

**INFLUENCE OF SOCIAL MEDIA PLATFORMS USAGE ON FOOD SECURITY IN
LANGATA SUB-COUNTY, NAIROBI, KENYA**

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**THIS THESIS IS SUBMITTED IN PARTIAL FULFILMENT OF THE
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JULY, 2026

DECLARATION

DECLARATION AND CERTIFICATION

DECLARATION BY STUDENT

I declare that this research and thesis work describes my original work and that it has not been presented in any other university for academic work.

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DEDICATION

This work is devoted to my family, whose constant support, encouragement, and understanding made this journey possible. Their patience, reassurance and belief in the importance of education gave me the determination and inspiration required to see this study through to completion. I also dedicate this work to all scholars and practitioners committed to advancing knowledge and improving systems that contribute to efficient governance, trade facilitation, and national development.

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ABSTRACT

Social media digital platform is a body of technologies that facilitate social interaction, make collaboration possible, and enable deliberation across stakeholders. The platforms have become vital integral part of peoples' daily life, shaping the way they connect and communicate with each other. This study examined the effects of social media platforms' usage on food security in Lang'ata Sub-County. Specifically, the study determined the level of usage of social media digital platforms on food security; assessed the households' perception on utilizing social media digital platform to enhance food security; and examined the challenges and opportunities in utilizing social media digital platforms to enhance food security. The study was anchored on platform theory. The study used descriptive and correlation research designs to gather data. This enabled the utilization of mixed research methods combining both qualitative and quantitative studies. A total of 176,314 households were targeted. Karen and Nyayo High Rise wards were purposively sampled from the five wards. A representative sample size of 370 households were selected using Yamane 1967 formula. Data collected were cleaned up, entered and analyzed in SPSS version 2.0 software to generate chi-squares, correlations, percentages, tables and figures. The mean score for social media platform usage in food availability activities was 202 (54.6); Mean score for social media platform usage in food accessibility activities was 141(38.2); Mean score for social media platform usage in food utilization activities was 188(50.8) while Mean score for social media platform usage in food stability activities was 183(49.6). While the overall mean score on social media platform usage on food security activities was 179(48.3), the majority 329(89%) had a positive feeling that social media platform usage influenced food security. Household satisfaction in one social media platform activity was highly and significantly linked to satisfaction in other activities related to food security ($p < 0.01$ for all pairs). Households who were active users of social media platforms in seeking for food security, including posting content, interacting with others, and consuming information; and social media platforms in facilitating two-way communication and feedback between users on food security was ($r = .866$). The tendency to compare oneself to others on social media on matters related to food security, which could lead to feelings of inadequacy or dissatisfaction; and the way users perceived and processed food security information from social media, including the potential for misinformation and echo chambers were found to be highly significant at $p\text{-value}=0.000$. 296(80.0%) and 276(74.6%) of the households observed that high cost of internet and high cost of phones and other social media gadgets respectively were major challenges. The study recommends that social media platforms usage should be enhanced to promote food security at the household level. Therefore, all stakeholders and sectors in food security should consider utilizing social media platforms for food security by addressing affordability and usage challenges, providing conducive environment through mainstreaming social media and food security policies, laws and plans at the sub-county level.

OPERATIONAL DEFINITION OF TERMS

Food security – Refers to a condition in which individuals consistently have reliable physical, social, and economic access to adequate, safe, and nutritious food that meets their dietary requirements and supports a healthy and active life.

Food Access – Food access refers to the ability of individuals and households to obtain sufficient, safe, and nutritious food that meets their dietary needs and supports a healthy and active life.

Food insecurity –When people or households lack steady and dependable access to enough safe, nourishing food to meet their nutritional needs for an active and healthy life, it is referred to as food insecurity.

Governance: Governance can be understood as the system of structures, processes, rules, and established practices through which decisions are made, authority is exercised, and accountability is maintained within a society, while also ensuring that stakeholders participate meaningfully in the management of resources.

Small and Micro Enterprises - Small-scale business endeavours that function with a restricted amount of capital, personnel, and resources. These businesses frequently have a significant impact on local economies by creating jobs and fostering economic expansion.

Social media digital platform - social media digital platforms are online communication tools that enable individuals and groups to interact, exchange information, share ideas and opinions, and influence decisions through the creation, storage, retrieval and dissemination of content in various forms such as text, images, and video within virtual environments.

Social media components- interactive digital platforms that facilitate communication and content sharing among users, including widely used applications such as Instagram, Facebook, WhatsApp, Twitter, LinkedIn, Myspace, and Snapchat.

ABBREVIATIONS/ACRONYMS

CSA	Climate Smart Agriculture
FAO:	Food and Agriculture Organization.
FBO:	Faith Based Organizations
FGDs:	Focused Group Discussion
G.o.K	Government of Kenya
HH	Household
ICTs:	Information and Communication Technologies.
IFRC:	International Federation of Red Cross and Red Crescent Societies
KNBS	Kenya National Bureau of Statistics
MCA	Member of County Assembly
SPSS	Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study examined the effects of social media digital platform usage on food security in Lang'ata Sub-County, Nairobi, Kenya. The chapter outlines the background of the study, presents the problem under investigation, and highlights the research objectives and guiding questions. It also discusses the significance, scope, and limitations of the study, and concludes with the conceptual framework that underpins the research.

1.2 Background of the Study

The expansion of internet connectivity has significantly reshaped how people interact, making it possible for individuals to stay connected regardless of physical distance. Even those in remote areas can now engage with others across vast regions, forming online communities that reinforce shared views, identities, and social affiliations. Such interactions have had a notable influence on behaviour, particularly among young people, where peer influence is often amplified through continuous digital engagement (Amichai-Hamburger, 2005).

Social media platforms have become central to this shift, offering a wide range of digital tools that support communication, collaboration, and collective engagement. These platforms include networking sites, content-sharing applications, and interactive online spaces that allow users to exchange ideas and participate in discussions. Commonly used platforms such as Instagram, Facebook, WhatsApp, Twitter, LinkedIn, Myspace, and Snapchat illustrate how widespread and accessible these technologies have become (Bryer & Zavattaro, 2011).

Young people, especially adolescents, are among the most active users of these platforms. Their frequent engagement through sharing content, interacting with peers, and consuming

information plays a role in shaping their social identities and perceptions over time (Boyd, 2007). In Kenya, the uptake of social media has grown rapidly over the years. For instance, Social Bakers (2013) reported approximately 1.8 million Facebook users in the country, positioning Kenya among the leading users on the continent at the time. This figure rose sharply to over five million by 2015 (Internet World Statistics, 2016), reflecting the increasing penetration of digital platforms.

Globally, the rapid expansion of internet connectivity and social media platforms has transformed how information related to agriculture, nutrition, and food systems is generated, shared, and utilized. In countries such as the United States, digital platforms are increasingly used to disseminate agricultural extension information, monitor food supply chains, and connect producers directly with consumers (Njinma *et al.*, 2024). In India, social media and mobile-based platforms have enabled farmers to access market information, weather forecasts, and modern farming practices, contributing to improved agricultural productivity and food access. Similarly, in China, digital agricultural ecosystems supported by social media and e-commerce platforms have strengthened rural food distribution networks and improved market access for smallholder producers (Afzal, 2023). These developments demonstrate that social media platforms are no longer limited to social interaction but have become important tools for promoting food security through enhanced information sharing, stakeholder engagement, and real-time communication. As countries continue to face challenges associated with climate change, population growth, and food system disruptions, digital platforms are increasingly being integrated into strategies aimed at improving food availability, accessibility, utilization, and stability (Bahn, 2021).

Across Africa, food insecurity remains a persistent challenge despite significant progress in digital transformation. Countries such as Nigeria, Ghana, South Africa, and Rwanda have

increasingly adopted social media and digital communication platforms to support agricultural extension services, market linkages, and dissemination of nutrition-related information. In Rwanda, digital platforms have been integrated into agricultural advisory services to improve farmers' access to production information and market opportunities (Galie, 2019). Similarly, Ghana has witnessed growing use of social media applications to facilitate knowledge exchange among farmers and agricultural stakeholders, while South Africa has leveraged digital technologies to strengthen food value chains and consumer awareness initiatives (Ramavhale *et al.*, 2024). Although these developments have expanded opportunities for enhancing food security, many African countries continue to experience challenges related to internet affordability, digital literacy gaps, misinformation, and unequal access to technology. Consequently, while social media platforms offer considerable potential to strengthen food systems across the continent, their effectiveness remains influenced by broader socio-economic and infrastructural conditions.

In Kenya, the growth of internet penetration and mobile technology has significantly increased the use of social media platforms among households, businesses, and public institutions. Platforms such as WhatsApp, Facebook, YouTube, TikTok, and Instagram are now widely used for communication, information sharing, business promotion, and social interaction (Munene & Kebenei, 2021). At the same time, food security remains a national priority, with many households continuing to face challenges related to food access, affordability, and nutritional adequacy. The Government of Kenya has implemented various policies and programmes aimed at improving food security while promoting the use of information and communication technologies to support agricultural development. Social media platforms have increasingly been used to disseminate information on agricultural practices, food markets, nutrition awareness, and food-related interventions (Njinma *et al.*, 2024). Despite this growing utilization, existing studies in Kenya have largely concentrated

on the political, social, and behavioural implications of social media use, leaving limited empirical evidence on how these platforms contribute to household food security. This knowledge gap is particularly evident in urban areas such as Lang'ata Sub-County, where digital connectivity and social media engagement are widespread, yet food insecurity continues to affect sections of the population.

1.3 Statement of the Problem

Food security continues to be a major concern in Kenya despite the existence of constitutional protections, policy interventions, and technological advancements intended to improve access to adequate and nutritious food. The Constitution of Kenya (2010) recognizes access to food as a basic right, while the Kenya Food and Nutrition Security Policy provides a framework for strengthening food availability, accessibility, utilization, and stability. Even with these measures in place, many households remain vulnerable to food insecurity. Data from the Integrated Food Security Phase Classification (IPC, 2025) show that approximately 2.2 million Kenyans experienced acute food insecurity between February and March 2025, with about 266,000 people requiring urgent food assistance. Although food insecurity has often been associated with arid and semi-arid regions, the challenge is increasingly evident in urban areas where rising living costs, income inequalities, unemployment, and limited access to timely information affect households' ability to secure sufficient food. This persistence of food insecurity raises concerns about whether existing approaches are adequately addressing the information and communication needs that influence household food security.

Over the past decade, Kenya has experienced remarkable growth in internet access and digital communication. By 2025, the country had an estimated 37 million internet users, and more than 99 percent of social media users accessed these platforms through mobile devices (Statista, 2025). The widespread use of platforms such as WhatsApp, Facebook, YouTube, TikTok, and Instagram has transformed how people obtain information, interact with

institutions, and make everyday decisions. Beyond their social functions, these platforms have increasingly become channels for sharing knowledge on agriculture, nutrition, food markets, and livelihood opportunities. Their ability to facilitate rapid information exchange presents an opportunity to support household food security by improving awareness, access to market information, and dissemination of food-related knowledge. However, despite their growing reach and influence, little is known about the extent to which social media platforms are actually being utilized by households to support food security outcomes in urban settings.

Research undertaken in Kenya has largely examined social media from political, social, and behavioural perspectives. Studies by Makinen and Kuria (2008), Muia (2016) and Kinyua (2022), for example, focused on issues such as political mobilization, youth behaviour, and psychosocial outcomes associated with social media use. More recently, Mulenga et al. (2025) investigated the relationship between social media use and eating disorders among university students in Lang'ata Sub-County. While these studies have expanded understanding of the societal effects of social media, they provide limited insight into how social media platforms may influence household food security through improved food availability, access, utilization, and stability. Similarly, little empirical evidence exists on the level of social media usage for food security purposes, households' perceptions of using these platforms, and the challenges and opportunities associated with their application in addressing food-related needs. As a result, the contribution that social media platforms could make toward strengthening household food security remains insufficiently understood. This knowledge gap is particularly important in Lang'ata Sub-County, where high levels of digital connectivity coexist with continuing food security concerns. The present study was therefore undertaken to examine the influence of social media platform usage on food security in Lang'ata Sub-County, Nairobi County, Kenya.

1.4. Purpose of the study

The purpose of this study is “to determine the influence of social digital platforms usage on food security in Lang’ata Sub-county, Nairobi County, Kenya. The study focused on how social digital platforms are contributing or have contributed towards actions and discussions around food security in the sub-county. The study also established the dynamics brought about by social media platforms usage towards response mechanisms on food security amongst the population in Lang’ata Sub County.

1.5 Research Objectives

The study was guided by both the overall and specific objectives;

1.5.1 Overall Objective

The study’s overall objective was to examine the influence of social media digital platforms on food security in Lang’ata Sub-County, Nairobi, Kenya.

1.5.2 Specific Objectives

The specific objectives for this study included, to:

- i. Determine the influence of level of usage of social media digital platforms on food security in Lang’ata Sub-county, Kenya.
- ii. Assess the influence of households’ perception on utilizing social media digital platform to enhance food security in Lang’ata Sub-county, Kenya.
- iii. Examine the challenges and opportunities in utilizing social media digital platforms to enhance food security in Lang’ata Sub-county, Kenya.

1.6 Research questions

This study was guided by the following research questions:

- i. What is the influence of the level of usage of social media digital platforms on food security in Lang'ata Sub-County, Kenya?

- ii. What is the influence of households' perceptions of utilizing social media digital platforms on food security in Lang'ata Sub-County, Kenya?
- iii. What are the challenges and opportunities associated with utilizing social media digital platforms on food security in Lang'ata Sub-County, Kenya?

1.7 Significance of the study

Maillard (2013) describes the significance of a study in terms of the value it adds to existing knowledge and how it contributes to addressing wider educational and societal concerns. Within the food industry, the use of social media has not been without challenges, as firms continue to face difficulties in effectively managing digital marketing and adapting to evolving online environments (Ekarina, 2020). Even so, evidence shows that social media has brought notable benefits across many sectors, particularly in the food industry, where it enhances visibility, communication, and customer engagement (Radavičiūtė & Kavaliauskienė, 2023). In addition, social media platforms provide access to real-time information, allowing businesses to better understand customer preferences and keep track of competitor activities. This kind of insight supports more informed decision-making and enables organizations to respond more quickly to changing market conditions (Tourani, 2022).

The study was being very useful to both households, private and government agencies mandated to address food insecurity in the country amidst hunger crisis and the ever-bulging population to priorities social media usage as a platform to enhance food security, not only as the sub-county level, but also at the national and regional level. The study will be very useful amongst the youthful population who are the majority and have easily learned and adopted much of their engagement or learning through the existing digital platforms. The youthful population is further relevant to this study because of their huge and ever ballooning numbers and the desire to access food varieties in time at their spaces of engagement. The platforms if used appropriately to share and teach users on modern food practices and trends then more

benefits will be derived from it. The study will further enhance the contribution of social entities to be able to support relevant initiatives meant to improve food security and resource sharing.

1.8 Scope of the Study

Creswell (2012) notes that scope is the boundary in which the study is confined to. The study focussed on determining the influence of social media platforms on food security, in Lang'ata Sub-County, Kenya. Key aspects of food security considered in this study included: Food availability, access, utilization and stability in Lang'ata Sub-county, assessment periods being the last 20 years, the time when social media has been extensively active in Kenya. The focus was further on the conditions and avenues only presented by media platforms towards transforming actions/perceptions/or attitudes of users on food practices. The study was also focused on the above stated objectives that is addressing how social media platforms have become very effective in addressing food access to the end users. The study also focused only on the target population.

1.9 Delimitations of the study

Creswell (2012) states that delimitation attempts to reduce the study's scope by outlining its main parameters. The study was delimited to Lang'ata Sub-County, Kenya because of the large population of social media users and high internet connectivity within the location. There are also huge population of youthful population in Lang'ata Sub County who are adapting. The study location was also suitable because of availability of existing official social media digital platforms already leveraging on the social platforms to undertake businesses targeting different kind of users. It is also important location for the study as it offers the learner with the opportunity to study online businesses both with local and also global touch. The high population in Nairobi County and within the different sub counties

also offers the researcher with the rare opportunity to get all types of feedback and associated challenges that comes with online businesses.

1.10 Limitations of the study

As stated by Creswell (2012), constraints are the potential shortcomings of a study that may be discovered in the process similar to this. The researcher faced challenges regarding finding persons/online food business owners not interested in sharing more about their online tricks or strategies for fear of high competition. The researcher addressed this by ensuring that such individuals are well informed on the basic intentions/objectives of the study. The researcher might have as well faced the challenge of fear of exposure by the respondents on their use of social media accounts that demands privacy. The researcher responded to such issues by addressing the core objectives of the study and the respondents seeing sense in contributing towards having a self-reliant society through our actions supported by the modern technological avenues.

1.11 Assumptions of the Study

The study made the assumption that the participants was to be truthful, helpful, and reliable when answering the research questions and was to be accessible to do so on time. The study also assumed that the respondents had an idea about how social media platforms can be used to towards supporting the individual, local and national efforts in addressing food insecurity in the country and at the global level. The study also assumed that there was to be no changes to the perceptions and usage mentality of social online users in regard in their daily lives.

1.12 Theoretical Review

This section discussed the research study theory/s focused on expounding on the role and application of social media digital platforms towards food access. The platform theory was discussed and how it related to the study objectives.

1.12.1 The Platform Theory

Platform theory has gained prominence as a framework for understanding how platforms act as powerful agents of change, reshaping the ways information is shared, transactions are conducted, and communication occurs across different sectors (Parker *et al.*, 2016). At its foundation, the theory explains how platforms create structured environments, either digital or physical, that bring together different groups of users and enable interactions that generate value through exchange (Van Alstyne *et al.*, 2016). A key feature of platforms is their reliance on network effects, where the value of the platform grows as more users join and participate, leading to a reinforcing cycle of increased engagement and utility (Evans, 2016). This dynamic has driven the success of platforms in areas such as social media, e-commerce, and transportation, where they have redefined traditional relationships between consumers, businesses and service providers. When viewed from the perspective of agricultural communication, the relevance of platform theory becomes particularly significant. Its ability to facilitate information exchange, connect diverse stakeholders, and support real-time interaction presents important opportunities for improving communication processes within the agricultural sector.

According to Adhikari and Baral (2025), over the past two decades, the global community has actually experienced tremendous shift and changes in the manner in which trade, businesses are undertaken including on how people are interacting. The theory discusses on how there has been phenomenal growth and rise of social integrated platforms whether social, commercial, or a blend of both that is uniquely transforming on how the global community approaches commerce, global connection, and community engagements. Platforms for example Amazon, Facebook, LinkedIn, and Airbnb have greatly altered our societal landscape, rewriting rules and creating new opportunities for all humanities.

Social digital platforms must enable its users to achieve and also realize their desired goals efficiently and effectively. This comprises or range from purchasing a product on Amazon, finding a job on LinkedIn, sharing a story on Facebook, or booking accommodation on Airbnb. For the success of the social digital platforms the users' needs to understand their needs, wants, and desires. It must then provide a seamless and intuitive user experience that facilitates these goals. This means investing in high-quality design, robust functionality, and personalized user experiences (Adhikari and Baral, 2025).

The other proposal by the theory is based on its power on enhancing connections amongst the users and stakeholders of various topical issues. Great platforms as they are today creating opportunities for users to connect with others, building a sense of community and fostering meaningful interactions. Social media platforms are perhaps the most obvious example, but even commerce-driven platforms benefit from this communal aspect. Individuals and groups are encouraged to consider Amazon's review system or eBay's buyer-seller feedback loop. These elements not only provide valuable information to users but also foster a sense of connection and community. For a platform to thrive, it must create spaces for these connections to form and evolve (Adhikari and Baral, 2025).

This theory therefore offers stakeholders with an opportunity to understand the dynamics and also opportunities presented by social media digital platforms that if well tapped has the potential to transform lives. Food security is a common global issue that technology that is widely used must be applied and adopted to enable the people enhance their survival techniques and opportunities. The use of social media today is considered to one of the best strategies that millions of global citizens can reached and new concepts, skills and knowledge as well as practices can be adopted. Training on modern techniques, behaviours, and latest technologies that can enhance better initiatives for transportation, storage, processing are

supported by the digital platforms that millions of users are actively present (Parker *et al.*, 2016).

Platform Theory emphasizes on three Key Principles; the importance of platforms enabling users to achieve their goals efficiently and effectively. This involves a seamless and intuitive user experience, high-quality design, and robust functionality that caters to the users' needs, wants, and desires. A core aspect of successful platforms is their ability to foster connections among users. This creates a sense of community and encourages meaningful interactions, leading to a shared sense of belonging and mutual support. Elements like review systems and feedback loops are examples of how platforms promote user interaction and community building. Lastly, Successful platforms should align with the values and best interests of their users. This involves creating a platform environment that resonates with the users' beliefs, allowing for meaningful engagement and fostering a sense of trust and loyalty (Adhikari and Baral, 2025).

Despite its widespread application in other sectors, platform theory has not been extensively examined within food security–related fields, particularly in agricultural communication. Agriculture remains a vital sector for both global food security and economic development, yet it continues to experience persistent communication gaps that limit effective information flow among stakeholders. Historically, agricultural communication has largely followed a one-directional approach, where information is transmitted through structured channels such as government extension services and agricultural publications. Although these methods have played an important role over time, they often lack the flexibility needed to engage diverse groups promptly. This limitation becomes more evident in an environment shaped by rapid technological advancement, global interconnectedness, and the evolving demands of modern agricultural systems (Rivera & Alex, 2004).

This study is anchored on Platform Theory by focusing on how digital platforms facilitate access to food, contribute to food security and alignment with user values. It could also explore how social digital platforms foster networking and knowledge sharing among users, and the impact of these connections on achieving broader societal goals (e.g., food security, access to food, employment). Key actors in the agricultural sector, including farmers, agribusinesses, consumers, policymakers, and researchers, often function in isolation, with minimal coordination across these groups (Aarts *et al.*, 2014). This fragmentation limits the flow of information and reduces opportunities for collaboration, making it difficult to respond effectively to emerging challenges. The absence of systems that support timely communication, market linkages, and knowledge exchange has further constrained the sector's ability to adapt to issues such as climate variability, changing consumer demands, and shifting market conditions. These limitations highlight the need for a more integrated approach that can better capture and address the evolving communication demands within the agricultural sector.

1.13 Conceptual Framework

The conceptual framework illustrates how the study variables are linked in examining the influence of social media platform usage on food security in Lang'ata Sub-County, Nairobi County, Kenya. Drawing from the reviewed literature, the framework presents the proposed relationships between the independent variables, represented by social media platform usage, and the dependent variable, which is food security. Specifically, the framework demonstrates how different aspects of social media usage interact with and potentially shape food security outcomes. Figure 2.1 provides a visual representation of these relationships, showing how the independent variables are expected to influence the dependent variable within the scope of this study.

