



Research Report

AN ASSESSMENT OF THE FORMS AND LEVELS OF WOMEN'S LIVELIHOOD IN GHANA:

VOCATIONAL AND ENTREPRENEURIAL SKILLS IN THE LAMBUSSIE AND WEST GONJA DISTRICTS

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EXECUTIVE SUMMARY

Introduction

Women play a critical role in Ghana's economy, particularly in agriculture, vocational trade and entrepreneurship. However, structural barriers such as limited access to land, financial services, and vocational training hinder their ability to fully participate in economic activities. This study assesses the forms and levels of women's livelihoods in the Lambussie and West Gonja Districts with a focus on vocational and entrepreneurial engagement. It also explores the key challenges and identifies opportunities to enhance women's economic empowerment.

Objectives

The primary objective of this study was to evaluate the existing livelihood opportunities available to women in Lambussie and West Gonja and assess the challenges they face. Specifically, this study aimed to:

- Assess current sources of resilience and income for women, particularly female farmers.
- Identify and map vocational and entrepreneurial skills of interest to women.
- Examine barriers preventing women from accessing livelihood skills, employment, and entrepreneurial opportunities.
- Conduct a gap analysis to highlight deficiencies in vocational and entrepreneurial training.
- Propose policy recommendations and programmatic interventions to improve women's access to economic opportunities.

Methodology

This study employed a mixed-methods approach that integrated both quantitative and qualitative data collection techniques. A structured survey was administered to 292 women across two districts to gather statistical insights into their economic activities, skill acquisition, and challenges. In addition, eight focus group discussions (FGDs) (four per district) were conducted with six to eight participants in each session (50 participants in

total), providing deeper insights into community experiences. Key informant interviews (KIIs) were conducted with 22 stakeholders including government officials, NGO representatives, community leaders, and women's association members. The research also incorporated a secondary data analysis from national reports, policy documents, and previous studies on women's livelihoods.

Key Findings

1. Women's Economic Participation and Sources of Livelihood

- Crop farming is the dominant livelihood activity, especially in Lambussie, where 86.8% of women are engaged in farming, compared with 55.3% in West Gonja.
- Trading remained a key source of income, with 72.8% of women in Lambussie and 64.5% in West Gonja engaging in market-based economic activities.
- Despite their contributions, women's economic activities remain informal, with limited access to financial and institutional support.
- Only 36% of households were female-headed, and these women faced greater economic vulnerability due to lower access to productive resources.
- Women in Lambussie and West Gonja rely on various external and community-based social protection and support mechanisms to enhance their resilience and sustain their livelihoods.

2. Challenges Hindering Women's Economic Empowerment

- Limited access to land and productive resources: Only 3.5% of women in West Gonja and 26.5% in Lambussie reported access to fertilised lands, while 0.7% in West Gonja and 2% in Lambussie reported access to mechanised water systems for farming.
- Financial constraints: 88.1% of women in Lambussie and 86.5% in West Gonja cited the high cost of fertilisers as a major barrier, while limited access to credit and high collateral requirements further hindered business growth.
- Gender biases and household responsibilities: 87.5% of women in West Gonja and 85.3% in Lambussie reported that expectations for women to prioritise household duties limit their economic engagement.
- Low literacy and inadequate vocational training: 38.4% of women in Lambussie and 39% in West Gonja had no formal education, making it difficult to transition to higher-paying vocational fields.
- Impact of climate change: 61.6% of women in Lambussie and only 27.7% in West Gonja reported access to climate-sensitive information, limiting their ability to plan agricultural activities effectively.

3. Vocational and Entrepreneurial Skills Development

- Women pursued a variety of vocational skills, with fashion and textile work emerging as the most preferred (81.8% in West Gonja and 47.9% in Lambussie), followed by catering (29.6% in Lambussie and 15.2% in West Gonja) and agro-processing. Many women acquired these skills through informal mentorship and community-based learning, with 58.3% in Lambussie and 46.1% in West Gonja gaining them through apprenticeships.
- Limited access to structured training remains a challenge. Only 13.9% of women in Lambussie and 17% in West Gonja acquired skills through formal education.

4. Gaps and Opportunities in Vocational and Entrepreneurial Training

- 66.2% of women in Lambussie and 68.8% in West Gonja cited limited availability of vocational training programs in their communities.
- 85.4% of women in Lambussie and 49.6% in West Gonja were unaware of existing vocational programs, highlighting a need for stronger outreach efforts.
- Community-based learning, digital skill development, and business incubation programs represent key opportunities for economic empowerment.
- Women's participation in e-commerce, green jobs, and agribusiness is an emerging trend that can bridge the employment gaps and create sustainable livelihoods.

Key Recommendations

1. Enhancing Support for Women Farmers

- **Access to Land and Secure Tenure:** Strengthening women's land rights through legal reforms, community sensitisation, and improved land registration can enhance the tenure security of female farmers. Traditional norms that limit women's land inheritance must be addressed through policy advocacy.
- **Agricultural Training and Climate-Smart Farming Techniques:** Expanding access to agricultural extension services and climate-smart farming techniques can improve productivity. Encouraging the recruitment of female agricultural extension officers can increase women's participation in these programmes.
- **Financial Inclusion for Female Farmers:** Expanding microfinance initiatives, cooperative-based lending, and gender-sensitive agricultural loan schemes can improve access to credit. Financial institutions should also reduce collateral requirements and introduce flexible repayment terms to accommodate seasonal agricultural cycles.

- **Expanding Market Access for Women in Agribusiness:** Strengthening market linkages, cooperatives, and digital trading platforms will allow female farmers to access better pricing and sales opportunities. Thus, participation in agricultural trade fairs and cooperative bargaining groups should be promoted.

2. Expanding Rural Vocational Training Centres

- Improving informal training and apprenticeship programs: strengthening community-based apprenticeships, women's cooperatives, and mentorship programs will expand access to vocational training. Recognising informal apprenticeships through certification programmes can improve employability.
- **Integrating Digital and Financial Literacy in Vocational Education:** Incorporating digital skills, mobile banking, and online business management into vocational training curricula can enhance women's entrepreneurial capability. Financial literacy programs should be mainstreamed into vocational education.
- Increasing scholarships and fee subsidies for female trainees: Expanding scholarships, reducing training fees, and introducing flexible payment structures can increase participation in vocational training programs. Collaboration between NGOs and the private sector can provide targeted funding to women in underrepresented vocational fields.

3. Expanding Opportunities for Women Entrepreneurs

- **Expanding Access to Business Financing and Microcredit:** Women entrepreneurs need access to low-interest microloans, grant funding, and financial coaching to support their business development. Financial institutions should develop gender-responsive credit schemes to reduce entry barriers for women-owned enterprises.
- **Strengthening Mentorship and Business Development Services:** Establishing business incubators, networking events, and mentorship programs can connect women entrepreneurs with experienced professionals who provide business expansion guidance.
- **Facilitating Women's Access to Digital Markets and E-Commerce:** Training on digital marketing, online sales platforms, and social media branding can help women expand their businesses. The government and NGOs should promote initiatives that connect rural female entrepreneurs to digital marketplaces.
- **Addressing Legal and Policy Barriers for Women-Owned Businesses:** Simplifying business registration procedures, ensuring that women-led enterprises benefit from government procurement, and providing legal advisory services will help sustain women's businesses.

4. Role of Government, NGOs, and the Private Sector

- **Government Policy Frameworks Supporting Women's Livelihoods:** The government should review and enforce gender-responsive agricultural policies, vocational education reforms, and entrepreneurial incentives to ensure equitable benefits for women.
- **NGOs' Role in Technical Training and Funding Support:** NGOs should strengthen collaborations with government agencies to enhance skill development, funding opportunities, and gender-sensitive policies. Advocacy campaigns to shift societal perceptions of women's economic roles are essential.
- **Private Sector Investment in Women-Led Enterprises:** Encouraging corporate investment in training programs, employment opportunities, and mentorship initiatives will boost women's participation in the workforce and in entrepreneurship.
- **Community-Driven Solutions for Sustainable Empowerment:** Local initiatives, such as women's cooperatives, business associations, and participatory development programs, should be supported. Engaging male allies and traditional leaders can create long-term shifts in gender perception and economic inclusion.

A group of diverse people, including men and women of various ethnicities, are gathered in what appears to be a classroom or workshop setting. They are all clapping their hands together in a synchronized, celebratory gesture. The lighting is warm and focused on the group, creating a sense of community and shared accomplishment.

1. Introduction

1.1 Background

Entrepreneurship and vocational skill development are globally recognised as key drivers of economic growth and poverty reduction. These avenues provide individuals with the opportunity to own and operate successful business ventures, thereby contributing to employment generation and economic transformation. Research highlights the role of entrepreneurial and vocational education in shaping attitudes, skills, and competencies that enable individuals to establish and expand their enterprises (Piperopoulos & Dimov, 2015). Entrepreneurs serve as catalysts for economic change, fostering innovation, creating jobs, and improving societal welfare (Desai et al., 2019; Scarborough & Cornwall, 2020).

In Ghana, entrepreneurship is a significant contributor to economic activities, with over 90% of businesses classified as Micro, Small, and Medium Enterprises (MSMEs), employing more than 80% of the workforce and contributing approximately 60% to the country's Gross Domestic Product (GCB Report, 2023; Ghana Statistical Service, 2020; Ministry of Trade and Industry, 2019). Despite its importance, the entrepreneurial and vocational skill development landscape in Ghana faces several challenges, particularly in the informal sector. These include limited access to business development services, inadequate machinery, growth constraints, and barriers to transitioning into a formal economy (Ghana Statistical Service, 2019; Sunday et al., 2018).

Ghana has a predominantly youthful population, with approximately 58% of its citizens under the age of 25. However, a significant proportion of young people, particularly women, in rural and suburban areas lack access to vocational and entrepreneurial training. More than one-fifth of individuals aged 15-35 are not in education, employed, or engaged in skills training (Ghana Statistical Service, 2022; Baah-Boateng, 2018). These disparities are more pronounced in Northern Ghana, where school completion rates are lower, unemployment rates are higher, and time-based underemployment is prevalent. Youth unemployment in Northern Ghana is 36%, nearly twice the national average of 19.7% (UNDP, 2023; Ghana Statistical Service, 2024).

Although Ghana's National Employment Policies aim to enhance opportunities for vulnerable groups such as youth, women, and persons with disabilities, challenges persist in the Technical and Vocational Education and Training (TVET) sector. Issues such as a lack of coordination, misalignment between training and industry requirements, and inadequate facilities hinder the effectiveness of vocational training programs (Kissi et al., 2020). Women face additional barriers due to gender biases in labour markets, with many employed in informal sectors offering little job security or benefits such as pensions, health insurance, or maternity leave (World Bank, 2022).

One of the most affected sectors is agriculture, where gender disparities are evident in terms of access to land, inputs, and employment opportunities. Female farmers encounter obstacles related to resource ownership, financial constraints, and limited exposure to

modern farming techniques. These constraints affect productivity and overall economic wellbeing (Madin et al., 2023; Quisumbing et al., 2010). Climate change further exacerbates these vulnerabilities, as erratic weather patterns and declining natural resources disproportionately impact women, particularly those engaged in smallholder farming (Amosah et al., 2023; Madin et al., 2023). Female-headed farming households are particularly disadvantaged due to limited access to credit, high-yield seeds, irrigation facilities, and climate-sensitive data for decision-making (Bassey et al., 2013; Amosah & Lukman, 2023).

