

PERCEPTIONS, PRACTICES, AND CHALLENGES OF SMALL-SCALE FARMERS IN THE ERADICATION OF HUNGER IN THE AFIGYA-KWABRE DISTRICT: SDG 2 IN PERSPECTIVE

Isaac Eshun (1,*)

Daniel Kwame Emilio (2)

Anthony Bordoh (3)

Joseph Bentil (4)

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¹ Department of Social Studies Education, University of Education, Winneba, Ghana.

² Department of Social Science, Bia Lamplighter College of Education, Sefwi Debiso, Ghana.

³ Department of Social Studies Education, University of Education, Winneba, Ghana.

⁴ Department of Basic Education, University of Education, Winneba, Ghana.

* Corresponding author. E-mail: isaaceshun@uew.edu.gh

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Abstract:

This study examines the perceptions, practices, and challenges of small-scale farmers in the Afigya-Kwabre District regarding their role in eradicating hunger, with the Sustainable Livelihoods Framework (SLF) as the theoretical underpinning. Using the interpretivist paradigm and phenomenology research design, this study adopted a qualitative approach; data were collected through semi-structured interviews and focus group discussions with 25 small-scale farmers. The findings reveal that farmers perceive themselves as essential contributors to food security, focusing on self-sufficiency and using strategies such as crop diversification, sustainable farming techniques, and community-based initiatives. However, their efforts are hindered by economic constraints, environmental challenges such as climate change, and social barriers, particularly gender inequalities. The study highlights the need for targeted policy interventions, including improving market access, agricultural extension services, financial support, and secure land tenure. These interventions are crucial for enhancing the capacity of small-scale farmers to contribute to hunger eradication. The paper concludes by recommending specific actions such as enhanced access to subsidies and credit and the need for financial policies that cater specifically to small-scale farmers to address these challenges and promote sustainable food security in the district.

Keywords: *Small-Scale Farmers, Food Security, Hunger Eradication, Agricultural Practices, Policy Interventions, Sustainable Development Goals*

التصورات والممارسات والتحديات التي يواجهها المزارعون أصحاب الحيازات الصغيرة في القضاء على الجوع في منطقة أفيديا-كوابري: منظور الهدف الثاني من أهداف التنمية المستدامة

إسحاق إشون⁽¹⁾

دانيال كوامي إميليو⁽²⁾

أنتوني بوردوه⁽³⁾

جوزيف بينتيل⁽⁴⁾

الملخص:

تتناول هذه الدراسة تصورات وممارسات وتحديات المزارعين أصحاب الحيازات الصغيرة في منطقة أفيديا-كوابري فيما يتعلق بدورهم في القضاء على الجوع، مع إطار سبل العيش المستدامة (SLF) كأساس نظري. باستخدام المنهج التفسيري وتصميم البحث الظاهري، اعتمدت هذه الدراسة نهجاً نوعياً؛ تم جمع البيانات من خلال مقابلات شبه هيكلية ومناقشات جماعية مع 25 مزارعاً صغيراً. تكشف النتائج أن المزارعين يرون أنفسهم كمساهمين أساسيين في الأمن الغذائي، حيث يركزون على الاكتفاء الذاتي ويستخدمون استراتيجيات مثل تنويع المحاصيل، تقنيات الزراعة المستدامة، والمبادرات المجتمعية. ومع ذلك، فإن جهودهم تعوقها القيود الاقتصادية، والتحديات البيئية مثل تغير المناخ، والحواجز الاجتماعية، خاصةً عدم المساواة بين الجنسين. تبرز الدراسة الحاجة إلى تدخلات سياسية مستهدفة، بما في ذلك تحسين الوصول إلى الأسواق، خدمات الإرشاد الزراعي، الدعم المالي، وضمان حقوق ملكية الأراضي. تعتبر هذه التدخلات حاسمة لتعزيز قدرة المزارعين أصحاب الحيازات الصغيرة على المساهمة في القضاء على الجوع. وتختتم الورقة بتوصية بإجراءات محددة مثل تعزيز الوصول إلى الدعم المالي والائتمان، والحاجة إلى سياسات مالية تراعي خصيصاً المزارعين أصحاب الحيازات الصغيرة لمعالجة هذه التحديات وتعزيز الأمن الغذائي المستدام في المنطقة.

الكلمات المفتاحية: - المزارعون أصحاب الحيازات الصغيرة - الأمن الغذائي - القضاء على الجوع - الممارسات الزراعية - التدخلات السياسية - أهداف التنمية المستدامة

¹ قسم تعليم الدراسات الاجتماعية، جامعة التريبي، وينيبا، غانا.

² قسم العلوم الاجتماعية، كلية بيا لامبلايتير للتربية، سيفوي ديبيسو، غانا.

³ قسم تعليم الدراسات الاجتماعية، جامعة التريبي، وينيبا، غانا.

⁴ قسم التعليم الأساسي، جامعة التريبي، وينيبا، غانا.

* عنوان المراسلة: isaaceshun@uew.edu.gh

Introduction

The world has made significant strides towards achieving the United Nations' Sustainable Development Goal 2 (SDG 2): Zero Hunger. However, despite global efforts, an estimated 820 million people still suffer from hunger worldwide (FAO, 2019). Hunger and food insecurity remain pressing global challenges, particularly in Sub-Saharan Africa, where agricultural production has not fully matched population growth and food demands. Despite improvements in agricultural output, millions of people across the region still suffer from hunger and malnutrition. Agriculture is a critical sector in Ghana, employing approximately 44% of the population, with small-scale farmers accounting for most agricultural production. These farmers are instrumental in food production and rural livelihood improvement, making them key players in eradicating hunger (Ghana Statistical Service, 2021). Around 70% of the world's food is produced by small-scale farmers, contributing substantially to local and national food security (Food and Agriculture Organization, 2019). They employ about half of the workforce and comprise more than 90% of Ghana's agricultural producers. They ensure sustainable livelihoods in rural regions by reducing poverty, fostering community development, and producing food. Crop diversification and sustainable agricultural practices, for instance, are tactics that assist in stabilising food supplies and act as a buffer against environmental shocks.

Most households in the Afigya-Kwabre District depend on agricultural production for food and revenue, making small-scale farming the primary source of income. Some unique obstacles farmers confront are climate fluctuation, inadequate infrastructure, such as storage facilities, a lack of contemporary farming methods, low financial resources, and limited market access. These problems lessen their output and impact on ending hunger, underscoring the necessity of specialised solutions. Local initiatives like the "One Village One Dam" project demonstrate the district's potential to increase agricultural output. However, there are still gaps in our knowledge of and ability to meet the specific requirements of farmers. About 48% of farmers in Afigya-Kwabre are landowners, with the remaining farmers depending on family or rented plots, which makes farming more difficult. Due to the district's inadequate infrastructure, including storage facilities and roads leading to the market, post-harvest losses might reach 20% yearly. Furthermore, just sixteen percent of the district's farmers have official credit, further restricting their ability to invest in cutting-edge farming methods. These obstacles reduce farmers' production and ability to combat food insecurity successfully. Furthermore, just 28% of the district's farmers are female, and they are frequently forced to engage in subsistence farming with little access to resources, limiting women's ability to participate in decision-making (Antwi-Agyei, Dery & Adom, 2019).