This framework divides the study into three primary independent variables based on the objectives of the study; levels of usage of social media platforms; household's perceptions on utilizing social media platforms; and challenges and opportunities for social media platforms usage on food security. The construct variables under these three broads are informed by the contributions of social media platforms to agricultural development and thus food security as advanced by Aarts *et al.*, 2014; Parker *et al.*, 2016; and Adhikari and Baral, 2025). These variables under the independent variables are key determinant of how the population using social media platforms utilize the platforms to make food available, accessible, will utilizing these foods for the benefit of the social media users. Same variables also form the basis for social media usage to contribute to food stability. While putting in focus the existence of institutional and governance frameworks at the county and national levels under Kenya's decentralized governance system as advanced by Nanyia (2020), it is imperative to utilize existing social media platforms to also enhance food security governance not only at river basins but in the whole devolved levels of governance in Kenya.

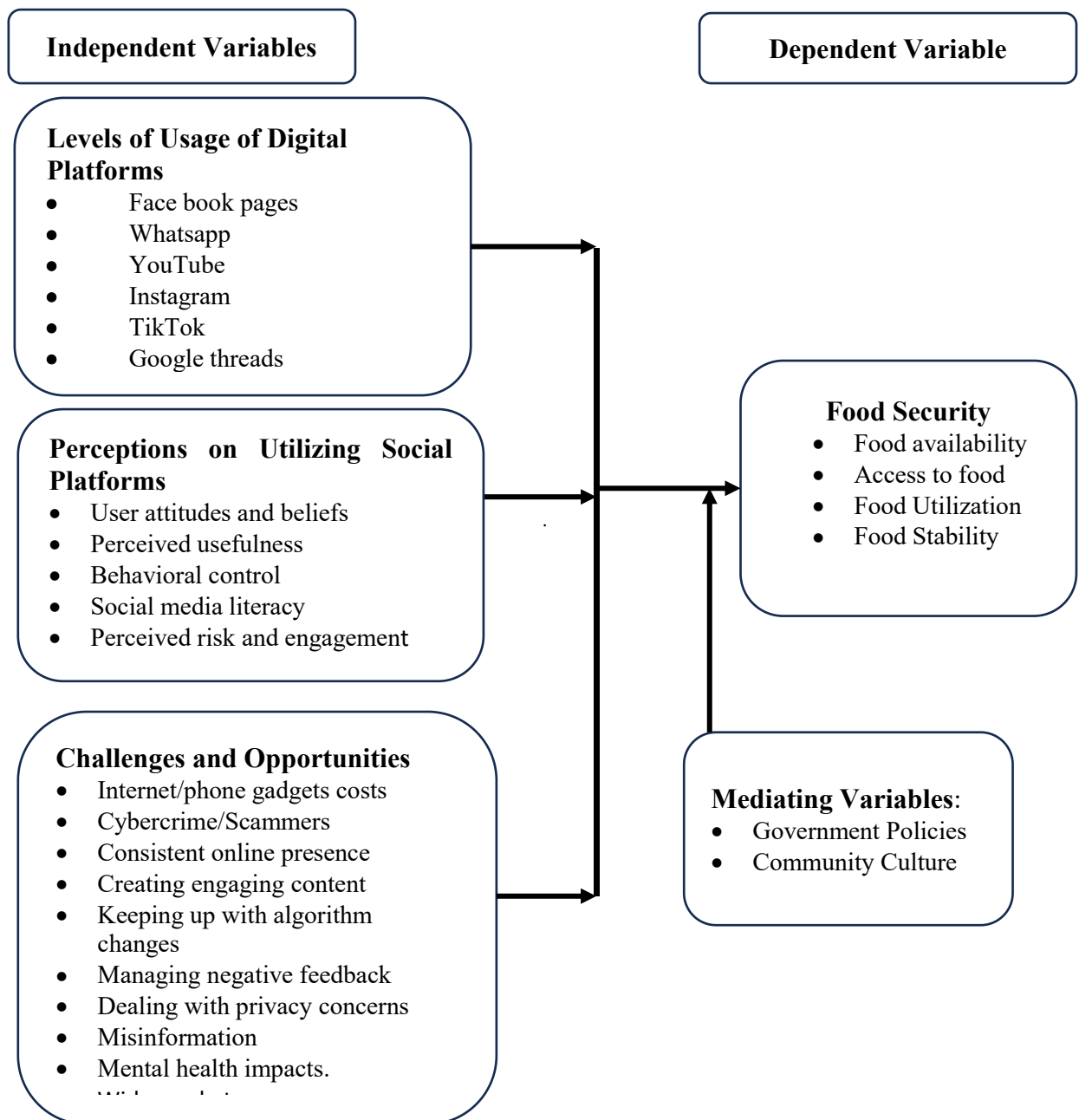


Figure 2.1: Conceptual Framework
Source: Researcher (2025)

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The study sought “to determine the influence of social digital platforms usage on food accessibility, a case study of Nairobi County, Kenya. This chapter therefore covered empirical review, summary of review of literature and research gap.

2.2 Empirical Review of Literature

2.2.1 Levels of Social Media Digital Platforms Usage on Food Security

Social media digital platforms can be understood as internet-based communication tools that enable individuals and groups to interact, exchange information and share ideas in real time across virtual spaces. These platforms support the creation, storage, retrieval, and dissemination of content in different formats, including text, images, and video, while also shaping opinions and influencing decision-making processes (Suchiradipta & Saravanan, 2016). Widely used examples include WhatsApp, Facebook, YouTube, LinkedIn, Instagram, blogs, and Skype. In recent years, additional platforms such as Microsoft Teams, Zoom, and Google Meet gained prominence, particularly during the COVID-19 pandemic when remote work and virtual interactions became necessary. A key characteristic shared across these platforms is their ability to reach large audiences simultaneously and facilitate the rapid flow of information. This capacity presents significant opportunities for extension practitioners and other stakeholders to engage with wide and diverse audiences more efficiently (Saravanan & Suchiradipta, 2017).

Over the years, households, civil society organizations, private institutions, and governments have relied on traditional media to communicate information to different audiences. Channels such as television, radio, and newspapers were widely used due to their broad reach and structured mode of dissemination (Thomas & Streib, 2003; Zacka, 2017). However, the

emergence of internet-based communication has significantly reshaped how information is shared and consumed. Communication has shifted from one-directional transmission to more interactive forms, where social media platforms now serve as key tools for engagement across networks. At various levels, these platforms are increasingly used to facilitate communication, collaboration, and interaction among users (Yildiz, 2007; Bannister & Connolly, 2015).

Over the past decade, social media platforms such as Twitter and Facebook have played a major role in shaping global communication patterns, contributing to a more interconnected world (Hershey, 2010). Studies conducted in countries such as the United States and the United Kingdom indicate that the use of new media has evolved beyond technical functionality, placing greater emphasis on enhancing digital experiences and user engagement (Clark & Aufderheide, 2009; Lahav & Zimand-Sheiner, 2016). This transformation has influenced how institutions and individuals communicate, shifting from simple information delivery to more dynamic and participatory forms of interaction.

This change has also redefined the relationship between citizens and government institutions, with communication increasingly taking the form of dialogue rather than one-way messaging. Social media platforms support both information sharing and feedback, allowing users to engage, respond, and participate in discussions (Yildiz, 2007). As a result, these platforms contribute to building communities, raising awareness, and encouraging collective action (Bertot, Jaeger & Grimes, 2010). They also serve practical functions such as informing the public on current issues, supporting crowdsourcing initiatives, and enabling institutions to monitor and respond to governance challenges (Bryer & Zavattaro, 2011). Despite these benefits, research on how government agencies adopt and use social media remains limited,

even though scholars have increasingly examined its role in public administration and communication (Bonson *et al.*, 2012).

At the same time, food insecurity continues to pose a significant challenge, particularly in developing countries where it remains a major concern within public policy discussions. Food security is generally understood as a condition where individuals consistently have access to adequate, safe, and nutritious food that meets their dietary needs for a healthy and productive life (FAO, 1996). It is commonly assessed through four key dimensions: availability, accessibility, utilization, and stability. Availability refers to the presence of sufficient food supplies, while accessibility relates to the ability of individuals to obtain that food. Utilization focuses on how food is consumed and its nutritional value, whereas stability reflects the consistency of these conditions over time within a given population (Schmidhuber, 2007; IFRC, 2007).

Achieving food security is closely linked to the nature of the food environment, which plays a central role in shaping how individuals and households obtain and consume food. The characteristics of this environment act as key determinants of access, influencing both the availability and accessibility of food options (Namenya, 2018). Research by Chen and Kwan (2015) shows that food choices are not made in isolation but are shaped by a combination of sociocultural influences and physical surroundings. Factors such as food quality, affordability, location of outlets, customer service, and operating hours all contribute to how individuals navigate food access within their environment. Food environments may present both risks and opportunities depending on the types of food options available. On one hand, the widespread presence of energy-dense, highly processed foods can contribute to unhealthy dietary patterns, while on the other, access to outlets offering nutritious food supports healthier choices. Empirical evidence has linked the concentration of fast-food outlets to

negative health outcomes, including increased obesity rates. For example, Maddock (2004) found that areas with a higher density of fast-food restaurants tended to record higher levels of obesity. Similarly, Chou *et al.* (2004) established that a greater number of fast-food and full-service restaurants, coupled with lower meal prices, was associated with rising obesity rates at the state level.

Agriculture remains a key pillar in ensuring food production, as it directly supports both the availability and accessibility of food for the population (GoK, 2011). Through farming activities, communities are able to produce and supply food, which is essential for sustaining livelihoods and meeting dietary needs. However, in Kenya, as in many other African countries, the sector faces a range of persistent challenges that limit its effectiveness. These include land degradation, continued reliance on traditional farming methods, inadequate access to reliable early warning systems and agricultural information, overgrazing, and increasing climate variability (FAO, 2017). Consequently, increased vulnerability to climate risks has significantly reduced agricultural productivity, as many farmers lack adequate capacity, resources, and access to climate-related information necessary to effectively mitigate and adapt to climate variability associated with climate change (Sissay *et al.*, 2012). A series of data have also shown that major crop failure in Lesotho was due to drought and floods (Akintunde, 2023). Agricultural extension workers have critical roles to play in order to make CSA technologies adopted by farmers. Danso-Abbeam (2018) observed that agricultural extension systems are meant to assist farmers and rural dwellers to receive vital knowledge, including agricultural technology in both developed and developing countries (Akintunde, 2023). Aker *et al.* (2016) identified over 140 digital agricultural initiatives worldwide, highlighting both the opportunities and limitations associated with the use of ICT in agricultural practices. Many of these initiatives have been implemented within agricultural extension services through tools such as mobile phones, computers, and internet-based

platforms (Onubedo, 2018; Akintunde, 2023). As a result, digital extension approaches are increasingly recognised as practical and affordable ways of delivering timely and relevant information to farmers, enabling them to make informed decisions with support from extension officers (Kurdyś-Kujawska, 2021). In this regard, social media, as a component of ICT, has emerged as a promising avenue for enhancing the effectiveness and reach of agricultural extension services (Akintunde, 2023). Evidence on food utilization shows that environments with better access to healthy food outlets tend to support more nutritious diets, particularly through increased availability of fresh foods. Studies have consistently linked greater access to supermarkets with higher consumption of fruits and vegetables and lower body mass index levels (Morland *et al.*, 2002; Brown *et al.*, 2008). In contrast, disparities in food access remain evident, as research indicates that low-income and minority neighbourhoods often have limited access to large supermarkets compared to more affluent areas, a situation that contributes to unequal health outcomes (Black *et al.*, 2014; Morland *et al.*, 2001).

In recent years, social media platforms have begun to reshape how information related to food security is shared, particularly in areas such as availability, access, utilization, and stability. Platforms like Twitter enable users to generate content, exchange information, and interact within digital networks, offering new ways to understand food-related behaviours. For example, Chen and Yang (2024) demonstrate that social media data can be used to examine how individuals make food choices within their surrounding food environments. Their findings suggest that users located near a higher concentration of grocery stores and fresh produce outlets are more likely to share content reflecting healthier eating patterns. This pattern supports the view that the nature of one's food environment can influence dietary behaviour (Black *et al.*, 2014).

Beyond information sharing, social media also shapes food and nutrition outcomes through broader social processes. Research by Ali, Amialchuk and Heiland (2011) highlights that online interactions can influence health-related behaviours in several ways, including reinforcing social norms around healthy eating, encouraging interest in new practices, providing emotional support, spreading knowledge on nutrition, and mobilising collective action around health-related issues. Together, these dynamics suggest that social media platforms hold considerable potential in influencing food-related decisions and promoting improved nutrition outcomes.

2.2.2 Households' Perception on Usage of Social Media Digital Platform for Food Security

Kristin *et al.* (2015) emphasize that human behaviour plays a central role in shaping outcomes in resource management, yet it is often overlooked during the design of management strategies. Similarly, Werg *et al.* (2013) highlight the importance of social factors, particularly risk perceptions, in reducing vulnerability and strengthening community capacity. These factors are relatively easier to influence compared to structural elements such as economic conditions, technology, or infrastructure, which typically require longer periods to change. Within social science research, various theoretical perspectives have been used to explain how behaviour is shaped by factors such as attitudes, values, trust, awareness, and perceptions of risk and social capital (Kristin *et al.*, 2015). Institutions play a critical role in this process, as they influence and regulate these behavioural drivers, making them essential in guiding sustainable resource use and long-term change (Heberlein, 2012; Kristin *et al.*, 2015). Ajzen's (1991) theory further explains that behaviour is largely influenced by individual attitudes, perceived social expectations, and the extent to which individuals feel capable of performing a given action. This perspective is useful in understanding behavioural

patterns related to resource management and can also inform policy approaches aimed at improving food security.

In relation to food security, perceived behavioural control is shaped by factors such as access to knowledge, skills, time, opportunities, and financial resources required to act (Ajzen, 1991; Ajzen, 2002; Fishbein & Ajzen, 2010). Research suggests that behavioural change cannot be attributed to a single factor such as lack of information, but rather to a combination of social, psychological, institutional, and economic influences (Kristin *et al.*, 2015). For instance, perceptions surrounding water quality, availability, and environmental impacts can shape how individuals respond to food security challenges (Robles *et al.*, 2011; 2014). As such, factors including knowledge, experience, norms, values, and risk perceptions are critical in supporting adaptive governance and effective resource management.

At the same time, social media has emerged as a powerful tool in shaping behaviour by influencing perceptions, attitudes, and access to information. Studies have shown that these platforms play a significant role in everyday life, particularly among younger populations, where they shape how individuals think, interact, and make decisions (Makinen & Kuria, 2008; Muia, 2016; Kinyua, 2022). Mulenga *et al.* (2025) note that social media has become deeply embedded in the daily routines of university students, affecting various aspects of their behaviour. Its widespread use has also extended into sectors such as business and agriculture, where it supports communication, growth, and knowledge sharing (Chang & Lindner, 2017).

In the agricultural sector, social media is increasingly being adopted by extension officers as a tool for accessing and sharing information through digital devices (Bhattacharjee & Raj, 2016). It enables professionals to coordinate activities, disseminate knowledge, and build online communities that support agricultural development and food security (Thakur &

Chander, 2018). The effectiveness of these platforms is often measured using engagement indicators such as comments, likes, followers, and mentions, which provide insight into how information is received and acted upon (Liu, 2010; Ramavhale *et al.*, 2024). However, despite these advantages, challenges remain, including limited opportunities for hands-on interaction with farmers, resistance to adoption among traditional practitioners, and varying levels of acceptance of digital tools (Kapuscinski, 2017; Ramavhale *et al.*, 2024).

2.2.3 Challenges and Opportunities in Social Media Digital Platforms for Food Security

According to Muliawan and Oktavia (2024), technology has developed rapidly, therefore industry development such as food security is fast and sophisticated. One of the essential technologies is the internet. Global trends show a steady rise in the use of digital technologies, particularly the internet and social media. According to Simon Kemp (2022), by February 2022, approximately 4.95 billion people, representing about 62.5 percent of the global population, were active internet users, while around 4.62 billion, equivalent to 58.4 percent, actively used social media platforms. This widespread adoption highlights the growing influence of digital platforms in shaping communication, interaction, and information exchange worldwide. In the business sector, technology plays a crucial role, especially in marketing, where social media has become one of the most effective channels for reaching and engaging target audiences (Muliawan & Oktavia, 2024). In Kenya, the continued expansion of digital connectivity and social media usage has contributed to rapid market development. This growth presents significant opportunities for businesses and marketers to leverage social media platforms in reaching consumers, promoting products, and enhancing overall market engagement.

Social media usage in Kenya is widespread, with a large proportion of internet users actively engaging on digital platforms. This high level of engagement has made social media an

effective channel for marketing and information sharing across different sectors. Many users rely on these platforms to discover activities, explore products, and make purchasing decisions, which increases their value as tools for communication and outreach. As a result, businesses and stakeholders within the food sector are increasingly adopting social media to promote their products and services. The broad reach and interactive nature of these platforms provide an opportunity to engage directly with consumers and enhance visibility. Consequently, organizations of varying sizes, from small enterprises to large firms, are investing in social media strategies as they compete to expand their market presence and improve their performance (Muliawan & Oktavia, 2024). The food industry is one of Kenya's largest and most significant investments. Moreover, the food industry sector is one of the business sectors that provided significant investments for Kenya (GoK, 2011). The findings suggest that the food industry holds significant potential for growth, driven by increasing digital engagement and expanding opportunities within the market.

Evidence suggests that social media and digital networks have made a meaningful contribution across many industries, with particularly strong effects observed in the food sector and, by extension, food security (Radavičiūtė & Kavaliauskienė, 2023). These platforms provide businesses with access to real-time information, allowing them to better understand customer preferences, monitor competitors, and adjust their strategies accordingly (Tourani, 2022). Despite these advantages, the food industry continues to face several challenges in effectively using social media for marketing purposes. One key difficulty relates to the short attention span of online users, which makes it necessary for organizations to develop content that is both engaging and relevant to their target audiences. In addition, identifying the most effective time to post content remains a challenge, as audience activity varies across platforms. The wide range of available social media channels further complicates decision-making, as businesses must match their content to the specific

characteristics of each platform and its users. These factors, if not well managed, can limit the ability of food-related organizations to communicate effectively and reach the intended audience (Ekarina, 2020).

Designing an effective promotional campaign in the area of food security requires a clear definition of objectives, a thorough understanding of the intended audience, and careful selection of appropriate social media platforms. In practice, however, many organizations struggle to accurately identify the characteristics of their target audience and to determine which platforms are most suitable for reaching them (Muliawan & Oktavia, 2024). Evidence suggests that the success of a social media marketing campaign largely depends on aligning relevant and meaningful content with the right communication channels, ensuring that messages reach and resonate with the intended users (Zamrudi & Il-Hyun, 2018). Therefore, an in-depth understanding of the target audience to be achieved and the characteristics of the social media platform to be used is very much needed in marketing (Muliawan and Oktavia, 2024). Moreover, the characteristics of users on each social media are different from one another. Despite these challenges, only a limited number of marketers take time to thoroughly analyse their target audiences and identify the specific platforms where those audiences are most active. This is often driven by the assumption that simply increasing the number of social media channels used will automatically lead to better outcomes. However, this approach can reduce effectiveness, as it overlooks the importance of strategic targeting and audience alignment in achieving meaningful results (Beese, 2016).

A considerable body of research has examined how social media is used as a strategic tool in business. However, limited attention has been given to segmenting social media users in a way that can inform the selection of appropriate platforms for targeted marketing. This gap suggests that more focused analysis is needed to align specific user groups with the most

effective communication channels (Muliawan & Oktavia, 2024). The aim of this research is to study the effectiveness of social media digital platforms usage in food security, focusing on the target audience of households, private and governments stakeholders, food businesses in Langata Sub-county, Kenya and analyze the perception and challenges faced by social media users. The analysis will be structured around key aspects such as the level of user participation in food security activities and the specific dimensions of food security that can be effectively supported through social media. This approach will make it possible to determine which platforms are most appropriate for delivering relevant and practical recommendations. The study considers commonly used platforms, including Facebook, YouTube, Instagram, Twitter, TikTok, Pinterest, and WhatsApp, due to their wide reach and ability to engage diverse audiences. Findings by Harris *et al.* (2021) suggest that platforms such as Instagram, YouTube, Facebook, Twitter, and TikTok are particularly effective in promoting food-related content (Muliawan & Oktavia, 2024). Even with these advantages, the use of social media is not without limitations. Challenges such as privacy concerns, cyberbullying, misinformation, legal issues, security risks, and excessive use continue to affect both farmers and extension officers (Ramavhale *et al.*, 2024). These factors underscore the importance of adopting a balanced and well-informed approach when integrating social media into food security initiatives.

While social media continues to demonstrate considerable potential in supporting different aspects of food security, its effective use within the sector in Kenya remains constrained by gaps in institutional frameworks. These limitations are further compounded by weaknesses in existing food security governance systems, which reduce the capacity to fully integrate digital platforms into policy and practice (Namenya, 2020). Building on the broader understanding of governance by Lebel *et al.* (2006), scholars have expanded the concept to include a wide range of institutions and relationships that shape decision-making processes. This perspective

recognises both formal structures such as policies, laws, and organizational arrangements, as well as informal systems that influence how governance is carried out (Huitema *et al.*, 2007). Such institutional arrangements can offer more effective solutions to collective challenges, particularly when they incorporate local knowledge, encourage participation, and allow for flexible and context-sensitive rules, often at lower enforcement costs (Ostrom, 1990).

Adaptive governance further strengthens this approach by promoting systems that are capable of adjusting to changing conditions while maintaining or improving desired outcomes. As noted by Koontz *et al.* (2015), this form of governance supports dynamic policy interactions that enhance the management of resources in uncertain and evolving environments. Evidence from existing literature also suggests that weak governance structures are a major contributor to persistent food insecurity, particularly in developing countries (Candel, 2014). Addressing these challenges requires governance arrangements that are responsive not only to immediate crises but also to long-term structural issues affecting food systems (Haddad, 2011; Candel, 2014).

Debate continues regarding the appropriate level at which solutions to food insecurity should be addressed. Some scholars argue that national governments remain central in driving effective interventions and policy responses (Paarlberg, 2002). Others, however, point out that the increasing interconnectedness of global food systems means that many of the underlying drivers of food insecurity extend beyond national boundaries, limiting the effectiveness of purely domestic approaches (McKeon, 2011). These perspectives highlight the need for coordinated and multi-level governance strategies that can respond to both local and global dimensions of food security challenges.

2.3 Summary of Literature Review

Social media platforms play an important role in bringing people together, raising awareness, and encouraging collective action. Beyond connecting users, they serve as effective channels for keeping the public informed on current issues and developments. These platforms also support crowdsourcing initiatives, allowing institutions to gather public input, monitor governance concerns such as corruption and respond to emerging challenges, including those related to food security. Communication remains a central element of government public relations, and social media has expanded the ways in which institutions engage with citizens. However, despite the growing use of these platforms in governance, there is still limited empirical evidence on how they are adopted and utilized by government agencies. Research examining inter-agency use of social media and its practical impact remains relatively scarce, pointing to a gap that requires further investigation.