To cope with these economic and environmental challenges, many young women in Northern Ghana migrate to urban trading centres or engage in small-scale mining during the dry season. Those who remain in their communities often face increased burdens of unpaid care work, exposure to domestic violence, and heightened risks of gender-based violence (Bawakyillenuo et al., 2016; Madin et al., 2022). Addressing these challenges requires integrated interventions that provide economic empowerment, access to financial resources, and training opportunities that are tailored to women's needs.

Addressing gender disparities in entrepreneurship, vocational training, and economic participation necessitates partnerships among local governments, private sector actors, and civil society organisations. Initiatives such as improved water access, provision of high-yielding seeds, microfinance schemes, and skills development programs are essential to enhancing women's economic resilience (Amosah & Lukman, 2023; Madin et al., 2023).

As part of efforts to promote women's economic resilience and decision-making inclusion, this study examines the current landscape of women's livelihoods in Lambussie and West Gonja Districts. This research explores existing sources of income, vocational and entrepreneurial skills of interest, and challenges affecting women's participation in economic activities. By mapping these elements, this study aims to provide insights into policies and targeted interventions for sustainable women's empowerment and economic independence.

1.2 Objectives of the Study

The overarching goal of this study was to assess the forms and levels of women's livelihood in Ghana, with a particular focus on the types of vocational and entrepreneurial skills in the Lambussie and West Gonja Districts. The specific objectives of this study were to:

- **Assess the existing sources of resilience and income among female farmers.**
 - Evaluate various existing sources of resilience for female farmers.
 - Analyse the different income-generating activities of female farmers.
 - Examine how female farmers utilise community-based social protection and insurance mechanisms to build resilience against economic shocks.

- Assess access to resources such as fertilised lands, mechanised water systems, high-yielding seeds, and climate-sensitive information and their impact on livelihoods.
- **Identify and map vocational and entrepreneurial skills.**
 - Identify and categorise the types of entrepreneurial skills that attract female youth in the studied districts.
 - Map out vocational skills that align with women's interests and economic aspirations.
 - Analyse the potential impact of these skills on women's economic empowerment.
- **Identify and analyse challenges.**
 - Investigate the key obstacles preventing women and youth from accessing livelihood skills, employment, and entrepreneurial opportunities.
 - Provides a detailed analysis of the barriers and constraints affecting economic participation and sustainability.
- **Conduct gap analysis and identify opportunities.**
 - A gap analysis was performed to highlight deficiencies in vocational and entrepreneurial training for women.
 - Identify emerging opportunities and propose strategies to bridge these gaps.
- **Propose policy and programmatic actions.**
 - Recommend key policy measures and programmatic actions to enhance investment in vocational and entrepreneurial skill development.
 - Provide actionable recommendations to policymakers, community leaders, and other stakeholders to improve women's access to livelihood skills, employment, and entrepreneurship opportunities.

1.3 Scope and Structure of Report

This study focuses on women's livelihoods in the Lambussie and West Gonja Districts while incorporating a broader national perspective. The research engaged key stakeholders, including government institutions such as the Ministry of Agriculture, Ghana Enterprises Agency (GEA), Technical and Vocational Education and Training (TVET), and Ministry of Gender, Children, and Social Protection. Additionally, collaboration with organisations such as Global Communities-Ghana has helped provide insights into ongoing resilience programs. At the subnational level, engagements were conducted with District Assemblies, local community leaders, women's groups, and local NGOs and community based

organisations to gather data on economic resilience, skill development, and entrepreneurial opportunities. This approach ensured a comprehensive understanding of the challenges and opportunities within these districts.

The remainder of this study is organised into different key sections. First, an overview of women's livelihoods in Ghana sets the context for the analysis. This is followed by a discussion of the methodology, detailing the research approach, data collection techniques, and analytical methods. The report then examines women's economic activities in the targeted districts and maps the vocational and entrepreneurial skills of interest. Subsequent sections explore the key challenges limiting women's access to economic opportunities and identify gaps and emerging prospects for skill development. The final parts of the report offer policy recommendations to enhance women's livelihoods, along with conclusions and key takeaways.



2. Women's Livelihoods in Ghana: An Overview

Women in Ghana play a critical role in sustaining their households and in contributing to national economic development. They engage in various economic activities, particularly agriculture, trade, and the informal sector. However, their livelihoods are often constrained by limited access to resources, market opportunities, and systemic gender bias (Jost et al., 2016; Madin et al., 2023).

2.1 Sources of Resilience and Income for Women

Women in Ghana engage in diverse economic activities to sustain their households and to contribute to national development. Their livelihoods are shaped by various factors including access to resources, resilience strategies, and societal norms (Wiggins & Keats, 2013). Despite facing persistent challenges, such as limited access to land, capital, and markets, women are involved in small-scale farming, trading, agro-processing, and entrepreneurship (Quisumbing et al., 2010; Amosah et al., 2023). This is also the case in Lambussie and West Gonja districts, where women are involved in farming, agro-processing, trading, and vocational and entrepreneurial activities.

Resilience among women in Ghana is built through social support networks, community-based initiatives, and informal savings groups (Carbonell & Nassè, 2021). Many women rely on traditional knowledge and adaptive strategies to navigate economic hardship. Diversifying income sources, such as engaging in small-scale farming, market trading, handicrafts, and agro-processing, has been a key strategy for enhancing economic resilience (Global Communities Ghana, 2020). Some women also leverage microfinance opportunities and cooperative organisations to strengthen their financial security (Kamara et al., 2019).

Agriculture remains a major source of livelihood for many women, particularly those living in rural areas. They cultivate crops, such as maize, yams, cassava, and plantains, whereas others engage in poultry and livestock farming (Madin et al., 2023). However, these activities are often constrained by inadequate access to credit, farming inputs, and irrigation systems (FAO, 2011). To supplement their income, many women participate in small-scale agro-processing, converting raw agricultural products into marketable goods such as gari, shea butter, and cereals (Ebenehi & Oguche, 2012). Additionally, informal trade and small businesses, including tailoring, basket weaving, and catering, provide alternative means of earning a livelihood (Ghana Statistical Service, 2019).

Despite their resilience, women in Ghana continue to face structural barriers, which limit their economic potential. Addressing these challenges requires targeted interventions to improve access to financial services, training programmes on enhancing their skills to sustain their businesses, and market linkages. Strengthening vocational education and entrepreneurial opportunities for women can further improve their ability to achieve sustainable livelihoods (Kissi et al., 2020).

2.2 Challenges Facing Women in Sustaining Livelihoods

Limited Access to Land and Credit

Women in Ghana often struggle to access land due to restrictive cultural and legal land ownership practices. In many communities, land inheritance follows patrilineal traditions, leaving women with little control over the agricultural property (Quisumbing et al., 2010). This limitation affects their ability to expand their economic activities and increase their income. Additionally, financial institutions require collateral for loans, which many women lack, thus restricting their access to credit (World Bank, 2022). Without adequate financing, women cannot invest in improved farming techniques, mechanised equipment, or business expansion opportunities.

Climate Change and Environmental Challenges

The effects of climate change, such as erratic rainfall, prolonged droughts, and declining soil fertility, exacerbate women's economic vulnerability (Amosah & Lukman, 2023). Many rely on rain-fed agriculture, which makes them highly susceptible to environmental fluctuations. Limited access to climate-sensitive agricultural data, high-yield seeds, and irrigation technology further hinders productivity (Madin et al., 2023). Consequently, many women experience seasonal income fluctuations, leading to financial instability (Béné et al., 2014).

Market Barriers and Value Chain Limitations

Women engaged in economic activities often face significant market-access constraints. Limited transportation infrastructure in rural areas prevents them from reaching larger markets, leading to postharvest losses and reduced profits (FAO, 2011). Additionally, price volatility and a lack of formal business networks have disadvantaged women in competitive industries. The absence of cooperative structures also limits their ability to negotiate better prices for products (Bawakyillenuo et al., 2016).

Gender Norms and Socioeconomic Barriers

Social norms and gender biases continue to restrict women's participation in the economy. Many women engage in economic activities with household responsibilities, limiting their time and mobility for income-generating activities (Madin, 2020). Traditional expectations about gender roles often prevent women from fully engaging in leadership and decision-making processes in both business and community settings (Bassey et al., 2013). These cultural barriers contribute to persistent gender gaps in employment and entrepreneurship (UNDP, 2023).

2.3 Vocational and Entrepreneurial Skills Development for Women

Entrepreneurship as a Path to Economic Empowerment

Ghana's entrepreneurial sector is a critical driver of economic development, with many women actively participating in small-scale businesses (Ghana Statistical Service, 2019). However, limited access to training programs, financial resources, and mentorship opportunities constrains business growth (Kissi et al., 2020). Many women enter entrepreneurship out of necessity, engaging in low-profit-margin businesses because of a lack of capital and technical skills (Ojidu, 2011). Expanding business development services and vocational training programs can equip women with the tools needed to improve their business performance and financial independence (Ghana Ministry of Trade and Industry, 2019).

Vocational and Entrepreneurial Skills of Interest to Women

Women in Ghana pursue various vocational and entrepreneurial skills to enhance their livelihood. These skills include catering and food processing, garment-making, basketry, leatherwork, shea butter processing, detergent making, and agricultural value chain activities (Ebenehi & Oguche, 2012). Additionally, some women explore digital economy opportunities, such as e-commerce, online marketing, and remote work (Ghana Statistical Service, 2019). Strengthening training programs in these areas can help bridge skill gaps and increase women's access to sustainable employment (Ojidu, 2011).

2.4 Enhancing Women's Access to Resources and Skills

Targeted policy interventions are necessary to improve women's access to livelihood skills, employment, and entrepreneurial opportunities (Kissi et al., 2020). Expanding financial inclusion through microcredit schemes and flexible loan facilities can help women entrepreneurs scale up their businesses (World Bank, 2022). Additionally, improving women's land tenure security will provide them with the necessary foundation for agricultural and business investments (Madin et al., 2023).

Vocational training programs must be aligned with industry needs to ensure that women gain relevant and marketable skills. Establishing business incubation centres and mentorship initiatives can further support women entrepreneurs in developing sustainable enterprises (Amosah & Lukman, 2023). Expanding market linkages by integrating women into value chains and strengthening cooperative networks can enhance their market reach and profitability (Global Communities Ghana, 2020).

A combination of resilience strategies, economic engagement, and structural challenges shape women's livelihoods in Ghana. While women contribute significantly to agriculture, trade, and entrepreneurship, systemic barriers limit their economic potential. Addressing

these challenges requires a multifaceted approach that includes strengthening vocational education, improving financial inclusion, and expanding market access (UNDP, 2023). Sustainable policies and interventions should foster resilience, increase resource availability, and empower women to achieve economic independence (FAO, 2011).