The Afigya Kwabre District in the Ashanti Region is predominantly rural, with most households engaged in small-scale agriculture. Farmers in this district produce

various staple crops, including maize, cassava, and vegetables, consumed locally and sold in nearby markets. These agricultural activities provide food and income to households, thereby contributing to food security at the local level. Although small-scale farmers contribute significantly to food security in Ghana, their role is often underappreciated in agricultural policies and development planning. For farmers to effectively contribute to eradicating hunger, their perspectives must be understood. Knowing how they perceive their role, the obstacles they face, and the kinds of support they require is essential for designing effective interventions that align with their needs. Despite the government's efforts to improve agricultural productivity through programmes such as the Planting for Food and Jobs (PFJ) initiative, hunger and food insecurity persist in many rural areas, including Afigya Kwabre. Engaging small-scale farmers in hunger eradication and food security discussions is important to address these issues. Understanding their perceptions will provide insights into their real challenges and help policymakers design practical solutions that empower farmers to enhance their productivity and impact.

The situation is particularly concerning in Ghana, where the Afigya-Kwabre District is located. According to the Ghana Statistical Service (2020), approximately 13.4% of the population lives below the poverty line, making them vulnerable to food insecurity. Small-scale farmers play a crucial role in addressing hunger globally. They produce about 70% of the world's food, especially staple crops. In Ghana, small-scale farmers account for over 90% of agricultural producers and employ nearly half of the country's workforce (World Bank, 2018). Despite their significance, small-scale farmers often face numerous challenges that hinder their ability to combat hunger effectively. These challenges include limited access to resources such as credit, technology, and markets (Khan et al., 2018). Additionally, climate change poses a significant threat to agricultural productivity, further exacerbating food insecurity issues (IPCC, 2019).

In the Afigya-Kwabre District, small-scale farmers have been at the forefront of efforts to address hunger. Local initiatives such as the "One Village One Dam" project have shown promise in improving agricultural productivity and water management (Ghana Government, 2020). However, there remains a gap in understanding the perceptions of small-scale farmers regarding their role in combating hunger and the effectiveness of current policies supporting their efforts. Even though international laws and programmes recognise small-scale farmers' contributions, little is known about their viewpoints and unique responsibilities in ending hunger, especially in local contexts like Ghana's Afigya-Kwabre District. Hunger and food insecurity in rural regions remain partly because of the lack of knowledge about the difficulties and requirements these farmers face. Furthermore, many current policies do not directly involve these farmers or consider their realities.

This study aims to fill this knowledge gap by examining the perceptions of small-scale farmers in the Afigya-Kwabre District regarding their role in eradicating hunger. By investigating these perceptions, we hope to gain an understanding of the challenges faced by small-scale farmers and identify opportunities for policy interventions that could enhance their contributions to hunger-reduction. The problem stems from hunger being a critical issue in the Afigya Kwabre District, with many households experiencing seasonal food shortages. As small-scale farmers form the backbone of food production in the district, their role in ensuring food availability cannot be overstated. However, the ability of these farmers to contribute meaningfully to hunger eradication is constrained by several factors. Limited access to credit, insufficient agricultural inputs, poor infrastructure, market barriers, and climate variability affect their productivity. In addition to these challenges, inadequate institutional support, such as extension services and market linkages, exacerbates the problem. Although government programmes exist to promote agricultural productivity, many farmers in the district struggle to access the necessary resources to benefit from such initiatives. The absence of farmer-centred approaches in policy formulation and the lack of active engagement with smallholder farmers in decision-making processes further reduce the effectiveness of interventions to improve food security. A significant gap exists in understanding how small-scale farmers in Afigya Kwabre perceive their role in hunger eradication and what challenges they consider most pressing. While there is a growing recognition of the need to address food insecurity through sustainable agricultural development, the success of these efforts depends on how well they align with the experiences and perspectives of farmers on the ground. Interventions may remain ineffective and unsustainable without understanding farmers' views and constraints. Thus, this study seeks to explore the perceptions of small-scale farmers in the Afigya Kwabre District regarding their contribution to hunger eradication. It will also identify their challenges and the support systems they deem necessary for success. The findings will provide valuable insights to policymakers, development partners, and agricultural institutions to develop farmer-friendly strategies that enhance food security and promote sustainable development. The following research questions guided the study:

- What are the perceptions of small-scale farmers regarding their role in eradicating hunger in the Afigya-Kwabre District?
- How do small-scale farmers' practices and strategies contribute to hunger reduction in the Afigya-Kwabre District?
- What challenges do small-scale farmers face in combating hunger in the Afigya-Kwabre District?

- How can policy interventions support small-scale farmers in enhancing their contributions to hunger eradication in the Afigya-Kwabre District?

Food security and hunger eradication remain critical global challenges, with the United Nations' Sustainable Development Goal 2 (SDG 2): Zero Hunger as a cornerstone of international development efforts. Small-scale farmers are pivotal in addressing this challenge, producing up to 70% of the world's food. Despite their importance, small-scale farmers often face numerous challenges that hinder their ability to combat hunger effectively. Recent studies have highlighted the need for a deeper understanding of small-scale farmers' perceptions regarding their role in food security and the factors influencing their contributions to hunger eradication.

Theoretical Perspective and Literature Review

The Sustainable Livelihoods Framework

The Sustainable Livelihoods Framework (SLF) provides a sound theoretical lens for understanding the role and challenges of small-scale farmers in eradicating hunger. This framework, developed by the United Nations Development Programme (UNDP) and popularised by the Department for International Development (DFID), emphasises the importance of assets, institutions, and strategies in achieving sustainable livelihoods (Scoones, 2018). The SLF identifies five critical capitals: financial, natural, physical, and social capital, which individuals and communities draw upon to improve their livelihoods.

Human capital refers to individuals' skills, knowledge, and health, enabling them to engage in productive activities. For small-scale farmers, access to agricultural training and extension services constitutes critical human capital. However, the lack of sufficient extension support in the Afigya Kwabre District limits farmers' ability to adopt new technologies and practices, undermining their productivity.

Financial Capital: Access to economic resources, such as savings, loans, and subsidies, is essential for investing in farm inputs and equipment. The absence of microfinance opportunities tailored to smallholder farmers creates a significant barrier to improving agricultural output. The SLF highlights the importance of financial capital in enhancing livelihoods and achieving food security, which aligns with the need for credit and subsidies identified by farmers in Ghana.

Natural and Physical Capital: Natural capital includes resources such as land, water, and climate, essential for agricultural production. In rural Ghana, farmers rely heavily on natural rainfall for crop production. The challenges posed by environmental degradation and climate change demonstrate the vulnerability of farmers' livelihoods to shifts in natural capital. Physical capital, such as roads, storage facilities, and irrigation systems, is critical to agricultural success. Inadequate

infrastructure limits farmers' ability to market their products and store surplus food, thereby reducing their contribution to hunger eradication.