The digital platforms are today being used by local and multinational entities or companies to market and sell their products to millions of clients at different levels. Entities/institutions that are focused in varied specific fields from education, marketing, resource mobilization, production are leveraging on the digital platforms to reach directly to their customers and also support their businesses. There are already global and local institutions who have linked their services to digital platforms to market their products and services through digital platforms like Face Book, Twitter, Instagram amongst other at a fee to the digital platform service providers thereby bringing them profit.

Food insecurity remains a persistent concern across many countries and continues to feature prominently in public administration discussions, particularly within developing economies. Food security is generally understood as a condition in which individuals consistently have access to sufficient, safe, and nutritious food that meets their dietary needs and supports a

healthy and productive life. Achieving this state depends not only on food supply but also on the surrounding food environment, which plays a key role in shaping access and consumption patterns. Elements such as sociocultural influences, physical infrastructure, and economic conditions all affect how people make food choices. Factors including food quality, affordability, proximity of retail outlets, customer service, and operating hours influence how individuals access and utilize available food resources.

In recent years, social media platforms have begun to reshape how information related to food is shared and consumed, influencing different dimensions of food security, including availability, access, utilization, and stability. Platforms such as Twitter provide interactive spaces where users create content, exchange information, and engage in discussions that reflect their food-related experiences and decisions. Research by Chen and Yang (2024) suggests that social media data can offer insights into how individuals' food choices are influenced by their surrounding environment. Their findings indicate that users located in areas with greater access to grocery stores and fresh produce outlets tend to share content that reflects healthier dietary patterns. This suggests that individuals in more supportive food environments are more likely to adopt healthier eating behaviours.

2.4 Study Gaps

The literature review points out how many users of modern digital platforms are yet to understand the numerous opportunities that are presented to them of which if well utilized then food security measures can be improved. The wide and large base offered by the users of social digital platforms is considered as one of the modern platforms and avenues through which information and practices related to food security can be adequately shared for adoption and utilization. There are still very minimum agricultural information and insights shared on many social digital platforms that this study proposes amongst the stakeholders so

that food security objectives can be shared. There are also very few studies that are focused on the role as well as influence of digital platforms amongst the youth and how this can be focused towards addressing food security insights. Most government agencies and structures are still finding old methods and systems as reliable in responding to food security issues and therefore the study will further enrich the knowledge and understanding in adopting new strategies that are modern in nature.

While there is general research on how social digital platforms impact food security, there is a lack of studies focused specifically on local contexts. Each region has unique socio-economic, cultural, and environmental factors that can influence food access, and more granular research is needed to understand these differences. For example, studies might explore how unique factors in Langata Sub-County, such as urbanization, economic disparities, or community networks, affect the use of social digital platforms for food access.

The existing literature often includes case studies or cross-sectional analyses, but there's a gap in longitudinal studies that track the long-term impact of social digital platforms on food security. This gap makes it difficult to understand how these platforms influence food access over time and across changing conditions. Longitudinal studies could help identify whether the benefits of social digital platforms are sustained over time or if they fluctuate due to various factors.

There's limited research on how social digital platforms impact vulnerable and marginalized groups, such as women, youth, or low-income households. These groups often face additional barriers to food access and understanding how social digital platforms can either alleviate or exacerbate these challenges is crucial. Future research should explore how these platforms affect different demographic groups and identify best practices for inclusive approaches to using social digital platforms to improve food access.

Another gap in the literature is the integration of social digital platforms with traditional food systems. While digital platforms offer new opportunities, there's limited research on how they coexist with traditional markets, small-scale vendors, and community-based food systems. Studies that examine how these platforms interact with existing food systems can provide insights into the best strategies for leveraging digital tools without disrupting local economies and practices.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlined the methodological approach adopted for the study, detailing the research design, the study area, and the target population. It also described the sampling procedures and sample size determination, the data collection methods and instruments employed, as well as the techniques used for data analysis. In addition, the chapter highlights the limitations encountered during the study.

3.2 Research Design

This study adopted a descriptive-correlational research design and employed a mixed-methods approach. The descriptive component was considered appropriate because it enabled the researcher to examine the prevailing patterns of social media platform usage, household perceptions, and the challenges and opportunities associated with the use of social media in enhancing food security in Lang'ata Sub-County. The design provided an opportunity to generate detailed information on the characteristics, experiences, and views of the respondents regarding the study variables without manipulating the study environment.

The correlational aspect of the design was suitable because the study sought to establish whether relationships existed between social media platform usage and food security outcomes. Specifically, it facilitated the examination of the extent to which variations in social media usage, household perceptions, and the challenges and opportunities associated with these platforms were related to food security among households. The design was therefore consistent with the study objectives, which focused on understanding the influence of social media platforms on food security rather than establishing cause-and-effect relationships.

A mixed-methods approach was adopted to provide a more comprehensive understanding of the phenomenon under investigation. Quantitative data were collected through household questionnaires to generate measurable evidence on social media usage and food security indicators, while qualitative data were obtained through key informant interviews and focus group discussions to capture participants' experiences, opinions, and contextual explanations. Combining quantitative and qualitative methods enabled triangulation of findings and enhanced the depth, credibility, and completeness of the study findings.

3.3 Study Site

The study was conducted in Lang'ata Sub-County, one of the seventeen administrative units within Nairobi City County. According to the KNBS 2019 census, the sub-county has an estimated population of 176,314 households and covers an area of approximately 196.80 square kilometres (GoK, 2020). Geographically, it is located around latitude 1°22'0" South and longitude 36°44'0" East, with elevation levels ranging between 1600 and 1850 metres above sea level (Appendix VII).

The area experiences a moderate tropical climate that remains fairly stable throughout the year. Lang'ata Sub-County is divided into five wards, namely Karen, Mugumoini, Nairobi

West, South C, and Nyayo High-Rise. It receives an average annual rainfall of between 800 and 1200 millimetres and maintains relatively consistent daylight hours of about twelve hours daily. Temperatures generally range from approximately 24°C to 29°C, depending on the season (Ochungo *et al.*, 2019).

In Lang'ata Sub-County, mobile phone applications have increasingly been adopted to address everyday challenges, including water shortages, which directly affect food utilization as one of the key pillars of food security. The area presents a marked contrast in living conditions, with high-income neighbourhoods such as Karen and parts of Lang'ata existing alongside middle-income areas like Nairobi West, Nyayo High-Rise and South C, as well as informal settlements such as Kibra that face significant socio-economic constraints. Although the sub-county is largely residential in nature, it also hosts a range of business activities, including offices and commercial establishments that support economic activity within the area (Muia, 2017). This enabled the researcher get study results from all the socio-economic levels of Nairobi residents. Langata sub-county hosts major local and global tech-savvy entities that are focused on improving as well as widening the market value and space for their respective social digital platforms and to serve most middle class residents in the gated communities. There are also varied social and digital driven market related activities meant to support socio-economic developmental activities from job creation, income generation and sharing of life skills.

Ochungo *et al.* (2019) report the development of a mobile phone-based quality tracing application built on blockchain technology to address gaps in tracking product provenance. On the other hand, majority of households in Langata Sub-county have embraced the diverse use of social media platform to meet various socio-economic needs. However, research indicates that there has been an increasing trend of violent acts within the schools which

spread has been supported by the availability of social media sites (Muia, 2017). This implies that social media usage has been negatively perceived in other aspects while in case of this study is seen as an opportunity to enhance food security in Langata Sub-county. It is for this reason that this study chooses Langata Sub County as a study site, since no study has ever been done to assess the effects of social media usage on food security in the Sub-county.

3.4 Target Population

The target population for this study comprised households and key stakeholders involved directly or indirectly in matters related to social media usage and food security in Lang'ata Sub-County, Nairobi County, Kenya. According to the Kenya National Bureau of Statistics (KNBS) Population and Housing Census Report (2019), Lang'ata Sub-County had a total population of 355,188 persons, consisting of 185,832 females and 169,356 males. The sub-county is administratively divided into five wards, namely Karen, Mugumoini, Nairobi West, South C, and Nyayo High Rise. The study focused on all households within these five wards, resulting in a target population of 176,314 households (GoK, 2020).

In addition to household respondents, the study targeted key informants drawn from institutions whose activities are linked to social media and food security. These included representatives from relevant government ministries and departments, non-governmental organizations involved in food security initiatives, online food marketers, and digital network service providers operating within Lang'ata Sub-County. Household heads provided information at the household level and therefore served as the unit of analysis, while households constituted the unit of observation.

Table 3.1: Target Population Matrix

Category	Target Population	Unit of Observation	Unit of Analysis
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Category	Target Population	Unit of Observation	Unit of Analysis
Households in Karen, Mugumoini, Nairobi West, South C, and Nyayo High Rise wards	176,314 Households	Household	Household Head
Government Ministries and Departments	Key Informants	Institution Representative	Institution Representative
Non-Governmental Organizations	Key Informants	Organization Representative	Organization Representative
Online Food Marketers	Key Informants	Business Representative	Business Representative
Digital Network Service Providers	Key Informants	Service Provider Representative	Service Provider Representative
Total	176,314 Households + Key Informants		

Source: Researcher (2025)

3.5 Study Sampling

3.5.1 Sampling Procedure

A multistage sampling approach was employed to select household respondents. In the first stage, two wards, namely Karen and Nyayo High Rise, were purposively selected from the five wards that constitute Lang'ata Sub-County. The two wards were chosen because they represent different socio-economic characteristics within the sub-county. Karen is predominantly characterized by upper-income households, whereas Nyayo High Rise comprises mainly middle-income and lower-income households. Selecting these wards enabled the study to capture views from diverse socio-economic groups that experience food security challenges under varying circumstances.

In the second stage, villages within the selected wards were identified and sampled using simple random sampling. Consistent with the recommendation by Mugenda and Mugenda (2013), at least 10 percent of the villages within each selected ward were included to enhance

representativeness. In the third stage, households within the sampled villages were selected through simple random sampling. Thereafter, proportionate allocation was used to distribute the sample size across the selected wards according to the number of households in each ward. This ensured that wards with larger household populations contributed proportionately more respondents to the study than wards with smaller populations.

For key informants, purposive sampling was used to identify respondents with relevant knowledge and experience regarding social media utilization and food security. These included representatives from relevant government ministries and departments, non-governmental organizations, faith-based organizations, online food marketers, and digital network service providers operating within Lang'ata Sub-County. Snowball sampling was subsequently employed to identify additional respondents who possessed specialized knowledge on the study subject. For focus group discussions, quota sampling was utilized to ensure balanced representation based on age, gender, and socio-economic status.

Table 3.2: Sampling Matrix

Respondent Category	Target Population	Sampling Technique	Justification
Households in Karen and Nyayo High Rise Wards	Households	Multistage (Purposive, Simple Random and Proportionate Sampling)	To obtain a representative sample of households from different socio-economic backgrounds
Government Ministries and Departments	Key Informants	Purposive Sampling	To obtain information from officials involved in food security and digital communication initiatives
Non-Governmental Organizations	Key Informants	Purposive and Snowball Sampling	To identify respondents with specialized knowledge on food security and social media programmes

Respondent Category	Target Population	Sampling Technique	Justification
Faith-Based Organizations	Key Informants	Purposive Sampling	To capture community-level perspectives on food security interventions
Online Marketers	Food Key Informants	Purposive Sampling	To obtain insights on the use of digital platforms in food-related activities
Digital Service Providers	Network Key Informants	Purposive Sampling	To provide information on digital access and social media usage
Focus Discussion Participants	Group Community Members	Quota Sampling	To ensure representation across age, gender, and socio-economic categories

Source: Researcher (2025)

3.5.2 Study Sample Size Determination

This section presents the procedure used to determine the study sample size and its distribution across the selected wards. The determination of the sample size involved two stages. First, the overall household sample size was calculated using Yamane's (1967) formula. Second, proportionate sampling was applied to distribute the sample across the wards in Lang'ata Sub-County based on the number of households in each ward.

3.5.2.1 Households sample size

The target population for the study consisted of 176,314 households in Lang'ata Sub-County as reported in the 2019 Kenya Population and Housing Census (KNBS, 2019). To obtain a representative sample from this population, the study adopted Yamane's (1967) formula, which is widely used for determining sample sizes in large populations with a specified margin of error.

The formula is expressed as:

$$n = \frac{N}{1 + N(e^2)}$$

Where:

n = required sample size

N = total population size (176,314 households)

e = margin of error (0.05)

Substituting the values:

$$\begin{aligned} n &= \frac{176,314}{1 + 176,314(0.0025)} \\ n &= \frac{176,314}{441.785} \\ n &\approx 370 \end{aligned}$$

3.5.2.2 Proportionate Sample Distribution

After determining the sample size, proportionate sampling was used to allocate the 370 households across the wards in Lang'ata Sub-County based on the number of households in each ward. This approach ensured that each ward contributed respondents in proportion to its share of the total household population.

The proportionate sample for each ward was calculated using Equation 3.1:

$$Ps = \frac{N_{hh}}{TN_{hh}} \times n$$

Where:

Ps = proportionate sample for each ward

Nhh = number of households in each ward

TNhh = total number of households in Lang'ata Sub-County (176,314)

n = calculated sample size (370)

Table 3.3: Langata Sub-County Household Sampling

Ward	Target Household Population Percentage (%)		Sample Size
Karen	24,507	14	51
Nyayo High Rise	24,191	14	51
Nairobi West	33,377	19	70
Mugumoini	47,037	26	99
South C	47,202	27	99
Total	176,314	100	370

Source: KNBS (2019) and Researcher (2025)

3.5.2.3 Key informants Sample size

The study also targeted respondents from the following lined government institutions, digital network providers, companies and local administration to be able to achieve outlined objectives.

Table 3.4 Categories of Key Informants Sampled

Category	Designation	No. in the sample
1. Public Administration	Chiefs	2
2. County Level policy implementers	Ward and sub-county Agriculture and water officers	2 wards level 2 sub-county level
3. Food Marketers	Naivas supermarket Jumia online shop	2
4. CSO working in food security sector		2
5. Farmers representative		1
6. Consumers representative		1

Source: Researcher (2025).

3.5.2.3 Focus Group Discussion Sample size

The sample size for the focus group discussion was determined through quota sampling.

Therefore, the proportion of men, women, youth of both genders and social economic status

of group discussion members was considered. Two group discussions were held one in each ward. The composition included 3 women, 3 men 2 youth of male gender and 2 youth of female gender. The discussions were held at the chiefs' offices in wards facilitated by the researcher who was assisted by two research enumerators one of them taking notes.

3.6 Data Collection approaches

Both qualitative and quantitative approaches were used in the study for data collection. A survey was utilized as the quantitative method, and key informant interviews and targeted group discussions were used as the qualitative method. The instruments are as explained below, along with their corresponding goals that were used to gather data.

3.6.1 Questionnaires

The researcher created structured questionnaires, which are essentially questions with a list of all potential answers. Respondents then choose the option that best expresses their viewpoint. Respondents from families and employees using digital platforms used the questionnaires. Additionally, the researcher conducted an online survey with social media users regarding particular research goals. For this study, structured questionnaires were created because they are more easily analyzed and may be used right away. The use of questionnaires and online surveys proved effective, as they enabled the study to reach a large number of respondents within a relatively short period while still allowing participants sufficient time to provide thoughtful responses. This approach also helped maintain confidentiality, as respondents completed the questionnaires independently. The instruments were hand-delivered to participants for self-administration, while online surveys were utilized to collect data aligned with specific study objectives.

3.6.2 Key Informant Interview Guides

According to Mugenda and Mugenda (2003), an interview is a method of conducting a questionnaire or interview schedule through spoken communication. Key informant

interviews were used to collect in-depth qualitative information from respondents who possessed specialized knowledge on social media utilization and food security issues within Lang'ata Sub-County. The interviews targeted representatives from relevant government ministries and departments, non-governmental organizations, digital network service providers, online food marketers, and faith-based organizations involved in food security initiatives. This method was considered appropriate because it enabled the researcher to obtain expert opinions, experiences, and insights that could not be adequately captured through structured questionnaires. Open-ended interview questions were used to allow respondents to elaborate on the role of social media platforms in enhancing food security, existing opportunities, implementation challenges, and possible interventions. The information obtained from key informants complemented household survey findings and provided a broader institutional perspective on the study objectives.

3.6.3 Focus Group Discussions

This FGD is a type of group interview where a moderator (interviewer) leads a small group ranging from six to twelve participants in an unstructured conversation about subjects that are pertinent to the research objectives. FGDs were conducted to generate detailed views and experiences from community members regarding the use of social media platforms in food-related activities. The discussions primarily involved market traders, women groups, and other community members who regularly interacted with social media platforms for communication, marketing, and access to food-related information. FGDs were considered suitable because they encouraged interaction among participants, allowing them to share experiences, compare opinions, and collectively discuss issues affecting food security within their communities. Through group discussions, the researcher was able to capture perceptions, attitudes, challenges, and opportunities associated with the use of social media platforms in ways that individual interviews or questionnaires might not reveal. The discussions therefore

provided rich contextual information that enhanced understanding of all the study objectives and supported the interpretation of quantitative findings.

3.7 Data Processing Analysis

The Statistical Package for Social Sciences (SPSS) was used to clean, code, and key field data. The gathered data was examined using descriptive analysis. Kirk and Miller (2014) state that, to draw reliable and repeatable conclusions from data on their context, descriptive analysis employs a set of classifications.

3.8 Result Presentations

Data was presented in both quantitative and qualitative formats, with tables serving as the format. The mean and standard deviation figures for the quantitative data were included in the tables. The standard deviation, mean, and percentage was used to display the frequency of responses.

By finding clusters of comments on important subjects that are discussed with the key informants, the researcher also performed a thematic narrative data analysis of the data from key informant interviews. The rate of responses was shown in tables to make comparisons easier. Essays presenting qualitative reports were discussed in accordance with the goals of the study, which are in line with the theories and empirical research.

3.9 Pilot Testing

A pilot study was conducted to test the clarity, reliability and suitability of the research instruments before the main data collection. The pilot test was carried out in Dagoretti South Sub-County, Nairobi County, which was selected because it shares similar socio-economic and technological characteristics with Lang'ata Sub-County, particularly in terms of urban settlement patterns, household economic activities, and widespread use of social media platforms for communication and business activities. Conducting the pilot study outside the

study area helped avoid contamination of the main sample while ensuring homogeneity with the study population.

The pilot study involved 10% of the study sample size, which is a commonly recommended proportion for pilot testing in social science research. Since the calculated sample size for the study was 370 households, a total of 37 respondents were selected for the pilot study. The respondents were drawn from households engaged in small-scale business activities and actively using social media platforms for communication and market-related interactions.

The purpose of the pilot study was to assess the clarity of the questionnaire items, the appropriateness of the language used, the time required to complete the questionnaire, and the effectiveness of the data collection procedures. Feedback obtained from the pilot respondents helped identify ambiguous questions, improve wording, and refine the structure of the questionnaire before administering it in the main study.

3.9.1 Instrument Reliability

The researcher-built scale measures for the construct and use the Cronbach's' Alpha formula to measure internal consistency. For each goal, Cronbach Alpha was determined. If the reliability number is higher than the recommended cutoff of 0.7, then all the variables were dependable.

Table 3.5: Reliability Test Results

Variable	Cronbach's Alpha	Decision
Level of Usage of Social Media Digital Platforms	0.823	Reliable
Households' Perceptions on Utilizing Social Media Platforms	0.847	Reliable
Challenges and Opportunities in Utilizing Social Media Platforms	0.812	Reliable
Food Security	0.781	Reliable
Overall Instrument	0.826	Reliable

3.9.2 Instrument Validity

According to Robinson (2011), the purpose of a research instrument's validity is to evaluate the potential scope of the measurement that the instrument is intended to capture. The baseline is to determine the degree of truthfulness of the findings. This can be accomplished by having the appropriate raters, such as professionals or available specialists (recommended 3 to 5) who are knowledgeable about the subject of study, rationally analyses a variety of instruments. The study used a measure of degree, whereby an instrument reflecting a certain concept's content or domain gathered the data. According to Mugenda & Mugenda (2013), using a professional or expert in an area is the standard practice for assessing a measure's content validity.

Table 3.6: KMO and Bartlett's Test

Test	Statistic	Value
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	KMO	0.814
Bartlett's Test of Sphericity	Approx. Chi-Square	1,186.427
	Degrees of Freedom (df)	351
	Sig. (p-value)	0.000

3.10 Legal and Ethical Considerations

Prior to data collection, ethical approval was obtained from Africa Nazarene University, while a research permit was secured from the National Commission for Science, Technology and Innovation (NACOSTI) to authorize the conduct of the study. In addition, permission to

access respondents was sought from the relevant authorities within Nairobi County and from institutions whose representatives participated as key informants in the study.

Participation in the study was entirely voluntary. Before administering questionnaires, conducting interviews, or facilitating focus group discussions, the researcher explained the purpose of the study to all participants and sought their informed consent. Respondents were informed of their right to decline participation or withdraw from the study at any stage without any penalty or negative consequences. This ensured that participation was based on free and informed choice.

The researcher also upheld the principles of confidentiality, anonymity, and privacy throughout the study. No personal identifiers were recorded in the research instruments, and all information collected was used strictly for academic purposes. Data obtained from respondents were treated with utmost confidentiality and stored securely to prevent unauthorized access. Respect, fairness, and dignity were maintained throughout the research process to safeguard the rights and welfare of all participants.

Where key informants were drawn from organizations involved in food security, digital communication, online food marketing, or related services, prior communication was made with the respective institutions to seek permission and facilitate access to the respondents. This was necessary to ensure smooth coordination of data collection activities and to comply with organizational procedures governing research involving their personnel.

CHAPTER FOUR

FINDINGS AND DATA ANALYSIS

4.1 Introduction

This chapter presents the findings and data analysis derived from the research conducted to assess the influence of social media platforms' usage on food accessibility in Nairobi County, Kenya. The study aimed to explore how social media platforms such as social media and mobile applications impact the availability, affordability, and access to food among urban populations. Data was collected from selected respondents across Langata Sub County, using both qualitative and quantitative methods. The analysis highlights key trends, patterns, and relationships between digital engagement and food security. This chapter systematically outlines the results, supporting the interpretation and discussion of the research objectives and questions.

4.2 Socio-demographic Characteristics of the Respondents

4.2.1 Response Rate

To meet the objectives of the study, data were collected from a sample of 370 respondents who participated in the survey. Structured questionnaires were distributed to all selected participants, and all 370 were successfully completed and returned, resulting in a full response rate of 100 percent. This level of participation exceeds the threshold suggested by Mugenda and Mugenda (2003), who note that a response rate of 70 percent is sufficient for drawing reliable conclusions. The achieved response rate therefore provided a strong basis for subsequent analysis.