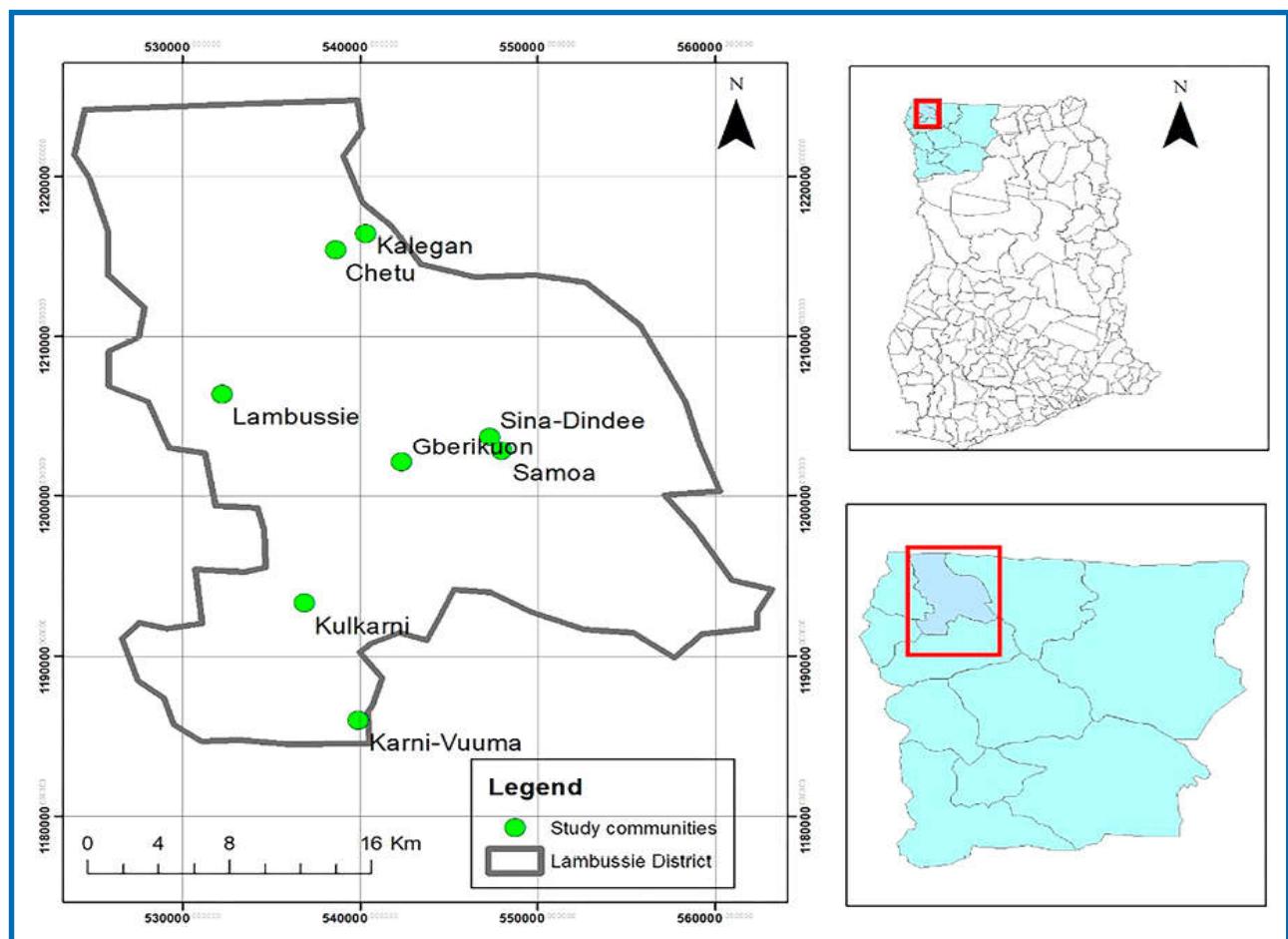
A blue-tinted photograph of a diverse group of people, likely students, sitting in rows in a classroom. They are all looking towards the right side of the frame, possibly at a teacher or presentation. The lighting is soft, and the overall atmosphere is focused and attentive.

3. Methodological Approach

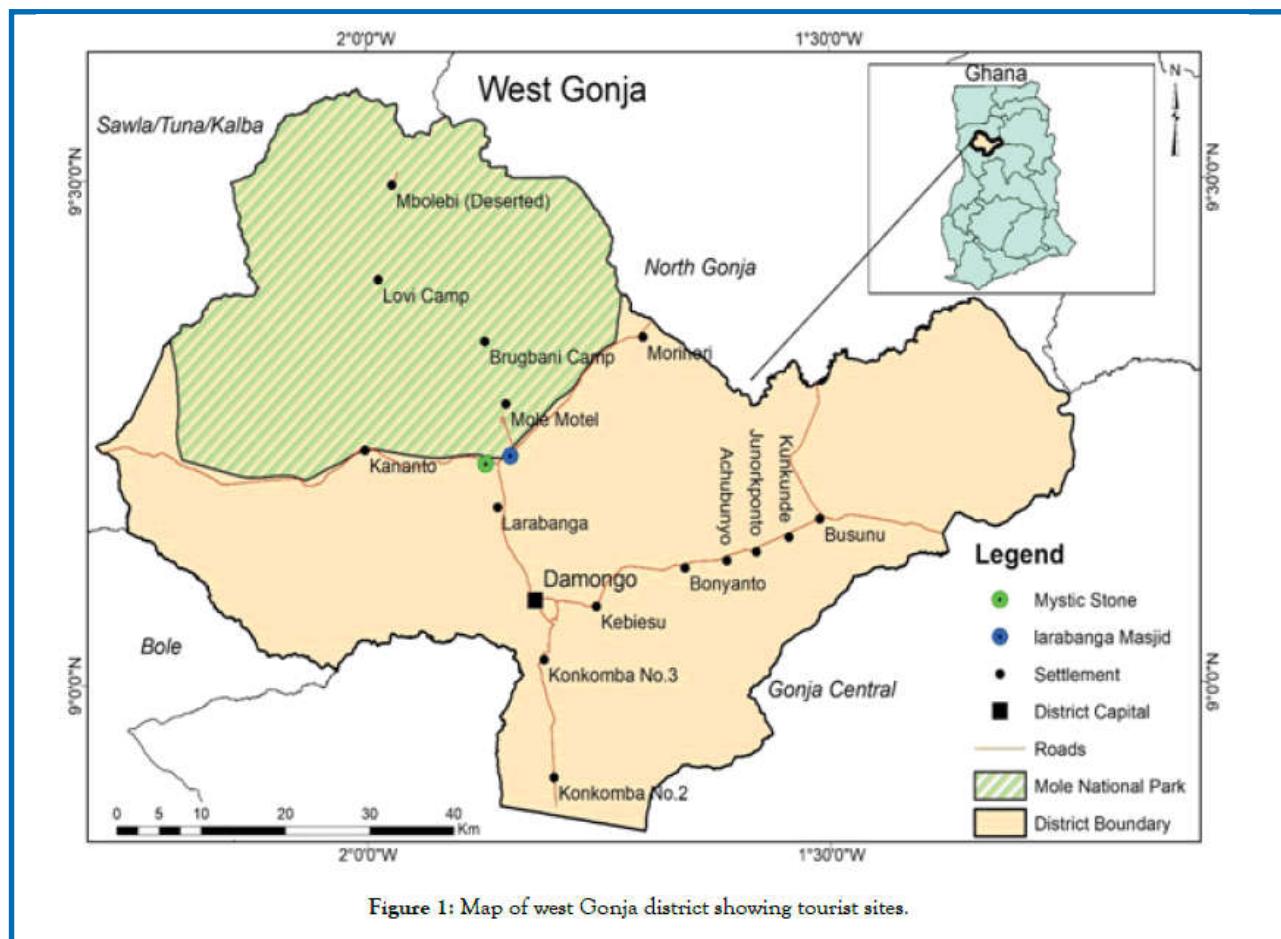
3.1 Research design (mixed-methods approach)

This study employed a mixed-methods approach to comprehensively explore the challenges and opportunities related to women's resilience, livelihoods, and entrepreneurial pursuits, particularly for female-headed farming households in the targeted districts of Lambussie and West Gonja. The research was conducted across multiple communities within the two study districts. In Lambussie District, data collection took place in Lambussie, Hamile, Samoa, Billaw, Piina, Karni, Suke, and Dahile. In the West Gonja Municipality, the study was carried out in Damongo, Laribanga, Yipala, Mognori, Busunu, Bonyanto, and Jonokponto. Table 1 provides a factsheet of the two districts. also limits their ability to negotiate better prices for products (Bawakyillenuo et al., 2016).

Map 1: District map of Lambussie District



Map 2: District map of West Gonja



Integrating qualitative and quantitative data collection techniques allowed for a more nuanced understanding of the issues and ensured that the research objectives were effectively addressed (Saunders et al., 2018).

Table 1: Geographical, demographic, and economic overview of Lambussie and West Gonja districts

Category	Lambussie District	West Gonja District
Location	Upper West Region, sharing a border with Burkina Faso.	Savannah Region, covering 8,353 km ² (about 12% of the region's total landmass).
Administrative Capital	Lambussie	Damongo serves as the administrative capital and economic hub.
Population	51,118 (2021 Census), with 51% women.	142,762 (2021 Census), with an almost equal gender distribution.
Settlement Type	Predominantly rural, with dispersed settlements.	A mix of urban and rural settlements.

Transport & Connectivity	Limited transport infrastructure; reliance on bicycles and motorbikes for mobility.	Well-connected transport networks facilitate trade and movement of goods.
Economic Activities	Farming (maize, groundnut, cowpea, soya beans, millet, sorghum); cross-border trade with Burkina Faso.	Farming (maize, yam, cassava, groundnut); agro-processing, and small-scale commerce.
Major Livelihoods	Small-scale farming, trading, and agro-processing.	Farming, trading, and small businesses.

The qualitative component of the study involved in-depth and key informant interviews, and focus group discussions (FGDs) with a diverse range of stakeholders. These included representatives from government institutions (MDAs, MMDAs), NGOs, CSOs, women's groups and associations, youth groups, local community members, CBOs, MSMEs, and traditional authorities. Key informant interviews were conducted with experts in vocational training, entrepreneurship, and economic development. These qualitative methods provided deeper insights into women's access to critical resources such as fertilised lands, mechanised water systems, high-yielding seeds, and climate-sensitive information (Yin, 2018). Data collection was conducted both face-to-face and via telephone, ensuring flexibility and inclusivity in reaching diverse participants.

The quantitative component consisted of structured surveys designed to capture a broader statistical understanding of the key issues. The surveys gathered data on vocational and entrepreneurial skills of interest to women, access to livelihood resources and opportunities, and the challenges they faced in sustaining their economic activities. The quantitative data complemented the qualitative findings, helping map the prevalence of specific vocational skills and entrepreneurial interests among women in the targeted districts.

To enhance the depth and validity of this study, a literature review was conducted using peer-reviewed journals, organisational reports, and official government and NGO publications. This review provided foundational knowledge on the socio-economic context, existing interventions, sources of resilience and incomes of women farmers, and the vocational and entrepreneurial landscape in Ghana. It also informed the development of data collection tools and contextualised the findings within broader national and global discussions (Creswell, 2018).

3.2 Data collection methods (surveys, interviews, FGDs)

This study was conducted at two levels: national and subnational. At the national level, key stakeholders and institutions responsible for policy formulation and implementation were engaged in understanding their role in enhancing women's resilience and livelihoods. At the subnational level, the study focused on two targeted districts, Lambussie and West

Gonja, to assess the specific challenges and opportunities women face in sustaining their livelihoods.

A multi-method approach was employed utilising questionnaires, interviews, and FGDs to capture diverse perspectives and experiences. Existing networks and rapport buildings with key stakeholders have facilitated effective and ethical data collection.

Questionnaire

A structured questionnaire was the primary tool used to gather quantitative data from respondents at the community level. The survey covered key themes such as sources of resilience and income for women farmers, the various vocational and entrepreneurial skills of interest to women, the main challenges hindering women's access to livelihood skills, employment, and entrepreneurial opportunities, and potential policy and programmatic interventions to enhance vocational and entrepreneurial development for women. To ensure efficiency, the Kobo Toolbox platform was used for data collection, facilitating both online and face-to-face administrations in the selected districts. Field assistants conducted in-person interviews using smartphones and tablets to digitally capture responses, even in areas without internet connectivity. This digital approach enhanced monitoring, improved data quality control, and enabled real-time data analysis while reducing costs and streamlining reporting.