Social Capital: Social capital encompasses networks, relationships, and community organisations facilitating collective action and resource sharing. For example, agricultural cooperatives and farmer associations enable farmers to pool resources, negotiate better prices, and access markets. However, weak social networks in some farming communities reduce farmers' ability to benefit from these collective efforts, limiting their market access and bargaining power (Adjei et al., 2020).

The SLF emphasises that sustainable development requires interventions that strengthen these various capitals. Policies that promote access to education, financing, infrastructure, and social networks are crucial to improving the livelihoods of small-scale farmers and enhancing their ability to contribute to hunger eradication. This framework is highly relevant to the study, highlighting farmers' multidimensional challenges and providing insights into the support needed to improve their productivity.

In order to examine the interactions of the five major capitals, namely human, social, natural, financial, and physical, the Sustainable Livelihoods Framework (SLF) served as a fundamental lens through which the research questions and analysis were guided. The SLF's emphasis on human capital influenced questions concerning farmers' knowledge, abilities, and attitudes, such as their preference for self-sufficiency versus commercial farming. Investigating strategies, including crop diversification, sustainable farming, and community projects, was led by natural and social capital, emphasising resiliency and teamwork. The examination of systemic constraints, such as restricted credit availability, inadequate infrastructure, and climate variability, was guided by financial and physical capital. The SLF emphasised the value of institutional assistance by posing queries regarding how subsidies, land tenure, and extension services meet farmers' needs and livelihoods.

Perceptions of Small-Scale Farmers Regarding Their Role in Eradicating Hunger

Research has increasingly emphasised the importance of understanding farmers' perceptions of their roles in food security. A study by Khan et al. (2018) in Kenya found that small-scale farmers' perceptions of their contributions to food security were influenced by market access, technological adoption, and government support. Similarly, in Ghana, Owusu et al. (2019) discovered that small-scale farmers' perceptions of their role in food security were shaped by their experiences with climate change and access to extension services. Recent studies have also explored the relationship between small-scale farmers' perceptions and their contributions to food security. A cross-sectional survey conducted in Ethiopia by Gebremariam et al. (2020) revealed a positive correlation between farmers' self-perceptions of their role

in food security and their reported contributions to household food availability. This finding suggests that understanding and potentially enhancing farmers' perceptions could increase food security outcomes.

Small-scale farmers play a pivotal role in food production and are central to efforts aimed at eradicating hunger in developing countries. According to the Food and Agriculture Organization (FAO, 2019), smallholder farmers produce nearly 80% of the food consumed in Sub-Saharan Africa. In Ghana, agriculture remains the primary livelihood for rural communities, where small-scale farming ensures household food security and contributes to national agricultural output. These farmers grow staple crops such as maize, cassava, yams, and vegetables, which form the bulk of the local diet and are sold in nearby markets. Smallholder agriculture is also recognised for its role in poverty reduction. Since farming generates income for rural households, improvements in small-scale agriculture translate to increased food availability and purchasing power, thereby reducing hunger (International Food Policy Research Institute, 2020). However, small-scale farmers operate under numerous constraints that limit their productivity and, consequently, their ability to contribute effectively to food security. As such, any intervention seeking to reduce hunger must incorporate farmers' perspectives and address their challenges.

Practices and Strategies of Small-Scale Farmers in Hunger Reduction in Ghana

In Ghana, small-scale farmers are crucial in addressing hunger challenges, producing a significant portion of the country's food. Crop diversification has become a key strategy in reducing hunger among small-scale farmers in Ghana. A study by Owusu et al. (2019) showed that small-scale farmers who practised crop diversification experienced improved food security compared to monoculture farmers. The authors credited these benefits to increased crop yields and reduced vulnerability to pests and diseases. A study by Amoako-Tuffour et al. (2018) in the Ashanti Region found that small-scale farmers who diversified their crops were better equipped to handle climate change impacts, resulting in more stable food production throughout the year. Conservation agriculture (CA) has gained recognition as a sustainable farming practice in Ghana. A case study by Asante et al. (2020) in the Northern Region demonstrated how CA helped small-scale farmers maintain soil fertility and reduce erosion, resulting in improved crop yields and better food availability. An investigation by Boateng et al. (2019) showed that conservation agriculture techniques, such as reduced tillage and permanent soil cover, were particularly influential in areas prone to drought, allowing small-scale farmers to maintain food production during periods of scarcity.

Organic farming has been recognised as a mechanism to improve food security for small-scale farmers in Ghana. A comparative study by Mensah et al. (2020) in the Eastern Region found that organic farming practices resulted in higher

nutritional value and better pest resistance than conventional farming methods. This suggests that organic farming could be a valuable strategy for small-scale farmers to produce more nutritious food for their communities. However, challenges remain as farmers carry out organic farming practices. A survey by Ofori et al. (2019) revealed that many small-scale farmers in Ghana lack access to organic inputs and certification processes, hindering the widespread adoption of organic farming practices.

Water management is essential for small-scale farmers in Ghana, especially in dry regions with less rainfall. Research by Danso et al. (2020) found that small-scale water harvesting systems implemented in the Upper East Region improved agricultural productivity and reduced hunger risks for rural communities. In the Bono Region (then Brong-Ahafo Region), a study by Owusu et al. (2018) showed that efficient irrigation systems implemented by small-scale farmers led to increased crop yields and improved food security for farming households.

Integrated Pest Management (IPM) has emerged as a crucial strategy for reducing chemical pesticide use and improving food safety in Ghana. A meta-analysis by Kranz et al. (2019) demonstrated that IPM practices significantly reduced pesticide use while maintaining or increasing crop yields, potentially leading to safer and healthier food options for consumers. However, challenges remain. A survey by Mensah et al. (2020) revealed that many small-scale farmers in Ghana lack access to training programmes and resources to implement effective IPM strategies.

Challenges Facing Small-Scale Farmers in Combating Hunger

Several studies have identified key challenges facing small-scale farmers that impede their ability to combat hunger effectively. Climate change has emerged as a primary concern, with research indicating that it poses significant threats to agricultural productivity and food security (IPCC, 2019). A study conducted in Rwanda by Nkubito et al. (2017) found that small-scale farmers' perceptions of climate change impacts on their livelihoods were closely tied to their willingness to adopt climate-resilient agricultural practices. Access to resources such as credit, technology, and markets has also been identified as a critical factor influencing small-scale farmers' contributions to hunger eradication. A qualitative study in Uganda by Mugisha et al. (2019) revealed that lack of access to financial services was a significant barrier preventing small-scale farmers from scaling up their production and contributing more significantly to food security.

Access to credit remains a persistent challenge for small-scale farmers in Ghana, including those in the Afigya Kwabre District. Many farmers lack the collateral to secure loans from financial institutions, restricting their ability to purchase quality seeds, fertilisers, and other agricultural inputs. Farmers cannot invest in technologies that improve productivity and increase food supply without adequate financing. The

lack of subsidies for fertilisers and seeds further compounds the problem, as noted by Aryeetey et al. (2022).