4.2.2 Gender, Age and Household Position of the respondents

As shown in Table 4.1, women accounted for a slightly larger proportion of the respondents (53.0%) than men (47.0%). This composition was beneficial to the study because women are often closely involved in decisions relating to food preparation, household consumption, and day-to-day food management. Their experiences provided useful insights into how households access food-related information and whether social media platforms contribute to improving food security. At the same time, the inclusion of a substantial proportion of male respondents ensured that the views of both genders were adequately represented, thereby providing a balanced understanding of household practices and decision-making processes.

The age distribution indicates that most respondents (57.8%) were between 18 and 35 years. This age group is generally more active on digital platforms and more likely to rely on social media for communication, information sharing, and commercial activities. Given the focus of this study, the large representation of younger respondents was particularly relevant because it reflected a segment of the population that regularly interacts with social media platforms. Their familiarity with digital technologies increased the likelihood of obtaining informed responses regarding the use of social media in accessing food-related information, market opportunities, and nutrition knowledge. The smaller proportion of respondents aged above 50

years may also point to differences in digital engagement across age groups, a factor that could influence the extent to which households benefit from online platforms.

Most respondents (84.1%) were household heads, while the remaining respondents were adult household members who participated on behalf of household heads who were unavailable during data collection. The dominance of household heads in the sample enhanced the quality of information collected because they are typically responsible for key decisions relating to household expenditure, food purchases, and allocation of available resources. Consequently, they were well placed to provide information on the household's food security situation and the role that social media platforms play in supporting food-related decisions. Taken together, the demographic characteristics indicate that the study largely captured responses from individuals who were directly involved in household management and who possessed varying levels of exposure to digital technologies, making them suitable respondents for examining the relationship between social media usage and food security.

Table 4.1: Summary of Households Socio- demographic Characteristics

Characteristics	Categories	Frequency(N=370)	Percent
Gender of the respondents	Male	174	47.0
	Female	196	53.0
Age of the respondent	18-35yrs	214	57.8
	36-50 yrs	71	19.2
	51-65yrs	52	14.1
	above 65yrs	33	8.9
Household position (Head or not)	Yes	311	84.1
	No	59	15.9
Land Size (acres)	<1	339	91.6
	2-3	21	5.7
	2-5	7	1.9
	Above 5	3	0.8
Educational level	None	17	4.6
	Primary	107	28.9
	Secondary	131	35.4
	Tertiary	115	31.1
HH Main Occupation	Farmer	31	8.4
	Civil servant	103	27.8

	Employee in private sector	110	29.7
	Business person	82	22.2
	On farm labourer	16	4.3
	Off farm labourer	21	5.7
	Other specify	07	1.9
HH Average monthly income	<3,000	51	13.8
	3,000-10,000	118	31.9
	10,000-20,000	107	28.9
	20,000 - 30,000	54	14.6
	> 30,000	40	10.8
HH Religion	Christians	340	91.9
	Muslims	09	2.4
	Traditional African	01	0.3
	Other specify	20	5.4

Note: Other occupations include: housewife, retired officers; Religion others include; Non-believers/Pagans.

Source: Field data, (2025)

4.2.3 Level of Education and Household Main Occupation and Average Income

The results presented in Table 4.1 indicate that most respondents had attained at least secondary education, with 35.4% (131) reporting secondary education and 31.1% (115) having attained tertiary education. Those who had completed primary education accounted for 28.9% (107), while only 4.6% (17) had no formal education. This educational profile is relevant to the study because literacy and educational attainment often influence an individual's ability to access, evaluate, and effectively utilize information available on social media platforms. Respondents with secondary and tertiary education are generally more likely to engage with digital content, compare information from different sources, and adopt online tools that support food-related decision-making. The relatively high proportion of respondents with formal education therefore provided a suitable basis for examining how social media platforms contribute to household food security.

Regarding household occupation, private sector employees constituted the largest proportion of respondents at 29.7% (110), followed by civil servants at 27.8% (103). Households engaged in business activities accounted for 22.2% (82), while only 8.4% (31) reported

farming as their main occupation. The dominance of salaried employment and business activities reflects the urban nature of Lang'ata Sub-County, where livelihoods are less dependent on agricultural production and more reliant on income-generating activities. In such settings, social media platforms often serve as important channels for accessing market information, identifying business opportunities, obtaining food-related information, and facilitating online transactions. The occupational distribution therefore suggests that respondents were likely to use digital platforms in ways that could influence both household income generation and access to food.

The findings further show that a considerable proportion of households operated within relatively low-income brackets. About 31.9% (118) reported earning between KES 3,000 and KES 10,000 per month, while 28.9% (107) earned between KES 10,000 and KES 20,000. Households earning less than KES 3,000 accounted for 13.8% (51), whereas only 10.8% (40) reported monthly incomes above KES 30,000. These findings have important implications for food security because household income directly influences the ability to purchase food, access nutritious diets, and withstand economic shocks. Income levels may also determine the extent to which households can afford internet connectivity, smartphones, and other digital tools required to access social media platforms. The income profile observed in this study therefore highlights the importance of understanding whether social media platforms can provide cost-effective avenues for accessing information, market opportunities, and resources that support household food security.

4.2.4 Respondents' Religion

Furthermore, Table 4.1 indicates that the majority of the respondents 91.9% (340) were Christians while 2.4% (09) and 0.3% (01) were Muslims and Traditional African religious practitioners respectively. However, 5.4% (20) reported to practice other forms of religions including non-believers and pagans.

Table 4.2: Food security and insecurity households' measurement comparison association amongst the Socio-demographic background factors of respondents at their household levels

Variable		Food Insecurity (n=191)	Food Security (n=179)	Difference	χ^2	p-value	Significant ?
Age group	18-35 years	45	47	2	1.272	0.003	Yes
	36 - 64 years	37	37.8	0.8			
	65 - 87 years	5.9	3.2	-2.7			
Sex	Male	39.1	35.7	-3.4	0.434	0.505	No
	Female	40.9	44.3	3.4			
Education level	None	9.7	8.4	-1.3	0.233	0.072	Yes
	Primary	55.8	56.8	1			
	Secondary	43.6	44.1	0.5			
	Tertiary	7.9	7.7	-0.2			
Main Occupation	Farmer	55.4	62.8	7.4	6.412	0.348	No
	Civil servant	5.2	5	-0.2			
	Employee in private sector	2.9	3.9	1			
	Business person	17.4	9.1	-8.3			
	On farm labourers	5.2	5	-0.2			
	Off farm labourers	6.6	6.2	-0.4			
	Other specify	3.3	3.9	0.6			
Average monthly income	<3,000	62.8	66.1	3.3	2.948	0.671	No
	3,000 -	47.4	41.2	-6.2			
	<10,000						

10,000 - <20,000	7.5	8.1	0.6
20,000 - <30,000	0.9	1.7	0.8
>30,000	1.4	2.9	1.5
Standard Deviation	3.19	3.87	0.7

*p<0.1 ***p< 0.01 statistically significant difference between the households with food secure and insecure

Source: Field data (2025)

Results in Table 4.2 above indicates that household head level of education was statistically significant among the households who were food secure and food insecure at p-value=0.072 while age group was also found to be statistically significant at p-value= 0.003 on social media platforms' usage on food security activities. However, it is interesting to note that household average monthly income, household's main occupation and sex of the household heads were found not to be statistically significant among the households who were food secure and food insecure on their usage of social media platforms for food security related activities in the sub-county. This implies that households' head level of education and sex were the main socio-demographic variables that determined household's utilization of social media platforms for food security related activities in Lang'ata Sub-county.

4.3 Levels of Social Media Digital Platforms Usage on Food Security

4.3.1 Household level food insecurity

The study assessed the level of social media usage in food security in the Sub-county. This was done by assessing variables measuring the status of food security or insecurity, the availability of necessary social media infrastructure and existence and usage of various social media platforms to attain various aspects of food security in the sub-county. Figure 4.1 below revealed that the majority (86%) of the households believed that food insecurity exists in the sub county while 14% of the households did not believe that food insecurity existed in Lang'ata Sub county.

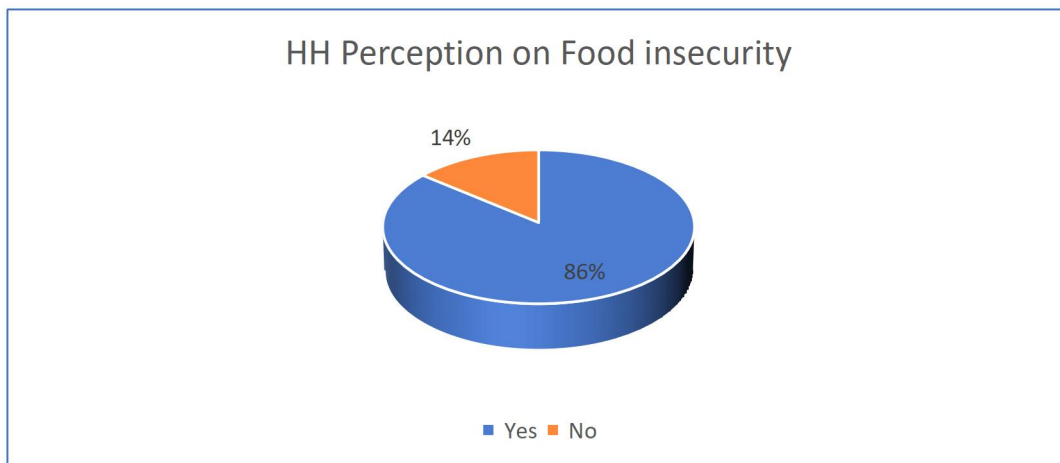


Figure 4.1: Households Heads Perception on Food insecurity

Source: Field data, (2025)

The major food insecurity drivers in the sub county as reported by the majority 281(76%) of the households was low levels of income followed by high prices of food as reported by 266(72%) of the interviewed households. The least contributing factor to food insecurity in Langata Sub county was low farm yield as reported by only 111(30%) of the total number of households who were interviewed as presented in Figure 4.2 below

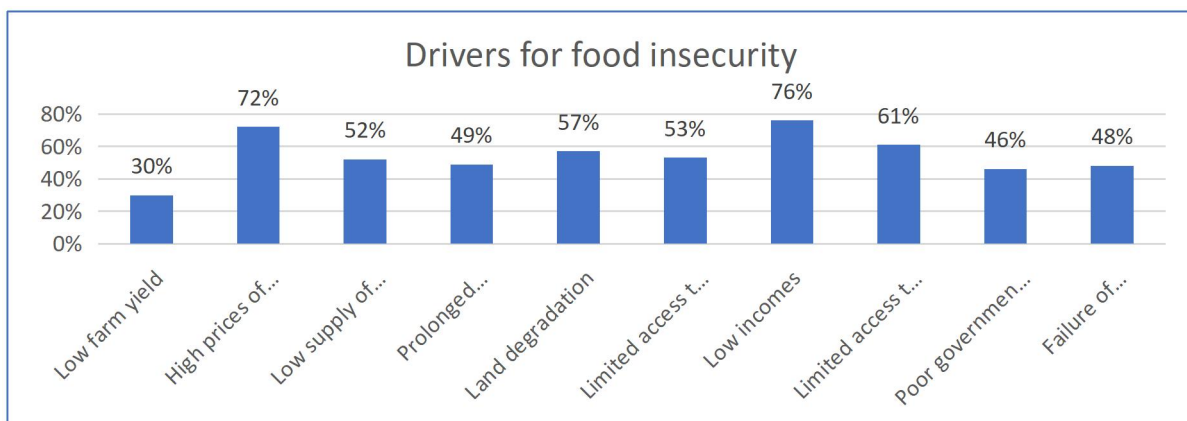


Figure 4.2: Drivers of Food Insecurity in Lang'ata Sub-county

Source: Field data, (2025)

Consequently, food insecurity in Lang'ata Sub-county contributed to various development and security challenges. Figure 4.3 below presents that the majority 307(83%) of the households who were interviewed believed that increased crime rate in the sub-county was as a result of food insecurity while 281(76%) of the households believed that poverty in the sub-county was as a result of food insecurity. On the other hand, 229(62%) of the households believed that human- wildlife conflicts and same number of households believed that malnutrition in children and aged members of the households were as a result of the food insecurity situation at the household level.

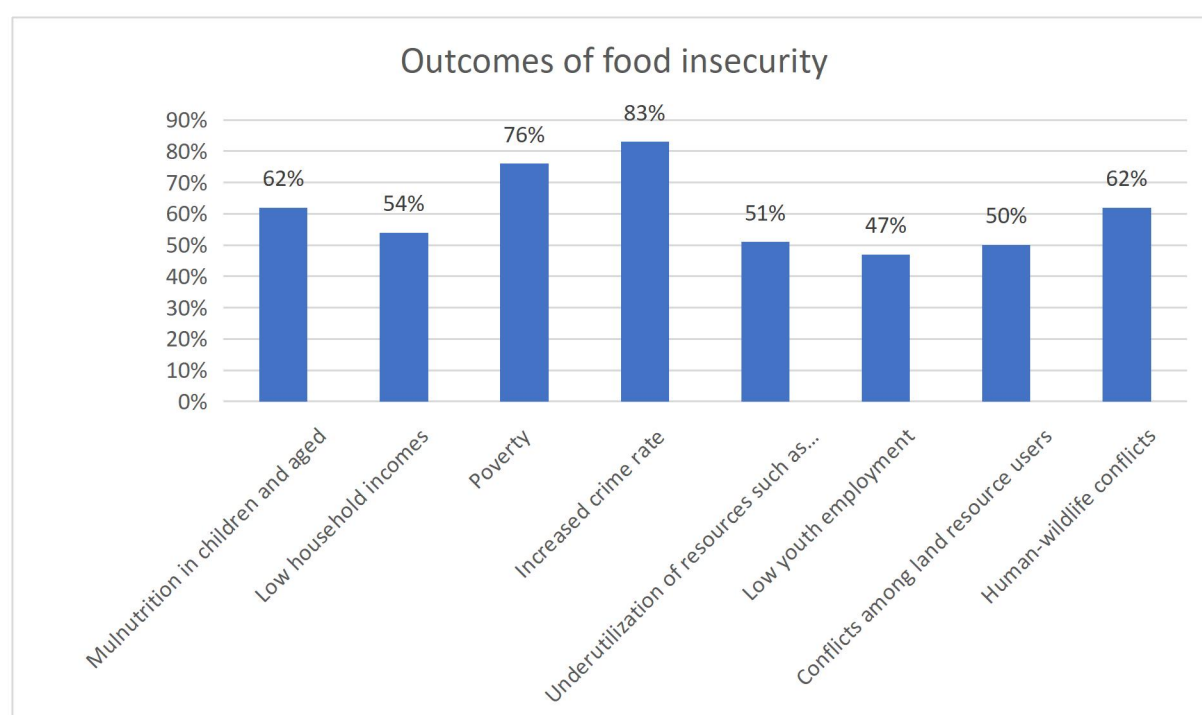


Figure 4.3: Outcome of food insecurity

Source: Field data, (2025)

When the household heads were asked whether they agreed or disagreed that food security is a key challenge to the general nation/ sub-county security, Majority 344(93%) of the households agreed, 19(5%) disagreed while 192(25%) reported not to know the whether food

insecurity was a challenge to the national and or sub county general security situation as presented in Figure 4.4 below.

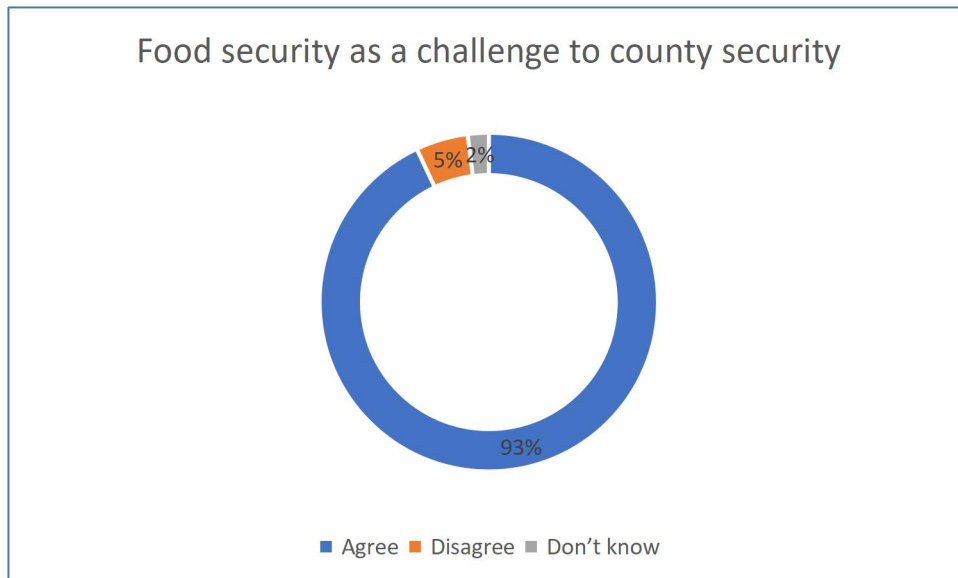


Figure 4.4: Food Security a Challenge to National and or Sub-County General Security
Source: Field data, (2025)

The finding that 86% of households believed that food insecurity exists in Lang'ata Sub-County demonstrates that access to adequate and nutritious food remains a major concern despite the widespread availability of food markets within Nairobi. This perception suggests that food insecurity in the study area is largely associated with households' inability to consistently obtain sufficient food rather than an absolute shortage of food supplies. A similar pattern has been reported in recent studies conducted in Kenya and other parts of Sub-Saharan Africa, where urban households continue to experience food insecurity because of economic constraints rather than limited food availability. For instance, Onyango et al. (2023) established that food insecurity among households in Nairobi was closely associated with low dietary diversity and inadequate economic access to food, with household income emerging as one of the strongest determinants of food security. Likewise, a systematic review by Dumisa (2025) concluded that socioeconomic conditions, particularly poverty and limited

household resources, remain the dominant drivers of food insecurity among urban households in Sub-Saharan Africa. These findings support the present study by demonstrating that food insecurity persists even in urban areas where food is physically available but financially inaccessible.

The study further established that low household income (76%) and high food prices (72%) were the leading drivers of food insecurity in Lang'ata Sub-County. This finding is consistent with recent evidence indicating that declining purchasing power continues to undermine household food security. The latest food security assessment in Kenya reported that elevated food prices remain one of the principal factors contributing to worsening food insecurity across the country, particularly among economically vulnerable households. Similarly, the 2025 Integrated Food Security Phase Classification assessment identified rising food prices as a major contributor to increasing levels of acute food insecurity in Kenya. The consistency between these studies and the present findings suggests that economic access to food remains a greater challenge than physical food availability for many households.

The respondents also associated food insecurity with broader social and developmental challenges, particularly increased crime, poverty, malnutrition, and human-wildlife conflict. These perceptions indicate that food insecurity extends beyond nutritional deprivation and has wider implications for household welfare and community stability. Similar observations have been reported in recent literature, which argues that persistent food insecurity weakens household resilience, increases socioeconomic vulnerability, and contributes to adverse health and security outcomes. Such evidence reinforces the view that addressing food insecurity requires integrated interventions that combine economic empowerment, improved food affordability, and sustainable livelihood opportunities rather than focusing solely on food production.

Finally, the finding that 93% of respondents regarded food security as a national and sub-county security concern aligns with contemporary perspectives that recognise food security as both a development and governance issue. This perception supports Platform Theory, which posits that digital platforms can facilitate timely dissemination of information, strengthen stakeholder interaction, and promote collaborative responses to societal challenges. Within the food security sector, effective use of social media platforms therefore has the potential to improve information exchange, enhance awareness, and strengthen coordination among households, government agencies, and other stakeholders involved in food systems

4.3.2 Social Media Platform Infrastructure

To measure social media platform infrastructure, the households had access to, Figure 4.5 indicates that majority 366(99%) of the households in Lang'ata Sub-county owned smart phones while 292(79%) owned laptops as electronic gadgets that could be used to power social media platforms for usage in food security activities. Of interest to note, none of the households visited lacked an electronic gadget that could be used to power social media usage. A good number of households also owned more than one type of electronic gadget.

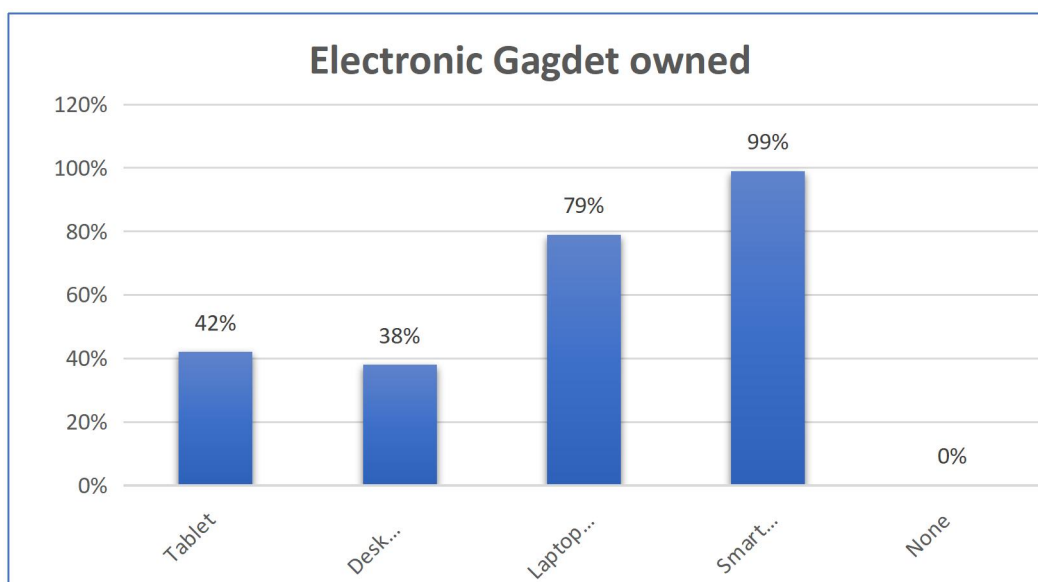


Figure 4.5: Electronic Gadgets Owned by Households

Source: Field data, (2025)

Majority 352(95%) of the households reported to have been owning the electronic gadgets for more than 10 years, while only 4(1%) reported to have been owning the gadgets for less than one year. On internet accessibility, 366(99%) of the households reported to have access to the internet in different forms. The electronic gadgets mentioned above were also used by the household for various purposes within and beyond the household daily activities. Figure 4.6 below presents the usage of the electronic gadgets owned by the household heads.

