runs an incentivised plastic collection drive with its own branding and rules. This confuses the public about what the priority behaviours are and who is ultimately responsible, diluting the overall impact (Ruocheng & Badolo, 2020).

2.4.4 The Informal Sector Communication Gap

The informal waste sector comprising waste pickers, itinerant buyers, and scrap dealers is the de facto recycling backbone of Accra, recovering significant amounts of plastic, metal, and paper (Amankwaa & Boafo, 2021). However, this critical sector operates almost entirely outside formal communication and policy frameworks.

Exclusion from Formal Campaigns: Formal SWM communication typically ignores the informal waste sector, failing to recognize their role, educate them on safety, or integrate their activities into municipal systems. This represents a massive missed

opportunity for leveraging existing recycling networks and knowledge (Ruocheng & Badolo, 2020).

To be effective, participatory communication must explicitly include the informal waste sector. This involves creating platforms for dialogue between waste pickers and the AMA, co-designing safe and efficient collection routes, and developing communication materials that educate the public on how to interact with and support informal recyclers, thereby formalizing and valorizing their crucial work (Oguntoyinbo, 2012).

2.4.5 Socio-Cultural and Demographic Heterogeneity

Accra is not a monolith; it is a mosaic of diverse communities with varying languages, literacy levels, cultural norms, and media consumption habits. A one-size-fits-all communication strategy is destined to fail. While English is the official language, many residents, particularly the elderly and those in low-income communities, are more comfortable in local languages such as Ga, Twi, or Ewe. High-literacy print materials are ineffective for a significant portion of the population (Malikhao, 2020; Prilutski, 2010). Communication must be multilingual and rely heavily on visual and oral-aural formats.

Different demographics are reached through different channels. While urban youth may be best engaged through social media and SMS, older populations and rural-urban migrants rely heavily on local radio stations and face-to-face communication in places of worship and community centres (Zebua et al., 2025). A sophisticated campaign must segment its audience and tailor both the message and the medium accordingly.

Deeply ingrained beliefs about waste and cleanliness can act as barriers. For instance, some may view handling waste after disposal as ritually unclean or socially demeaning, which can hinder participation in recycling or composting initiatives (Buor, 2020; Paul

et al., 2019). Culturally sensitive communication that engages with and respectfully addresses these norms is required.

In conclusion, the communication challenges in Accra are systemic and deeply intertwined with the city's governance, infrastructure, and social fabric. Overcoming them requires moving beyond simple information dissemination to a more holistic, politically aware, and context-embedded approach that addresses these foundational barriers as part of the communication strategy itself.

2.5 Chapter Summary

This literature review has established that enhancing public participation in SWM in Accra requires a fundamental shift in communication strategy. The prevailing top-down, information-centric approaches have proven insufficient for fostering sustained behaviour change. The theoretical frameworks of Participatory Communication and Social Marketing offer a more robust foundation, emphasizing community dialogue, audience understanding, and the strategic reduction of barriers to participation.

The review identified key barriers in Accra, including infrastructural gaps, low public trust, and the failure to leverage social norms and feedback. It also highlighted the potential of leveraging existing community structures and the informal sector. The gaps in the current literature point to a pressing need for research that explores how these participatory and socially marketed communication strategies can be concretely designed, implemented, and evaluated within the unique socio-political landscape of Accra. The subsequent chapter will outline the methodology for conducting this vital investigation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter details the methodological approach adopted to explore communication strategies for enhancing public participation in solid waste management campaigns in Accra, Ghana. It outlines the research philosophy, design, population, sampling techniques, data collection and analysis methods, and ethical considerations. The aim is to demonstrate how the study was structured to generate credible, contextually grounded insights into how communication influences participation in waste management practices. Given the study's focus on human perceptions, attitudes, and lived experiences, a qualitative approach was deemed most appropriate. This allowed for an in-depth exploration of the social and cultural dynamics shaping residents' engagement with waste management campaigns.

3.1 Research Design

The study employed a qualitative exploratory research design. Qualitative research is concerned with understanding phenomena from the participants' perspectives, focusing on meaning, context, and experience (Creswell & Poth, 2018). This approach was selected because the research sought to explore how and why communication strategies influence public participation, rather than measuring the frequency or distribution of variables. The exploratory nature of the design was appropriate given the limited prior research on participatory communication strategies within Accra's waste management context. It made it possible to remain open to emerging themes and insights grounded in participants' lived realities.

The choice of a qualitative exploratory design was grounded in the nature of the study's objectives, which required an in-depth examination of how communication strategies

are used by government agencies and private waste management firms in Accra, how these strategies shape public awareness, attitudes, and behaviours toward solid waste management, and which communication channels residents prefer and deem credible. This approach also aligned with the aim of generating context-specific insights that could inform more effective communication practices capable of fostering sustained public participation in waste management initiatives across the city. This design facilitated flexibility in data collection and analysis, enabling the probing deeper into participants' narratives and capture the complexity of communication dynamics in urban waste management (Merriam & Tisdell, 2016).

3.2 Research Population

In qualitative research, the research population refers to the entire group of individuals or entities that share characteristics relevant to the study's focus (Creswell & Poth, 2018). For this study, the population comprised all residents of Accra and institutional actors involved in waste management communication within the city. However, given the qualitative exploratory nature of the research, the study focused on purposively selected segments of this population to generate in-depth, context-rich insights rather than statistical representation (Patton, 2015).

The research population was strategically delineated into two complementary groups to address the study's objectives:

- **Residents of Accra**

This group constituted the primary audience and behavioral actors in waste management practices. Residents were selected because their perceptions, attitudes, and behaviors represent the ultimate target and measure of communication campaign effectiveness. Their inclusion directly addresses Research Objectives 2 (assessing

influence on awareness, attitudes, and behaviors) and 3 (evaluating preferred and trusted communication channels).

- Institutional Stakeholders

This group included representatives from organizations responsible for designing, implementing, and managing waste management communication in Accra. They include: Public sector entities e.g. Accra Metropolitan Assembly (AMA) and other Municipal Assemblies, Private sector actors e.g. members of the Environmental Service Providers Association (ESPA), such as Zoomlion Ghana Ltd. and Jekora Ventures.

- Community intermediaries: Assembly members and local leaders who bridge formal communication and community reception.

The inclusion of institutional stakeholders addresses the first research objective (identifying and describing communication strategies) and provides the sender perspective to complement the receiver perspective from residents, enabling a holistic analysis of the communication ecosystem (Merriam & Tisdell, 2016).

3.2.1. Rationale for Population Selection

The selection of these two groups follows the principle of perspectival triangulation in qualitative research, where multiple viewpoints are sought to build a comprehensive understanding of the phenomenon under study (Denzin, 2017). By examining both the communicators (stakeholders) and the communicatees (residents), the study captures the complete communication cycle from strategy design through message dissemination to reception and behavioral response. This approach aligns with the participatory communication framework guiding the study, which emphasizes dialogue between institutions and communities (Servaes & Servaes, 2021).

3.2.2 Geographic Scope: Accra

Accra was selected as the study site due to its status as Ghana's capital and largest urban center, where waste management challenges are most acute and communication efforts most concentrated. The city's socio-economic diversity encompassing high-income neighborhoods, peri-urban settlements, and low-income inner-city communities provided a rich context for examining how communication strategies perform across different demographic and infrastructural settings. This contextual variety strengthens the transferability of findings to similar urban environments in Ghana and other LMICs (Lincoln et al., 1985).

3.3 Sampling Technique and Sample Size

3.3.1 Sampling Technique

This study employed a purposive sampling technique, a non-probability method in which participants are deliberately selected based on their ability to provide rich, relevant, and in-depth insights into the research topic (Palinkas et al., 2013). Unlike random sampling, which aims for representativeness, purposive sampling seeks information-rich cases that can illuminate the phenomena under study (Patton, 2015). This approach is especially appropriate for exploratory qualitative research where understanding processes, meanings, and contexts is prioritized over generalization (Creswell & Poth, 2018).

Specifically, the study used criterion sampling, a subtype of purposive sampling, where participants are selected because they meet predetermined criteria relevant to the research objectives (Palinkas et al., 2013). For this study, the criteria were residents must have lived in Accra for at least one year, be directly responsible for or involved in household waste disposal, and be able to reflect on local waste management communication. Stakeholders must hold a position in an institution involved in waste

management communication (e.g., AMA, ESPA member agencies) and have direct experience in campaign design, implementation, or community engagement. The rationale for selecting these two groups stems directly from the research objectives: residents provide the public perception and behavioral data, while stakeholders offer the institutional and strategic perspective. This dual-perspective approach enables a holistic understanding of the communication-participation dynamic (Merriam & Tisdell, 2016).