Erratic weather patterns and climate change present significant challenges to smallholder agriculture. Changes in rainfall patterns, prolonged droughts, and unseasonal floods have led to unpredictable crop yields, making it difficult for farmers to plan their production cycles effectively (Antwi-Agyei et al., 2019). Farmers in Afigya Kwabre, like many rural areas in Ghana, rely on rain-fed agriculture, leaving them highly vulnerable to climate shocks. Farmers struggle to maintain consistent yields without access to irrigation or climate-resilient crop varieties, contributing to seasonal food shortages.

Infrastructure, particularly transportation and storage facilities, is crucial to agricultural productivity. Rural farmers often lack access to well-maintained roads, limiting their ability to transport goods to markets. In addition, the absence of storage facilities leads to significant post-harvest losses, reducing the quantity of food available for sale and consumption. This challenge affects farmers' incomes and local food security (World Bank, 2021). Small-scale farmers are also disadvantaged by market volatility and exploitation by intermediaries, which results in low-profit margins.

Agricultural extension services are vital for disseminating modern farming practices, yet access to such services remains inadequate in many parts of Ghana. Extension officers provide essential knowledge on crop management, pest control, and sustainable farming methods. In their absence, many farmers continue to rely on traditional farming methods, which limits productivity and makes it difficult to respond to challenges like pests or climate variability (MoFA, 2021).

Policy Interventions Supporting Small-Scale Farmers in Alleviating Hunger

Recent research has highlighted the importance of policy interventions in supporting small-scale farmers' efforts to combat hunger. A systematic review by Ouma et al. (2020) examined various policy approaches to enhance small-scale farmers' contributions to food security. The study concluded that targeted policies addressing specific challenges faced by small-scale farmers, such as improved access to markets and technology, were most effective in boosting their contributions to food security. In the context of Ghana specifically, a study by Amoako-Tuffour et al. (2018) analysed the impact of government policies on small-scale farmers' productivity and food security. The researchers found that policies promoting irrigation development and extension services positively affected small-scale farmers' yields and food availability.

Governments and development agencies have recognised the need to support small-scale agriculture to achieve food security. In Ghana, initiatives such as the

Planting for Food and Jobs (PFJ) programme aim to increase agricultural productivity by providing farmers with improved seeds, fertilisers, and extension services (MoFA, 2021). However, studies indicate that many small-scale farmers struggle to access these benefits due to bureaucratic hurdles and a lack of awareness about available programmes. Strengthening the relationship between farmers and local governments is essential for ensuring policies are effectively implemented and aligned with farmers' needs.

Moreover, agricultural cooperatives have been identified as a critical strategy for enhancing smallholders' access to resources and markets. Farmers can improve their bargaining power by participating in cooperatives and negotiating better product prices. Encouraging the formation of cooperatives is a practical way to promote sustainable agricultural development and food security (Adjei et al., 2020).

Although studies such as those conducted by Khan et al. (2018) and Owusu et al. (2019) offer important perspectives on the functions of small-scale farmers in Ghana and Kenya, they extrapolate results to a wide range of geographical areas. Localised elements, including unique climate patterns, cultural norms, and particular policy implications in districts like Afigya-Kwabre, are ignored by this method. Although studies like Gebremariam et al. (2020) emphasise the connection between food security and farmer views, they do not investigate how these beliefs affect the efficacy of policy measures. This restriction makes it difficult to develop focused solutions considering the reality farmers face. Numerous studies primarily concentrate on technical fixes, like conservation agriculture or crop diversification (Owusu et al., 2019; Asante et al., 2020), failing to sufficiently address systemic problems like insufficient infrastructure, shaky institutional support, or precarious land tenure, which are crucial in districts like Afigya-Kwabre.

Although women's contributions to agriculture have been recognised, previous studies have frequently overlooked the structural obstacles based on gender that restrict their ability to make decisions and be productive. In Afigya-Kwabre, for example, women make up only 28% of farmers, a discrepancy that has important ramifications for inclusive agricultural growth. Studies that examine gender perspectives in agriculture, such as Mensah et al. (2020), concentrate on women's participation in general without critically analysing the unique institutional and cultural barriers that women encounter in rural areas like Afigya-Kwabre. This limited perspective does not adequately capture the localised variables that limit women's participation in farming and decision-making processes. Most research focusing on policy, like Owusu et al. (2019), ignores the necessity of tailored interventions to reduce gender inequality. For instance, these studies rarely examine how women's restricted access to resources affects their capacity to embrace better farming techniques while discussing subsidies and extension programmes.

The Afigya-Kwabre District is the exclusive subject of this study, which offers detailed insights into the district's particular problems, including inconsistent rainfall, insufficient storage facilities, and difficulties accessing markets. The research clarifies the dangers of over-generalisation by customising the analysis to specific situations. Small-scale farmers' perspectives, tactics, and difficulties in ending hunger are captured in this study by prioritising qualitative data from focus groups and interviews. A detailed grasp of how policies and interventions fit or do not fit with farmers' realities is made possible by this viewpoint.

In addition to technical fixes, this study tackles more general structural problems that significantly impact farmers' ability to fight hunger, like unstable land tenure and inadequate agricultural extension services. The report suggests workable legislative solutions that address these structural obstacles.

This study explores the unique obstacles female farmers face in Afigya-Kwabre, acknowledging the gender gap in agricultural involvement and promoting gender-sensitive policy solutions to empower women in agriculture. It offers policymakers and development partners practical insights by tackling systemic and sociocultural hurdles and critically analysing localised data. Bridging the gap between general theoretical frameworks and small-scale farmers' real-world challenges in ending hunger ensures context-specific and farmer-centred interventions.

Research Methodology

This study was rooted in interpretivism, a philosophical perspective emphasising understanding social phenomena via the meanings people assign to them. Interpretivism resonates well with the study's aim of exploring small-scale farmers' perceptions of their contributions to hunger eradication within the Afigya-Kwabre District. The interpretivist paradigm makes up the foundation of this study, allowing for an exploration of participants' subjective experiences and meanings while also providing rich insights into their perceptions of hunger eradication efforts within the Afigya-Kwabre District.

This study employed a phenomenological research design to explore and describe a shared experience among individuals. Phenomenology focuses on understanding common lived realities, making it well-suited for examining small-scale farmers' experiences of perception, practices, and challenges in their bid to eradicate hunger. The qualitative approach enabled the development of themes to address research questions while providing rich textural and structural descriptions to capture participants' perspectives on how small-scale farmers in the Afigya-Kwabre District eradicate hunger.

Under the phenomenological research design, this study adopted the qualitative approach. A qualitative approach associates itself with the constructivist

or social constructivist/interpretivist approach (Kuranchie, 2021). The researchers employed the qualitative study approach primarily due to the nature of the issue under investigation, the researchers' personal experiences, and the study's target group. According to Creswell (2009), "Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem" (p. 21). Choosing this approach, therefore, enabled the researchers to understand the issue under investigation via an in-depth study of how small-scale farmers perceive hunger eradication in the Afigya-Kwabre District.