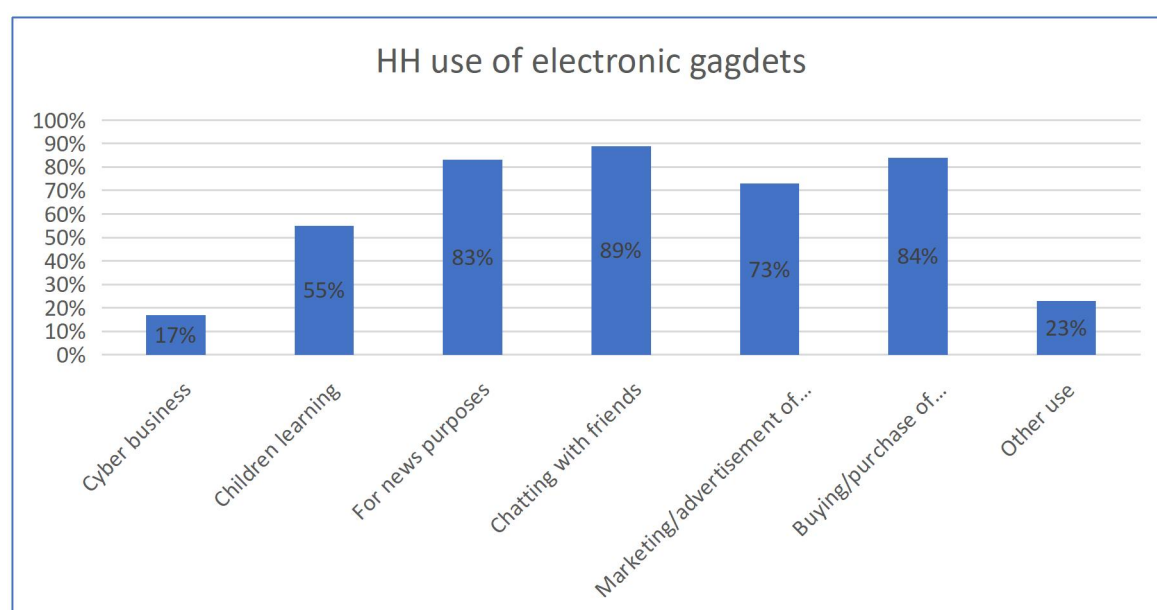


Figure 4.6: Households Use of the electronic gadgets owned

Source: Field data, (2025)

Analysis presented in Figure 4.6 showed that majority 329(89%) of the households used the electronic gadgets for chatting with friends while 311(84%) used the electronic gadgets for buying or purchase of products and services. Further, 307(83%) of the households reported to use the gadgets for news purposes. The who reported to use the gadgets for marketing and advertisement were 270(73%) of the total interviewed household heads. On the other hand, 363(98%) of the households reported that there was at least a member who was computer literate. At the same point, 329(89%) of the household head indicated that they had bought or sold a product using the electronic gadget owned at the household level. During the focus

group discussion, the households reported to have used the gadgets to purchase food and non-food merchandise especially from online platforms such as JUMIA, Killmal, Citizen Duka among other platforms. Majority 322(87%) of the household indicated to have purchased and or sold food stuff related products using the electronic gadget found within the household. Further, Majority 363(98%) of the households revealed that they have ever seen an advert related to food on social media platform during their lifetime.

These findings indicate that households are not merely connected to digital technologies but are actively integrating them into their daily economic and social activities. Similar observations have been made by Eduafo et al. (2024), who found that smartphone ownership and internet connectivity have transformed how households access agricultural information, interact with extension services, and obtain market intelligence. Likewise, Klerkx et al. (2023) argued that increasing digital connectivity has enabled consumers and producers to participate more actively in digital food systems through online purchasing, information sharing, and market interactions. The widespread use of electronic devices for online transactions observed in the present study therefore suggests that digital platforms are becoming increasingly embedded in household food acquisition practices.

However, the present findings differ from those reported by Kante et al. (2022), who found that although ownership of mobile devices was relatively high among rural households in Sub-Saharan Africa, effective utilization of digital agricultural services remained constrained by unreliable internet connectivity, limited digital literacy and the high cost of mobile data. In contrast, households in Lang'ata Sub-County reported almost universal internet access, widespread computer literacy, and extensive use of digital technologies for commercial activities. These differences are likely to reflect the relatively advanced telecommunication

infrastructure and greater availability of digital services within urban areas compared with rural communities.

The qualitative findings reinforce these quantitative results. Participants explained that online shopping platforms had become convenient avenues for purchasing food products, while exposure to food-related advertisements on social media had increased awareness of available products and suppliers. The convergence of evidence from household surveys and focus group discussions suggests that digital infrastructure has created an enabling environment for the use of social media platforms in supporting household food security. These findings are consistent with Platform Theory, which proposes that digital platforms derive value by connecting users, facilitating information exchange, and enabling transactions among multiple stakeholders. In the present study, the widespread availability of digital infrastructure provides the technological foundation through which social media platforms can contribute to improved access to food-related information and services.

4.3.3 Levels of Social Media Platform Usage in Food Security Activities

Table 4.3 below presents statements on the levels of social media platform usage in relation to food security related activities in the study area.

Table 4.3 Statements on the levels of social media platform usage in relation to food security

	Social Media Platform frequency and percentage score: n=370						
	Face book	Youtube	Instagram	Whatsap	Tiktok	Google thread	Telegram
	Frequency (%)						
Which social media platform you think can be used to promote food security in this Sub-county?	216(58.4)	91(24.6)	73(19.7)	316(85.4)	232(62.7)	72(19.5)	62(16.6)
Which social media platform is mostly used by households for food security related activities in this household?	201(54.3)	83(22.4)	53(14.3)	311(84.1)	217(58.6)	51(13.8)	60(16.2)
Which social media platform have you ever used for food security activities?	189(51.1)	73(19.7)	20(5.4)	311(84.1)	187(50.5)	23(6.2)	13(3.5)
Which one have you ever used to purchase or sale any food stuff?	189(51.1)	51(13.8)	23(6.2)	311(84.1)	101(27.3)	21(5.8)	13(3.5)
Which social media platform do you use to get information on food?	312(84.3)	53(14.3)	29(7.8)	316(85.4)	310(83.8)	14(3.8)	14(3.8)

Source: Field data, (2025)

Findings presented in Table 4.3 above indicate that majority 312(84.3%) households indicated that Facebook was a social media platform which households got information on food. While 91(24.6%) of the household heads believed that WhatsApp was the social media platform used to promote food security activities while Facebook was the least believed to promote food security by 216(58.4%) households in the sub-county. On the other hand, 311(84.1%) of the households WhatsApp social media platform was mostly used by households for food security related activities in their households compared to other social media platforms assessed. At the same time 311 (84.1%) of the households reported to have ever used WhatsApp social media platform for food security activities as well as to purchase or sale any food stuff. When asked which social media platform they used to get information on food, the majority 316(85.4%) of the households reported to have used WhatsApp while the least 14(3.8%) of the households reported google threads and telegram social media platforms. During the key informant interviews with one of the sub-county agricultural officers responded:

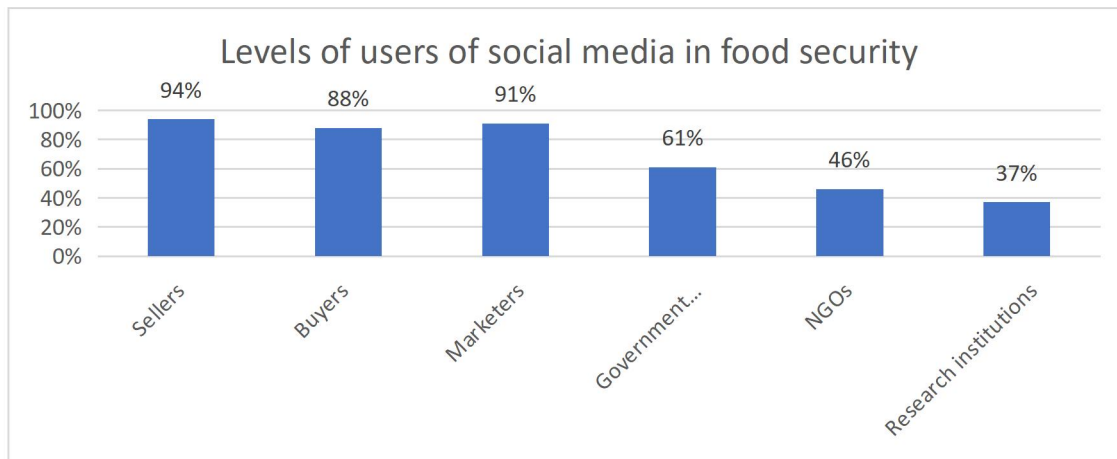
“I agree with what this study is researching on. Today, our work has been made easier and also risky by the emergence of social media platforms. For example, I use WhatsApp to mobilize community members for agricultural forums, I share information on the platform and that has been easier and faster compared to what we used to do writing letters and distributing to chiefs whenever we used to call for a meeting. Also today, people with their phone using social media hold us accountable and report whenever we do not do the right thing. This has become a norm for some of us to be careful since we can be reported and we lose our jobs. I have to perform observing the code of conduct and ensure that good reports are delivered on social media about my performance.”

The predominance of WhatsApp and Facebook demonstrates that households prefer communication platforms that are easily accessible, interactive, and capable of supporting rapid information exchange. Similar patterns have been reported in recent empirical studies examining digital communication within agricultural and food systems. Eduafo et al. (2024) observed that WhatsApp has become one of the most preferred platforms for agricultural extension because it enables users to exchange information quickly, participate in discussion groups, and receive advisory services at minimal cost. Likewise, Ramavhale (2024) reported that WhatsApp and Facebook remain the most widely adopted social media platforms among agricultural stakeholders due to their simplicity, affordability, and capacity to facilitate continuous interaction between farmers, extension officers, and markets. Comparable evidence was presented by Klerkx et al. (2023), who argued that social media platforms increasingly function as digital innovation ecosystems by connecting producers, consumers, researchers, and policymakers through efficient knowledge-sharing networks. Collectively, these studies reinforce the present findings by demonstrating that the effectiveness of social media in supporting food security largely depends on its accessibility and ability to facilitate real-time communication.

The key informant interviews further reinforced these findings. One agricultural officer explained that WhatsApp had substantially improved communication between extension officers and community members by making it easier to mobilize participants for agricultural forums, disseminate advisory information, and strengthen accountability in public service delivery. These observations illustrate how social media platforms have expanded beyond personal communication to become practical tools for agricultural governance and service delivery. Similar conclusions were reached by Birner et al. (2023), who found that digital communication platforms have enhanced the responsiveness and efficiency of agricultural

extension systems by reducing communication delays and strengthening interactions between service providers and farming communities.

Further analysis of data presented in Figure 4.7 below presents levels of users of social media



platforms in the study area.

Figure 4.7: Levels of Users of Social Media in Food Security

Source: Field data, (2025)

Figure 4.7 shows that in the study area, majority 348(94%) of the household reported that sellers of food security related products were the users of social media platforms, 337(91%) household heads reported marketers while 326(88%) of the household heads reported buyers of food security related products in the study area. Research institutions were reported by the least 137(37%) of the total number of households who were interviewed. On the food related information, Figure 4.8 below showed that the majority 289(78%) of the households heads reported to have received information on how the household could utilize food, 274(74%) reported to have received information on where the household could access a particular food stuff, 252(68%) reported to have received information on the availability of food while 244(66%) reported to have received information on the factors affecting stability of food availability access and utilization. The following is a statement from one adult female during the focus group discussion:

‘‘Yes, social media platforms have made those of us who work and are busy throughout the day to make orders from online marketing platform and they deliver food stuff at our door steps. Yesterday, I ordered grocery from Naivas Supermarket using the WhatsApp, made payment using M-Pesa and within 15 minutes I had someone knocking at my door with my shopping.’’

These findings indicate that households primarily associate social media with commercial food transactions rather than research and knowledge generation. Similar observations were reported by Abdul-Rahman et al. (2022), who found that digital platforms are increasingly driven by market-oriented interactions, enabling producers, traders, and consumers to exchange market information and conduct commercial transactions more efficiently. This growing commercialization of social media reflects the expanding role of digital platforms within contemporary food systems.

Generally, the household as presented in Figure 4.8 below indicated that social media platforms usage stands a good position in enhancing the status of food security in Langata Sub-county.

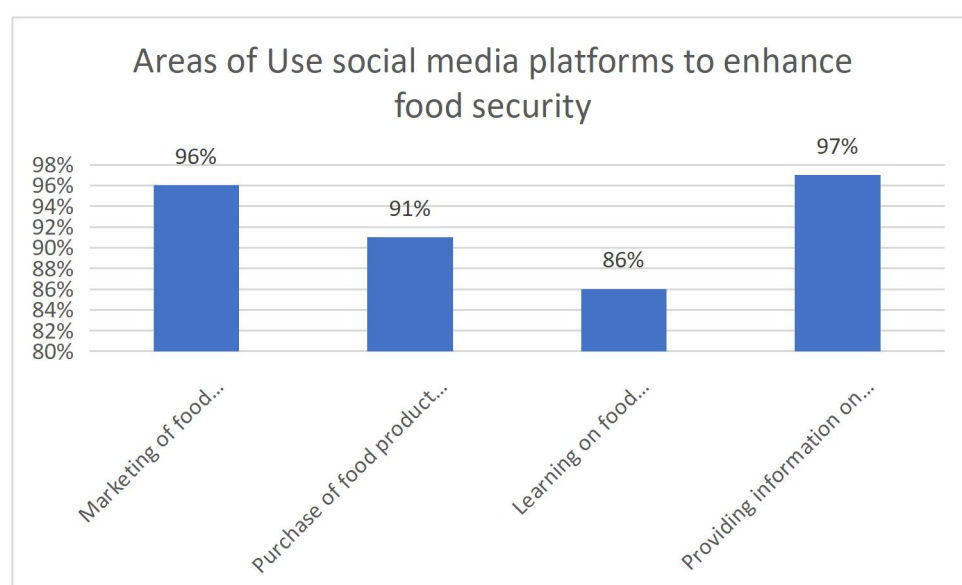


Figure 4.8: Areas of Use of Social Media Platforms to enhance Food Security

Source: Field data, (2025)

Above average, 359(97%), of the interviewed households believe that use of social media platform could be useful in providing information on how foods are utilized. 355(96%) believed that social media platform could be useful in marketing of food products and services, 337(91%) household believed that social media platforms could be useful in helping households purchase of food products and services while 318(86%) of households believed that social media platform could be useful in helping households learn and improve on food production.

Comparable findings were reported by Hamza et al. (2025), who established that digital platforms improved farmers' market participation and strengthened food value chains by facilitating access to market information, customers, and digital payment systems. Although Hamza et al. focused primarily on farming communities, the similarities suggest that social media contributes to food security by improving access to food markets regardless of whether users are producers or consumers.

The respondents also expressed strong confidence in the future role of social media in enhancing food security. Nearly all households believed that social media could improve food utilization (97%), facilitate food marketing (96%), support the purchase of food products (91%), and enhance food production through information sharing (86%). These perceptions are consistent with recent evidence showing that digital platforms continue to transform food systems by strengthening communication, expanding market access, and supporting knowledge dissemination across agricultural value chains. However, the present findings differ from those reported by Kante et al. (2022), who observed that although social media platforms possess considerable potential for supporting agricultural development, their effectiveness in many rural communities remains constrained by limited internet connectivity,

inadequate digital literacy, and affordability challenges. The higher levels of utilization reported in Lang'ata Sub-County are likely to reflect the relatively advanced digital infrastructure, higher literacy levels, and better internet accessibility characteristic of urban environments.

Taken together, the quantitative findings, key informant interviews, and focus group discussions demonstrate that WhatsApp and Facebook have become central platforms through which households access food-related information, participate in food markets, and communicate with service providers. This convergence of evidence supports Platform Theory, which argues that digital platforms create value by facilitating interaction, information exchange, and collaboration among multiple users. Within Lang'ata Sub-County, the extensive use of these platforms suggests that they provide an effective digital ecosystem capable of supporting household food security through improved communication, market connectivity, and knowledge sharing.

4.3.4 Social Media Platforms Contribution to Food Security Levels (Dependent Variable)

Findings presented in Table 4.4 indicate that the contribution of social media platforms differed across the four dimensions of food security examined in this study. The mean score for food availability was 202 (54.6%), followed by food utilization at 188 (50.8%), while food stability recorded a mean score of 183 (49.6%) and food accessibility recorded the lowest mean score of 141 (38.2%). The overall mean score of 179 (48.3%) indicates that, although social media platforms contributed to several household food security activities, their overall contribution remained below average. This suggests that households have embraced social media primarily as an information-sharing platform rather than as a comprehensive solution capable of addressing all dimensions of food security. Consequently, considerable opportunities remain for expanding the application of social media platforms in strengthening household food security.

Table 4.4: Social media platforms contribution to of food security Dimension/Levels

Factors of food security		Yes	No
Foods are available		Frequency (%)	
a.	HHs willingness to change food production practices	201(54.3)	169(45.7)
b.	HH farmers access to productive technologies and practices	213(57.6)	157(42.4)
c.	HH farmers access to resources, labour, finance, agricultural inputs	217(58.6)	153(41.4)
d.	HH farmers secure and timely access to fertile land, water and ecosystem services	109(29.5)	261(70.5)
e.	HHs knowledge and skills to improve food production	271(73.2)	99(26.7)
	Mean score for social media platform usage in food availability	202 (54.6)	168(45.4)
Foods are accessed			
f.	Women have a strong say in HH economic decision making	146(39.5)	224(60.5)
g.	Increased HH income	107(28.9)	263(71.1)
h.	HH engage in secure income generating activities	171(46.2)	199(53.8)
	Mean score for social media platform usage in food accessibility	141(38.2)	229(61.8)
Food stability			
i.	Farmers grow climate adapted crops	178(48.1)	192(51.9)
j.	HH are energy efficient	193(52.5)	177(47.8)
k.	Land restoration including soil and water conservation and management	174(47.0)	196(50.3)
l.	HHs have and implement preparedness plans to protect lives and assets	194(52.4)	176(47.6)
m.	HH have coping strategies	184(49.7)	186(50.3)
n.	Resource assets, income exists which can be mobilized by HHs	176(47.6)	194(52.4)
	Mean score for social media platform usage in food stability	183(49.6)	187(50.4)
Foods are utilized effectively			
o.	Access to clean water	90(24.3)	280(75.7)
p.	HHs willingness to change diets	198(53.5)	172(46.5)
q.	HHs skills and knowledge to ensure good nutrition, food safety and sanitation	276(74.6)	94(25.4)
	Mean score for social media platform usage in food utilization	188(50.8)	182(49.2)
	Overall Social media platform usage on Food security Mean Score	179(48.3)	191(51.7)

Source: Field data, (2025)

Findings presented in Table 4.4 indicate that the contribution of social media platforms differed across the four dimensions of food security examined in this study. The mean score for food availability was 202 (54.6%), followed by food utilization at 188 (50.8%), while food stability recorded a mean score of 183 (49.6%) and food accessibility recorded the lowest mean score of 141 (38.2%). The overall mean score of 179 (48.3%) indicates that,

although social media platforms contributed to several household food security activities, their overall contribution remained below average. This suggests that households have embraced social media primarily as an information-sharing platform rather than as a comprehensive solution capable of addressing all dimensions of food security. Consequently, considerable opportunities remain for expanding the application of social media platforms in strengthening household food security.

The relatively stronger contribution of social media to food availability and food utilization agrees with recent studies showing that digital communication platforms are particularly effective in disseminating agricultural knowledge, nutrition information, and production practices. Eduafo et al. (2024) reported that social media has significantly improved access to agricultural advisory services by enabling users to obtain timely information on production technologies, farming practices, and market opportunities. Similarly, Ramavhale (2024) observed that social media platforms have enhanced the dissemination of agricultural information by facilitating interaction among farmers, extension officers, and other stakeholders. Comparable findings were reported by Klerkx et al. (2023), who argued that digital platforms have transformed agrifood systems by accelerating knowledge exchange and improving access to innovations that enhance agricultural productivity. Collectively, these studies support the present findings by demonstrating that social media contributes more directly to improving household knowledge and production practices than to addressing structural constraints affecting food security.

The present study established that social media contributed less to food accessibility and food stability than to the other dimensions of food security. These findings suggest that while households can readily obtain information through digital platforms, such information does not automatically translate into improved purchasing power, stable household incomes, or

sustained access to food. Similar observations have been reported in recent literature. The Food and Agriculture Organization of the United Nations et al. (2024) noted that food insecurity in many developing countries is increasingly driven by economic barriers, including declining household incomes, inflation, and rising food prices, rather than by inadequate access to information alone. Likewise, Hamza et al. (2025) argued that although digital platforms improve market participation and facilitate access to agricultural knowledge, their influence on household food security remains dependent on broader socioeconomic conditions such as income levels, market infrastructure, and access to productive resources. These findings reinforce the argument that digital technologies should complement, rather than replace, broader economic and policy interventions aimed at strengthening household food security.

Among the individual food security indicators, the highest proportions of respondents indicated that social media had enhanced household knowledge and skills related to food production (73.2%) and nutrition, food safety, and sanitation (74.6%). These findings suggest that the greatest value of social media lies in its educational function, enabling households to access practical information that supports healthier food production and consumption practices. Similar conclusions were reached by Eduafo et al. (2024), who found that digital platforms have become increasingly effective channels for delivering agricultural extension messages and promoting knowledge transfer among farming communities. Likewise, Birner et al. (2023) observed that digital advisory platforms have strengthened agricultural extension by improving farmers' access to technical knowledge while reducing communication barriers between service providers and communities. The agreement between these studies and the present findings indicates that social media is particularly effective in improving knowledge-based dimensions of food security.

In contrast, the lowest proportions of respondents associated social media with improved household income (28.9%), access to clean water (24.3%), and secure access to land and ecosystem services (29.5%). These findings differ from those reported by Hamza et al. (2025), who demonstrated that social media significantly improved farmers' incomes by increasing market participation, productivity, and technical efficiency among agricultural producers in Pakistan. The variation between the two studies is likely to arise from differences in the study populations. Whereas Hamza et al. focused on farming households that relied directly on agriculture for their livelihoods, the present study examined predominantly urban households whose interaction with social media centred more on information access, communication, and food purchasing than agricultural production. Consequently, improvements in household income and access to productive resources remain influenced by broader structural and economic factors that extend beyond the capabilities of social media platforms.

The triangulated findings further strengthen these conclusions. Quantitative results identified WhatsApp and Facebook as the dominant platforms through which households accessed food-related information. Similar evidence emerged from key informant interviews, where agricultural officers described social media as an efficient channel for disseminating agricultural information and coordinating extension activities. Focus group participants likewise explained that social media enabled them to identify food suppliers, compare prices, and purchase food products through online platforms. The convergence of evidence from the three sources demonstrates that social media platforms primarily support household food security by facilitating communication, improving access to information, and strengthening linkages between consumers, service providers, and food markets.

These findings are consistent with Platform Theory, which argues that digital platforms generate value by connecting diverse users, facilitating information exchange, and supporting

collaborative interactions. The widespread use of social media observed in Lang'ata Sub-County demonstrates that digital platforms have created effective communication networks capable of supporting household food security. Nevertheless, the relatively modest overall contribution observed in this study suggests that digital platforms alone cannot fully address food insecurity. Their effectiveness depends on complementary investments in household incomes, agricultural production, market systems, infrastructure, and supportive public policies that enable households to translate digital information into improved food security outcomes.