Semi-structured interviews

Semi-structured interviews were conducted to complement the survey data and to gain deeper insights into the experiences of women, policymakers, and local leaders. Interviews were held at both the national and subnational levels with key stakeholders, including government agencies, traditional authorities, local community representatives, NGOs, and CSOs, such as women's groups and youth associations. At the national level, interviews explored policy mechanisms that support women's resilience in farming, access to resources such as fertilised lands, mechanised water systems, high-yielding seeds, climate-sensitive information, and the vocational and entrepreneurial skills available to women. At the subnational level, interviews focused on women's lived experiences, mapping the types of vocational and entrepreneurial skills available, and identifying the challenges and opportunities in the two targeted districts. A total of 22 interviews were conducted in the two districts. The semi-structured interview guide provided flexibility, while ensuring that the core themes were consistently covered.

Focus Group Discussions

Focus group discussions (FGDs) were conducted to foster open conversations on community dynamics, enabling a collective understanding of women's sources of resilience and income, vocational and entrepreneurial skills of interest, challenges in accessing livelihood skills, employment, and entrepreneurial opportunities, and potential

policy and programmatic actions to enhance investment in women's economic empowerment.

A total of eight FGDs were held four in each district with a total of 50 participants. Each focus group comprised six to eight participants and included sessions with women and women's associations. Additionally, a separate FGD was conducted for men in each district, to document their perspectives on women's economic roles and challenges. The discussions lasted between one and two hours and were conducted using an interview guide to ensure a structured yet interactive discussion.

3.3 Sampling strategy

A purposive sampling technique was employed to select key stakeholders for the interviews and the FGDs. This approach allowed for deliberate selection of participants with relevant knowledge, experience, and perspectives related to the research objectives (Saunders et al., 2018). The stakeholders included representatives from the Ministry of Agriculture, Ghana Enterprises Agency (GEA), National Vocational Training Institute (NVTI), Ministry of Local Government, and Ministry of Gender, Children, and Social Protection. Additionally, the two District Assemblies, the Department of Food and Agriculture, gender officers, local community members, women's groups, opinion leaders, assembly members, and identifiable NGOs/CSOs operating in the communities were engaged to provide insights into vocational and entrepreneurial skills of interest to women and youth. A total of 22 stakeholders with deep insights were interviewed as part of this process.

For the survey administration, a combination of convenience, purposive, and quota sampling strategies were adopted to facilitate data collection from 292 female respondents across the two selected districts. The sample was diverse, with 51.7% (151 respondents) from Lambussie and 48.3% (141 respondents) from West Gonja (see Table 2). The age distribution showed that 31.8% of respondents were between 35-44 years, followed by 31.2% between 25-34 years, 18.8% between 45-55 years, 11.6% between 18-24 years, and 6.5% aged 56 and above.

In terms of household type, 36.0% of the respondents were from female-headed households, with 64.0% from male-headed households. Purposive sampling ensured that the research participants, all of whom were women, were deliberately selected based on their knowledge and willingness to participate. Convenience sampling allowed for practical data collection within time and resource constraints, whereas quota sampling ensured representation across demographic groups.

Table 2: Demographics of surveyed respondents

Category	Total		Lambussie		West Gonja		
	Frequency	%	Frequency	%	Frequency	%	
Age	18-24	34	11.6	17	5.8	17	5.8
	25-34	91	31.2	42	14.4	49	16.8
	35-44	93	31.8	45	15.4	48	16.4
	45-55	55	18.8	32	11.0	23	7.9
	56+	19	6.5	15	5.1	4	1.4
	Total	292	100.0	151	51.7	141	48.3
Household type	Female-headed	105	36.0	64	21.9	41	14.0
	Male-headed	187	64.0	87	29.8	100	34.2
	Total	292	100.0	151	51.7	141	48.3

3.4 Data Analysis

The quantitative data collected through structured questionnaires were analysed using SPSS software. Descriptive statistics were employed to assess the trends and patterns, providing insights into the participation levels, sources of resilience, and economic activities of women in the targeted districts. This approach helped quantify key variables, allowing for a systematic interpretation of the numerical trends.

Qualitative data gathered from interviews and FGDs were analysed using a thematic and content-based approach. Using this method, recurring themes, patterns, and narratives were identified, providing a rich understanding of participants' perspectives on resilience, income sources, vocational and entrepreneurial skills, and barriers to economic participation. Narrative analysis further deepened insights by uncovering personal experiences and stories that illustrate broader statistical findings.

An integrated data analysis approach was adopted to ensure holistic interpretation of the findings. While quantitative data provided numerical insights and statistical trends, qualitative data enriched these findings by offering context, depth, and real-life examples. The synthesis of both datasets allowed for a comprehensive understanding of the research questions, ensuring that policy and programmatic recommendations were well-informed by both empirical data and lived experiences.

A blue-tinted photograph of a classroom. In the foreground, a person is seen from the side, holding a book. In the background, several other people are visible, some looking towards the front of the room. The overall atmosphere is that of a learning environment.

4. Findings

This section presents the findings on women's livelihoods in the Lambussie and West Gonja Districts. The findings align with the study objectives and draw on quantitative and qualitative data to provide a well-rounded understanding of the subject. The findings are structured into five areas. The first section focuses on sources of resilience and income for women, exploring the various income-generating activities women engage in and the strategies they adopt to build resilience against economic shocks. This includes examining their access to resources such as fertilised lands, mechanised water systems, high-yielding seeds, climate-sensitive information and community-based insurance. The second section delves into vocational and entrepreneurial skills, identifying the skills that women and female youth are either currently engaged in or are interested in acquiring and mapping the potential of these skills to enhance women's economic empowerment. The third section examines women's challenges in sustaining their livelihoods, highlighting the structural and systemic barriers that hinder women's access to livelihood skills, employment, and entrepreneurial opportunities. This section is followed by analysing gaps in existing vocational and entrepreneurial training, assessing the extent to which women's needs are currently met, and identifying emerging opportunities to support their economic participation and resilience building. The final section presents policy and programmatic recommendations, outlining the key actions that stakeholders, including policymakers, local governments, and development organisations, can take to enhance women's access to productive resources, skills training, and economic opportunities.

4.1 Sources of Resilience and Income for Women

Women in the Lambussie and West Gonja Districts engage in diverse income-generating activities and resilience-building strategies to sustain their livelihoods. These strategies are shaped by socioeconomic factors, local traditions, and resource access, all of which influence economic opportunities. This section examines the primary sources of resilience and income among women in these districts, with a focus on agriculture, agro-processing, small-scale trading, and vocational enterprises. It also explores the role of community-based social protection mechanisms in strengthening women's economic security, and how access to fertilised lands, mechanised water systems, high-yielding seeds, and climate-sensitive information contributes to their financial sustainability. Drawing from both quantitative and qualitative data, the findings provide insights into the economic activities women rely on to support their families and communities and build resilience against shocks while navigating the existing structural and environmental conditions.

4.1.1 Income-Generating Activities Among Women

Income generation plays a pivotal role in women's livelihoods in the Lambussie and West Gonja Districts. Women in these areas engage in a diverse range of economic activities, leveraging available resources to sustain their households and contributing to their communities. Agriculture remains the most significant source of income, with women being

involved in crop production, livestock rearing, and agro-processing. Crops such as maize, yams, cowpeas, and cassava are commonly cultivated, while livestock rearing includes poultry, goats, and sheep. Agro-processing activities, such as shea butter extraction and cassava processing, further enhance income generation by adding value to the raw materials.

In addition to agriculture, women also participate in small-scale trading and market vending. These activities include the sale of farm produce, processed goods, and other commodities, such as textiles and handicrafts. Vocational pursuits also form a vital part of women's income-generating strategies, with many engaging in garment making, catering, weaving, and beauty services. Such activities not only provide financial support but also offer opportunities for skill enhancement and empowerment. Through these diverse income-generating activities, women in Lambussie and West Gonja demonstrate resilience and adaptability in navigating the socioeconomic challenges of their communities.

However, the extent of engagement in these income generating activities varies by household type and district, and is influenced by rural-urban dynamics, access to resources, and economic opportunities. The findings in Figure 1 indicate that crop farming is the most prevalent income-generating activity among women, particularly in female-headed households, where 80% of the respondents reported it as their primary source of income. In comparison, 66.8% of women in male-headed households engaged in crop farming, suggesting that female-headed households are slightly more dependent on agriculture for sustenance and income.

At the district level, there is a notable disparity in crop-farming engagement. Lambussie recorded the highest proportion (86.8%) of women engaged in crop farming, compared to 55.3% in West Gonja. This could be explained by the fact that West Gonja is relatively more urbanised than Lambussie, with more economic diversification and greater access to non-agricultural income-generating activities. In contrast, Lambussie remains largely agrarian, making crop farming a dominant livelihood activity.

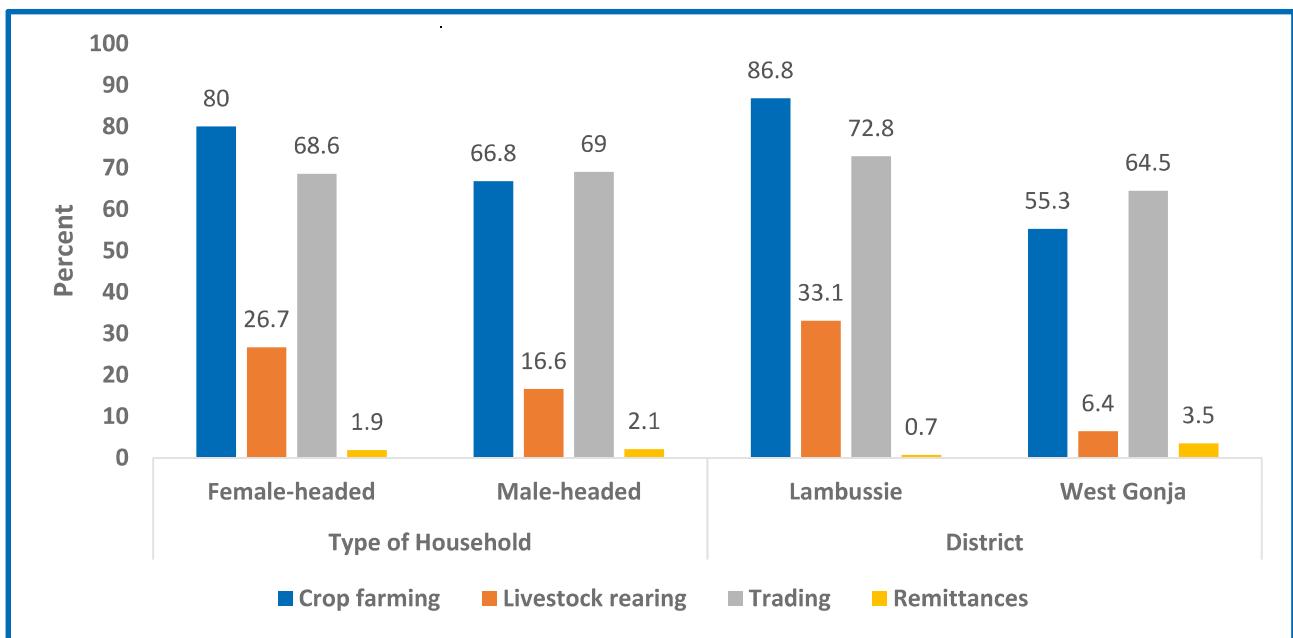
Livestock rearing is also an important economic activity, with 26.7% of women in female-headed households engaged in it compared to 16.6% in male-headed households. Higher participation among female-headed households may indicate an adaptive strategy to diversify income sources and mitigate the risks associated with reliance on crop farming alone. The district-level data reveal a stark contrast: 33.1% of women in Lambussie engage in livestock rearing compared to only 6.4% in West Gonja. Lower participation in West Gonja could be linked to limited access to grazing land as part of the district is consumed by the Mole park and other reserves, limited water sources, and urban-related constraints on livestock farming.