The study's main goal was to understand farmers' lived experiences, perspectives, and firsthand experiences with hunger eradication in the Afigya-Kwabre District. Semi-structured interviews and focus groups are two examples of qualitative techniques that enable in-depth investigation of the social dynamics and subjective experiences influencing the roles and practices of farmers. It would have been challenging to reach this level of comprehension using only quantitative methods, which frequently prioritise quantifiable information above subtle insights. For instance, understanding farmers' perspectives on commercial versus self-sufficiency farming necessitates investigating their decision-making processes, cultural settings, and motivations aspects best handled through open-ended dialogues. Similarly, detailed, descriptive data rather than numerical trends are required to comprehend gender dynamics or community-based efforts.

The study population included only small-scale farmers in the Afigya-Kwabre District. Data collection occurred primarily on small-scale farms, community centres, local markets, and residential sites where farmers typically gathered to exchange information and resources. This focus ensured participants had sufficient experience to form informed opinions about their role in combating hunger. Purposive sampling was used to select participants based on their involvement in small-scale agriculture and willingness to discuss their perceptions of hunger eradication efforts. Farmers who practised small-scale farming and were open to sharing their knowledge about ending hunger were explicitly chosen. This strategy made sure that participants had enough experience to provide insightful data.

Snowball sampling was also employed to identify additional participants through referrals from initial respondents. The first participants were asked to suggest more farmers who fit the requirements for membership. This approach was very helpful in reaching people or groups that were difficult to reach and could have otherwise gone unnoticed. Snowball sampling runs the danger of overrepresenting people in the same professional or social networks, which could reduce the range of viewpoints. Peer-recommended farmers, for instance, can have comparable difficulties or methods, which could skew the results. In order to establish a wider network for snowball sampling, the first volunteers were chosen from various

geographic regions and sociodemographic backgrounds within the district. The inclusion criteria established for the study were small-scale farmers in the Afigya-Kwabre District who have been actively engaged in agricultural practices for at least three years. The criterion selection was made to enable the researcher to capture more experiential and rich information from participants.

According to qualitative research standards, which prioritise depth over breadth, a total of 25 small-scale farmers took part in the study. According to Guest, Bunce, and Johnson (2006), depending on the study's scope, 12 to 25 participants are frequently needed for qualitative research to reach data saturation, which is the point at which no new themes arise. The sample size ensured data collection and analysis manageability while permitting various experiences and viewpoints. Two primary data collection methods were employed: semi-structured interviews and focus group discussions. Interview guides were developed to explore participants' experiences and perceptions of their role in combating hunger. Focus group discussions allowed for collective sharing of experiences and comparison of perspectives across different groups of farmers. The study's trustworthiness was determined through member checking and purposive sampling of critical informants (small-scale farmers). Member checking was conducted with a subset of participants to validate findings. Using purposive sampling to select relevant participants permits the transferability of the findings to groups and others who share similar characteristics.

Qualitative data analysis generates meaning from research participants' views and experiences of situations by identifying corresponding patterns and themes in the data (Creswell, 2009). Data saturation was assessed through iterative analysis and discussion with research assistants. The analysis focused on understanding the small-scale farmers' perception of alleviating hunger in the Afigya-Kwabre District. The primary data sources for analysis included transcripts of interviews and focus group discussions with farmers within the district. The data analysis process began with the transcription of all interviews. The transcribed data were analysed using thematic analysis to identify key and emerging themes and patterns related to the farmers' perception of hunger eradication. For this reason, descriptive and interpretive techniques were employed to make meaning of the data based on the themes from the data collected.

Ethical considerations were paramount throughout this qualitative study. All participants provided informed consent before participation, and confidentiality was ensured through pseudonymisation of data and secure storage. All the researchers vetted and approved the study protocol. Several steps were implemented to promote fair and transparent interactions in recognition of the possible impact of power disparities between participants and researchers. Discussions and interviews took

place in neutral, well-known settings that the participants selected, including farms or community centres. This promoted a more laid-back atmosphere and lessened the researchers' perceived authority.

Results and Discussions

This section addresses the presentation of results and discussion of the study's findings. The data analysis focused on understanding the small-scale farmers' perception of hunger alleviation in the Afigya-Kwabre District. The primary sources of data for analysis included transcripts of interviews and focus group discussions with farmers. Three principal questions were addressed in the study- (1) What are the perceptions of small-scale farmers regarding their role in eradicating hunger in the Afigya-Kwabre District? (2) To what extent do small-scale farmers' practices and strategies contribute to hunger reduction in the Afigya-Kwabre District? (3) How can policy interventions support small-scale farmers in enhancing their contributions to hunger eradication in the Afigya-Kwabre District?

Socio-Demographic Data of Participants

The interviews and focus group discussions revealed social and demographic information about the study participants. Tables 1 to 4 show participants' socio-demographic data, including their sex composition, age distribution, years of farming experience, and means of land ownership (land tenure system).

Table 1: Sex Composition of Participants		
Sex	Number of Participants	Percentage (%)
Male	18	72
Female	7	28
Total	25	100

Source: Field Data, 2024

Table 1 shows the sex composition of farmers. There was a significant male predominance in the sample, with 72% of participants being male. This gender disparity could have affected the nature of responses obtained, particularly concerning traditional gender roles in agriculture. Table 2 shows the age distribution of participants.

Table 2: Age Distribution of Participants		
Age (years)	Number of Participants	Percentage (%)
20 to 29	6	24
30 to 39	6	24
40 to 49	8	32
50 to 59	3	12
60 or above	2	8
Total	25	100

Source: Field Data, 2024

Table 2 shows the age distribution of participants. Most farmers (68%) fell within the 30 – 59 age brackets, suggesting a blend of experienced and younger farmers in the investigation. The diversity in participants' age distribution may contribute to varied perspectives on efforts to eradicate hunger within the Afigya-Kwabre District. Table 3 shows small-scale farmers' years of farming experience within the Afigya-Kwabre District.

Table 3: Years of Farming Experience		
Farming Experience (years)	Number of Participants	Percentage (%)
3 to 7	4	16
8 to 12	5	20
13 to 17	10	40
18 or above	6	24
Total	25	100

Source: Field Data, 2024

Table 3 shows that most participants (64%) had years of farming experience from thirteen (13) years and above, indicating a high level of expertise among the sampled farmers. These extensive farming experiences might shape their perceptions of hunger eradication strategies. Table 4 shows the means of land ownership (land tenure) of small farmholders in the Afigya-Kwabre District.

Table 4: Land Tenure System		
Land tenure	Number of Participants	Percentage (%)
Personally-owned Land	12	48
Family-owned Land	9	36
Own Land by Rent	4	16
Total	25	100

Source: Field Data, 2024

Table 4 shows that 48% of participants, representing most of the sampled participants, owned their farmland, while 16% rented it, and 36% worked on family-owned land. The high percentage of land ownership could influence farmers' sense of control over their farming activities and their critical role in fighting against hunger.