Participants were located and approached through a structured recruitment process. For residents, community entry was facilitated by local assembly members and community leaders in selected neighbourhoods across Accra, where prospective participants were briefed on the purpose of the study and those who met the eligibility criteria and provided consent were included.

For institutional stakeholders, access was secured through an established professional contact within the organisation, who assisted in identifying relevant officers and arranging interview appointments. This approach ensured that appropriate stakeholders were reached efficiently while maintaining transparency and ethical standards in the recruitment process.

3.3.2 Sample Size

In qualitative research, the principle of sample size is guided by the goal of saturation, the point at which no new information or themes emerge from additional data (Guest et al., 2006). The aim is not statistical representativeness, but thematic completeness and depth of understanding (Braun & Clarke, 2022).

This study engaged 58 participants in total. 50 residents from diverse neighborhoods across Accra (e.g., Adabraka, Nima, Madina, East Legon, Ashaiman, etc). 8 institutional stakeholders from key waste management bodies. The sample size was determined based on recommendations for qualitative exploratory studies, where 12–50 interviews are often sufficient to reach saturation (Guest et al., 2006; Vasileiou et al., 2018). The inclusion of 50 residents allowed for diversity across socio-economic, geographic, and demographic lines, ensuring a range of perspectives on communication and participation. The 8 stakeholders provided sufficient institutional insight while maintaining manageability for in-depth analysis. Data saturation was assessed continuously during data collection and analysis. After approximately 40 resident interviews and 6 stakeholder interviews, no substantially new themes emerged in subsequent transcripts. This was confirmed through constant comparative analysis, where new data were compared with existing codes and themes (Charmaz, 2014). Saturation was further validated during the coding process, where code frequencies and thematic maps stabilized. Thus, the chosen sample size was both practically feasible and methodologically sound, ensuring that the research questions could be answered with adequate depth and rigor.

3.4 Data Collection Methods

Data collection methods in qualitative research refer to the systematic procedures used to gather empirical evidence relevant to the research questions (Merriam & Tisdell, 2016). The selection of appropriate methods is crucial for ensuring the validity, reliability, and depth of the data collected. For this study, two complementary qualitative methods were employed: semi-structured interviews and focus group discussions (FGDs). This methodological combination enabled both individual

reflection and collective sense-making, providing a comprehensive understanding of communication strategies and public participation in waste management. This methodological triangulation enhanced the validity and depth of the findings by capturing both individual and collective perspectives (Denzin, 2017; Patton, 2015). Triangulation is a validation strategy in qualitative research that involves using multiple methods, data sources, investigators, or theoretical perspectives to cross-check and corroborate findings, thereby enhancing the credibility and robustness of the results. According to (Denzin, 2017), triangulation strengthens research by “combining different methodologies in the study of the same phenomenon,” allowing researchers to compensate for the limitations of a single approach and develop a more comprehensive and trustworthy understanding of the issue under investigation.

3.4.1 Semi-Structured Interviews

Semi-structured interviews involve a guided conversation where predefined open-ended questions are used flexibly, allowing for probing and exploration of emerging themes (Bryman, 2016). This method was selected because it facilitates in-depth exploration of individual experiences, perceptions, and attitudes while maintaining focus on the research objectives (Kvale & Brinkmann, 2015). Interview guides were developed based on the research objectives and theoretical framework. The guides underwent piloting with two volunteers to assess clarity, relevance, and flow, after which minor adjustments were made. The final guides contained core thematic areas: awareness of campaigns, trust in institutions, channel preferences, motivators, barriers, and feedback mechanisms. Interviews were conducted with 34 residents from diverse Accra neighborhoods and 8 institutional stakeholders from AMA, ESPA member agencies, and community leadership. All interviews were conducted in participant-preferred locations (homes, offices, community centers) to ensure comfort and

openness. Each session lasted 20–25 minutes, was audio-recorded with informed consent, and later transcribed verbatim for analysis.

3.4.2 Focus Group Discussions

Focus group discussions (FGDs), defined as group interviews that promote interaction among participants to generate insights into shared norms, conflicts, and collective meanings (Kitzinger, 1995), were conducted across four groups, each comprising four residents who were homogeneously grouped by neighbourhood to encourage open dialogue. The FGD guide was structured around scenarios and open-ended questions designed to explore collective attitudes, social norms, and community-level communication dynamics. Each session lasted approximately 30 minutes, was audio-recorded with consent, and later transcribed, with the interactive format enabling participants to build on one another's contributions and reveal shared understandings that might not surface during individual interviews.

3.4.3 Methodological Triangulation and Justification

The use of both interviews and FGDs represent methodological triangulation. This approach aligns with the study's exploratory design by capturing both individual and collective perspectives, as interviews offered depth on personal experiences while FGDs revealed social norms and community dynamics, thus enhancing credibility through the reduction of single-method bias and enabling cross-verification of findings. It also allowed different research objectives to be addressed appropriately, with interviews better suited to describing communication strategies and assessing their influence on awareness and behaviour, and FGDs more effective for evaluating preferred communication channels and generating community-informed recommendations for improved engagement. Overall, the combined use of these methods ensured that the study captured the complex, multi-layered nature of

communication and participation within Accra's waste management context, producing rich data for thematic analysis.

3.5 Data Analysis

The analysis of qualitative data followed a rigorous thematic approach, guided by (Braun & Clarke, 2006) six-phase framework for identifying, analyzing, and reporting patterns within the interview and focus group transcripts. Thematic analysis was selected for this study due to its flexibility and systematic nature, which aligns well with the exploratory aims of understanding shared meanings and experiences across different participant groups. Unlike more prescriptive qualitative methods, thematic analysis allows for the identification of both explicit and implicit ideas without being constrained by pre-existing theoretical frameworks, making it particularly suitable for examining the complex relationship between communication strategies and public participation in waste management (Nowell et al., 2017).

The process began with deep familiarization with the data, involving multiple readings of all transcripts and repeated listening to audio recordings to note initial patterns, contradictions, and significant statements. This was followed by systematic line-by-line coding using NVivo 14 software, which enabled efficient organization and retrieval of both descriptive codes, such as "radio as primary channel," and interpretive codes, such as "trust deficit in AMA." NVivo's query and visualization tools supported the identification of broader patterns and relationships between codes, facilitating the development of potential themes that were then rigorously reviewed against the full dataset to ensure internal coherence and distinctiveness. For example, the theme "The Trust Deficit and Institutional Credibility" emerged from codes related to broken promises, perceived corruption, and residents' preference for local leaders over formal

institutions. Each theme was refined and clearly defined before being woven into a coherent analytical narrative, illustrated with vivid, anonymized participant extracts in the findings chapter.

Throughout this process, NVivo served as an essential tool for data management, systematic coding, theme development, and visualization, while also preserving a transparent audit trail of all analytical decisions. To ensure the trustworthiness of the analysis, several validation strategies were implemented in line with (Lincoln et al., 1985), criteria for qualitative rigor. Credibility was strengthened through methodological triangulation using both interviews and focus groups. Dependability was supported by maintaining detailed documentation of the analytical process and developing a standardized codebook to ensure consistency. Confirmability was addressed through reflexive journaling to bracket research biases, while transferability was enhanced through thick description of the research context and purposive sampling designed to capture diverse perspectives within Accra's waste management landscape. Together, these measures ensured that the analysis was not only systematic and transparent but also yielded findings that are credible, dependable, and contextually meaningful.

3.6 Ethical Considerations

Research ethics refers to the moral principles and standards that guide the conduct of scholarly inquiry, ensuring the protection, dignity, and rights of participants while maintaining the integrity of the research process (Israel & Hay, 2006) . Adherence to ethical guidelines is essential not only for regulatory compliance but also for fostering trust, ensuring validity, and upholding the social responsibility of the researcher. This study was conducted under the ethical approval of the UniMAC-IJ Institutional Review

Board, which reviewed and approved the research protocol, instruments, and participant safeguards prior to data collection.

The principles of informed consent, confidentiality, and anonymity were religiously upheld. All participants were informed of the purpose of the study, the nature of their involvement, and their right to withdraw at any stage without penalty. Informed consent was obtained in writing, and participants were assured that their information would remain confidential and used solely for academic purposes. To preserve anonymity, pseudonyms were used in transcripts and reports, and identifying details were omitted. Audio recordings and transcripts were stored securely, accessible only to the researcher. The study was conducted with respect to participants' cultural values and comfort levels. Interviews and discussions were scheduled at convenient times and in familiar environments to ensure openness and trust. Adherence to the principle of non-maleficence, ensured that participation did not expose individuals to any form of psychological or social harm.