Trading represents another major source of income, with 68.6% of women in female-headed households and 69% in male-headed households being involved in market-based activities. Trading was slightly more prevalent at district level in Lambussie (72.8%) than in

West Gonja (64.5%). This suggests that while trading is a key economic activity across both districts, women in rural Lambussie may rely on it more due to limited alternative employment options. Additionally, Lambussie's proximity to the Burkina Faso border likely facilitates cross-border trade, creating more opportunities for women to engage in market-based activities. In contrast, women in the more urbanised West Gonja district might have access to additional non-trading income opportunities.

Remittances are the least common source of income across households and districts, with only 1.9% of female-headed households and 2.1% of male-headed households reporting it as a primary income source. However, a significant district-level variation exists, as West Gonja records a higher percentage of women relying on remittances (3.5%) than Lambussie (0.7%). This suggests that West Gonja's greater urbanisation and migration networks, possibly to southern Ghana, may provide more opportunities for family members to work in urban centres and send financial support to relatives, while in Lambussie, women are more dependent on local economic activities.

Figure 1. Primary source of income



While agriculture and trading dominated, 8% of the surveyed women indicated that their income came from other sources, demonstrating a trend toward economic diversification. Table 3 summarises these alternative sources. These alternative income sources illustrate the adaptive strategies women employ in response to economic challenges and highlight the role of vocational skills (discussed in detail in Section 4.2) and social protection mechanisms in expanding livelihood opportunities as well as building resilience against shocks.

Table 3: Alternative sources of income for women in the study area

Income Source	Examples Reported by Respondents
Fashion & Textile Work	Dressmaking, tailoring, weaving
Food Industry	Food vending, operating food joints
Beauty & Personal Care	Hairdressing, beauty services
Teaching & Education	Teaching, assisting in local schools
Support from Family	Remittances from family members

The qualitative data gathered from the interviews and FGDs provided rich insights into the economic activities of women in the Lambussie and West Gonja Districts. Women in these districts engage in a range of livelihood activities in order to sustain themselves and their families. A key finding from the qualitative data is that women do not rely on a single income-generating activity. Instead, they combined agriculture, trade, and skilled work to enhance their financial stability. A woman from Lambussie described this practice: "You cannot depend on only farming because if the rains fail, you will suffer. For this reason, I also sell food items in the market.". Similarly, a participant from West Gonja emphasized the importance of skills training and self-employment: "Many of us have learned skills like dressmaking and hairdressing so that even if the farming season is bad, we can still earn money".

The findings align with the survey data but provide deeper insights into how and why women engage in certain activities. Table 4 summarises the major sources of income reported in the qualitative interviews.

Table 4: Major sources of income from qualitative data

Primary Activity	Description	Quotes from Participants
Crop Farming	Farming of ground nuts, maize, yams, cowpeas, and cassava for household consumption and sale.	<i>"Farming is what we know best, but the challenge is getting fertiliser and enough land." – FGD participant, Lambussie</i>
Livestock Rearing	Poultry, goats, and sheep rearing as a secondary income source.	<i>"We keep small animals so that when we need money, we can sell them." – Woman in West Gonja</i>
Trading & Market Vending	Selling farm produce, foodstuff, and household goods in local markets.	<i>"Every market day, I take my groundnuts and cassava to sell." – FGD participant, Lambussie</i>
Agro-Processing	Shea butter production, groundnut oil extraction, pito brewing.	<i>"Shea butter gives us some money, but we don't have machines to make the work easy." – Woman in Lambussie</i>

Handicrafts & Sewing	Dressmaking, weaving, and tailoring.	<i>"Some of us sew dresses to support our families." – West Gonja FGD participant</i>
Food Services	Operating small food joints and selling prepared foods.	<i>"I started cooking and selling food when farming alone was not enough." – Trader, West Gonja</i>
Remittances	Receiving financial support from family members.	<i>"My son in Accra sends me something small every month." – Elderly woman, Lambussie</i>

The findings highlight that women in both districts rely on a combination of farming, trading, and secondary economic activities to sustain their livelihood. However, the rural nature of Lambussie results in a higher dependence on crop farming and livestock rearing, whereas the more urbanised setting of West Gonja presents opportunities for diversified economic activities and remittances. These differences underscore the need for context-specific interventions to enhance women's access to resources, training, and financial support to strengthen their economic resilience.

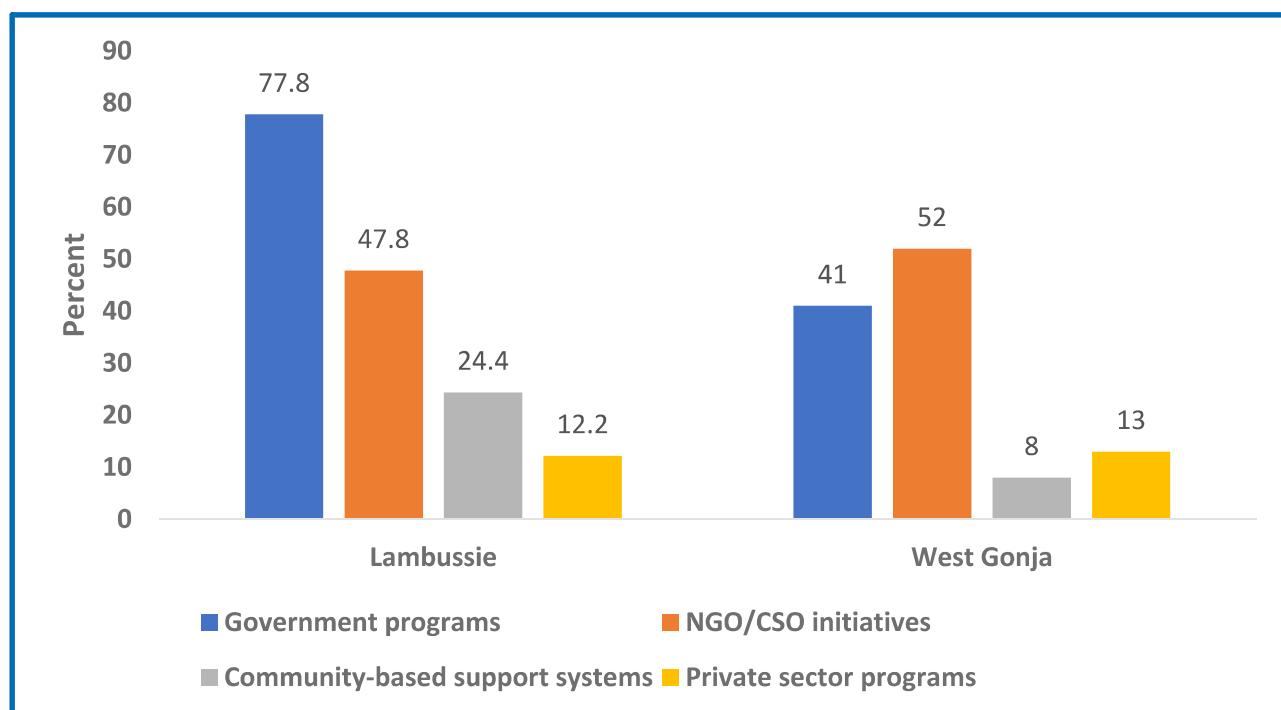
4.1.2 Community-Based Social Protection and Support Mechanisms

Women in Lambussie and West Gonja Districts rely on various external and community-based social protection and support mechanisms to enhance their resilience and sustain their livelihoods. These mechanisms play a critical role in providing financial stability, business capital, and emergency assistance for women, particularly those in female-headed households who often lack formal employment opportunities. Through rotational savings and credit groups (Susu, Village Savings and Loans Associations–VSLA, microfinance initiatives), cooperative societies, and support from NGOs, faith-based organisations, and development partners, women can access financial resources, entrepreneurial skills, business management training, and social networks that strengthen their economic independence.

Figure 2 depicts the sources of livelihood support for women in Lambussie and West Gonja, with notable variations in sources of assistance across the two districts. Government programmes emerged as the most significant source of support in Lambussie, with 77.8% of the respondents indicating that they had received some form of assistance from government initiatives such as the Livelihood Empowerment Against Poverty (LEAP) program, the Labour-Intensive Public Works (LIPW) program, and subsidised agricultural support schemes. In contrast, only 41% of respondents in West Gonja reported benefiting from government programs. The high percentage in Lambussie may be attributed to the district's relatively strong integration with state-led agricultural and social welfare programs, as well as the higher levels of vulnerability among women in rural Lambussie compared to the more urbanised West Gonja, where alternative economic opportunities may be more accessible.

Conversely, NGO/CSO initiatives played a larger role in West Gonja (52%) than in Lambussie (47.8%). This suggests that in West Gonja, non-state actors, such as development partners and community-based organisations, have a more active presence in supporting women's livelihoods. This may also indicate a gap in state intervention, necessitating reliance on NGOs and CSOs to provide critical support. Community-based support systems such as local cooperatives and women's associations were more prominent in Lambussie (24.4%) than in West Gonja (8%). The significant difference suggests that the more rural Lambussie may have stronger informal community safety nets and grassroots women's organisations that provide assistance through rotational savings groups (VSLA, susu schemes) and self-help mechanisms. Private sector involvement in livelihood support was relatively low in both districts, at 12.2% in Lambussie and 13% in West Gonja. This finding suggests that formal private sector investment in women's livelihood support remains minimal. Women in these areas continue to rely largely on public programmes, development partner initiatives, and community-based associations for economic and social resilience. To build sustainability, there is need for deliberate mechanisms to drive both formal and informal private sector investments in women led agric and agri-business value chains in both Lambussie and West Gonja Districts.

Figure 2: Source of support received



Qualitative data lent credence to the quantitative and also revealed that rotational savings and credit associations such as Village Savings and Loans Associations (VSLA) and traditional Susu groups have emerged as crucial social protection mechanisms for women. These savings groups provide women with access to credit and labour, allowing them to

Box 1: Participants' views on operations of VSLAs

The village savings club offers the productive poor (especially women groups), mainly in rural communities, the opportunity to contribute to a group and lend to themselves with an agreed interest rate. Each time the group meets (mostly once a week), each member of the women's group makes contributions and can take small loans from the volt (box). Thus, revisiting the traditional concept of savings where women deposited coins or money into boxes as savings and withdraw when in need. The primary objectives of this concept are to help improve women's entrepreneurial capacity, inculcate a culture of savings, and increase community access to credit so that they can embark on income-generating activities to diversify and sustain their livelihoods. Group members save every market day for about a year, after which the accumulated savings are shared. Members can, however, take small loans from this volt for their personal needs at a very low interest rate. Profits from the loans are shared among members according to the amount saved.