Several key themes emerged from the focus group discussions and interviews with small-scale farmers. Four broader themes emerged from the study data, including perceptions of farmers' role in food production and security, strategies for hunger reduction, challenges facing small-scale farmers, and government support and policy implications.

Perceived Role in Food Production and Security

Among the central issues that the study objectives sought to address was the perception of small-scale farmers in eradicating hunger in the Afigya-Kwabre District. The interviews revealed farmers' strong sense of responsibility towards food production and security, transcending beyond their immediate households to the broader community.

- Self-sufficiency vs. Commercial Farming

Many farmers emphasised their commitment to self-sufficiency, viewing it as essential to combating hunger. 80% of participants put self-sufficiency first, producing mainly to satisfy domestic food needs before considering surplus sales. One farmer succinctly said, "We plant, harvest, *eat food. That is our main goal.*" This sentiment highlights the importance of self-sufficiency in the farmers' perception of their role in combating hunger. In contrast, there was less enthusiasm for commercial farming, with some farmers expressing concerns about its impact on food security. 60% of respondents voiced reservations about switching to large-scale farming, pointing to the possibility of ignoring regional food demands and resource limitations. As another farmer noted, "*Commercial farming takes away from what we need for our families. It is not about feeding everyone.*" This dichotomy shows the struggle between meeting immediate household needs and contributing to broader food security goals. Some farmers saw a balance between self-sufficiency and commercial farming. One farmer explained, "*I grow enough for my family but try to sell some. It is hard, but it helps pay for school fees.*" This perspective suggests that while self-sufficiency remains paramount, some farmers attempt to incorporate commercial aspects into their farming practices.

- Impact of Farm Size on Food Production

Farmers' perceptions of their role were influenced by their farm sizes. Larger farms contributed more significantly to food production, while smaller plots were considered imperative for household sustenance. As one farmer explained, "*My small farm feeds my family, but bigger farms feed more people. Some farmers have big farms; they produce enough to feed many. However, for us small-scale farmers, every crop counts.*" Interestingly, some farmers saw potential in combining small and large farms. As one farmer suggested, "*If we had bigger farms, we could feed more people. Nevertheless, we also need small farms because they keep the land fertile when we rotate crops.*" This point of view underscores the complementary nature of different farm sizes in addressing food security challenges.

- Perception of Role in Feeding Families and Community

Farmers demonstrated a strong responsibility towards feeding their families and the wider community. One farmer stated, "*We grow crops for ourselves but sell to feed others. That is what farming is about. Sometimes, we do not make much money, but we know we are feeding people. Moreover, that is satisfaction.*" Another farmer

echoed this sentiment: *"When I see children eating the vegetables I grew, I feel proud. It is not just about growing food but about giving life."* Such statements reveal farmers' emotional investment in their role beyond just producing food.

Practices and Strategies for Hunger Reduction

Small-scale farmers in the Afigya-Kwabre District employ various strategies to reduce hunger in their communities. These practices show the proactive strategies taken by farmers to combat food insecurity beyond just producing food.

- Crop Diversification Strategies

Many farmers emphasised the importance of growing multiple crops to ensure food security throughout the year. One farmer explained, *"We grow different crops to feed ourselves and others. Cassava, maize, vegetables, we plant everything."* This approach highlights the farmers' understanding of the importance of crop diversity in maintaining food availability. Some farmers went beyond mere diversification, implementing complex rotation systems. As another farmer noted, *"We rotate our crops carefully. Cassava comes after maize, and vegetables come after cassava. It keeps the soil healthy."* This sophisticated farming practice reveals the farmers' knowledge of sustainable farming techniques and commitment to long-term soil productivity. Interestingly, some farmers saw potential in integrating traditional crops with modern varieties. As one farmer suggested, *"We grow local yams, but we have also started planting Irish potatoes. They sell well and feed us, too."* This combination of traditional and modern crops reflects the farmers' adaptability and willingness to embrace new technologies while preserving conventional agricultural practices.

- Improved Farming Techniques

Farmers demonstrated awareness of improved farming techniques, particularly in seed quality and fertiliser usage. As one farmer stated, *"We use better seeds now. They give higher yields and resist pests better."* This quote illustrates the farmers' recognition of the impact of high-quality inputs on farm productivity. In addition to improved seeds, many farmers emphasised the importance of proper fertilisation. Another farmer explained, *"We apply organic manure to keep the soil rich. It is free and good for the land."* This practice shows the farmers' understanding of sustainable agriculture principles and preference for environmentally friendly methods. Some small farmholders were experimenting with innovative techniques to enhance productivity. As one farmer noted, *"We have started using drip irrigation. It saves water and gives plants exactly what they need."* This excerpt highlights the farmers' willingness to adopt modern technologies to improve efficiency and reduce environmental impact.

- Community-Based Initiatives

Farmers demonstrated strong community spirit in their efforts to combat hunger. Many emphasised sharing tools and knowledge among farming communities. As one farmer stated, *"We help each other out. If someone needs a tractor, we pool our resources to hire one."* This quote illustrates the cooperative nature of farming in the district. Some farmers were actively involved in knowledge exchange programmes. Another farmer explained, *"There is a group near my farm where we share farming tips. We learn from each other's experiences."* This practice shows the farmers' recognition of the value of collective learning in improving agricultural productivity. Interestingly, some farmers saw potential in formalising these informal networks. As one farmer suggested, *"We should form a cooperative. That way, we can buy inputs together and sell our produce collectively."* This idea reflects the farmers' awareness of the benefits of organised farming groups in negotiating better prices and accessing credit.

- Integration with Local Markets and Distribution Networks

Many farmers recognised the importance of effectively integrating their production with local markets to combat hunger. One farmer noted, *"We grow crops for ourselves but sell to feed others. That is what farming is about."* This sentiment underscores the farmers' understanding of the link between production and consumption in addressing food insecurity. Some farmers were actively engaged in developing distribution networks. Another farmer explained, *"We have started a weekly market day in our village. Everyone brings produce, and people come from neighbouring towns to buy."* This initiative demonstrates the farmers' proactive approach to connecting producers with consumers and enhancing regional food availability.

Challenges Facing Small-Scale Farmers

One of the prominent themes that emerged from the interviews with small-scale farmers in the Afigya-Kwabre District was the range of challenges that impede their efforts to contribute to hunger eradication effectively. These challenges were categorised into three main sub-themes: economic challenges, environmental factors, and social and cultural barriers. Each of these obstacles reflects the complex realities that small-scale farmers navigate as they attempt to improve food security in the district.

- Economic Challenges

A significant challenge raised by participants was the lack of consistent market access and issues related to pricing. Small-scale farmers in the Afigya-Kwabre District reported difficulties in accessing buyers, especially during times of surplus, which often leads to financial losses. One farmer commented, *"Sometimes we grow too much, but the buyers do not come. We lose money."* This statement underscores the vulnerability of these farmers to fluctuations in demand, where the absence of

reliable market channels exacerbates their economic instability. The lack of adequate market infrastructure and fair pricing systems limits the ability of small-scale farmers to sell their produce, especially during peak seasons. This challenge is consistent with the research objective of assessing the extent to which small-scale farmers' practices and strategies contribute to hunger-reduction. Despite their willingness to grow more food, economic barriers like market access hinder their capacity to significantly impact local hunger eradication efforts.