3.7 Chapter Summary

This chapter has outlined the qualitative exploratory methodology used to investigate communication strategies for enhancing public participation in solid waste management in Accra. Through purposive sampling, semi-structured interviews, and focus group discussions, rich qualitative data were collected and analyzed thematically. Ethical principles were strictly observed to protect participants and ensure the study's integrity. The following chapter presents the findings derived from this methodological approach.

CHAPTER FOUR

INTERPRETATION AND ANALYSIS OF FINDINGS

4.0 Introduction

This chapter presents a comprehensive analysis of qualitative data gathered from semi-structured interviews and focus group discussions (FGDs) with 50 residents and 8 institutional stakeholders in Accra, Ghana. The study employed a philosophical approach to understand lived experiences and perceptions regarding communication strategies in solid waste management (SWM) campaigns. The findings are organized thematically around the study's four research questions, with each theme supported by rich participant narratives, analytical interpretation, and integration with relevant theoretical frameworks and empirical literature. To ensure confidentiality while maintaining analytical depth, participants are referenced using pseudonyms (R1–R50 for residents, S1–S8 for stakeholders). This methodological rigor allows for a significant exploration of the complex interplay between communication strategies, public trust, infrastructure realities, and participatory behaviors in Accra's SWM landscape.

4.1 Profile of Participants

The study engaged 50 residents purposively selected from diverse neighborhoods across Accra to capture varied socio-economic, cultural, and infrastructural contexts. Eight participants from high-density, low-income areas like Nima and Agboghloshie provided perspectives shaped by informal settlement patterns and limited municipal services. Twenty from middle-income neighborhoods such as Madina and Adentan offered views reflecting more formalized but still inconsistent waste management systems. Twelve residents from planned, higher-income areas like East Legon,

Cantonments, Dansoman shared experiences with relatively better services but different engagement patterns. This stratified sampling ensured representation across Accra's heterogeneous urban structure.

The eight institutional stakeholders included two senior officials from the Accra Metropolitan Assembly (AMA), one representative each from three municipal assemblies (Ayawaso West, Adenta, and Korle Klottey), and three communications/project officers from private waste management companies under the Environmental Service Providers Association (ESPA). Their collective experience in SWM ranged from 5 to 15 years, providing insights into both policy-level strategies and ground-level implementation challenges.

4.2 RO1: Communication strategies used in solid waste management campaigns in Accra

4.2.1 Multiplicity of communication strategies

The findings revealed a multiplicity of strategies spanning mass media campaigns, community sensitization activities, school and market outreach programmes, branding and public signage, and door-to-door education. These were complemented by occasional policy communication through press releases, sanitation by-law announcements, and the National Sanitation Day initiative. S3, an environmental health official from the AMA described their approach as a blend of education and enforcement:

We use both public education and enforcement. Our environmental health officers go into communities to educate people on proper waste disposal, but we also enforce the sanitation by-laws when necessary. Communication is a key part of compliance.

This aligns with global research emphasizing that effective communication campaigns integrate multiple channels to reinforce key messages consistently (Burrows, 2009). Studies indicate that combining interpersonal engagement with mass media strategies fosters public ownership and encourages sustainable behavior change (He et al., 2024). In the Ghanaian context, municipal and private sector collaboration enhances message reach and credibility (Lissah et al., 2021), while participatory activities, such as durbars, school programs, and door-to-door outreach, are critical for influencing local behavioral adoption (Tarigan et al., 2020).

At the municipal level, communication strategies were similar but varied in scale and emphasis. The Ayawaso West and Adentan Municipal Assemblies focused more on community durbars, while Korle Klottey Municipality incorporated school programmes and clean-up campaigns. S5, a representative from Adentan Municipal Assembly stated: “We rely heavily on community durbars and school outreach. Schools are a great entry point because children take the message home. We also partner with churches and mosques.” Private sector stakeholders under ESPA adopted complementary communication strategies that highlighted service branding, public engagement, and corporate social responsibility. S2, a representative from a private waste management organization noted:

We combine branding with public education. Our trucks, uniforms, and jingles on the radio constantly reinforce sanitation messages. We also partner with all assemblies for clean-up campaigns and some time’s health walks.

Similarly, S7, a communication officer from a private waste management organization emphasized localized engagement: “In Adabraka and Korle Klottey areas, we visit homes and talk directly to residents. Face-to-face interaction builds trust and helps people understand why they must pay for waste services.”

This combination of promotional and participatory techniques is consistent with findings from Ankamfio (2017) and McKenzie-Mohr (2000), who highlight that integrated approaches enhance awareness, foster engagement, and improve compliance with pro-environmental behaviors.

From the community perspective, residents reported exposure to a variety of campaign messages, especially through radio announcements, community durbars, and public address systems mounted on waste trucks. However, they also expressed that such messages were often inconsistent or sporadic. R26, a market woman from Teshie explained: “Sometimes we hear them say we should keep the environment clean or that dumping is bad, but after that, we don’t hear anything again. It’s not regular, and people forget.”

Several participants emphasized that the absence of follow-up communication weakens message retention and impact. This findings thus indicate that while communication strategies in Accra are diverse and multi-channeled, they lack strategic coordination, continuity, and participatory depth.

4.2.2 The Dominance of Transmission-Based, Top-Down Methods

Findings revealed that waste management communication in Accra remains predominantly anchored in what Freire (2020) would characterize as the "banking model" of communication, where messages are "deposited" into passive audiences.

The communication flow was perceived as strictly top-down. This finding is at the heart of the Participatory Communication critique. The lack of feedback loops prevents communication from being a dialogue and inhibits the co-creation of solutions. It fosters a sense of powerlessness among residents, framing them as passive recipients of messages rather than active partners in waste management. S2, a private organization

waste management stakeholder confirmed this, saying, "Our communication is largely outbound. We have not systematically created inbound channels for community feedback, and that is a major weakness."

Residents across all neighborhoods reported exposure to standardized messages delivered through mass media channels, particularly radio and television. R12, a 52-year-old trader in Nima, articulated this experience vividly:

Every morning on Radio, we hear the same jingle: 'Keep your environment clean, bag your waste properly.' It's like a morning alarm, you hear it but don't really listen anymore. They talk at us, never with us. Some time back when cholera broke out in our area, they increased the announcements but still didn't ask us why the gutters were choked in the first place.

This transmission-based approach was confirmed by institutional stakeholders who framed it as necessary for achieving broad coverage. S3, an AMA official with 10 years of experience, explained:

Our primary objective is awareness creation at scale. With limited budgets, radio gives us the best reach. We estimate our messages reach 70% of Accra's population through our partnerships with five major stations. The challenge is moving beyond awareness to actual behavior change, which requires more resource-intensive approaches.

Similarly, R21, a resident from Jamestown noted, "Oh, we hear it all the time on the radio. 'Keep your surroundings clean.' They play it every morning."

The persistence of this model aligns with Oduro-Appiah et al.'s (2017) observation that SWM communication in Ghana remains stuck in what they term the "information dissemination trap," where increasing message volume substitutes for strategic engagement. From a Participatory Communication Theory perspective (Servaes & Servaes, 2021), this approach fundamentally misunderstands communication as a linear transmission process rather than a dialogic, meaning-making practice. The absence of mechanisms for audience feedback or message co-creation represents what Huesca

(2002) identifies as a critical failure in development communication, prioritizing institutional voices over community knowledge.

4.2.3 Fragmented Messaging in a Multi-Actor Governance Landscape

A significant finding was the blaring of messages resulting from uncoordinated communication efforts among multiple SWM actors. Residents reported receiving contradictory instructions from different authorities, creating what R28, a 36-year-old teacher in Madina, described as "message fatigue":

One day, Zoomlion encourages us to separate plastics for recycling. On another day, the AMA health officer says just put everything in one bag for collection, no burning. On a different day, a community NGO distributes flyers about composting organic waste. By the end of the day, we're confused, which rule should we follow? Most people just default to what's easiest: bag everything and hope it gets collected.

This fragmentation reflects the complex institutional ecology of SWM in Accra, where responsibilities are distributed among metropolitan and municipal assemblies, private waste companies, NGOs, and community-based organizations. S6, an ESPA representative, acknowledged this coordination deficit:

There's no central clearinghouse for SWM communication. Each entity develops campaigns based on its specific mandate. AMA focuses on public health compliance, private companies emphasize service utilization, NGOs promote environmental sustainability. Sometimes these messages align, often they don't. We need what I'd call a 'communication unity of purpose' but lack the governance mechanism to achieve it.

This finding resonates with Grant and Oteng-Ababio's (2016) analysis of fragmented urban governance in Accra, where institutional pluralism without integration leads to policy incoherence. The communication implications are significant as Ruocheng and Badolo (2020) note in their study of Accra's SWM sector, fragmented messaging not

only confuses residents but also erodes the perceived legitimacy of all institutional actors. From a Social Marketing perspective (Burrows, 2009), this represents a fundamental failure in message strategy, where the "product" (desired waste management behavior) is presented with conflicting specifications, making adoption psychologically difficult for the target audience.