Operations of VSLAs "...each member of the Susu group contributes GHC10 every market day, with an extra 50p contribution dedicated to supporting members with family emergencies. Loans range from GHC100 to 1,000, with an interest of GHC5 monthly on every GHC100 loan advanced to members". *Women's groups in Lambussie*

For instance, a woman in an FGD indicated, "I was finding it difficult to establish my sewing shop/store after my apprenticeship training, but through the VSLA, I have been able to put up my shop with the loan I took. Now, I have more customers and can pay my bills and do other things". A 45-year-old weaver in Hamile indicated that "her dream of getting money to start petty trading and expand her weaving business materialized through this savings or susu." Another participant in Larabanga also mentioned: "Now I have two businesses all through this susu. I have been able to send my two daughters to senior high school and support the family's upkeep."

A former employee of a defunct NGO in the Lambussie district, opined that "*these women groups' susu, or saving scheme, is an effective method of helping poor women in the communities mobilize funds to support their farming and other small businesses.*" He went on to explain that "*the Susu has been one of the leading social insurance mechanisms women use to build their resilience or improve their responsiveness to shocks. Most members of these susu groups can now access credit, which they can use to start and expand their businesses. It has also instilled in them the spirit of savings and brought social cohesion and cordiality among families, groups, and communities. Through savings and loans, group members (women especially) can now contribute to the family's welfare, especially food, health insurance, and children's education. Most beneficiaries have entered petty trading, such as selling soap, processing shea butter, weaving, pito brewing, and selling foodstuffs.*"

invest in farming, trading, and vocational business. During FGDs and interviews, many women emphasised the importance of these savings groups. A participant in West Gonja explained, "I relied on the susu loan to plough my farmland and also buy other essentials when in need".

Women in multiple communities in both districts confirmed that their VSLA contributions were vital for both farming and business activities (for more details on the operations of the VSLAs, see Box 1). Typically, members contribute 5–10 GHC weekly, and the accumulated savings are distributed at the end of the cycle or loaned to members at a low interest rate. A weaver in Hamile town in the Lambussie district shared her experience, "My dream of getting

money to start petty trading and expand my weaving business materialized through this savings group." Additionally, a woman in Larabanga in West Gonja Municipal noted: "Now I have two businesses, all through this susu. I have been able to send my two daughters to senior high school and support my family." An NGO representative in Lambussie also noted, "These women's savings groups are effective in mobilizing funds to support farming and small businesses, but they need more external support to remain sustainable". These testimonials indicate that savings and loans

groups are instrumental in empowering women economically. However, small loan amounts and limited financial literacy prevent women from maximising the benefits of these schemes. Many women expressed that the funds available in the VSLA and susu groups were too small to invest in large-scale business ventures.

Furthermore, women's groups and cooperatives facilitate economic collaboration, resource pooling, and capacity-building. Women in the two districts organised themselves into associations to leverage group-based support for their livelihood activities. These associations operate as platforms for:

- **Skill development** (training in agriculture, trading, and vocational skills)
- **Financial support** (group loans and savings)
- **Labour exchange** (helping each other on farms)

In Lambussie, an FBO (Farmer-Based Organisation) leader noted: "We work together, taking turns to help each other on our farms, from ploughing to harvesting". Similarly, in Damongo in the West Gonja, a dressmaker highlighted the role of the Dressmakers' Association: "We support our members in weddings, outdooring, bereavements, and other difficult situations".

In addition, NGOs, faith-based organisations, and development agencies played a critical role in providing vocational training, agricultural inputs, and microfinance services to women in both districts. Some of the key organisations identified during the FGDs and interviews are summarised in Table 5.

Table 5: Key NGOs supporting women's livelihoods in Lambussie and West Gonja

NGO	Support Provided	District
World Vision Ghana	Village Savings and Loans, livelihood programs, borehole construction	West Gonja
Send Ghana	Microfinance services, vocational training, women's empowerment	Both
CAMFED	Entrepreneurship support, climate-smart agriculture training, educational support.	Both
Care International	Supported the village savings and loans in communities, trained some people on bee-keeping and also supported and trained farmers on the growth of maize and soybeans. This they did through a local NGO (PRUDA) which was active at the time.	Lambussie
PRUDA	Agricultural input support, training in high-yielding seeds.	Lambussie
Action Aid	Involved in WASH and menstrual hygiene activities in schools, prevention of domestic violence in communities, support for learners at the basic level and also supported women with equipment to expand their economic activities such as share butter and groundnuts processing.	Lambussie
Care International	Helped pregnant women or parents with children under 5 years to improve their nutritional needs by providing them with potato vines, groundnut, guinea pigs and Alefu. They also supported the village savings and loans (susu) groups.	Both

In summary, external and community-based social protection and support mechanisms are crucial in sustaining women's livelihoods in these districts. Rotational savings groups, cooperatives, and NGO-led initiatives provide access to capital, labour, and financial stability. However, limited funding, a lack of financial literacy skills, and declining NGO programs pose significant challenges. Many development partners previously supporting women's livelihoods have either scaled down operations considerably or exited these districts, leaving a gap in support structures at the district and community levels. Strengthening women's community based mechanisms such as savings groups, increasing financial education, and ensuring a good balance between local private sector investments and external support will enhance their economic resilience in these communities.

4.1.3 Access to Productive Resources

Access to essential agricultural resources is critical to improving the productivity and resilience of women engaged in farming. The availability of fertilised land, mechanised water systems, high-yielding seeds, and climate-sensitive information play a significant role in determining agricultural outcomes. However, disparities exist in access to these resources, which are influenced by location, economic constraints, and institutional support. This section examines the level of access to productive resources in the two districts and highlights the implications for women's livelihoods.

As shown in Figure 3, there are noticeable variations in access to agricultural inputs and support services between Lambussie and West Gonja. Extension services, which provide critical technical guidance and farming best practices, were more accessible in West Gonja (75.2%) than in Lambussie (45.7%). This finding suggests that farmers in the more urban West Gonja benefit more from agricultural extension officers, which may contribute to better productivity and innovation in farming methods compared to the more agrarian and rural Lambussie.

Access to fertilised land—a key determinant of agricultural output—was reported by 26.5% of respondents in Lambussie, compared to just 3.5% in West Gonja, according to the survey data.. The stark contrast in accessibility can be attributed to the differing agricultural and land use dynamics in the two districts. Lambussie is predominantly rural, with a high proportion of residents engaged in farming. Given the limited availability of arable land, women in this district are more likely to invest in fertilising their farmlands to sustain productivity. In contrast, West Gonja has vast stretches of land, including more fertile and virgin plots; however, these lands are often located far from settlements and are beyond the reach of many women. This finding aligns with qualitative data, where women expressed concerns about land degradation and the increasing cost of fertilisers. A woman in West Gonja explained: "Without good land, it is difficult to farm successfully. The price of fertilisers keeps rising, and those of us with no land of our own struggle to get good soil to farm on". Addressing these disparities requires targeted interventions that consider each district's unique land tenure systems and support for soil fertility management.

Additionally, mechanised water systems for irrigation were almost non-existent in both districts, with only 2% of the respondents in Lambussie and 0.7% in West Gonja having access to such infrastructure. The lack of mechanised irrigation suggests that female farmers are heavily reliant on rain-fed agriculture, making them vulnerable to erratic rainfall and climate change effects. This was echoed in focus group discussions, in which many women emphasised their reliance on unpredictable weather patterns. One farmer in Lambussie noted: "When the rain fails, we have no alternative. We just wait and hope for better next year".

Moreover, climate-sensitive information, which is vital for planning agricultural activities in response to weather changes, was more accessible in Lambussie (21.2%) than in West Gonja (5%). This disparity suggests that programs promoting climate resilience, such as weather advisory services, may be more effective in Lambussie. However, even in Lambussie, access remains relatively low, indicating a gap in disseminating climate information effectively to female farmers and a need for both the state and private sector to invest heavily in climate advisory services to farmers across the two districts.

Box 2 presents key qualitative insights on the climate-related challenges faced by women in Lambussie and West Gonja, highlighting their struggles and coping mechanisms and the urgent need for targeted adaptation measures to protect their livelihoods and wellbeing.

Box 2: Women's experiences of climate challenges in Lambussie and West Gonja districts

Women in Lambussie and West Gonja face climate-related challenges, with unpredictable rainfall, prolonged droughts, and shifting weather patterns disrupting their farming and economic activities. Previously, farmers could predict the rainy season with certainty, but now, unexpected dry spells and excessive rainfall frequently damage crops. A woman from Lambussie lamented, "If we plant too early, the rain stops, and our crops dry up. If we delay, the rain comes heavily and washes everything away".

Women rely on dugouts water bodies for irrigation, but many of these dry up during the dry season. One vegetable farmer expressed her frustration: "We are at the mercy of the weather. Without rain, our crops die, and we have no way to water them". This has led to low yields, food shortages, and loss of income, forcing women to turn to petty trading or food processing. Yet, even these trading and processing businesses are affected. A shea butter processor noted: "When the rains are too much, our shea nuts get mouldy before we can dry them. When it is too dry, the trees don't bear enough fruit".

Many women lack timely and accessible climate information, relying instead on word of mouth or community elders to determine planting seasons. While some receive updates via radio or mobile alerts, they struggle with technical terms. A farmer in Lambussie explained: "They say things like 'low-pressure system' and 'wind speeds,' but we just need to know when to plant".

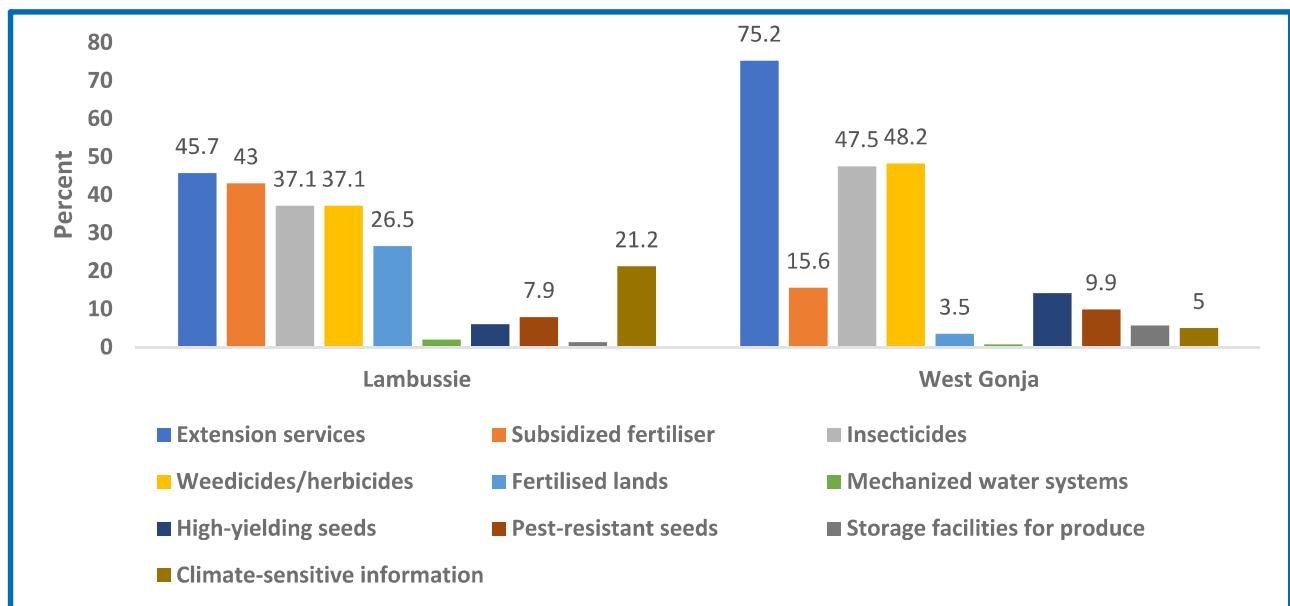
In West Gonja, access to climate information is even more limited, with many women saying that forecasts arrive too late or are too general. A local leader remarked, "Sometimes they say it will rain, but we wait for days, and nothing happens". Climate change places an unequal burden on women, who are responsible for both farming and household duties. A woman from Lambussie shared: "When the farm fails, we are the ones who must find ways to feed the family. Some days, we go to the market to sell small things just to buy food". Additionally, climate shocks force young girls out of school, as families struggle to afford fees during droughts or bad harvests.