4.4 Households Perception on Social Media Usage for Food Security

4.4.1 Households feelings on Social Media Platform Usage for Food Security

The study also sought to assess the general household heads' perception on the knowledge, skills and attitudes toward social media platform usage on the various aspects of food security. The analysis of findings in Figure 4.9 below reveals that the majority 329(89%) of the household heads had a positive feeling that social media platform usage influenced food security.

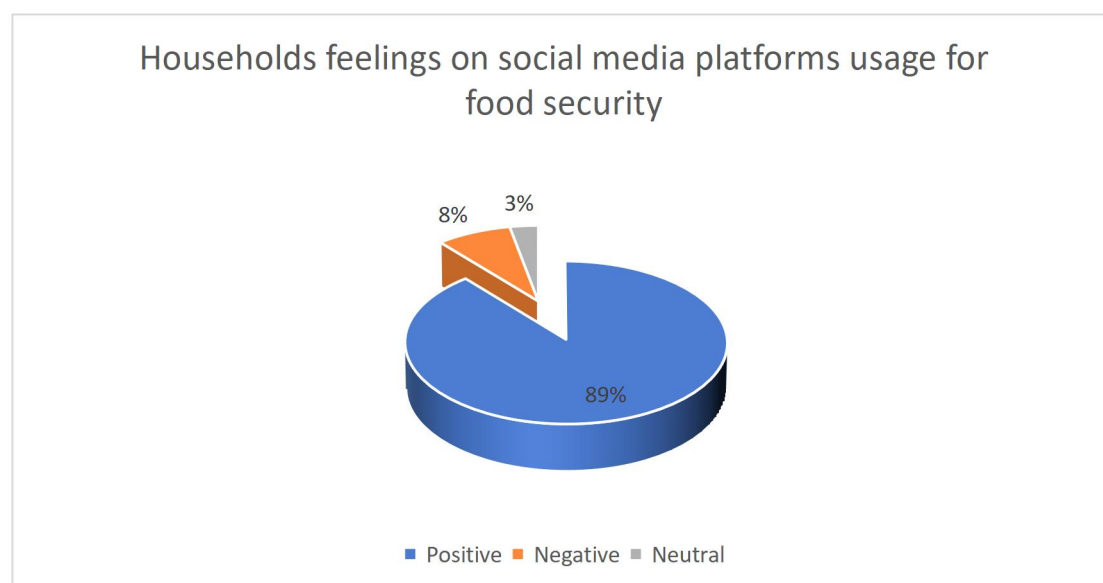


Figure 4.9: Households feelings on Social Media Platform Usage for Food Security

Source: Field data, (2025)

However, when asked how valuable and beneficial users perceived social media to be for their food security needs and goals in their household, above average 289(78%) of the households felt it was highly valuable, 44(12%) households felt it was moderately valuable while only 37(10%) of the total number of households who were interviewed felt that it was less valuable.

Study findings indicate that above average 229(62%) of household heads reported that household users find social media platforms difficult to use and not straightforward to navigate and use on food security related goals, 70(19%) of the households' heads reported that households' users find social media platforms moderately easy to use and moderately straightforward to navigate and use on food security related goals. However, 74(20%) of the household heads felt that household users find social media platforms easy and straightforward to navigate and use on food security related goals. On the other hand, above average 274(74%) of the household heads believe that they have the ability to successfully utilize social media and manage household online presence to seek food security. However, when asked whether they think households had the potential for managing negative consequences associated with using social media, such as privacy concerns, cyberbullying, or misinformation, only 133(36%) of the households reported in the affirmative(yes) while the majority 237(64%) reported in the negative (no).

4.4.2 Households Engagement and interaction with social media platform on food security

The study further assessed the extent to which households engaged and interacted with social media platforms in relation to food security activities. The findings presented in Table 4.5 indicate that the majority, 318 (85.9%), of household heads strongly agreed that members of

their households actively participated in social media by posting content, interacting with other users, and consuming food-related information. Similarly, 304 (82.2%) strongly agreed that social media platforms facilitated two-way communication and feedback among users on matters relating to food security.

Table 4.5: Statements about household engagement and interaction with social media on food security related activities

	Statement on User Engagement and Interaction	5. Strongly Agree, 4. Agree, 3. Undecided, 2. Disagree, 1. Strongly Disagree				
		1	2	3	4	5
		Frequency (%)				
a.	You are actively users on participating on social media platforms as you seek for food security, including posting content, interacting with others, and consuming information.	09(2.4)	02(0.5)	06(1.6)	35(9.5)	318(85.9)
b.	Social media platforms facilitate two-way communication and feedback between users on food security	05(1.4)	11(3.0)	09(2.4)	41(11.1)	304(82.2)
c.	There is high level to which users react to content, including liking, commenting, sharing, and other forms of interaction on food security	06(1.6)	09(2.4)	11(3.0)	61(16.5)	283(76.5)
d.	Overall high satisfaction with the social media experience, which can be influenced by the platform's functionality, content, and community on food security issues.	12(3.4)	13(3.5)	16(4.3)	201(54.3)	128(34.6)
e.	There is high level of trust among the users on the information and individuals they encounter on social media in relation to food security.	52(14.1)	47(12.7)	51(13.9)	119(32.2)	101(27.3)

Source: Field data, (2025)

The high level of household participation demonstrates that social media has evolved beyond a passive information source into an interactive platform that supports continuous communication and knowledge exchange. The ability to create content, seek clarification, and engage in discussions enables users to participate actively in food-related decision-making. Similar observations have been reported in recent studies examining digital engagement within agricultural systems. Eduafo et al. (2024) found that social media platforms

significantly enhanced interaction between farmers and extension officers by encouraging continuous dialogue, collaborative problem-solving, and timely dissemination of agricultural information. Likewise, Birner et al. (2023) observed that digital advisory platforms have transformed agricultural extension from one-way communication into participatory knowledge-sharing systems where users actively exchange experiences and practical solutions. These findings support the present study by demonstrating that active user engagement increases the effectiveness of social media as a channel for agricultural and food-related communication.

The findings further revealed that 283 (76.5%) of respondents strongly agreed that users frequently reacted to food-related content by liking, commenting, sharing, and participating in other forms of online interaction. This pattern suggests that households are not merely recipients of information but also contribute to the circulation and validation of food-related knowledge within their social networks. Similar findings have been reported by Klerkx et al. (2023), who argued that digital platforms strengthen agricultural innovation by enabling users to exchange experiences, validate information collectively, and build virtual communities centred on agricultural learning. Comparable evidence was presented by Ramavhale (2024), who established that continuous interaction among users enhances the effectiveness of social media in disseminating agricultural information because discussions and feedback improve both the credibility and practical application of shared knowledge.

Although household engagement was generally high, trust in information obtained through social media appeared comparatively lower. Only 119 (32.2%) of respondents agreed that there was a high level of trust among users regarding food-related information and the individuals sharing it. This finding suggests that while households actively participate in online discussions, they remain cautious about the credibility of information available

through social media platforms. Similar concerns have been documented in recent studies on digital communication. Abdul-Rahman et al. (2022) observed that although digital platforms facilitate rapid dissemination of agricultural information, users often question the reliability of online content because misinformation, unverified sources, and conflicting opinions remain common challenges. Likewise, Food and Agriculture Organization of the United Nations (2023) noted that the growing use of digital communication in agriculture has increased the need for mechanisms that verify the accuracy of information shared through social media platforms. The agreement between these studies and the present findings indicates that improving trust remains essential if digital platforms are to realise their full potential in supporting household food security.

The findings also showed that respondents expressed generally positive levels of satisfaction with their experiences of using social media for food security activities. Satisfaction appears to be influenced not only by the functionality of the platforms but also by the availability of relevant content and opportunities for interaction with other users. Similar conclusions were reached by Eduafo et al. (2024), who found that users were more likely to continue using digital agricultural platforms when they perceived the information to be useful, timely, and responsive to their needs. This suggests that sustained household engagement depends on maintaining reliable information, user-friendly platforms, and meaningful interactions that address practical food security challenges.

Taken together, these findings indicate that social media platforms have created interactive digital environments where households actively participate in discussions, exchange knowledge, and obtain food-related information. However, the comparatively lower level of trust suggests that information quality remains an important concern requiring greater attention from government agencies, agricultural extension providers, and other stakeholders.

These findings support Platform Theory, which argues that the value of digital platforms depends not only on connecting users but also on facilitating trustworthy interactions that encourage collaboration, knowledge exchange, and collective problem-solving. Strengthening the credibility of information shared through social media is therefore likely to enhance household participation and increase the contribution of digital platforms to food security.

4.4.3 Correlation Analysis of household satisfaction with social media platform usage on food security Variables

The study further examined the relationships among the variables measuring household satisfaction with social media platform usage in relation to food security. The Pearson correlation results presented in Table 4.6 indicate that all the variables were positively and statistically significantly correlated at the 0.01 level, demonstrating that improvements in one aspect of household engagement with social media were associated with improvements in the other dimensions of user satisfaction.

Table 4.6: Correlation Analysis of household satisfaction on social media platforms usage on food security Variable

Correlations		1	2	3	4	5
1	You are actively users on participating on social media platforms as you seek for food security, including posting content, interacting with others, and consuming information.	<i>R</i> 1 <i>p</i> <i>N</i> 370				
2	Social media platforms facilitate two-way communication and feedback between users on food security	<i>R</i> .866** <i>p</i> .000 <i>N</i> 370	1			
3	There is high level to which users react to content, including liking, commenting, sharing, and other forms of interaction on food security	<i>R</i> .636** <i>p</i> .000 <i>N</i> 370	.403**	1		
4	Overall high satisfaction with the social media experience, which can be influenced by the platform's functionality, content, and community on food security issues.	<i>R</i> .734** <i>p</i> .000 <i>N</i> 370	.671**	.678**	1	
						370

5	There is high level of trust among the users on the information and individuals they encounter on social media in relation to food security.	<i>R</i>	.630**	.545**	.411**	.578**	1
		<i>p</i>	.000	.000	.000	.000	
		<i>N</i>	370	370	370	370	370

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Field data (2025)

The strongest positive relationship was observed between active participation in social media platforms for food security and the ability of these platforms to facilitate two-way communication and feedback among users ($r = .866$, $p < .001$). This strong association indicates that households that actively create content, interact with other users, and consume food-related information are also more likely to perceive social media as an effective communication channel for exchanging knowledge and receiving feedback. Similar findings have been reported in recent studies examining digital agricultural communication. Eduafo et al. (2024) found that active participation in social media significantly enhanced communication between agricultural extension officers and farmers by encouraging continuous dialogue, timely feedback, and collaborative problem-solving. Likewise, Birner et al. (2023) argued that digital advisory platforms strengthen agricultural knowledge systems because regular interaction between users promotes learning, trust, and collective decision-making. These findings are consistent with the present study and suggest that user participation is an important determinant of effective digital communication within food systems.

The correlation analysis also showed strong positive relationships between active participation and overall satisfaction with the social media experience ($r = .734$, $p < .001$), as well as between overall satisfaction and two-way communication ($r = .671$, $p < .001$). These relationships suggest that households derive greater satisfaction from social media platforms when they are able to communicate effectively, exchange information freely, and participate in interactive discussions. Similar conclusions were reached by Klerkx et al. (2023), who

observed that user satisfaction within digital agricultural platforms increases when systems facilitate continuous interaction, responsive communication, and easy access to relevant information. Comparable evidence was reported by Ramavhale (2024), who established that social media platforms become more valuable to users when they encourage participation and create opportunities for collaborative learning among members of agricultural communities.

Although all the relationships were statistically significant, relatively weaker positive associations were observed between two-way communication and users' reactions to food-related content ($r = .403, p < .001$), as well as between users' reactions to content and trust in information shared through social media ($r = .411, p < .001$). These findings suggest that frequent liking, commenting, or sharing of content does not necessarily translate into higher levels of trust in the information available on social media platforms. Similar concerns have been documented in recent literature. Abdul-Rahman et al. (2022) observed that while digital platforms encourage extensive interaction among users, concerns regarding misinformation, credibility of information sources, and authenticity of online content often reduce users' confidence in information obtained through social media. Likewise, the Food and Agriculture Organization of the United Nations (2023) reported that although digital platforms have expanded access to agricultural information, the quality and reliability of user-generated content remain important challenges that require greater institutional oversight and verification mechanisms. The agreement between these studies and the present findings suggests that increasing user engagement alone is insufficient unless accompanied by measures that strengthen confidence in the accuracy of shared information.

The views expressed during the focus group discussions further support the quantitative findings. Participants explained that WhatsApp groups had become useful forums for exchanging information on food availability, comparing market prices, discussing weather

conditions, and sharing agricultural experiences with other households. They also emphasised the importance of strengthening communication between households, agricultural officers, and policymakers through digital platforms to improve dissemination of early warning information and facilitate timely responses to emerging food security challenges. These observations demonstrate that households perceive social media not merely as communication tools but as collaborative platforms capable of supporting community-based responses to food security issues.

Taken together, the correlation analysis demonstrates that household satisfaction with social media platform usage is multidimensional, with active participation, communication, interaction, satisfaction, and trust reinforcing one another. The findings support Platform Theory, which proposes that digital platforms generate greater value when they facilitate continuous interaction, feedback, and knowledge exchange among users. Nevertheless, the comparatively weaker association between user interaction and trust highlights the need to strengthen the credibility of food-related information shared through social media. Improving content verification, promoting digital literacy, and increasing the participation of credible institutions such as agricultural extension services would likely enhance user confidence and improve the contribution of social media platforms to household food security.

4.4.4 Households level of satisfaction with social media platforms on food security

Findings in Table 4.7 below presents analysis on the households' level of satisfaction with social media platforms in enhancing involvement in food security activities.

Table 4.7: Households level of satisfaction with social media platforms in enhancing involvement in food security activities

	Areas of social media platforms in enhancing your involvement in food security activities	Level of satisfaction: 1=Highly satisfied 2=Satisfied 3=Fairly Satisfied 4=Less Satisfied 5= Not satisfied				
		Frequency (%)				
		1	2	3	4	5
a.	How social media usage affects individuals' self-esteem, body image, and overall sense of self towards food security.	61(16 .5)	192(51. 9)	84(22 .7)	21(5.7)	12(3.4)
b.	The tendency to compare oneself to others on social media on matters related to food security, which can lead to feelings of	57(15 .4)	102(27. 6)	71(19 .2)	30(8.1)	110(29. 7)

	inadequacy or dissatisfaction.					
c.	The potential impact of social media information on food security on mental well-being, including anxiety, depression, and loneliness	113(30.5)	84(22.7)	67(18.1)	28(7.6)	78(21.1)
d.	How social media influences relationships, social connections, and communication patterns related to food security.	184(49.7)	91(24.6)	65(17.6)	21(5.7)	09(2.4)
e.	The way users perceive and process food security information from social media, including the potential for misinformation and echo chambers.	97(26.2)	78(21.1)	86(23.2)	96(25.9)	13(3.5)

Source: Field data, (2025)

Findings presented in Table 4.7 indicate varying levels of household satisfaction regarding the contribution of social media platforms to food security activities. More than half of the respondents, 192 (51.9%), reported being satisfied with the influence of social media on their confidence and overall perception of their ability to engage in food security activities. This suggests that social media platforms provide households with opportunities to acquire knowledge, interact with other users, and strengthen confidence in making food-related decisions. The findings imply that satisfaction extends beyond access to information and encompasses users' perceptions of their ability to participate effectively in food security activities through digital platforms.

The positive levels of satisfaction observed in the present study are consistent with recent evidence demonstrating that social media enhances users' confidence by improving access to knowledge and strengthening participation in digital communities. For example, Mishra et al. (2023) found that regular engagement with digital agricultural platforms increased farmers' confidence in adopting improved production practices because users were able to exchange experiences and receive timely technical support from peers and extension officers. Similar conclusions were reported by de Bruin and Wiggins (2024), who observed that participation in online agricultural communities enhanced users' confidence and willingness to implement new food production and nutrition practices through continuous interaction with knowledgeable community members. Likewise, Nakasone, Torero, and Minten (2022) argued that digital communication platforms empower households by reducing information

asymmetry and enabling informed decision-making on agricultural production and household food management. Collectively, these studies reinforce the present findings by demonstrating that satisfaction with social media largely stems from its ability to improve users' confidence and access to practical knowledge.

Despite these positive perceptions, nearly one-third of respondents, 110 (29.7%), expressed dissatisfaction with the tendency to compare themselves with other users on social media regarding food security issues. This finding suggests that exposure to other users' experiences may sometimes generate unrealistic expectations or feelings of inadequacy, particularly where households perceive themselves to be less successful in achieving food security. Comparable observations have been reported beyond agricultural research. Appel et al. (2023) found that social comparison remains one of the unintended consequences of social media engagement because users frequently evaluate their achievements against selectively presented online experiences. Similarly, Meier and Reinecke (2023) reported that excessive comparison with other users can reduce satisfaction and psychological well-being, even where digital platforms provide valuable information and social support. Although these studies examined social media use more broadly, their findings help explain why some households in the present study expressed lower levels of satisfaction despite recognising the usefulness of social media for food security.

The findings further indicate moderate satisfaction regarding the influence of social media on mental well-being, relationships, and communication relating to food security, while perceptions concerning misinformation and information processing were comparatively less favourable. These findings suggest that although households appreciate the opportunities created by digital communication, they remain cautious about the credibility and quality of information encountered online. Similar concerns have been documented across recent studies on digital agriculture and online communication. Steinke et al. (2024) observed that

users of agricultural social media platforms increasingly value rapid access to information but remain concerned about misinformation and the absence of effective mechanisms for verifying online content. Likewise, Aker and Blumenstock (2023) argued that although digital technologies have expanded access to agricultural information in developing countries, their effectiveness depends heavily on users' ability to distinguish credible information from misleading or inaccurate content. These observations are consistent with the present findings and indicate that information quality remains an important determinant of household satisfaction with social media platforms.

Table 4.8: Food security and insecurity households' measurement comparison association amongst the household social media platform usage level of satisfaction variables

Areas of social media platforms in enhancing your involvement in food security activities	Food Insecurity (n=191)	Food Security (n=179)	Difference	χ^2	p-value	Significant?
How social media usage affects individuals' self-esteem, body image, and overall sense of self towards food security.	17.2	42.6	23.4	25.595	0.000** *	Yes
The tendency to compare oneself to others on social media on matters related to food security, which can lead to feelings of inadequacy or dissatisfaction.	12.7	28.5	17.8	19.201	0.000** *	Yes
There is high level to which users react to content, including liking, commenting, sharing, and other forms of interaction on food security	23.9	24.4	2.5	0.337	0.562	No
How social media influences relationships, social connections, and communication patterns related to food security.	13	11.4	-3.6	1.150	0.284	No
The way users perceive and process food security information from social media, including the potential for	7.5	21.5	16	20.723	0.000** *	Yes

misinformation and echo chambers.						
The overall score for management knowledge of watershed						
Mean(SD)	14.67 (19.76)	25.90 (26.94)	11.22(7.18)	F=33.385	0.000** *	Yes

*p<0.1 **p<0.05 ***p< 0.01 statistically significant difference between the households with food secure and insecure

Source: Field data, (2025)

The comparative analysis presented in Table 4.8 further demonstrated statistically significant differences between food-secure and food-insecure households regarding several dimensions of satisfaction. Significant differences were observed in relation to social media's influence on users' self-esteem, social comparison, and the way households processed food-related information ($p < .001$). These findings suggest that households experiencing better food security derive greater benefits and satisfaction from social media platforms than households facing food insecurity. One possible explanation is that food-secure households possess greater financial capacity, higher digital literacy, and better access to resources needed to implement information obtained through social media. Similar findings were reported by Fabregas et al. (2022), who established that the effectiveness of digital advisory services is strongly influenced by households' socioeconomic capacity to adopt recommended practices. Likewise, Barrett et al. (2023) argued that access to digital information alone does not guarantee improvements in food security unless households possess sufficient economic and productive resources to translate knowledge into practical action. These findings therefore suggest that social media platforms are most effective when complemented by broader interventions that strengthen household livelihoods and economic resilience.

The absence of statistically significant differences regarding users' reactions to online content and the influence of social media on interpersonal relationships indicates that these aspects of social media engagement are experienced relatively similarly across both food-secure and food-insecure households. This suggests that the opportunity to participate in online

discussions and interact with other users is widely shared regardless of household food security status. Comparable findings were reported by Ritzhaupt et al. (2022), who found that digital participation is increasingly determined by access to communication technologies rather than by socioeconomic status alone, particularly within urban settings where internet connectivity is relatively widespread.

The triangulated findings further strengthen these conclusions. Quantitative evidence demonstrated generally positive perceptions of social media, while key informants acknowledged that digital platforms had increased public awareness and community engagement in food security initiatives. Participants in the focus group discussions similarly described social media as an important source of information on food availability, nutrition, food prices, and household food management. At the same time, they emphasised the need for greater verification of information because inaccurate or misleading content occasionally circulated on digital platforms. The consistency of evidence obtained from household surveys, key informant interviews, and focus group discussions therefore demonstrates that households generally value social media as a useful resource for supporting food security, although sustained confidence depends on improving the credibility and reliability of information shared through these platforms.

These findings support Platform Theory, which proposes that digital platforms create value by facilitating interaction, knowledge exchange, and collaboration among users. The generally high levels of household satisfaction observed in the present study indicate that social media platforms have successfully created opportunities for communication and learning related to food security. However, concerns regarding misinformation and unequal benefits between food-secure and food-insecure households demonstrate that the effectiveness of digital platforms ultimately depends on both the quality of information available and households' capacity to utilise that information effectively.

4.5 Challenges and Opportunities of Using Social Media Platforms for Food Security activities

4.5.1 Affordability and Usage challenges

The last objective of this study was to assess the challenges and opportunities that existed in the study area from using social media platforms on food security activities. Findings indicate that, 93% of the interviewed households revealed that households had experienced challenges when using social media platform on food security related activities. Ten statements with possible challenges of social media platform usage on food security activities identified from previous research were put to test in this study. Findings as presented in Table 4.9 indicate that 296(80.0%) and 276(74.6%) of the households observed that high cost of internet and high cost of phone and other social media gadgets respectively were major challenges of social media platform usage for food security households experienced in the study area. More analysis indicates that 279(75.4%) of the households observed that cybercrime/Scammers using social media on food security information was the challenge while lack of consistency online on the presence of food security related information was identified by 197(53.2%) of the household who were interviewed.