4.2.4 Episodic and Instrumental Use of Participatory Channels

While mass media dominated the communication landscape, analysis revealed selective deployment of participatory channels, primarily during specific events or crises. Community durbars (town hall meetings) emerged as the most frequently cited participatory forum, but their use was described as sporadic and often ritualistic. R35, an assembly member with 5 years of community leadership experience, provided nuanced insight:

Yes, we sometimes organize durbars, usually once a year or when there's a disease outbreak. The assembly officials come, explain the sanitation bylaws, sometimes distribute flyers. There's a Q&A session, but it's mostly one-way. People ask about missing bins or irregular collection, and the officials promise to 'look into it.' Then nothing changes until the next crisis. It feels less like dialogue and more like a pressure-release valve.

The instrumental nature of these engagements was acknowledged by stakeholders. S4, a municipal environmental health officer, framed participation in pragmatic terms:

Participatory approaches are resource-intensive. We use durbars when we need community buy-in for specific initiatives, like introducing new collection fees or relocating dump sites. But for routine communication, radio is more cost-effective. The challenge is that communities now associate durbars with problems, not partnerships.

This finding illuminates a critical tension in Participatory Communication implementation. While the theory emphasizes continuous dialogue and co-creation (Servaes & Servaes, 2021), implementation often reduces participation to instrumental

consultation during crises. As Waisbord (2008) observes in his study of participatory development communication, when participation becomes episodic rather than embedded, it fails to build the sustained relationships necessary for transformative change. The data suggests that in Accra's SWM context, participatory channels are used more for gaining temporary community acceptance than for building ongoing partnerships.

A particularly telling sub-theme emerged regarding school-based communication, which several stakeholders identified as strategically important but under-resourced. S2, a communications officer at a private waste management organization, noted:

Schools are our most effective entry point for behavior change. Children internalize the messages and pressure their parents. But we only reach about 15% of schools in Accra due to budget constraints. If we could scale this channel, we'd see generational impact.

This insight connects to McKenzie-Mohr's (2000) Community-Based Social Marketing principle of leveraging existing social networks and institutions. The underutilization of schools represents a missed opportunity for what communication scholars term "intergenerational learning transfer", a potentially powerful mechanism for sustainable behavior change that remains marginal in current strategies.

4.3 RO2: Effectiveness of communication strategies in influencing public awareness, attitudes, and participation

4.3.1 The Awareness-Action Paradox in SWM Behavior

The data revealed a pronounced disconnect between high levels of campaign awareness and low behavioral compliance, a phenomenon that R5, a 45-year-old market trader in Agbogbloshie, articulated with striking clarity:

Ask anyone here if they know they shouldn't dump waste in the gutter, and they'll say yes. We hear it every day on radio, see it on posters, even our children sing the 'Tua na yenfa wo borla' jingle. But knowing and doing

are different things. Yesterday, I watched my neighbor, a woman who leads church clean-up exercises, dump her household waste behind her kiosk at 5AM. Why? Because the collection point is 15 minutes away, she opens her stall at 6 AM, and the last time she walked there, the bin was overflowing anyway. So she chose convenience over conscience.

This narrative encapsulates what Schultz and Oskamp (1996) term the "attitude-behavior gap," where cognitive awareness fails to translate into behavioral action due to contextual constraints. The data suggests this gap is particularly pronounced in low-income neighborhoods where infrastructural deficiencies are most acute. R31, a 33-year-old seamstress in Nima, provided additional context:

During the rainy season last year, AMA flooded the radio with messages about not dumping waste in drains. We knew the risks: cholera, flooding, mosquitoes. But when it rained for three days straight and the communal bins weren't collected, what were our options? Let waste pile up inside our single room with three children? Or clear it quickly into the already-flooded gutter? We chose survival over sanitation rules.

From a Social Marketing perspective (Burrows, 2009), this represents a fundamental flaw in campaign design: emphasizing the "promotion" P (awareness messaging) while neglecting the "place" and "price" Ps (accessibility and perceived costs of participation). As Ankamfio (2017) notes in her study of waste management behaviors in Ghana, campaigns that focus solely on information provision without addressing structural barriers are doomed to produce what she terms "frustrated awareness" knowledge that cannot be operationalized.

Institutional stakeholders demonstrated significant understanding of this paradox. S1, an AMA director with 20 years of sanitation experience, reflected:

Our awareness metrics are strong. Survey show 85% recall of our key messages. But our behavior change metrics tell a different story. We're winning the communication battle but losing the behavioral war. The lesson is clear: awareness is necessary but insufficient. We need to pair messages with services that make compliance possible.

This insight connects to Ajzen's (1991) Theory of Planned Behavior, which posits that behavioral intention depends not only on attitudes but on perceived behavioral control, the belief that one can successfully execute the behavior. When residents perceive that proper waste disposal is logistically impossible (due to missing bins, irregular collection, or physical distance), even positive attitudes toward environmental cleanliness fail to produce compliance.

4.3.2 The Corrosive Impact of Institutional Distrust

Trust emerged as a fundamental factor mediating the effectiveness of communication. The data revealed a stark contrast in the levels of trust between residents and institutional actors, which significantly influenced how messages were received and acted upon. A pervasive sense of distrust towards the AMA and private waste management companies was evident in low-income neighborhoods. Residents frequently cited unfulfilled promises, irregular waste collection services, and perceived corruption as reasons for their skepticism. This pervasive theme across all participant groups was what R19, a 58-year-old community elder in Old Fadama, described as "the trust deficit":

These sanitation campaigns come and go like the seasons. Before elections, politicians promise us bins, regular collection, even recycling centers. We clean our areas, attend their rallies, sometimes even vote for them. Then silence for four years. The last time an assemblyman came here was 12 months ago after a fire destroyed 50 homes, and they needed photos for their report. Why should we believe today's message when yesterday's promises are still unfulfilled?

R15, also a community leader in Old Fadama said, "They come and promise us bins and regular collection. After subscription payment, we don't see them again for months,". This sentiment was echoed in a focus group where participants argued that

authorities were quick to blame residents for indiscipline but slow to provide basic services. This distrust led to message rejection. Public service announcements urging proper waste disposal were often interpreted as the authorities shifting blame. R22, a female resident in Ashaiman questioned, "How can they tell me not to dump rubbish in the gutter when they are the ones who have not provided a container for us?"

In contrast, trust was higher in some high-income areas where services were more consistent. However, even here, trust was conditional and transactional rather than intrinsic. Institutional stakeholders were aware of this credibility deficit. S2, a private waste company officer stated, "Our biggest challenge is not communication; it is legacy. People have had bad experiences with service delivery, so even our well-meaning educational campaigns are met with pessimism."

The data also revealed that trust was highest in local, informal leadership. Community chiefs, assembly members, and leaders of neighborhood associations were often viewed as more credible sources of information than distant city authorities. R16, a participant in a focus group in Dansoman explained:

If the Assemblyman calls a meeting and tells us about a new sanitation program, we will listen. We know him, he lives here. But if it is a letter from the assembly, we ignore it.

This historical legacy of broken promises has created what Lissah et al. (2021) identify as "institutional credibility erosion". A cumulative process where repeated service failures undermine the perceived legitimacy of official communication. The data revealed this erosion operates at multiple levels. At the political level, residents associated waste management campaigns with electoral cycles rather than genuine public service. R27, a 41-year-old taxi driver in Dansoman, noted:

Every four years, trucks with loudspeakers multiply. They paint new slogans, distribute branded plastic bags, even pay community youth to lead clean-ups. Two months after elections, everything disappears. We've learned to distinguish between 'campaign sanitation' and 'real sanitation.' Unfortunately, most of what we see is the former.

At the operational level, inconsistencies in service delivery directly undermined message credibility. R44, a 36-year-old food vendor in East Legon, explained:

The new waste campaign is: 'Segregate Your Waste.' I have color-coded bags, green for organic, yellow for plastic. I spent two weeks teaching my family the system. Then the collection truck came and dumped all the bags together without separating anything. That moment killed my motivation. If they don't take their own rules seriously, why should I?

Stakeholders acknowledged this credibility challenge but framed it as a legacy issue rather than a communication problem. S8, a waste private company manager with 12 years in waste management, observed:

The trust deficit isn't about our current messaging. It's about 20 years of inconsistent service delivery. We're communicating in the shadow of failed promises made by previous administrations, contractors who disappeared with payments, and projects abandoned halfway. Building trust requires not just better communication but years of consistent service excellence.