Women in these districts require urgent climate adaptation programs, improved access to climate-sensitive information, and policies that support resilience-building efforts. Without intervention, their livelihoods and economic stability remain at risk.

Similarly, access to high-yielding and pest-resistant seeds is limited, although West Gonja showed slightly better access. Only 6% of women in Lambussie had access to high-yielding seeds, compared to 14.2% in West Gonja, while 7.9% and 9.9% reported access to pest-resistant seeds, respectively. The scarcity of these improved seed varieties limits their potential to increase agricultural output. Women often rely on traditional seed-saving methods or purchase seeds from informal markets, which may not always suit the current climatic conditions.

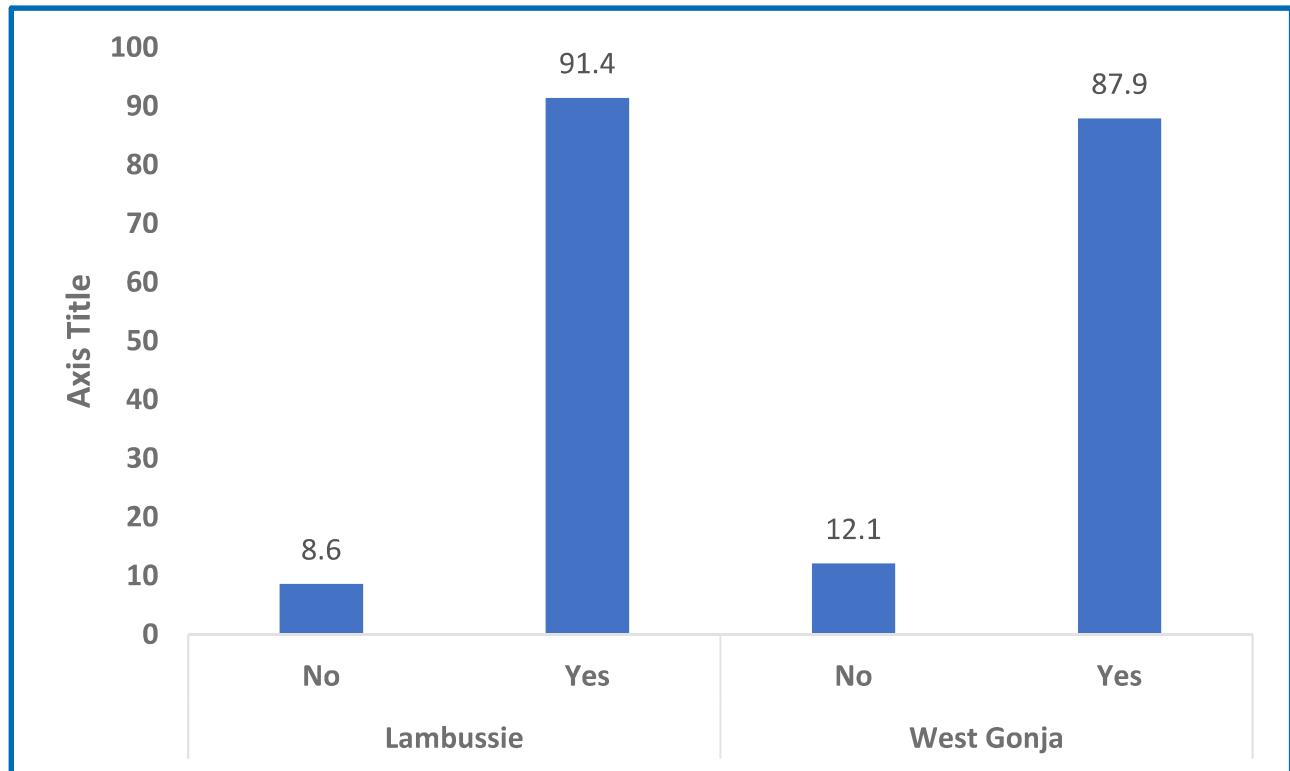
Proper storage facilities are crucial to prevent post-harvest losses and ensure food security. However, access to storage facilities for farm produce remains critically low, with only 1.3% of respondents in Lambussie and 5.7% in West Gonja reporting availability. The lack of proper storage systems and facilities drives many women to sell their produce immediately after harvest at lower prices, thereby reducing their potential earnings. During the interviews, several women lamented the difficulty of storing grains and vegetables for extended periods. One respondent in Lambussie shared: "We do not have storage warehouses, so we have no choice but to sell at low prices during the harvest season".

Figure 3: Types of agricultural resources accessible to respondents



While access to fertilised land remains limited, access to farmland is considerably better, with that a significant majority of respondents in both Lambussie (91.4%) and West Gonja (87.9%) reporting that they having access to farmland. This is an indication that land availability for agricultural purposes is relatively high across the two districts (Figure 4).

Figure 4: Respondents' access to agricultural land



However, there are notable differences in the proportion of women who do not have access to farmland, with (8.6%) in Lambussie and 12.1% in West Gonja facing challenges in securing land for farming. Although access to farmland is generally high, land security and control remain the key issues. Qualitative data suggest that women often do not have ownership rights over the land they cultivate. This makes them vulnerable to displacement, limiting their ability to make long-term investments in productivity-enhancing resources, such as soil fertility management and irrigation systems. One participant explained: "Most of the land here is family-owned, and as a woman, you can only farm if your husband or male relative allows you to". Another woman in West Gonja shared her experience: "I farm on my father's land, but anytime my brothers want to use it, I have to give it up. I have no say over the land".

The data shows that most women in both Lambussie and West Gonja access land through family ownership, but notable differences exist in other forms of land tenure (Figure 5). The majority of respondents in both districts relied on family-owned land for their agricultural activities, with 70.3% in Lambussie and a significantly higher 87.9% in West Gonja, indicating that their land is family owned. While renting land remains relatively uncommon overall, it is significantly more prevalent in Lambussie, where 17.4% of women reported renting farmland, compared with only 0.8% in West Gonja. The women who are likely to rent are the female-headed households, especially those who only came into the community as a result of marriage. The higher prevalence of land rental in Lambussie can be attributed to

the district's limited land availability and high dependence on agriculture. Given the scarcity of land, women—especially those in female-headed households—are more likely to rent farmland to sustain their livelihoods.

Female-headed households often lack direct access to family-owned land or inheritances and therefore resort to renting as a means of securing arable land for farming. In contrast, West Gonja has vast expanses of land, reducing the need for women to rent farmland. However, even in West Gonja, women in female-headed households may still face structural barriers such as lack of land inheritance rights, pushing them to explore alternative means like communal allocations or informal borrowing of land for farming. These findings highlight the gendered dimensions of land tenure and the need for targeted policies that support secure land access for female farmers, including rental subsidies, formalized land lease agreements, and community-driven land allocation reforms.

A striking difference between the two districts was the higher proportion of community-allocated land in

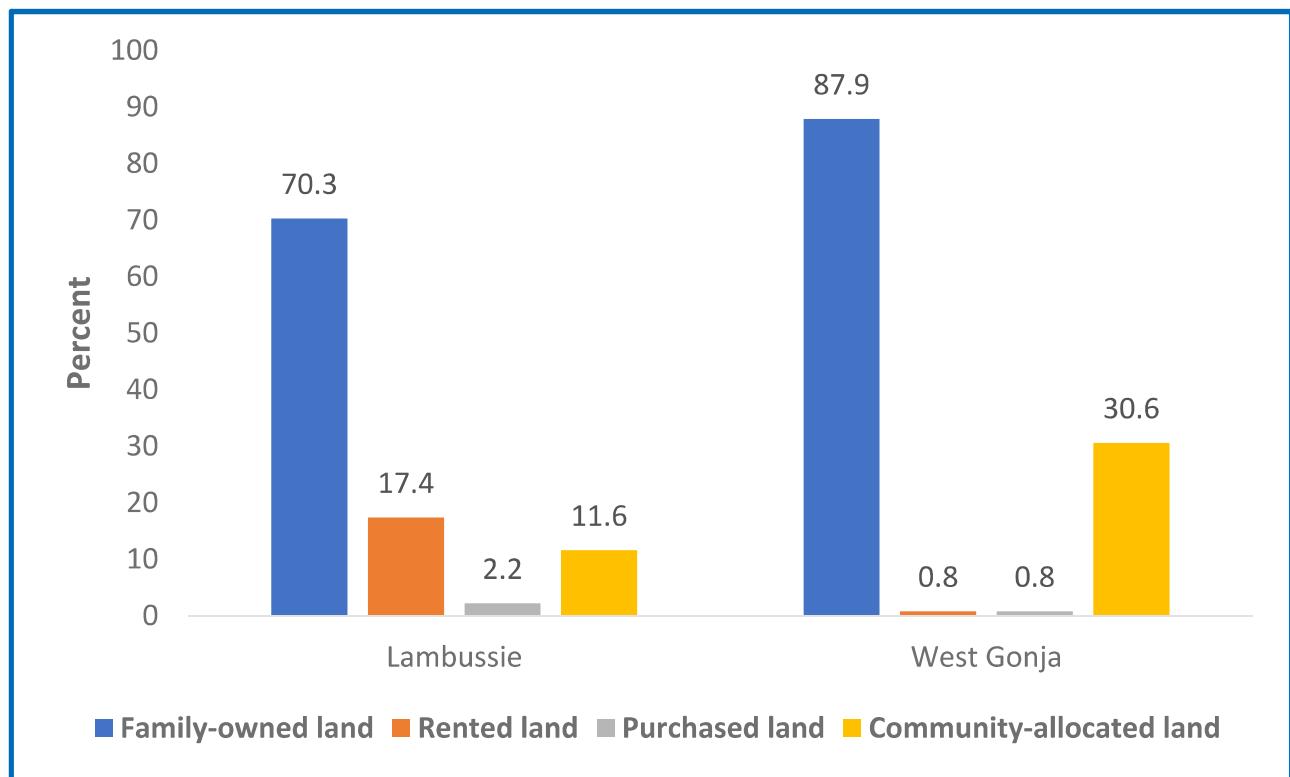
**West Gonja
(30.6%) than
in Lambussie
(11.6%).**

This suggests that traditional authorities and community leadership play a more active role in land distribution in West Gonja, potentially offering women an avenue to access land outside of family inheritance or family allocations. A participant in West Gonja highlighted the role of local leaders: "Our chiefs sometimes allocated land to us, especially to women's groups. This is helpful because otherwise, we would have no land to farm". The community-based allocation of land is an important resilience mechanism, particularly for women who do not inherit land or cannot afford to rent land. However, such arrangements may not always guarantee long-term security, as access can be revoked based on shifting community needs or leadership changes.