Table 4.9: Affordability and Usage challenges

	Food security challenge	Yes	No
		Frequency (%)	
a.	High cost of internet	296(80.0)	74(20.0)
b.	High cost of phone and other social media gadgets	276(74.6)	94(25.4)
c.	Cybercrime/Scammers using social media on food security information	279(75.4)	91(24.6)
d.	Lack of consistency online on the presence of food security related information	197(53.2)	173(46.8)
e.	Food security entrepreneurs lack knowledge on creating food security related content	191(51.6)	179(48.4)
f.	Food security entrepreneurs face challenges of keeping up with algorithm changes	177(47.8)	193(52.2)
g.	Both food security entrepreneurs and consumers lack knowledge of managing negative online feedback	208(56.2)	162(43.8)
h.	Both food security entrepreneurs and consumers lack knowledge on dealing with privacy concerns	179(48.4)	191(51.6)

g.	Both food security entrepreneurs and consumers lack knowledge of handling food security related misinformation	209(56.5)	161(43.5)
i.	Both food security entrepreneurs and consumers have knowledge of managing mental health impacts of using social media for food security related activities.	79(21.4)	291(78.6)

Source: Field data (2025)

Further analysis on the challenges households faced on using social media platform for food security in the study area indicate that below average 177(47.8) of the households who were interviewed observed that food security entrepreneurs face challenges of keeping up with algorithm changes while 208(56.2%) of the households observed that both food security entrepreneurs and consumers lacked knowledge of managing negative online feedback.

On the other hand, 179(48.4%) of the households observed that both food security entrepreneurs and consumers lack knowledge on dealing with privacy concerns while 209(56.5%) of the households observed that the challenge was both food security entrepreneurs and consumers lacked knowledge of handling food security related misinformation on the social media. Furthermore, small percentage 79(21.4%) of the interviewed households observed that both food security entrepreneurs and consumers had knowledge of managing mental health impacts of using social media for food security related activities.

During the focus group discussions, majority of the households reported not to be comfortable with the food safety standards when they procured foods using the social media platforms. At the same point, they reported that social media platforms are dominated by fraudsters and that it was safe for them to keep off engaging on food issues for fear of their information being mis-used.

4.5.1.1. General Social Media Usage Challenges

This section explores the challenges experienced by digital online users in accessing food in terms of availability, pricing, and usability. While online platforms offer numerous benefits in enhancing food accessibility, users still face significant hurdles. These include fluctuating prices across platforms, limited availability of certain food items, unreliable delivery services, and usability issues such as poor internet connectivity or lack of digital literacy. Additionally, concerns over food quality, trustworthiness of vendors, and inconsistent customer service affect user confidence. Understanding these challenges is essential for improving digital food systems and ensuring that online platforms effectively support food access for all users. The respondents mentioned the following issues as some of the major challenges hindering proper usage of modern digital platforms for usage in regards to food topical issues. The results are illustrated in Figure 4.10.

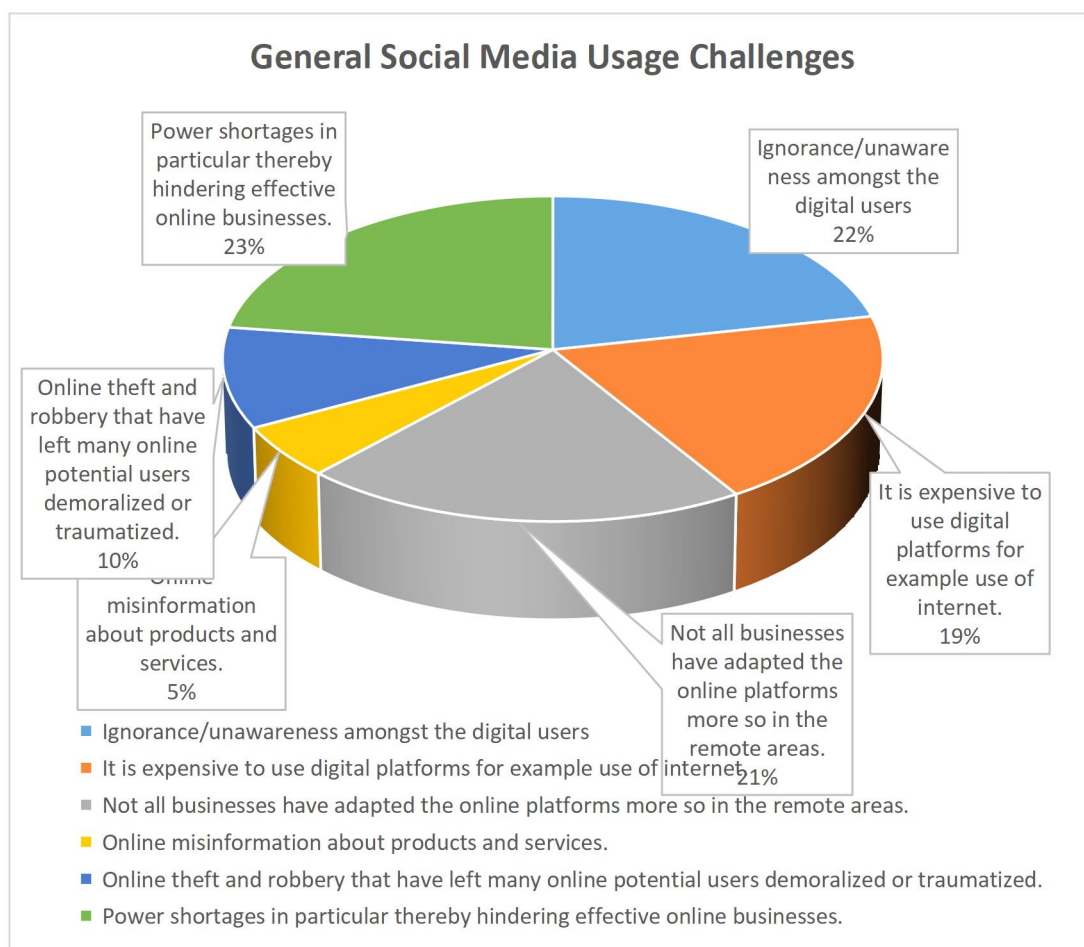


Figure 4.9: General Social Media Usage Challenges

Source: Field Data, 2025

The results presented in Figure 4.10 highlight several key challenges faced by users of digital platforms in accessing food. The most reported issue was fluctuating food prices, mentioned by 144(39%), indicating that price inconsistency across different platforms creates confusion and limits users' ability to make informed purchasing decisions. Poor internet connectivity was cited by 89(24%), emphasizing infrastructure gaps that hinder effective access to digital food services, especially in low-income or informal settlements.

Another 67(18%) identified delayed delivery services as a major issue, reflecting inefficiencies in logistical operations of online vendors. Additionally, 41(11%) pointed out the lack of trustworthy vendors and concerns over food quality, raising questions about safety and reliability in online food sourcing. Lastly, 33(9%) experienced difficulties due to low

digital literacy and platform usability, which restricts full engagement, particularly among older or less tech-savvy users. These findings suggest that while digital platforms have expanded food access, persistent challenges related to affordability, access, reliability, and usability continue to undermine their full potential. Addressing these issues is crucial for making digital food systems more inclusive and effective in promoting food security.

4.5.2 Households Suggestions on Social Media Usage for Food Security

When asked on the possible recommendations to the social media users and government line ministries on production and food access, the respondents agreed that improving internet access, opening up remote areas through expansion of access roads as well as awareness education on how best to utilize social media in promoting food security. Figure 4.10 illustrates the order of priority as outlined by the respondents.

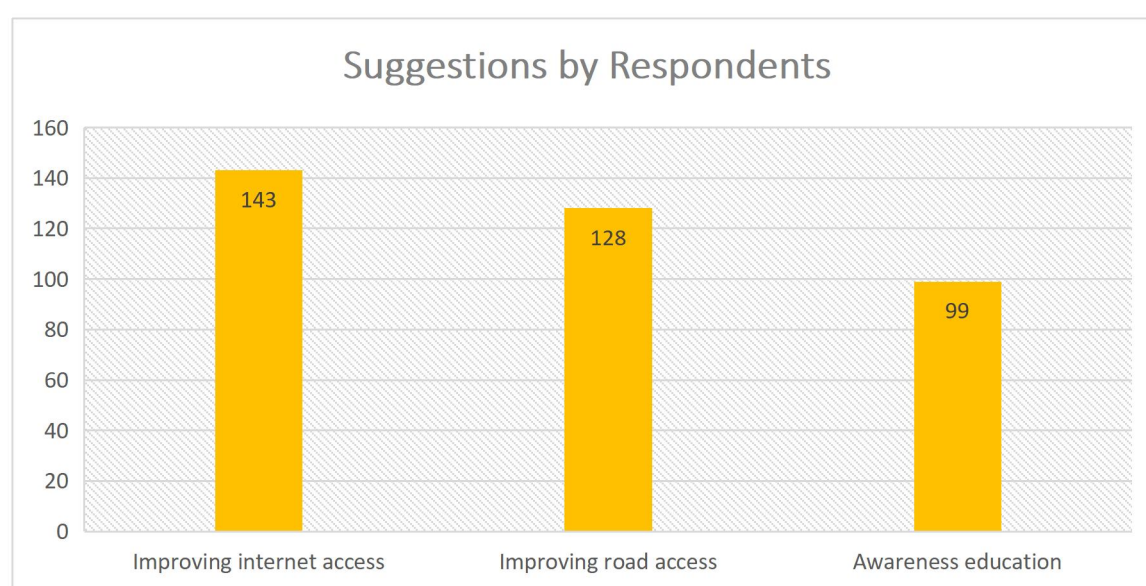


Figure 4.11: Households Suggestions on social media usage

Source: Field Data, 2025

Based on the feedback as indicated above, the respondents agreed that there is need to improve and provide internet services to other locations or regions that the service is poorly available. There was consensus amongst majority of the respondents that one hindrance to

social media application food access and information is the absence of internet in many areas. The respondents further agreed that, access in many areas has still remained wanting and there is need to improve road networks, electricity network to support many other users. On the same, there was recommendation to promote awareness on the use and application social media as not just a tool for communication and networking but can be further used to promote ideas and practices on food security measures.

4.5.3 Social Media and Food Security Legal Frameworks Challenges

The study examined households' perceptions of the legal and policy environment governing the use of social media platforms in promoting food security. Specifically, respondents were asked whether existing county and national food security frameworks support the use of social media, whether they were aware of food security policies or plans that encourage the use of social media for food security, and whether they knew of any social media policies or legal frameworks related to food security. To establish whether perceptions differed between food-secure and food-insecure households, a Chi-square test of independence was performed.

The results are presented in Table 4.10.

Table 4.10: Food security and insecurity on social policies, legal frameworks and plans

Drivers to watershed destruction	Food insecurity (n=191)	Food Security (n=179)	Difference	χ^2	p-value	Significant?
Do the county and national government food security frameworks support use of social media in promoting food security in Langata Sub-county?	60.3	78	17.7	13.91	0.000**	Yes
Are you aware of any food security policy/law/plan that support the use of social media to promote food security in Langata Sub-county?	35.5	32.4	-3.1	0.421	0.517	No
Are you aware of any	60.3	45.7	-14.6	8.22	0.004*	Yes

social media policy/law/ plan that support the use of social media to promote food security in Langata Sub-county?	0	**
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p<0.05 *p< 0.01 statistically significant difference between the households with food secure and insecure
Source: Field data (2025)

The study further examined households' perceptions regarding the adequacy of legal and policy frameworks supporting the use of social media platforms in promoting food security. The findings indicate that the majority of respondents, 255 (69%), believed that existing county and national food security frameworks do not adequately support the use of social media platforms in advancing household food security. Similarly, 218 (59%) of the households reported that they were unaware of any food security policy, legislation, or strategic plan that explicitly promotes the use of social media in food security activities. Although some respondents referred to agricultural and water policies, very few were able to identify the specific provisions of the Kenya National Food and Nutrition Security Policy (2011) or other policy instruments relating to digital communication in food systems. These findings suggest that while households increasingly utilise social media platforms in their daily food-related activities, awareness of the policy environment governing their application remains limited.

The limited awareness of food security policies observed in the present study is consistent with recent evidence indicating that digital transformation within agricultural and food systems has progressed more rapidly than the development and dissemination of supporting policy frameworks. Clapp et al. (2023) argued that many countries have embraced digital innovations in agriculture without establishing sufficiently coordinated policy frameworks to guide their implementation, regulate digital services, or ensure equitable access among vulnerable populations. Similarly, Trendov, Varas, and Zeng (2022) observed that although

digital technologies have become increasingly important in modern food systems, many developing countries continue to experience significant policy gaps regarding governance, institutional coordination, and digital inclusion. Comparable findings were reported by Reardon et al. (2023), who noted that fragmented policy environments often limit the capacity of digital innovations to contribute effectively to food system transformation despite widespread technological adoption. Together, these studies support the present findings by demonstrating that policy and institutional development frequently lags behind technological advancement.

The study further established that while 218 (59%) of respondents indicated awareness of social media-related policies, most were unable to identify specific legal or regulatory instruments linking social media to food security activities. This finding suggests that awareness of social media regulation does not necessarily translate into understanding how digital platforms can be integrated into agricultural development and household food security initiatives. Similar observations have been reported in recent studies examining digital governance in developing countries. Daum (2023) found that many digital agriculture initiatives operate in environments where users possess limited knowledge of the regulatory frameworks governing digital services, resulting in inconsistent adoption and limited utilisation of available technologies. Likewise, Klerkx and Rose (2024) argued that successful digital transformation within agrifood systems depends not only on technological infrastructure but also on supportive governance structures, policy coherence, and institutional capacity to guide implementation.

The Chi-square analysis presented in Table 4.10 further demonstrated statistically significant differences between food-secure and food-insecure households regarding perceptions of government support for social media use in food security ($\chi^2 = 13.91$, $p < .001$) and

awareness of social media policies supporting food security ($\chi^2 = 8.220$, $p = .004$). These findings suggest that household food security status influences how respondents perceive government policy support and digital governance. One possible explanation is that food-secure households are more likely to interact with extension services, agricultural programmes, and digital information platforms, thereby increasing their exposure to government initiatives and policy information. Similar conclusions were reached by Fabregas et al. (2022), who found that households with stronger socioeconomic capacity and greater institutional engagement were more likely to utilise digital advisory services effectively than economically vulnerable households. Likewise, Barrett et al. (2023) argued that the benefits of digital innovations are closely linked to households' access to complementary resources, institutional support, and public services rather than technology alone. These studies reinforce the present findings by highlighting the importance of policy implementation and institutional outreach in maximising the benefits of digital platforms.

The qualitative findings further reinforce the quantitative evidence. Key informants acknowledged that social media platforms present considerable opportunities for addressing food security challenges within urban and peri-urban settings but emphasised the need for stronger public education, digital literacy, and integration of technology within existing food security policies. Participants also recognised the emergence of online food marketplaces such as Jumia, Kilimall, and Citizen Duka, which have expanded households' access to food products through digital transactions. These observations suggest that the private sector has advanced more rapidly in integrating digital technologies into food systems than public policy frameworks. Similar conclusions were reached by World Bank (2023), which reported that private digital platforms increasingly drive innovation within food value chains, while government institutions frequently struggle to develop responsive regulatory and policy frameworks capable of supporting digital transformation.

The convergence of quantitative findings, key informant interviews, and household narratives demonstrates that significant opportunities exist to strengthen household food security through social media platforms. However, these opportunities are unlikely to be fully realised without coherent policy frameworks, greater public awareness, and stronger institutional support for digital food systems. These findings support Platform Theory by demonstrating that digital platforms generate greater public value when they operate within enabling institutional environments characterised by effective governance, supportive regulations, and collaborative stakeholder participation. Strengthening the integration of digital technologies within national and county food security policies would therefore enhance the contribution of social media platforms to household food security in Lang'ata Sub-County.

4.5.4 Challenges Related to Households Involvement in social media platform for food security

The study further examined the factors that influence households' involvement in the use of social media platforms for food security activities. Respondents were asked to rate the importance of various institutional, technological, socioeconomic, and governance factors that could either facilitate or hinder the effective utilization of social media in supporting household food security. The responses were measured using a five-point Likert scale ranging from "Not Important" to "Very Important." The findings are presented in Table 4.11.

Table 4.11: Factors contribute to the Households involvement in food security activities using social media

	Food Security factors	Rank: 1= Not important 2= less Important 3= Important 4= Very important 5= Don't know					Rank
		Frequency (%)					
		1	2	3	4	5	
a.	<i>Need to increase or sustain food production</i>	21(5.7)	13(3.5)	65(17.6)	259(70.0)	12(3.2)	4
b.	<i>Availability of financial resource</i>	16(4.3)	27(7.3)	41(11.1)	271(73.2)	15(4.1)	2
c.	<i>Local political will and support on using social media for food security</i>	43(11.6)	53(14.3)	78(21.1)	179(48.4)	17(4.6)	9
d.	<i>Leadership that promotes use of social media for food security activities</i>	23(6.2)	33(8.9)	45(12.2)	260(70.3)	09(2.4)	3
e.	<i>Local social media and food security</i>	15(4.1)	21(5.7)	56(15.1)	247(66.8)	31(8.4)	5

	<i>policies, laws, plans</i>						
f.	<i>Supporting traditional/cultural values systems</i>	16(4.3)	53(14.3)	45(12.2)	67(18.1)	189(51.1)	11
g.	<i>Adequate knowledge and expertise</i>	12(3.2)	23(6.2)	67(18.1)	194(52.4)	74(20.0)	8
h.	<i>Collaborations and partnership with other food security sector actors</i>	22(5.9)	25(6.8)	78(21.1)	236(63.8)	092.4()	6
i.	<i>Working with food security research institutions</i>	34(9.2)	45(12.2)	70(18.9)	214(57.8)	07(1.9)	7
j.	<i>Availability of food security early warning systems</i>	09(2.4)	14(3.8)	57(15.4)	279(75.4)	11(3.0)	1
k.	<i>Clear conflict resolution framework</i>	16(4.3)	34(9.2)	46(12.4)	96(25.9)	178(48.1)	10

Source: Field data (2025)

The findings indicate that households considered several institutional and socioeconomic factors essential for maximizing the contribution of social media platforms to food security. The highest-ranked factor was the availability of food security early warning systems, which 279 (75.4%) of the respondents rated as very important. This was followed by the availability of financial resources (73.2%), leadership that promotes the use of social media for food security (70.3%), and the need to increase or sustain food production (70.0%). These findings suggest that households view social media as most beneficial when it is integrated with broader food security interventions that strengthen preparedness, resource mobilisation, and institutional support rather than functioning as an isolated communication tool.

The prominence of early warning systems observed in this study agrees with growing international evidence highlighting the importance of digital technologies in strengthening anticipatory responses to food insecurity. Coughlan de Perez et al. (2023) reported that digital communication platforms significantly improve disaster preparedness by enabling rapid dissemination of weather forecasts, pest outbreaks, and food security alerts to vulnerable communities. Similarly, United Nations Office for Disaster Risk Reduction (2023) observed that integrating digital communication technologies into early warning systems enhances community resilience by facilitating timely decision-making before food crises emerge. Comparable findings were reported by Global Network Against Food Crises (2024), which identified digital early warning systems as essential components of contemporary food

security strategies because they improve preparedness and reduce households' vulnerability to climate-related shocks. Together, these studies support the present findings by demonstrating that households increasingly recognise timely access to information as a critical resource for improving food security.

The importance attached to financial resources, leadership, and supportive policies further demonstrates that technological innovations alone are insufficient to improve household food security. Respondents acknowledged that adequate financing, effective leadership, and enabling policy environments are necessary to translate digital information into practical action. Similar conclusions were reached by Barrett et al. (2023), who argued that digital innovations produce meaningful improvements in food security only when complemented by supportive institutions, financial resources, and effective governance. Likewise, Reardon et al. (2023) found that digital transformation within agrifood systems depends heavily on coordinated investments in infrastructure, institutional capacity, and market development rather than technology alone. These findings reinforce the present study by suggesting that social media platforms function most effectively when embedded within broader food security programmes supported by strong governance structures.

Respondents also attached considerable importance to local food security policies, partnerships, research collaboration, and adequate technical knowledge. More than two-thirds of households regarded local policies as important, while substantial proportions highlighted collaboration with food security stakeholders, research institutions, and access to appropriate knowledge and expertise. These findings indicate that households recognise food security as a shared responsibility requiring cooperation among government agencies, researchers, civil society organisations, and communities. Similar observations were reported by Leeuwis et al. (2022), who found that collaborative knowledge networks significantly improve agricultural

innovation because they facilitate continuous learning and exchange of experiences among multiple stakeholders. Likewise, Steinke et al. (2024) demonstrated that digital advisory services become more effective when researchers, extension officers, policymakers, and local communities work together to generate and disseminate reliable information. These studies support the present findings by illustrating the importance of institutional collaboration in strengthening digital food systems.

An interesting finding relates to traditional and cultural value systems, where more than half of the respondents indicated that they were uncertain about their contribution to social media-supported food security activities. Similarly, many respondents expressed uncertainty regarding the role of conflict resolution frameworks. These responses may indicate limited public awareness of how cultural institutions and community governance structures can complement digital technologies in promoting household food security. Similar concerns were raised by FAO (2024), which noted that digital agriculture programmes often focus primarily on technological solutions while giving insufficient attention to local cultural practices, community institutions, and traditional knowledge that influence technology adoption. This suggests that future interventions should integrate digital innovations with existing community structures to enhance their effectiveness and long-term sustainability.

The triangulated findings provide additional support for the quantitative evidence. Household survey data identified high internet costs, expensive digital devices, cybercrime, misinformation, and affordability constraints as major barriers limiting the effective use of social media platforms. Key informants similarly emphasised that internet affordability and unreliable online information reduce households' willingness to depend on digital platforms for food security activities. Focus group participants reinforced these observations by explaining that although social media enables rapid access to food-related information,

inconsistent internet connectivity, high data costs, and concerns regarding misinformation frequently limit sustained utilisation. Nevertheless, participants consistently acknowledged that digital platforms have expanded opportunities for accessing market information, nutrition advice, and food availability updates. The convergence of evidence from the three sources therefore demonstrates that while social media platforms possess considerable potential for strengthening household food security, their effectiveness depends on addressing affordability, digital inclusion, and information credibility.

These findings support Platform Theory by demonstrating that digital platforms create greater value when supported by complementary institutional, economic, and governance systems. The widespread recognition of leadership, partnerships, policy support, early warning systems, and financial resources as critical enabling factors suggests that social media platforms should be integrated into broader food security strategies rather than implemented as stand-alone technological interventions. Strengthening these complementary systems would enhance the capacity of households to utilise social media platforms effectively in improving food security within Lang'ata Sub-County.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a synthesis of the study findings, conclusions drawn from the evidence generated during the research, and recommendations arising from the findings. The study examined the influence of social media platform usage on food security among households in Lang'ata Sub-County, Nairobi County. The discussion is organized according to the study objectives, namely the level of usage of social media digital platforms on food security, households' perceptions regarding the use of social media platforms to enhance food security, and the challenges and opportunities associated with utilizing social media platforms for food security activities.