This analysis aligns with Amoah and Kosoe's (2014) finding that in Ghanaian urban contexts, sanitation communication operates within what they term a "historical credibility economy", where present messages are evaluated against past performance. From a Public Relations perspective (Grunig, 2001), this represents a fundamental challenge to the Two-Way Symmetrical Model, which presupposes a baseline of organizational credibility that may not exist in contexts of historical service failure.

This theme aligns directly with Participatory Communication theory, which emphasizes trust and relational dynamics as prerequisites for effective communication. The findings suggest that current top-down communication strategies are undermined by a

foundational trust deficit, necessitating a shift towards more localized and relational communication channels.

4.3.3 The Infrastructure-Communication Disconnect

Perhaps the most analytically significant finding was the identification of what several participants termed the "empty promise problem", communication that promotes behaviors the physical system cannot support. R47, a 42-year-old food vendor in Chorkor, presented this disconnect in stark terms:

They tell us: 'Use the designated bins.' But walk through Chorkor—where are these bins? The three we have serve 5,000 people. They tell us: 'Wait for the collection truck.' But the schedule is a mystery. Sometimes Tuesday morning, sometimes Friday afternoon, sometimes not for two weeks. They tell us: 'Don't dump in the sea.' But when the bins overflow and trucks don't come, the sea becomes our dumping ground. It's not that we don't want to comply; it's that the system won't let us comply.

This infrastructure-communication paradox was particularly acute in informal settlements, where physical geography further complicated service delivery. R8, a 29-year-old student who volunteers with a community clean-up group in Nima, explained:

Our neighborhood has alleyways so narrow that standard collection trucks can't enter. The communication campaigns assume everyone lives on paved roads with vehicle access. When they say 'place waste at designated points,' they mean the main roads. But for elderly residents or mothers with young children, carrying heavy waste bags 10-15 minutes to the main road isn't feasible. So waste accumulates in hidden corners until someone burns it or it washes away in the rain.

Stakeholders provided the institutional perspective on this disconnect. S3, an AMA planning officer with expertise in urban infrastructure, framed it as a resource allocation challenge:

There's a fundamental mismatch between our communication ambitions and our infrastructural reality. Our campaigns are designed for an ideal Accra, one with regular collection schedules, adequate bins, accessible roads. But we're communicating in a real Accra with budget constraints,

logistical bottlenecks, and informal settlements that defy standard service models. We're essentially promoting a product we can't fully deliver.

This finding powerfully illustrates the COM-B Model (Michie et al., 2011), which states that behavior requires capability, opportunity, and motivation. While communication campaigns might enhance motivation and even capability (through information), they cannot create opportunity where physical infrastructure is absent. As Oteng-Ababio (2011) argues in his analysis of Accra's waste management challenges, what appears to be "public non-compliance" is often rational adaptation to systemic failure, A perspective that reframes the problem from individual behavioral deficiency to structural limitation.

The data further revealed that this infrastructure gap varies significantly across Accra's socio-economic landscape, creating what might be termed "participation geographies", spatial patterns of compliance/non-compliance shaped by service quality. R13, a retiree who has lived in both low-income and middle-income neighborhoods, observed:

When I lived in East Legon, I could even separate my waste because the system worked. Bins were available, collection was regular, and I could see my efforts mattered. Now in Labadi, with inconsistent services, I've stopped separating. It's not that I care less about the environment; it's that the system signals my efforts are wasted. Behavior follows infrastructure, not just information.

This spatial dimension of participation has important implications for communication strategy: standardized city-wide messages fail to account for neighborhood-specific infrastructural realities, resulting in what might be called "contextual message irrelevance", communication that ignores the lived constraints of its audience.

4.4 RO3: Communication channels most preferred and trusted by residents

4.4.1 Radio as the Persistent Medium of Mass Reach

Despite the limitations of top-down approaches, radio was unanimously the most widespread and accessible channel, particularly for older residents and those in peri-urban communities. Its strength was its pervasiveness and the credibility of local language broadcasters. "My radio is on from morning till night. I hear everything. News, music, and the sanitation messages," said R20, an elderly resident in Adentan.

R6, a 67-year-old retired teacher in Labadi, highlighted radio's cultural integration:

Radio is part of our daily rhythm. Morning prayers, news and evening stories on different radio stations. The sanitation messages come between these programs. sometimes as jingles, sometimes as announcements from the Ministry. Even if you're not actively listening, they seep into your consciousness. And crucially, they come in Ga, Twi, Ewe, not just English. That linguistic accessibility matters, especially for elders.

Radio's persistence as the primary channel reflects what Malikhao (2020) identifies as the "oral-aural preference" in many African communication contexts. A cultural orientation toward spoken rather than written communication. This preference is particularly strong among older residents and those with limited literacy. R14, a 35-year-old fisherman in Jamestown who never attended formal school, explained:

I can't read the posters they put up. The letters blur together. But I understand every word on radio. When the announcer says 'heavy rains expected, clear your drains,' I tell my sons to check our gutters. Radio speaks my language, literally and figuratively.

However, radio's effectiveness was mediated by program format and timing. Several participants noted that brief jingles during commercial breaks had limited impact compared to longer discussions on talk shows. R38, a 39-year-old mason in Nima who listens regularly to political talk radio, observed:

The 30-second jingles are easy to ignore. But last month, when 'Ekosii Sen' on Asempa FM dedicated a whole hour to discussing why Accra floods every year, that got people talking. The host interviewed engineers,

assembly members, even ordinary people. That kind of in-depth discussion changes minds, not just creates awareness.

Institutional stakeholders recognized radio's reach but expressed concerns about its limitations for behavior change. S3, the AMA official, noted:

Radio gives us breadth but not depth. We can tell 2 million people to separate their waste, but we can't show them how, answer their questions, or address their specific concerns. It's a megaphone, not a conversation.

This analysis suggests that while radio remains indispensable for reach in Accra's SWM communication, its utility may be maximized not through standalone announcements but through integration with more interactive formats, a finding that aligns with Prilutski's (2010) recommendation for "layered radio strategies" that combine brief spots with longer participatory programs.

4.4.2 The Primacy of Interpersonal and Community-Based Channels

Despite radio's dominance, analysis revealed a strong preference for and greater trust in interpersonal and community-based channels. This preference was most pronounced for complex or sensitive messages requiring clarification or negotiation. R41, a 34-year-old artisan in Ashaiman, distinguished between different types of information:

For simple reminders "clean-up day is Saturday", radio is fine. But for important changes such as the introduction of new collection fees or this dumping site is closing, we need face-to-face explanation. See the way new utility fees are announced on television and radio, it causes panic and confusion. When the rubbish container site was relocated, people didn't understand. But when the assembly members finally called a meeting to explain the details, people calmed down. Some still disagreed, but at least they understood.

The data identified a hierarchy of trust among interpersonal channels, with traditional authorities and religious leaders occupying privileged positions. R9, a 39-year-old

trader in Ga Mashie who serves as a neighborhood health volunteer, explained this hierarchy:

If a message comes from Zoomlion or AMA, people are skeptical. 'What do they want from us?' If it comes from our assemblyman, they listen but may question his motives. Is he trying to impress his bosses? But if their pastors, chief or the Imam speaks, that carries weight. These are people who live with us, share our struggles, and don't gain politically from sanitation campaigns. Their endorsement makes a difference.

This trust in traditional and religious authorities reflects what Buor (2020) identifies as the enduring legitimacy of non-state institutions in Ghanaian urban life. A legitimacy that often surpasses that of formal municipal structures. The implications for communication strategy are significant as Paul et al. (2019) noted in their study of solid waste management in Kumasi, messages delivered through traditional channels achieve integration into local value systems that enhances compliance a term known as normative embedding.

Community durbars, while less frequent than mass media campaigns, were consistently rated as the most effective channel for building understanding and commitment. R5, the Agbogbloshie trader, compared different channels:

On radio, you hear a message once and maybe remember 20%. At a durbar, you hear it explained, see demonstrations, ask questions, hear your neighbors' questions and concerns. You leave with 80% understanding and a sense that 'we're in this together.' The problem is we only have durbars once or twice a year, while we need that level of engagement every month.

Stakeholders acknowledged the superiority of interpersonal channels but cited resource constraints. S4, the municipal environmental officer, explained:

Organizing effective durbars requires significant resources: venue, logistics, personnel, follow-up. We can reach like 10,000 people via radio for the cost of one durbar reaching 200. The math pushes us toward mass media, even though we know face-to-face is more effective per capita.

This cost-effectiveness dilemma represents what communication economists term the scale-depth trade-off. The tension between reaching large audiences superficially versus smaller audiences meaningfully. The data suggests that in Accra's waste management context, this trade-off has been resolved overwhelmingly in favor of scale, potentially at the expense of depth and effectiveness.