- Environmental Factors

Another recurring challenge identified was the impact of environmental factors, particularly the adverse effects of climate change and soil degradation. Farmers noted that unpredictable weather patterns have affected their productivity, making planning for planting and harvesting difficult. One farmer remarked, *"The rains do not come like before, and when they do, it is too much, and our crops get destroyed."* This reflects how changing rainfall patterns contribute to lower yields, further complicating farmers' efforts to maintain consistent food production. Additionally, issues such as soil degradation were mentioned, with one participant noting, *"Our land is not as fertile as it used to be, so we do not get the same harvests anymore."* These environmental challenges directly impact the extent to which small-scale farmers can sustain their production levels and play a meaningful role in hunger-reduction. The unpredictability of the environment limits their ability to implement long-term strategies that would otherwise enhance their contributions to food security.

- Social and Cultural Barriers

The study also highlighted social and cultural barriers as significant obstacles for farmers in the district. Some participants mentioned the traditional gender roles that limit women's participation in farming activities, particularly in decision-making processes. A female farmer shared, *"We women want to farm more, but the men are the ones who decide where we can farm and what we can grow."* This quote illustrates how traditional social norms restrict women's agency in agricultural practices, restraining their potential contribution to food production and hunger eradication. Moreover, community expectations and cultural practices sometimes discourage the adoption of innovative farming techniques, as farmers feel pressured to conform to traditional methods. These cultural challenges complicate efforts to introduce modern practices that could potentially boost food production and reduce hunger in the district.

Government Support and Policy Implications

Another critical theme from the data was the perception of government support and the policy landscape affecting small-scale farmers in the Afigya-Kwabre District. Farmers expressed mixed views regarding the effectiveness of existing government

initiatives and highlighted areas where policy changes could significantly improve their ability to contribute to hunger eradication. The findings revealed that agricultural extension services, subsidies, land tenure policies, and suggestions for policy reform were central to their concerns.

- Views on Agricultural Extension Services

Most farmers reported dissatisfaction with the availability and quality of agricultural extension services. They emphasised the need for more frequent and practical support from extension officers to improve their farming practices and productivity. One farmer noted, *"The extension officers do not come often. We do not get the help we need when problems with our crops occur."* This excerpt reflects a general sentiment among farmers that the existing extension services are inadequate, limiting their access to vital technical knowledge and support. Another farmer commented, *"Even when they come, they only tell us things we already know. We need more practical help, not just advice."* This statement further underscores the perceived disconnect between the farmers' needs and the support provided by extension officers. These statements align with the research objective of exploring policy interventions that could support small-scale farmers. Effective agricultural extension services are crucial for providing farmers with the necessary tools to improve their productivity, enhancing their role in combating hunger.

- Perceptions of Subsidies and Support Programmes

Farmers expressed varying opinions on government subsidies and support programmes. While some acknowledged that the programmes exist, they noted that these initiatives often do not reach those who need them the most. One participant stated, *"We hear about subsidies for seeds and fertilisers, but they do not reach us. Only the big farmers get them."* This remark highlights a significant gap in the distribution of government resources, where small-scale farmers feel marginalised by a system favouring more prominent, more established farmers. Another farmer mentioned, *"The fertiliser we get is too expensive, even with the subsidy. It is still hard for us to afford."* This sentiment points to the limited financial relief current subsidy programmes offer small-scale farmers with high input costs. The failure of these programmes to adequately support small-scale farmers directly impacts their capacity to increase productivity and contribute meaningfully to hunger reduction efforts, as outlined in the research objective.

- Opinions on Land Tenure Policies

Land tenure policies also emerged as a significant issue for small-scale farmers. Many participants expressed frustration with the lack of secure land ownership, which they argued restricts their investing ability in long-term agricultural practices. One farmer explained, *"The land I farm on does not belong to me. It belongs to the chief, and every year, we have to renegotiate."* This illustrates the precarious nature

of land tenure arrangements in the district, where farmers lack the security to plan for the future and invest in sustainable farming techniques. Similarly, another farmer shared, *"Without land ownership, we cannot make big changes. We farm to survive, not to grow more."* This comment reinforces the idea that insecure land tenure limits the farmers' ability to scale their production, thereby constraining their contributions to hunger eradication in the district. Addressing these land tenure issues through policy reforms could enable farmers to adopt more efficient and sustainable farming practices, thus aligning with the research objective of identifying ways to enhance their role in hunger-reduction.

- Policy Changes Needed to Support Small-Scale Farming

When discussing potential policy changes, participants expressed a strong desire for more inclusive policies that cater specifically to small-scale farmers. One farmer suggested, *"The government needs to focus on us, the small farmers. We are the ones who grow food for our communities, but we do not get the help we need."* This statement highlights the perceived neglect of small-scale farmers in government policies and programmes, calling for a more targeted approach to support their contributions to local food security. Another participant emphasised the need for policies that address climate change and its impact on farming, stating, *"We need policies that help us deal with the changing weather. Farming is getting harder, but there is no support for that."* This highlights the growing concern among farmers about environmental challenges and the lack of policy frameworks to help them adapt to climate change. The third research objective indicates that such policy interventions would enhance farmers' resilience and strengthen their capacity to contribute to hunger eradication.

Discussion of Findings

This section presents a discussion of the study's findings, structured around the research objectives: the perceptions of small-scale farmers regarding their role in hunger eradication, the extent of their practices and strategies in hunger reduction, the challenges they face, and potential policy interventions to enhance their contribution to food security.

- Perceptions of Small-Scale Farmers Regarding Their Role in Hunger Eradication

The study revealed that small-scale farmers in the Afigya-Kwabre District perceive themselves as critical players in eradicating hunger. Farmers emphasised their role in ensuring household food security and supporting their communities. This aligns with the Sustainable Livelihoods Framework, where food production is viewed as part of a broader livelihood strategy (Scoones, 2018). According to Eshun, Golo, and Dankwa (2019, p. 35), "People choose livelihood strategies that provide them with livelihood outcomes. For impoverished people, livelihood strategies are usually varied and often complex." This is even though several people are trying to have a sustainable

livelihood by intensifying and diversifying their small existing assets to make a living. Many farmers see self-sufficiency as their primary goal, prioritising feeding their households before considering commercial farming. This reflects a local understanding of their role in food production, as highlighted by the UN's (2015) emphasis on local food systems in achieving Sustainable Development Goal 2 (Zero Hunger). Golo and Eshun (2018, p. 1) buttress that "from the perspective of international human rights law, people are in no case to be deprived of their means of subsistence." This shows the essence of prioritising the need to sustain small farm holdings to feed their families.

However, farmers showed limited enthusiasm for large-scale commercial farming, citing concerns about its impact on local food availability. This finding supports the work of Owusu et al. (2019), who noted that farmers' perceptions of food security are often rooted in their ability to feed their families before engaging in broader market activities.