5.2 Summary of Findings

5.2.1 Level of Usage of Social Media Digital Platforms on Food Security

The first objective sought to determine the level of usage of social media digital platforms on food security among households in Lang'ata Sub-County. The findings showed that social media platforms were widely used by households for accessing food-related information. WhatsApp emerged as the most utilized platform, with 316 households (85.4%) reporting its use for obtaining food-related information, followed closely by Facebook, which was used by 312 households (84.3%). Analysis of the contribution of social media platforms to different dimensions of food security revealed that food availability recorded the highest mean score of 202 (54.6%), followed by food utilization at 188 (50.8%), food stability at 183 (49.6%), and food accessibility at 141 (38.2%). Despite the widespread use of social media platforms, the overall mean score for social media usage in food security activities was 179 (48.3%), suggesting that although households frequently accessed these platforms, their utilization had not yet translated into substantial improvements across all dimensions of household food security.

5.2.2 Households' Perceptions on Utilizing Social Media Platforms to Enhance Food Security

The second objective examined households' perceptions regarding the utilization of social media platforms in enhancing food security. The findings revealed generally positive perceptions towards the use of social media platforms. A majority of respondents, 329 households (89%), indicated that social media platform usage influenced food security. Furthermore, 192 households (51.9%) expressed satisfaction with the role of social media in shaping attitudes, awareness, and participation in food security activities. Correlation analysis showed strong and statistically significant relationships among several satisfaction variables, indicating that positive experiences in one area of social media engagement were associated with positive experiences in other food-security-related activities. The study also established

a strong positive relationship ($r = 0.866$) between active participation on social media platforms and the effectiveness of two-way communication and feedback mechanisms related to food security. However, some concerns emerged, with 110 households (29.7%) expressing dissatisfaction regarding tendencies for social comparison on social media platforms and the potential influence of misinformation on food-related decisions.

5.2.3 Challenges and Opportunities in Utilizing Social Media Platforms to Enhance Food Security

The third objective sought to examine the challenges and opportunities associated with utilizing social media platforms to enhance food security. The findings revealed that 93% of households had experienced challenges while using social media platforms for food-security-related activities. The most frequently reported challenges were the high cost of internet services, cited by 296 households (80.0%), the high cost of smartphones and other digital devices, reported by 276 households (74.6%), and cybercrime or scams associated with food-related information, identified by 279 households (75.4%). Other challenges included inconsistent availability of reliable food-related information, limited knowledge on handling misinformation, privacy concerns, and difficulties managing negative online feedback. Despite these constraints, households identified significant opportunities associated with social media platforms. These included increasing food production (70%), availability of financial resources to support food security initiatives (73.2%), and strong leadership and political support for promoting the use of social media in food security activities (70.3%). These findings indicate that social media platforms possess substantial potential to support food security if existing barriers are effectively addressed.

5.3 Conclusions

5.3.1 Overall Conclusion

The study concludes that social media platforms have become an important component of household food security systems in Lang'ata Sub-County. Although originally designed for

communication and social interaction, these platforms are increasingly being used to access food-related information, facilitate engagement among stakeholders, and support food-security-related decision-making. However, the benefits currently realized remain below their full potential due to technological, financial, and information-related constraints that limit effective utilization.

5.3.2 Level of Usage of Social Media Platforms

The study concludes that households actively utilize social media platforms, particularly WhatsApp and Facebook, to access information related to food availability, food utilization, food stability, and food accessibility. Nevertheless, the relatively modest overall usage score indicates that high platform adoption alone does not automatically translate into improved food security outcomes. The effectiveness of social media platforms depends on the quality, relevance, accessibility, and practical application of the information shared through these channels.

5.3.3 Households' Perceptions

The study concludes that households generally hold favourable perceptions regarding the use of social media platforms for food security purposes. Positive perceptions are reflected in high levels of satisfaction, strong engagement, and widespread belief that social media contributes to food security. However, concerns relating to misinformation, social comparison, and information credibility remain important considerations that may influence the extent to which households trust and utilize information obtained through social media platforms.

5.3.4 Challenges and Opportunities

The study concludes that while social media platforms present substantial opportunities for improving food security, their effectiveness is constrained by affordability, digital access, and information integrity challenges. Internet costs, device affordability, cybercrime, misinformation, and gaps in digital literacy continue to limit households' ability to fully

benefit from available digital platforms. At the same time, opportunities associated with increased food production, resource mobilization, and institutional support demonstrate that social media platforms can play a more significant role in strengthening household food security if these barriers are addressed.

5.3.5 Contribution to Knowledge and Practice

The study contributes to Platform Theory by demonstrating that social media platforms can serve functions that extend beyond communication and entertainment. The findings provide empirical evidence that digital platforms can facilitate information exchange, stakeholder interaction, awareness creation, and participation in food-security-related activities. From a practical perspective, the study provides evidence that policymakers, food security agencies, development organizations, and digital service providers can leverage social media platforms as complementary tools for enhancing household food security in urban settings.

5.4 Recommendations

5.4.1 Level of Usage of Social Media Platforms

The Nairobi City County Government, in collaboration with food security agencies and agricultural extension services, should establish structured social media information programmes through widely used platforms such as WhatsApp and Facebook to provide households with timely, accurate, and practical information on food availability, nutrition, markets, and food production opportunities.

5.4.2 Households' Perceptions

Organizations involved in food security programmes should implement digital literacy and information verification initiatives aimed at helping households critically evaluate food-related content shared on social media platforms and minimize the negative effects of misinformation and misleading online content.

5.4.3 Challenges and Opportunities

The national government, telecommunications providers, and relevant regulatory agencies should expand affordable internet access initiatives and strengthen online safety measures to reduce the barriers associated with internet costs, digital device affordability, cybercrime, and misinformation, thereby enabling households to utilize social media platforms more effectively for food security activities.

5.5 Suggestions for Further Research

Future studies may examine the influence of specific social media platforms on individual dimensions of food security such as food accessibility, food utilization, food availability, or food stability. Further research may also investigate the effectiveness of social media-based food security interventions in rural areas and compare the findings with those obtained in urban settings.

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APPENDICES

APPENDIX I: RESEARCH QUESTIONNAIRE FOR THE GENERAL PUBLIC

Dear Respondent,

I am a candidate at “Africa Nazarene University pursuing Master of Science in Governance Peace and Security. As part of my academic programme, I am carrying out a research survey seeking to determine the influence of social media digital platforms usage on food security in Langata Sub-county, Nairobi, Kenya. You are welcome to participate in this survey by responding honestly and objectively to this questionnaire. The information collected will be treated with confidentiality and will only be used for the purpose of this research. Your contribution in facilitating the success of this study will be highly appreciated.”

Thank You

APPENDIX II: HOUSEHOLD QUESTIONNAIRE

STUDY TITLE: EFFECTS OF SOCIAL DIGITAL PLATFORMS USAGE ON FOOD SECURITY IN LANGATA SUB-COUNTY, NAIROBI, KENYA

HOUSEHOLD QUESTIONNAIRE

Section A: General Social, Economic and Demographic Information

(Please tick/fill blank space)

Interviewer Name/Code: _____ Questionnaire No: _____ Date: _____

1.County: _____ 2. Sub-county: _____ 3. Location: _____

Respondent Name: _____

4. Gender: 1= Male [] 2 = Female []

005. Are you head of household 1= Yes [], 2 = No []

006. Land size (acres) 1= <1 [], 2 = 2 [], 3 = 4 [], 4 = 6 [], 5 = 10 & > []

007. Educational level 1=None [], 2=Primary [], 3=Secondary [], 4= Tertiary []

008. Age (years) 1=18-35yrs [], 2=36-50 yrs. [], 3=51-65 [] 4=above 65yrs []

009. Main occupation 1=Farmer [] 2= Civil servant [] 3=Employee in private sector [] 4= Business person [] 5= On farm laborer [] 6= off farm laborer [] 7=other specify _____

010. Household size 1=Females [] 2=Males [] 3=No. below 18 [] 4=No. above 65years [] _____

011. HH Religion 1=Christians [] 2= Muslims [] 3=Hindus [] 4= Traditional African [] 5= Other specify _____

012. HH Average monthly income 1= <3,000 [] 2=3,000-10,000 [] 3=10,000-20,000 [] 4= 20,000 - 30,000 [] 5= > 30,000 []

013. HH Land tenure system 1= Free hold [] 2= Lease [] 3=Communal [] 4= Government [] 5= other specify _____

016. HH Land use activities 1=Cropland (total) Rain fed [] 2=Cropland (total) Irrigated [] 3=Grazing land [] 4=Forest/woodland [] 5=Mixed land [] 6=settlement, infrastructure [] _____

017. HH Main source of food 1= Own Farm [] 2= Buying [] 3=Government donations [] 4=Neighbors gifts [] 5=NGO [] 6=Other Specify _____

Section A: Level of Social Media Usage in food Security

1. Does food insecurity exist among the households in Langata Sub-county?

- a. Yes ☐
- b. No ☐
2. What are the drivers for food insecurity in Langata Sub-county?
 - a. Low farm yield ☐
 - b. High prices of foods ☐
 - c. Low supply of food in the market ☐
 - d. Prolonged drought ☐
 - e. Land degradation ☐
 - f. Limited access to food market information ☐
 - g. Low incomes ☐
 - h. Limited access to financial information ☐
 - i. Poor government policy ☐
 - j. Failure of traditional food systems ☐
 - k. Other Specify..... ☐
3. What are the outcomes of food insecurity in Langata Sub-county?
 - a. Low household incomes ☐
 - b. Poverty ☐
 - c. Increased crime rate ☐
 - d. Underutilization of resources such as market/labour ☐
 - e. Low youth employment ☐
 - f. Conflicts among land resource users ☐
 - g. Human-wildlife conflicts ☐
4. Do you agree or disagree that food security is a key challenge to the general nation/sub-county security in Langata Sub-county?
 - a. Agree ☐
 - b. Disagree ☐
 - c. Don't know ☐
5. Which of the following gadget is found in your household?
 - a. Tablet ☐
 - b. Desk top computer ☐
 - c. Laptop Computer ☐
 - d. Smart phone ☐
 - e. Other ☐
 - f. None ☐
6. How long has the household owned the gadget mentioned above?
 - a. Less than 1 year ☐
 - b. 1-2 years ☐
 - c. 2-5 years ☐
 - d. 5-10 years ☐
 - e. above 10 years ☐
7. Does the household have access to internet services?
 - a. Yes ☐
 - b. No ☐
8. What do you use the gadget mentioned above for?
 - a. Cyber business ☐
 - b. Children learning ☐
 - c. For news purposes ☐

- d. Chatting with friends ☐
 - e. Marketing/advertisement of products/services ☐
 - f. Buying/purchase of products/services ☐
 - g. Other use ☐
 - h. None ☐
9. Is any member of the household computer literate?
- a. Yes ☐
 - b. No ☐
10. Have you ever used any of the mentioned gadget to buy or sale a product or a service?
- a. Yes ☐
 - b. No ☐
11. If yes, which product or service did you purchase or sale? List here
-
12. Have you ever purchased or sold any food stuff using any of the gadgets mention above?
- a. Yes ☐
 - b. No ☐
13. Have you ever seen any advert on social media on any information concerning food?
- a. Yes ☐
 - b. No ☐
14. Which social media platform you think can be used to promote food security in this Sub-county?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐
 - h. Any other _____
15. Who are the most users of social media in food security related activities in this Sub-county?
- a. Sellers ☐
 - b. Buyers ☐
 - c. Marketers ☐
 - d. Government agencies ☐
 - e. NGOs ☐
 - f. Research institutions ☐
 - g. Any Other _____
16. Which social media platform is mostly used by households for food security related activities in this household?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐

- h. Any other _____
17. Which information on food did you receive or see?
- a. Availability of food ☐
 - b. Where you can access a particular food stuff ☐
 - c. How you can utilize food ☐
 - d. Factors affecting food availability, access, and utilization ☐
18. Which social media platform have you ever used for food security activities?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐
 - h. Any other _____
19. Which one have you ever used to purchase or sale any food stuff?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐
 - h. Any other _____
20. Which social media platform do you use to get information on food?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐
 - h. Any other _____
21. Which social media platform you think can be used to promote food security in this sub-county?
- a. Face book pages ☐
 - b. Whatsapp ☐
 - c. YouTube ☐
 - d. Instagram ☐
 - e. TikTok ☐
 - f. Google threads ☐
 - g. Telegram ☐
 - h. Any other _____
22. How can you use social media platforms to enhance food security in this sub-county?
- a. Marketing of food products and services ☐
 - b. Purchase of food products and services ☐
 - c. Learning on food productions ☐
 - d. Providing information on food utilization ☐
 - e. Any other _____

Section B: Households' Perception on Social Media Usage for Food Security

23. What is the overall feelings of households on social media platforms usage for food security in this household?
 - a. positive
 - b. negative
 - c. neutral
24. How valuable and beneficial users perceive social media to be for their food security needs and goals in this household?
 - a. Highly valuable
 - b. Moderately valuable
 - c. Low valuable
25. To what extent do household users find social media platforms easy and straightforward to navigate and use on food security related goals?
 - a. Difficulty to use
 - b. Moderate to use
 - c. Easy to use
26. Do you believe you have the ability to successfully utilize social media and manage your online presence to seek food security?
 - a. Yes ☐
 - b. No ☐
27. Do you have the ability to critically evaluate information, understand platform mechanics, and navigate online environments safely and effectively for food security purposes?
 - a. Yes ☐
 - b. No ☐
28. Do you think you have the potential for managing negative consequences associated with using social media, such as privacy concerns, cyberbullying, or misinformation?
 - a. Yes ☐
 - b. No ☐

29. To what extent do you agree with the following statements about your household engagement and interaction with social media on food security related activities? **5.**

Strongly Agree, 4. Agree, 3. Undecided, 2. Disagree, 1. Strongly Disagree

	Statement on User Engagement and Interaction	Rank
a.	You are actively users on participating on social media platforms as you seek for food security, including posting content, interacting with others, and consuming information.	
b.	Social media platforms facilitate two-way communication and feedback between users on food security	
c.	There is high level to which users react to content, including liking, commenting, sharing, and other forms of interaction on food security	
d.	Overall high satisfaction with the social media experience, which can be influenced by the platform's functionality, content, and community on food security issues.	
e.	There is high level of trust among the users on the information and individuals they encounter on social media in relation to food security.	

30. What is your level of satisfaction with the following areas of social media platforms in enhancing your involvement in food security activities in Langata Sub-county?

Levels: 1=Highly satisfied 2=Satisfied 3=Fairly Satisfied 4=Less Satisfied 5= Not satisfied

	Areas of social media platforms in enhancing your involvement in food security activities	Level of satisfaction
a.	How social media usage affects individuals' self-esteem, body image, and overall sense of self towards food security.	
b.	The tendency to compare oneself to others on social media on matters related to food security, which can lead to feelings of inadequacy or dissatisfaction.	
c.	The potential impact of social media information on food security on mental well-being, including anxiety, depression, and loneliness	
d.	How social media influences relationships, social connections, and communication patterns related to food security.	
e.	The way users perceive and process food security information from social media, including the potential for misinformation and echo chambers.	

Section D: Challenges and Opportunities of Using Social Media for Food Security

31. Have you ever experienced any challenge when using social media for any food security related activities?

- a. Yes []
- b. No []

32. Have you ever experienced any of the following challenges on social media usage for food security as a household in Langata Sub-county?

	Food security challenge	Yes	No
a.	High cost of internet		
b.	High cost of phone and other social media gadgets		
c.	Cybercrime/Scammers using social media on food security information		
d.	Lack of consistency online on the presence of food security related information		
e.	Food security entrepreneurs lack knowledge on creating food security related content		
f.	Food security entrepreneurs face challenges of keeping up with algorithm changes		
g.	Both food security entrepreneurs and consumers lack knowledge of managing negative online feedback		
h.	Both food security entrepreneurs and consumers lack knowledge on dealing with privacy concerns		
g.	Both food security entrepreneurs and consumers lack knowledge of handling food security related misinformation		
i.	Both food security entrepreneurs and consumers have knowledge of managing mental health impacts of using social media for food security related activities.		

33. In order of importance, what factors contribute to the public involvement in food security activities using social media in Langata Sub-county? *1= Not important 2= less Important 3= Important 4= Very important 5= Don't know*

Food Security factors	Rank	Give examples and give reasons
------------------------------	-------------	---------------------------------------

a.	<i>Need to increase or sustain food production</i>		
b.	<i>Availability of financial resource</i>		
c.	<i>Local political will and support on using social media for food security</i>		
d.	<i>Leadership that promotes use of social media for food security activities</i>		
e.	<i>Local social media and food security policies, laws, plans</i>		
f.	<i>Supporting traditional/cultural values systems</i>		
g.	<i>Adequate knowledge and expertise</i>		
h.	<i>Collaborations and partnership with other food security sector actors</i>		
i.	<i>Working with food security research institutions</i>		
j.	<i>Availability of food security early warning systems</i>		
k.	<i>Clear conflict resolution framework</i>		

34. Do the county and national government food security frameworks support use of social media in promoting food security in Langata Sub-county?

- a. Yes ☐
b. No ☐

35. Are you aware of any food security policy/law/ plan that support the use of social media to promote food security in Langata Sub-county?

- a. Yes ☐
b. No ☐

36. If yes, please list _____

37. Are you aware of any social media policy/law/ plan that support the use of social media to promote food security in Langata Sub-county?

- a. Yes ☐
b. No ☐

38. If yes, please list _____

39. What are the existing opportunities for using social media for food security activities in this household?

40. What do you feel that should be done to enhance the use of social media for food security in Langata Sub-county?

Section E: Measuring Dependent Variables

35. Are existing social media platforms contributing to the following factors of food security in Langata Sub-county?		
Factors of food security	1=Yes 2= No	Give reason

Foods are available			
a.	HHs willingness to change food production practices		
b.	HH farmers access to productive technologies and practices		
c.	HH farmers access to resources, labour, finance, agricultural inputs		
d.	HH farmers secure and timely access to fertile land, water and ecosystem services		
e.	HHs knowledge and skills to improve food production		
Foods are accessed			
f.	Women have a strong say in HH economic decision making		
g.	Increased HH income		
h.	HH engage in secure income generating activities		
Food stability			
i.	Farmers grow climate adapted crops		
j.	HH are energy efficient		
k.	Land restoration including soil and water conservation and management		
l.	HHs have and implement preparedness plans to protect lives and assets		
m.	HH have coping strategies		
n.	Resource assets, income exists which can be mobilized by HHs		
Foods are utilized effectively			
o.	Access to clean water		
p.	HHs willingness to change diets		
q.	HHs skills and knowledge to ensure good nutrition, food safety and sanitation		

END

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX III: KEY INFORMANT INTERVIEW GUIDE

Name of the Sub-county	Name of the ward	Designation of the interviewee
Name of the interviewer		

1. Which food security activities does your organization/institution work for in Langata Sub-county?
2. Does food insecurity exist among the households in Langata Sub-county?
3. What are the drivers for food insecurity in Langata Sub-county?
4. What are the outcomes of food insecurity in Langata Sub-county?
5. Do you agree or disagree that food security is a key challenge to the general nation/sub-county security in Langata Sub-county?
6. Does your organization support, promote or encourage households to use social media for food security related activities?
7. Which social media platform you think can be used to promote food security in this Sub-county?
8. Who are the most users of social media in food security related activities in this Sub-county?
9. Which social media platform is mostly used by households for food security related activities in this Sub-county?
10. Which social media platform you think can be used to promote food security in this sub-county?
11. How can your organization/institution use social media platforms to enhance food security in this sub-county?
12. What is the overall feelings of households on social media platforms usage for food security in this Sub-county?
13. How valuable and beneficial users perceive social media to be for their food security needs and goals in this sub-county?
14. To what extent do household users find social media platforms easy and straightforward to navigate and use on food security related goals?
15. Do you believe households have the ability to successfully utilize social media and manage your online presence to seek food security?
16. Do households have the ability to critically evaluate information, understand platform mechanics, and navigate online environments safely and effectively for food security purposes?
17. Do households have the potential for managing negative consequences associated with using social media, such as privacy concerns, cyberbullying, or misinformation?
18. What are the challenges of using social media to promote/enhance food security activities in this sub-county?
19. Are existing government policy and legal frameworks supporting the use of social media for food security activities?
20. What are the existing opportunities for using social media for food security activities in this sub-county?
21. What else can you add on the topic of this study?

END

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX IV: FOCUS GROUP DISCUSSION GUIDE

NOTE: (One FGD in each ward 6 female 6 males of which 3 Must be the Youths)

Name of the ward	Number of Female	Number of Males
Name of the Facilitators		

1. Which food security activities do you engage in in this ward?
2. Does food insecurity exist among the households in this ward?
3. What are the drivers for food insecurity in this ward?
4. What are the outcomes of food insecurity in this ward?
5. Do you agree or disagree that food security is a key challenge to the general nation/sub-county security in this ward?
6. Is there any organizational/institutional support, to promote or encourage households to use social media for food security related activities?
7. Which social media platform you think can be used to promote food security in this ward?
8. Who are the most users of social media in food security related activities in this ward?
9. Which social media platform is mostly used by households for food security related activities in this ward?
10. How can you use social media platforms to enhance food security in this ward?
11. What is the overall feelings of households on social media platforms usage for food security in this ward?
12. How valuable and beneficial users perceive social media to be for their food security needs and goals in this ward?
13. To what extent do household users find social media platforms easy and straightforward to navigate and use on food security related goals?
14. Do you believe households have the ability to successfully utilize social media and manage your online presence to seek food security?
15. Do households have the ability to critically evaluate information, understand platform mechanics, and navigate online environments safely and effectively for food security purposes?
16. Do households have the potential for managing negative consequences associated with using social media, such as privacy concerns, cyberbullying, or misinformation?
17. What are the challenges of using social media to promote/enhance food security activities in this ward?
18. Are existing government policy and legal frameworks supporting the use of social media for food security activities?
19. What are the existing opportunities for using social media for food security activities in this ward?

END

THANK YOU FOR PARTICIPATING IN THIS STUDY

APPENDIX V: RESEARCH PERMIT



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Nairobi, Kenya.
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Email: vc@anu.ac.ke
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18th February 2025

TO WHOM IT MAY CONCERN

RE: RESEARCH PERMIT: ANNE NASHIPAE MONIREI

Anne Nashipae Monirei Reg. No. 21S01DMGP017 is a Bonafide postgraduate student at Africa Nazarene University pursuing a master's degree in governance, Peace, and Security Studies. This program entails Coursework and Thesis. She has successfully completed her coursework and defended her thesis proposal entitled:

“Influence of Social Digital Platforms Usage on Food Security in Langata Sub-County, Nairobi, Kenya”.

Any assistance accorded to her to facilitate data collection and complete her thesis will be highly appreciated.

Sincerely.



Prof. Orpha K. Ongiti
Dean, Postgraduate Studies & Director, Institute of Research

APPENDIX VI: NACOSTI PERMIT

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
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APPENDIX VII: LOCAL MAP