4.4.3 The Emergent Digital Divide in Communication Preferences

A clear generational and socio-economic pattern emerged regarding digital communication preferences. Social Media was the preferred channel for younger, more educated residents and in high-income areas. It was praised for its interactivity and speed. R10, a university student in East Legon said, "I follow AMA on Facebook. Sometimes they post about cleanup exercises, and you can see people's comments, both good and bad. At least you see there is some conversation," .

Younger, more educated, and economically secure residents reported regular use of digital platforms for information gathering and sharing. R8, the 29-year-old student, mentioned:

My primary source for sanitation information is WhatsApp groups, community groups, university groups, even a city-wide 'Clean Accra' group with over 100 members. When there's a problem with collection in my area, someone posts about it immediately. We share photos of overflowing bins, tag AMA's social media accounts, coordinate clean-up efforts. This real-time, interactive communication is what we need, not yesterday's news on today's radio.

However, this digital engagement was far from universal. R31, the 33-year-old seamstress with primary education and limited income, highlighted the digital divide:

I have a basic phone for calls and SMS. No internet, no WhatsApp. When people talk about checking AMA's Facebook page for collection schedules, I can't participate. Even if I had a smartphone, the data costs are too high. For me and most women in my market, communication still means radio, announcements at church, or word of mouth.

This divide has significant implications for equity in SWM communication. As Zebua et al. (2025) note in their bibliometric analysis of waste management communication, digital strategies risk creating what they term participation exclusion, marginalizing those without access to technology or digital literacy. The data suggest this exclusion operates along familiar lines: age, education, income, and gender.

Institutional stakeholders demonstrated awareness of this divide but uncertainty about how to bridge it. S1, the AMA communications director, noted:

We're expanding our digital presence—Facebook, Twitter, even TikTok for youth engagement. But we can't abandon traditional channels. Our challenge is developing what we call 'omni-channel' strategies that serve both the digitally connected youth and the radio-dependent elders. Currently, we have parallel strategies rather than integrated ones.

An interesting sub-theme emerged regarding the potential of mobile technology even among non-smartphone users. R19, the Old Fadama elder with a basic phone, suggested:

Why can't they use SMS? Even my simple phone gets texts. Send us weekly collection schedules, reminders about clean-up days, alerts when services are disrupted. It's cheaper than radio ads and reaches us directly.

This suggestion aligns with emerging research on appropriate technology in development communication using widely available, affordable technologies rather than cutting-edge but exclusionary ones. As the International Telecommunication Union (2021) data shows, mobile phone penetration in Ghana exceeds 80%, suggesting SMS-based strategies could achieve near-universal reach without excluding the digitally marginalized.

4.5 RO4: improvements in communication strategies to enhance public participation

4.5.1 The Need for Dialogue Feedback Systems

The absence of formal feedback mechanisms emerged as a critical deficiency in current SWM communication strategies. Participants across neighborhoods expressed frustration with what they perceived as a one-way communication flow. R29, a 42-year-old nurse in Adabraka, articulated this need:

Communication should be a conversation, not a monologue. Last month, the bin at our clinic overflowed for eight days. I called three different AMA numbers—one disconnected, one rang endlessly, one transferred me to four departments before I gave up. Eventually, I took a photo and posted it on Twitter with #AccraWaste. Within two hours, someone from Zoomlion responded and the bin was cleared the next day. Why did I have to use social media shame to get attention? Why isn't there a simple, reliable way to report problems and get responses?

This narrative highlights what Grunig's (2001) Two-Way Symmetrical Model identifies as the foundation of effective public relations. Systems that allow not just message transmission but mutual understanding through feedback. The data revealed that the lack of such systems creates what several participants termed communication learned helplessness. A gradual disengagement from official channels due to repeated non-responsiveness.

The need for feedback extends beyond problem reporting to include input on campaign design and implementation. R44, the Madina food vendor who experienced the failed waste segregation initiative, explained:

If they had asked us before preaching or launching the segregate your waste program, we would have told them it wouldn't work. Our compound houses have 15 families sharing two collection bins. Who monitors if everyone uses the right bin? Who pays for the extra bins? We have practical knowledge they don't have, but they never ask. They design in offices, then impose on streets. It's backwards.

This disconnection between institutional planning and community reality represents what participatory communication scholars term the "expert-lay knowledge gap" (Servaes & Servaes, 2021). When professional expertise isn't tempered by local knowledge, even well-meaning initiatives fail. R17, a 51-year-old plumber who has participated in multiple community sanitation committees, suggested a more collaborative approach:

Every neighborhood should have a sanitation committee that meets monthly with assembly representatives. Not just to receive instructions, but to co-plan. We know where illegal dumping happens, why people dump there, what would work better. That knowledge should shape campaigns, not just implement them.

Stakeholders acknowledged the feedback gap but cited systemic barriers. S3, the AMA environmental health officer, explained the institutional constraints:

We recognize the need for feedback mechanisms, but our systems aren't designed for it. Our performance metrics focus on outputs: number of radio spots aired, posters distributed, durbars held and not outcomes like community satisfaction or behavior change. Without metrics that value listening, resources flow to speaking. It's a structural problem, not just a communication one.

This insight reveals a fundamental misalignment in institutional incentives in what might be termed the accountability asymmetry in municipal communication. Systems that hold officials accountable for message transmission but not for community reception or response.

Several participants proposed specific, low-cost feedback mechanisms that could bridge this gap. R33, a 38-year-old taxi driver familiar with various neighborhoods, suggested:

Every collection truck should have a complaint register. A simple notebook where residents can write issues. The driver collects it daily,

someone at the office reviews it weekly. For those who can't write, the driver could note verbal complaints. It's low-tech, low-cost, but shows they're listening. Currently, when we complain to drivers, they say 'I just collect waste, I don't make decisions.' That disconnect needs to end.

This suggestion aligns with Mefalopulos' (2008) principle of appropriate participation technology using simple, accessible tools rather than complex systems that exclude marginalized groups. The persistence of such practical suggestions from residents, coupled with their exclusion from official planning, represents what participatory theorists identify as the democratic deficit in development communication (Waisbord, 2008).

4.5.2 Culturally Embedded Communication Through Trusted Intermediaries

Participants consistently emphasized that message effectiveness depends not just on content but on messenger credibility. The data revealed a sophisticated understanding of what communication theorists term source credibility with traditional authorities, religious leaders, and respected community figures consistently rated as more trustworthy than municipal officials. R14, the Nima youth leader, explained this dynamic:

When Zoomlion announces a clean-up exercise, maybe 20 people show up. When the Imam announces it after Friday prayers, 200 show up. It's not that the message changes, it's the messenger. The Imam has spiritual authority, but he also lives here, knows our families, shares our struggles. He's not a distant bureaucrat; he's community.

This preference for culturally embedded messengers reflects what anthropology of communication identifies as the contextualization principle (Malikhao, 2020): messages are interpreted through the perceived relationship between sender and receiver, not just through content. In Accra's diverse cultural landscape, this principle suggests that standardized city-wide messages delivered by generic officials lack the contextual relevance needed for behavioral impact.

The data revealed particular effectiveness of what might be termed peer-to-peer sanitation communication, where community members educate and motivate each other.

R27, the Dansoman taxi driver, described an innovative approach in his neighborhood:

We formed 'Sanitation Champions'. Ordinary residents nominated by their streets. No pay, just recognition. Their job is to model good cleaning practices, gently remind neighbors and report persistent problems. It works because it's peer pressure, not government pressure. When your neighbor who faces the same challenges keeps their area clean, you feel ashamed if yours is dirty. It's social accountability, not legal enforcement.

This approach aligns perfectly with McKenzie-Mohr's (2000) Community-Based Social Marketing, which emphasizes leveraging existing social networks rather than creating new bureaucratic structures. The success of such informal systems, despite their limited scale, suggests that formal campaigns might achieve greater impact by supporting rather than supplanting organic community initiatives.

Religious institutions emerged as particularly potent communication channels, though their potential remains underutilized. R9, the Ga Mashie health volunteer, noted:

Churches and mosques already have captive audiences every week. They announce births, deaths, weddings, meetings—why not sanitation messages? In my church, when the pastor talks about cleanliness as godliness and announces specific actions: 'this Saturday, we're cleaning the church surroundings, bring brooms', people respond. That spiritual framing gives sanitation moral weight, not just a municipal requirement.

This spiritual framing connects to what Buor (2020) identifies as the sacralization of cleanliness in many Ghanaian communities, the cultural association between physical cleanliness and spiritual purity. Campaigns that recognize and leverage this cultural association, rather than treating sanitation as purely technical or regulatory, might achieve deeper resonance.