- **Small-Scale Farmers' Practices and Strategies in Hunger Reduction**

The findings demonstrate that farmers employ various strategies to reduce hunger, such as crop diversification, improved farming techniques, and community-based initiatives. Crop diversification, in particular, was noted as an essential strategy, as it contributes to food security, enhances soil fertility, and reduces pest and disease vulnerabilities. This supports the findings by Owusu et al. (2019), who demonstrated that crop diversification improves resilience against environmental shocks and increases food availability.

Farmers in the Afigya-Kwabre District have adopted several sustainable agricultural practices, such as organic farming, conservation agriculture, and drip irrigation. These practices align with the International Food Policy Research Institute's (2020) recommendations for sustainable food systems in developing countries. Using traditional and modern crop varieties suggests adaptability to changing environmental and market conditions, reflecting resilience in their farming systems, as suggested by the resilience theory (Walker & Salt, 2006).

Community-based initiatives such as shared tools and market days were highlighted as effective strategies for enhancing food access. These initiatives reflect the solid social capital within the farming community, which, as Adjei et al. (2020) noted, is critical for fostering cooperation and improving market access.

- **Challenges Facing Small-Scale Farmers**

The study identified several challenges that impede small-scale farmers' ability to contribute effectively to hunger eradication. These challenges include economic constraints, environmental factors, and social and cultural barriers. A lack of consistent market access and pricing issues were significant financial challenges, with

farmers reporting that surplus produce often goes unsold due to inadequate market infrastructure. This finding is consistent with the World Bank's (2021) assertion that limited market access is a significant barrier to smallholder farmers' participation in national and international food systems.

Environmental challenges, particularly the adverse effects of climate change and soil degradation, were also significant. Farmers noted that unpredictable rainfall patterns and declining soil fertility impact their productivity. This aligns with the IPCC's (2019) report on climate change impacts on agriculture in sub-Saharan Africa. Smallholder farmers remain vulnerable to these environmental shifts without adequate adaptation strategies, further constraining their ability to contribute to food security.

Social and cultural barriers, particularly those related to gender roles, were another challenge. Female farmers reported limited decision-making power in farming activities, reflecting traditional gender norms in the district. This mirrors the findings by Antwi-Agyei et al. (2019), who highlighted the need for gender-sensitive agricultural policies to empower women in rural farming communities.

- Policy Interventions to Support Small-Scale Farmers

The findings underscore the need for targeted policy interventions to support small-scale farmers in combating hunger. Farmers expressed dissatisfaction with the existing agricultural extension services, noting that they are inadequate and do not provide the necessary technical support. As MoFA (2021) suggested, strengthening extension services would help farmers adopt modern farming techniques and improve productivity. Additionally, farmers expressed a desire for better access to subsidies and credit, highlighting the need for financial policies that cater specifically to small-scale farmers.

Land tenure insecurity was another significant issue, with many farmers lacking farmland ownership. Secure land tenure is essential for encouraging long-term investment in farming practices, as Aryeetey et al. (2022) noted. Policy reforms that ensure secure land ownership for small-scale farmers would enhance their ability to implement sustainable farming strategies and increase food production.

In conclusion, the study demonstrates that small-scale farmers in the Afigya-Kwabre District play a critical role in local food security but face significant challenges that limit their contribution to hunger eradication. Targeted policies that address these challenges—such as improving market access, enhancing extension services, and ensuring secure land tenure—would significantly enhance their capacity to contribute to food security in the district.

The study's conclusions support the Sustainable Livelihoods Framework (SLF), emphasising the interdependent roles that physical, financial, social, natural, and

human capital play in maintaining small-scale farmers' livelihoods. The SLF strongly emphasises using natural resources to build resilience, reflected in farmers' adaptation techniques such as crop diversification (92%). In comparison, community activities (48%) highlight the value of social networks. However, obstacles that prevent sustainable livelihoods are revealed by poor infrastructure (68%) and limited access to extension services (32%).

Gender discrepancies, especially women's limited access to resources and decision-making, call into question the SLF's presumptions of fair gains from capital. The results also show that without tackling structural problems like high interest rates and sociocultural obstacles, even expanding access to resources like loans or infrastructure may not be enough. This subtle use of the SLF highlights its applicability while highlighting the necessity of gender-sensitive, context-specific, and integrated interventions in Afigya-Kwabre's hunger eradication efforts.

Conclusion and Recommendations

The study concludes that small-scale farmers are vital to food security in the Afigya-Kwabre District. Despite facing significant challenges, they are resilient in combating hunger through various adaptive farming strategies. However, their potential is limited by economic, environmental, and social challenges. The study supports the need for targeted policy interventions to help farmers overcome these barriers, particularly regarding market access, agricultural training, and secure land tenure. Without these interventions, small-scale farmers' ability to effectively contribute to hunger eradication will remain constrained.

Based on the findings and discussions made, some conclusions have been made from the study:

Although they confront many obstacles, small-scale farmers in the Afigya-Kwabre District are essential to local food security. Notwithstanding their adaptability and endurance, obstacles like restricted market access, budgetary limitations, and shifting environmental conditions limit their potential. In order to assist farmers in their efforts to end hunger, the study emphasises the significance of focused governmental initiatives, such as strengthening agricultural extension services, securing land tenure, and developing infrastructure. These results highlight the necessity of farmer-centred, context-specific strategies to advance sustainable agricultural systems and meet the more general objectives of food security.

Based on the findings, the following recommendations are put forth for the district:

Implementation of district-level initiatives to improve market access for small-scale farmers. This could include establishing regular market days in specific locations and promoting partnerships between farmers and local businesses. Improve the quality and accessibility of agricultural extension services. This could involve

training extension officers in modern farming techniques and encouraging them to adopt a more participatory approach in working with farmers within the Afigya-Kwabre District.

Increase transportation efficiency, lower post-harvest losses, give farmers access to more significant markets, and build and maintain farm-to-market highways. Areas with inadequate connections and heavy cultivation should be prioritised. To reduce spoilage and increase the shelf life of perishable items like fruits and vegetables, build community-based storage facilities with temperature control. Expand irrigation infrastructure, such as drip irrigation and small-scale dams, to lessen dependency on unpredictable rainfall and increase agricultural productivity all year round.

Develop clear policies and mechanisms to secure land tenure for small-scale farmers within the Afigya-Kwabre. This could include programmes to help farmers acquire titles for their land and prevent land grabbing by more extensive agricultural interests. Programmes to give small-scale farmers access to underutilised public lands, prioritising women and underrepresented groups, should also be launched. Tenant farmers should have explicit and binding agreements to safeguard their rights and guarantee fair access to land resources.

Implement policies to promote and strengthen local food systems. This could include initiatives to encourage the consumption of locally grown produce and support local processing industries.

Establish training programmes specifically designed for small-scale farmers in the Afigya-Kwabre. These programmes should focus on improving farming techniques, business skills, and environmental sustainability. Implement district-wide initiatives to enhance farming systems' resilience to climate change. This could include promoting drought-resistant crops and conservation agriculture practices.

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