Stakeholders demonstrated growing recognition of these cultural dynamics. S3, the environmental health officer with experience in multiple communities, observed:

We're learning that sanitation communication works best when it's not 'government to citizen' but 'community to community.' Our most successful initiatives have been where we empowered local leaders as communication partners, not just message conduits. The challenge is scaling this approach within bureaucratic systems designed for standardization, not customization.

This tension between bureaucratic standardization and cultural customization represents what development communication scholars term the localization paradox (Servaes & Servaes, 2021): the recognition that effective communication must be context-specific, competing with institutional pressures for uniform, centrally controlled messaging.

4.5.3 Toward Integrated, Multi-Channel Communication Ecosystems

Perhaps the most significant finding regarding improvements was the consistent call not for new channels but for better integration of existing ones. Participants described current communication as fragmented, different messages through different channels without coordination and proposed what R50, a 55-year-old teacher in Teshie, termed communication unity:

Right now, it's like an orchestra where every musician plays a different tune. Radio says one thing, posters show another, assembly members explain a third. We need what musicians call 'harmony', different instruments playing the same song. If the radio announces waste segregation on Monday, the posters should show how, the assembly members should demonstrate on Wednesday, the collection should reflect it on Friday. Currently, we have noise, not music.

This musical metaphor powerfully captures what strategic communication theory identifies as message integration. The coordinated alignment of content across channels to reinforce rather than contradict (Burrows, 2009). The data suggests that in Accra's SWM context, this integration is currently more aspirational than actual.

Participants proposed specific integration mechanisms. R41, the Ashaiman artisan with experience in community organizing, suggested:

Every major campaign should have a 'communication map' that shows how messages flow across channels. For example: Week 1—Radio announcements + community durbars to introduce new initiative. Week 2—School programs + poster distribution with details. Week 3—Religious institutions + follow-up durbars for feedback. Week 4—Collection system adjustment based on feedback. Currently, we get announcements without preparation, implementation without explanation, and evaluation without our input.

This proposed cyclical approach aligns with what participatory action research terms the communication spiral iterative cycles of communication, action, and reflection that build community ownership (Tufté & Mefalopulos, 2009). The contrast between this proposed model and current linear approaches highlights what might be the central communication challenge in Accra's SWM: moving from one-way information transmission to multi-directional engagement.

Digital integration emerged as a particularly promising and challenging area. R8, the digitally engaged student, proposed:

Why can't we have a simple app or USSD code that gives real-time collection schedules, reports problems, shows clean-up locations? Even basic phones can use USSD. When you report a problem, you get a tracking number. When it's resolved, you get a confirmation. This creates accountability loops that build trust. Currently, reporting feels like shouting into a void.

This suggestion reflects growing global trends toward what Zebua et al. (2025) term civic tech for sanitation, using appropriate digital tools to enhance citizen engagement in municipal services. The technological capability exists; the barriers appear to be institutional rather than technical. Stakeholders acknowledged the

integration challenge but emphasized systemic constraints. S3, the AMA official, explained:

Integration requires coordination, and coordination requires resources we don't have. Different departments manage different channels: Health handles radio, Environmental Services handles durbars, Public Affairs handles posters. Each has its own budget, timeline, priorities. Achieving true integration would require restructuring how we plan and fund communication, not just better meetings.

This insight reveals what might be termed the siloed communication governance problem: organizational structures that fragment communication functions, making integrated strategies administratively difficult even when theoretically desirable.

A particularly insightful proposal came from R22, the retiree with experience in both formal employment and community volunteering, who suggested a paradigm shift:

We need to stop thinking of sanitation communication as campaigns or temporary bursts of activity and start thinking of it as conversation: ongoing dialogue. Like a good neighbor who checks in regularly, not a distant relative who visits once a year with gifts and demands. This requires changing how we measure success: not how many people heard our message today, but how many relationships we've built over time.

This relational framing aligns with what public relations scholars identifies as the shift from communication management to relationship management (Grunig, 2001) recognizing that behavioral change emerges from sustained trust rather than episodic messaging.

4.6 Chapter Summary

This chapter analyzes communication strategies in Accra's solid waste management through four research questions and several intersecting themes. It highlights critical tensions: the gap between awareness and action due to trust deficits and infrastructural constraints; the conflict between broad mass media approaches and more effective

interpersonal engagement; the discrepancy between standardized messages and community-specific needs; and the emphasis on one-way information flow rather than dialogue. The analysis connects findings to theories like Participatory Communication and Social Marketing, proposing a transformative roadmap that integrates mass media with interpersonal channels and balances top-down communication with bottom-up feedback. The implications emphasize reimagining urban governance relationships, moving beyond better messaging to foster democratic engagement in municipal services.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This final chapter presents key findings and recommendations based on the core research problem regarding the ineffectiveness of communication strategies in Accra's solid waste management campaigns. It revisits the research objectives and questions to provide a coherent summary of key findings, presents conclusions grounded in empirical evidence and relevant theoretical perspectives, and proposes practical and policy-oriented recommendations for improving communication strategies in solid waste management campaigns in Accra. Specific recommendations are aimed at stakeholders, including policymakers and community leaders, advocating for context-specific strategies to enhance public participation in solid waste management. The chapter further outlines areas for future research to advance scholarly understanding of participatory communication and urban environmental governance in Ghana.

5.2 Summary of Key Findings

The study explored the communication strategies employed in solid waste management campaigns in Accra, assessed their effectiveness in shaping public awareness, attitudes, and participation, and examined residents' preferred and trusted communication channels. Several interrelated findings emerged from the analysis.

The study found that SWM communication in Accra utilizes multiple strategies, including radio announcements, community durbars, school outreach programmes, public signage, and door-to-door education. While this diversity suggests significant communication effort, the strategies are largely fragmented and poorly coordinated.

Multiple actors such as metropolitan and municipal assemblies, private waste management companies, and civil society organizations operate without a shared communication framework, resulting in inconsistent and sometimes contradictory messages. This fragmentation contributes to public confusion, message fatigue, and weakened campaign impact.

Findings also revealed a dominant reliance on top-down, transmission-based communication approaches. Most SWM campaigns prioritize mass media dissemination, particularly radio, with limited opportunities for dialogue or feedback. Residents are largely positioned as passive recipients of information rather than active partners in waste management processes. This approach undermines the principles of participatory communication, which emphasize dialogue, co-creation, and shared ownership of development initiatives.

A significant awareness–action gap was identified. Although residents demonstrate high awareness of sanitation messages and acknowledge the health and environmental risks associated with improper waste disposal, this awareness does not consistently translate into compliant behaviour. Structural and contextual constraints such as inadequate waste bins, irregular collection schedules, and long distances to disposal sites, limit residents’ ability to act on communicated messages. As a result, non-compliance often reflects systemic failure rather than individual irresponsibility.

Furthermore, findings reveal that institutional trust emerged as a critical mediator of communication effectiveness. In low-income and informal settlements, residents expressed deep mistrust toward city authorities and private waste management companies due to historical experiences of unfulfilled promises and inconsistent service delivery. This trust deficit diminishes message credibility and encourages message

rejection. Conversely, local actors such as assembly members, traditional leaders, and community-based leaders were perceived as more trustworthy and influential communicators.

The study also revealed a pronounced infrastructure–communication disconnect. Campaigns frequently promote waste management behaviours that existing infrastructure cannot support, creating what participants described as “empty promises.” This mismatch exacerbates public frustration, reinforces scepticism, and discourages sustained participation in sanitation initiatives.

Finally, radio emerged as the most accessible and widely trusted communication channel, largely due to its linguistic inclusivity and cultural embeddedness. However, residents expressed a preference for interactive and discussion-based radio formats over repetitive jingles. Face-to-face engagement and localized communication were also identified as more effective for building trust and encouraging long-term behavioural change.

5.3 Conclusion

The study concludes that although solid waste management communication campaigns in Accra have achieved relatively high levels of public awareness, they have fallen short of producing sustained behavioural change. This limitation stems not from insufficient communication activity, but from the nature, orientation, and contextual misalignment of communication practices.

Predominantly top-down, fragmented, and infrastructure-insensitive communication strategies fail to reflect residents’ lived realities and the structural conditions shaping waste disposal behaviour. Communication efforts that are not matched with adequate

service delivery or that ignore community voices risk reinforcing pessimism and disengagement.

The findings affirm the relevance of Participatory Communication Theory by demonstrating that dialogue, trust-building, and community involvement are central to effective environmental communication. Sustainable improvements in SWM in Accra therefore require a shift from episodic, awareness-driven campaigns toward integrated, participatory, and context-responsive communication systems that operate alongside reliable waste management services.

5.4 Recommendations

Based on the findings and conclusions of the study, the following recommendations are proposed:

First, metropolitan and municipal assemblies should develop and implement a coordinated SWM communication framework that aligns messages across all stakeholders. A unified strategy will reduce contradictory messaging, enhance clarity, and promote a shared understanding of expected waste management behaviours.

Second, participatory communication should be institutionalized as a core component of SWM campaigns. Community engagement should extend beyond crisis-driven durbars to sustained dialogue platforms that enable residents to contribute to problem identification, message design, and solution development. This approach will enhance ownership, trust, and long-term behavioural change.

Third, communication strategies must be aligned with infrastructural realities. Authorities should ensure that waste bins, collection schedules, and access routes are

adequate before promoting specific behaviours. Where infrastructural limitations persist, communication messages should be realistic, context-sensitive, and transparent about constraints.

Fourth, trust-building should be treated as a strategic communication objective. This requires consistent service delivery, transparency, and accountability. Engaging trusted local actors such as assembly members, traditional leaders, and community influencers can significantly enhance message credibility and acceptance.

Fifth, radio programming should be optimized by prioritizing interactive formats, including talk shows, phone-in programmes, and community-focused discussions, rather than relying predominantly on short jingles. These formats facilitate clarification, feedback, and deeper public engagement.

Finally, school-based sanitation education should be expanded and institutionalized. Schools offer a strategic entry point for long-term behavioural change through intergenerational learning, and integrating SWM education into school curricula can yield sustainable environmental outcomes.

5.5 Areas for Future Research

This study employed a qualitative approach within selected communities in Accra. Future research could adopt mixed-methods designs to quantitatively examine the relationship between communication strategies, infrastructural availability, trust, and behavioural outcomes.

Further studies could also explore the role of digital and social media platforms in SWM communication, particularly among younger urban populations. Comparative research

across different Ghanaian cities or other African metropolitan areas would provide broader insights into urban sanitation communication dynamics.

Additionally, future research could incorporate the perspectives of policymakers, private service providers, and frontline sanitation workers to deepen understanding of institutional constraints and opportunities for integrated communication and service delivery. Such research would contribute to the development of more holistic and sustainable urban waste management strategies.

5.6 Chapter Summary

This chapter summarized the key findings of the study, presented conclusions drawn from the analysis, and proposed recommendations aimed at improving communication strategies for solid waste management in Accra. The chapter established that while awareness of sanitation messages is high, behavioural change remains limited due to top-down communication approaches, infrastructural constraints, and institutional distrust. It emphasized the need for coordinated, participatory, and context-sensitive communication strategies aligned with reliable service delivery. The chapter also identified areas for future research to further enhance understanding of effective communication in urban environmental management.

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APPENDIX

Interview Guide Draft

Semi-Structured Interview Questions for Residents

Introduction

"Good morning/afternoon. My name is Ernest Morgan Acquah, and I am a student from UNIMAC conducting research on communication and public participation in waste management in Accra. Thank you for agreeing to speak with me. This interview will take about 10-15 minutes. Your participation is voluntary, and you may choose to stop at any time. All your responses will be kept confidential and anonymous. With your permission, I will audio-record this conversation to ensure I accurately capture your views. Do you have any questions before we begin?"

Part 1: Demographics (Briefly noted)

Pseudonym/Alias:

Location/Neighborhood:

Gender:

Age Range:

Length of residency in Accra/Neighbourhood:

Part 2: Interview Questions

Theme: Awareness and Knowledge

1. Can you tell me what you know about solid waste management campaigns here in Accra? (e.g., "Keep Accra Clean")
2. Where have you heard or seen messages about keeping your environment clean and managing waste?
3. What, specifically, do these messages ask you to do? Can you explain the steps?

Theme: Communication Channels and Message Reception

4. Which of these sources of information (e.g., radio, TV, community announcements, social media, word of mouth) do you find most reliable? Why?
5. Can you describe a recent time you received information about waste disposal? What was the message, and how did you receive it?
6. Is the information you receive clear and easy to understand? Is there anything that is confusing?

Theme: Trust and Credibility

7. Who do you trust the most for correct information about waste management? (e.g., AMA, Zoomlion, your Assembly member, Chief, neighbors)? Why?
8. In your opinion, do the waste management authorities (AMA, Zoomlion) understand the challenges you face in disposing of waste? Why or why not?

Theme: Participation, Motivators, and Barriers

9. Can you describe your typical household waste disposal routine?
10. What makes it easy for you to dispose of your waste properly?
11. What are the biggest challenges or difficulties you face in disposing of your waste properly? (Probe: infrastructure, cost, knowledge, social pressure).
12. What would motivate you or your community to participate more in proper waste management? (Probe: incentives, better services, community spirit).

Theme: Feedback and Community Role

13. If you have a problem with waste in your area (e.g., an overflowing bin), what do you do? Who do you report it to?

14. Have you ever been asked for your opinion on waste management services or campaigns? If yes, by whom and how?

15. How influential are community leaders (Chiefs, Assembly members) in getting people to participate in clean-up exercises or follow waste rules?

Conclusion

16. If you could give one piece of advice to the AMA/Zoomlion/all stakeholders on how to communicate better with residents about waste, what would it be?

17. Is there anything else you would like to add about this topic?

Thank you so much for your time and for sharing your valuable experiences with me.

Semi-Structured Interview Guide for Institutional Stakeholders

Introduction

"Good morning/afternoon. My name is Ernest Morgan Acquah, and I am a student from UNIMAC conducting research on communication and public participation in waste management in Accra. Thank you for taking the time to speak with me. This interview will focus on your institution's role and experiences. It should take about 15-30 minutes. Your responses will be kept confidential, and neither your name nor your institution will be identified in the thesis without your express permission. May I audio-record our conversation for accuracy?"

Part 1: Respondent Information

Organization/Institution:

Position/Role of Interviewee:

Part 2: Interview Questions

Theme: Strategy and Design

1. What are the main objectives of your institution's public communication regarding solid waste management?
2. How do you go about designing a waste management campaign? (Probe: audience research, message development, channel selection).
3. How do you decide which communication channels (radio, social media, community durbars, etc.) to use for different audiences?

Theme: Implementation and Challenges

4. What do you consider the most effective channel for reaching residents? Why?
5. What are the biggest challenges you face in communicating with the public about waste management?
6. How does your institution work with community leaders or local groups in your communication efforts?

Theme: Perception and Feedback

7. How do you assess the effectiveness of your communication campaigns? How do you know if they are working?
8. What mechanisms exist for the public to give feedback on your services or communication? How is this feedback used?
9. From your perspective, what are the main reasons why some residents do not participate in proper waste management practices?

Theme: Trust and Collaboration

10. How would you describe the level of public trust in your institution's messages on waste management? What influences this?

11. Is there coordination between your institution and other key actors (e.g., AMA, Zoomlion, NGOs) on public communication? Can you describe this relationship?

Conclusion

12. Looking forward, what changes or improvements are you considering for your public communication strategy?

13. Is there anything else you think is important for me to understand about communicating on this issue in Accra?

Thank you for your valuable insights and for contributing to this research.

Focus Group Discussion Guide for Residents

Introduction

"Welcome everyone. My name is Ernest Morgan Acquah. I am from UNIMAC and I am here to learn about your experiences with waste and how you get information about it. I want to hear from all of you. There are no right or wrong answers. We will be talking for about an half an hour. We may be audio-record the discussion so we don't miss any of your important points. Everyone's identity will be kept confidential. Please try to speak one at a time so the recorder can pick up your voices. Let's begin by everyone stating a pseudonym (a made-up name) you'd like to use for this discussion."

Part 1: Ice-breaker

Let's go around and say your pseudonym and one word that comes to mind when you think about "waste disposal" in your neighborhood.

Part 2: Discussion Questions

Theme: Collective Awareness and Channels

1. As a group, how do people in this community usually find out about clean-up exercises or new rules for waste disposal?
2. Let's list the different ways you receive messages about waste. Which of these ways is most common? Which is most trusted?

Theme: Social Norms and Collective Action

3. I want you to imagine a scenario: The only waste container in this neighborhood has been overflowing for a week. Rubbish is spreading all around it.
 - What would most people here actually do with their waste?
 - Who would get the blame for this situation? The residents? The company? The government?
 - What would be the best way to solve this problem?

Theme: Barriers and Motivators

4. What stops people in this community from always doing the right thing with their waste?
5. What would get everyone in this community to participate more? (Probe: stricter laws, rewards, better services, community pressure).

Theme: Community and Leadership

6. How big of a role do your local leaders (DCEs, MMDAs, Chiefs) play in managing waste here?

7. If you had a message for the people in charge of waste collection in Accra, what would you say as a community?

Conclusion

8. Is there anything we haven't talked about that you think is important for me to know?

Thank you all so much for your time and for sharing your honest thoughts and experiences. Your contributions are extremely valuable to this study.