Women's ability to purchase land remains extremely low in both districts, with only 2.2% in Lambussie and 0.8% in West Gonja owning land through purchases. The survey further revealed that land purchasers were primarily separated or divorced women and those from female-headed households. Similar sentiments emerged during the qualitative interviews, where respondents noted that women most likely to purchase land were those with financial resources, women who were not originally from the locality but had marital ties to the area, and those who were either widowed or divorced. This finding underscores the persistent cultural and economic barriers preventing women from acquiring land directly through formal transactions. A woman from Lambussie explained: "Even if I had the money, buying land was difficult. Most landowners prefer to sell to men because they think women do not have the strength to manage land". This sentiment aligns with broader cultural

perceptions that restrict women's access to land ownership. In many communities, women are considered "strangers" or temporary members in their husbands' families, which limits their ability to claim permanent ownership of land. One respondent from West Gonja highlighted this reality: "A woman is a guest in her husband's house. If there is land to be given out, it will go to a man because he is seen as part of the family, but a woman is just passing through". This usufructuary rather than ownership status places women in a vulnerable position, making them reliant on male relatives or community leaders for land access. As a result, women are often allocated land for temporary use but denied long-term security, which limits their ability to make productive investments. Addressing these challenges requires targeted land tenure reforms that recognize women's farming contributions and promote gender-inclusive land ownership policies.

Figure 5: Type of access to farmland



Limited access to productive resources significantly affects women's ability to scale up their agricultural activities. The disparities observed between the two districts suggest that factors such as urbanisation, government support, and NGO interventions may influence access. The data show that women in Lambussie are slightly better positioned with regard to access to fertilised land and climate-sensitive information. By contrast, West Gonja women benefit more from extension services, high-yielding seeds, and pest-resistant crops. However, the overall accessibility of key agricultural inputs remains inadequate, which makes it difficult for women to transition from subsistence farming to commercial agriculture. The qualitative findings further reinforce these concerns, as women frequently

cited land insecurity, the high cost of inputs, and the lack of irrigation systems as major barriers. Addressing these issues through targeted interventions, such as improved access to fertilisers, expansion of mechanised water systems, and subsidised high-yielding seed distribution, could enhance agricultural productivity and income stability for female farmers in both districts. Government and development partners should work toward formalising land tenure arrangements that secure women's long-term access to farmland while enhancing access to timely climate sensitive information.

4.2 Mapping Vocational and Entrepreneurial Skills of Interest to Women

Vocational and entrepreneurial skills are essential for women's economic empowerment, providing them with opportunities to generate income, achieve financial independence, and contribute to community development. In Lambussie and West Gonja, women engage in diverse vocational and entrepreneurial activities, leveraging both traditional and modern skills to sustain their livelihoods. The following section explores the key vocational skills women in these districts pursue, the entrepreneurial competencies they require to manage and scale their businesses effectively, and the broader relevance of these skills in fostering economic resilience. By understanding the specific skills of interest to women, policymakers, the private sector, and development partners can design targeted interventions that enhance women's effective participation in income-generating activities and support their entrepreneurial aspirations.

4.2.1 Vocational Skills of Interest to Women

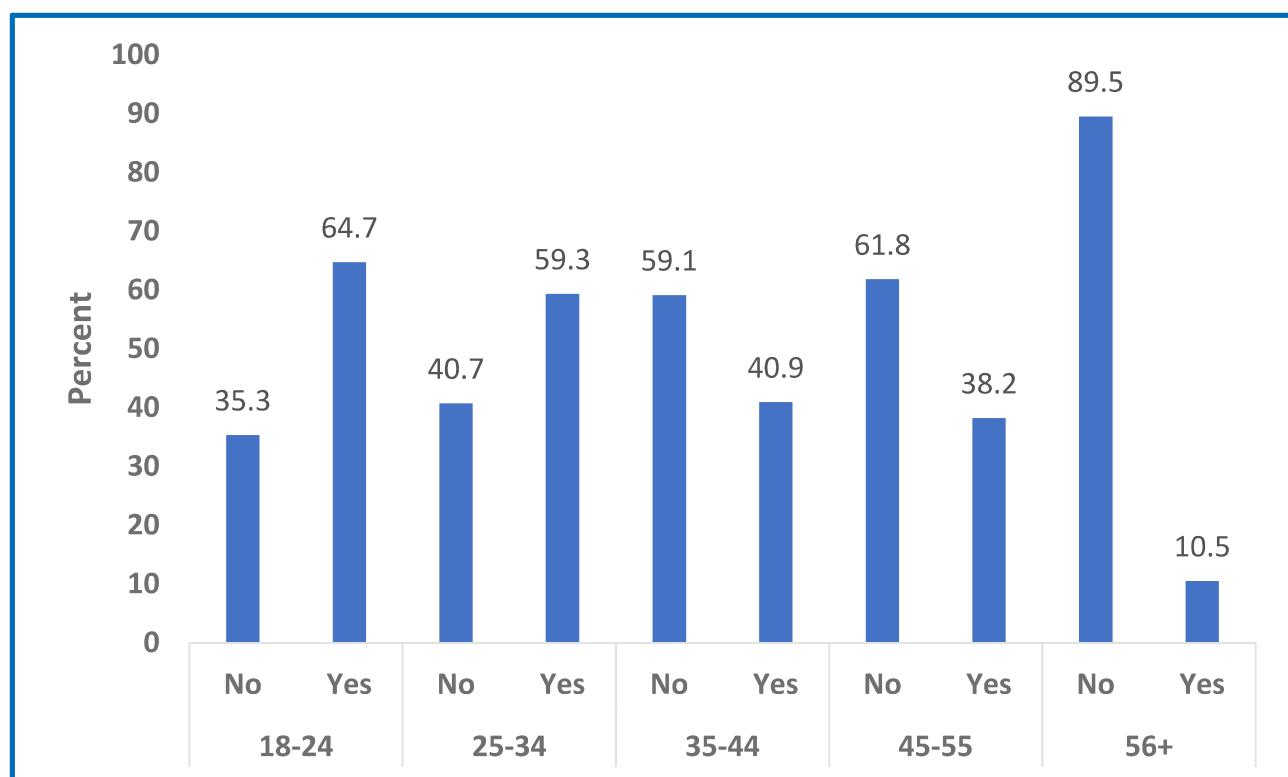
Vocational skills play a crucial role in enhancing women's economic empowerment by providing them with opportunities for self-sufficiency and sustainable income generation. In Lambussie and West Gonja districts, women engage in various vocational activities, including garment-making, agro-processing, weaving, hairdressing and catering. However, the level of involvement in vocational activities varies across districts, with some women facing participation barriers. This section presents an overview of the vocational skills that women are engaged in, the factors influencing their participation, and their relevance to women's livelihoods.

The survey explored the extent of women's involvement in vocational activities. The results indicate that slightly less than half of the women in both districts were actively engaged in vocational activities, with 47% in Lambussie and 46.8% in West Gonja. However, a significant proportion of women 53 % in Lambussie and 53.2% in West Gonja are not currently involved in any vocational activities. Figure 6 illustrates the participation of women in vocational activities across different age groups, revealing distinct engagement patterns. The highest involvement is observed among younger women, with 64.7% of those aged 18-24 and 59.3% of those aged 25-34 actively participating in vocational activities. This suggests that younger women may have more opportunities or motivation to enrol in vocational training,

possibly due to fewer household responsibilities and increased access to training programs.

As age increases, participation in vocational activities declines significantly. Among women aged 35-44, only 40.9% reported engagement, while the figure dropped further to 38.2% among those aged 45-55. The reduced participation at this stage may be attributed to growing household and caregiving responsibilities, economic constraints, or limited training opportunities tailored to older women. The lowest engagement was recorded among women aged 56 and above, with only 10.5% involved in vocational activities. A staggering 89.5% of women in this age category were not engaged in any form of vocational training. This may be due to age-related barriers, physical constraints, and cultural norms that discourage older women from acquiring new skills. These findings suggest the need for more inclusive vocational training programs that accommodate women of all age groups. Expanding access for older women by offering flexible training schedules, community-based skill development, and financial incentives could improve their participation.

Figure 6: Current involvement in vocational activities by age group



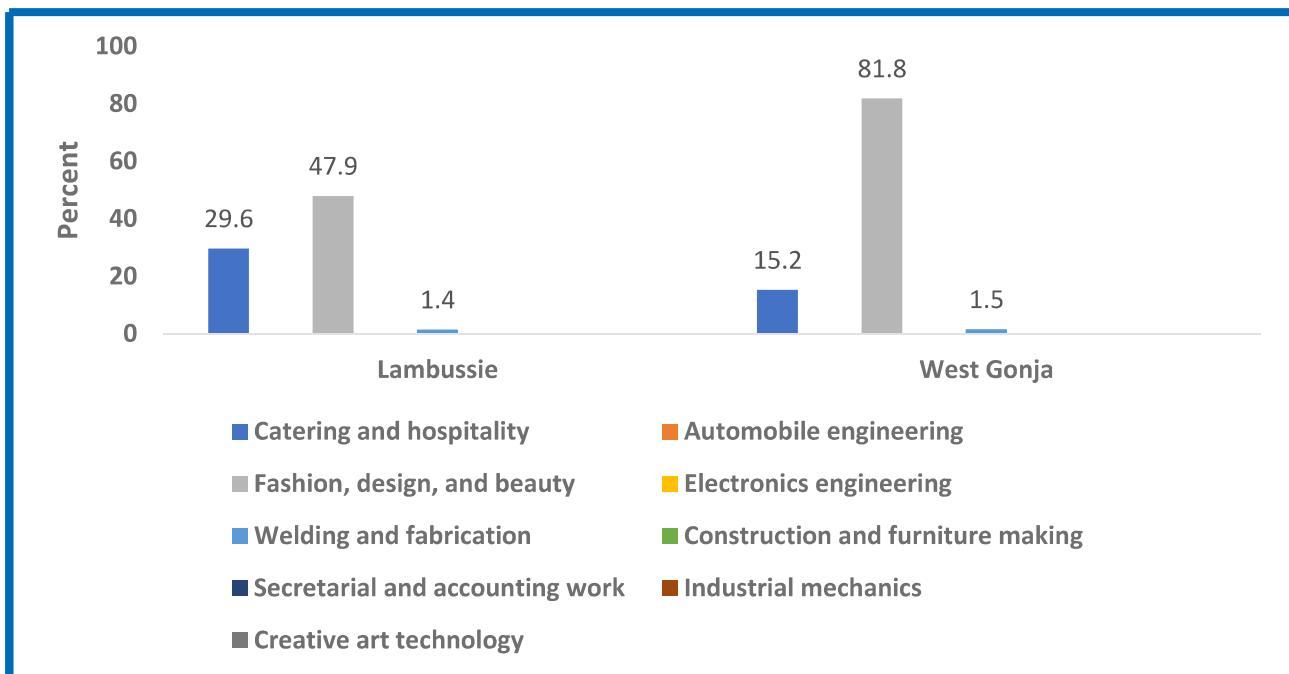
Qualitative analysis revealed that the most common vocational skills of interest to women include garment-making, catering, agro-processing, shea butter production, leatherworks, weaving, and hairdressing. These skills provide women with economic opportunities through self-employment or integration into their value chains. The identified skills and their significance are summarised in Table 6.

Table 6: Vocational skills and significance

Vocational Skill	Significance
Garment Making	Provides financial independence and caters to local and urban markets.
Weaving	Combines cultural preservation with economic benefits through local and export markets.
Agro-Processing	Adds value to agricultural products, increasing income and market competitiveness.
Catering	Supports small-scale food businesses and enhances women's entrepreneurial ventures.
Soap and Pomade Making	Produces essential household items for sale in local markets, ensuring steady income.
Hairdressing	Offers beauty services that are in high demand, particularly among the youth, and fosters entrepreneurship.

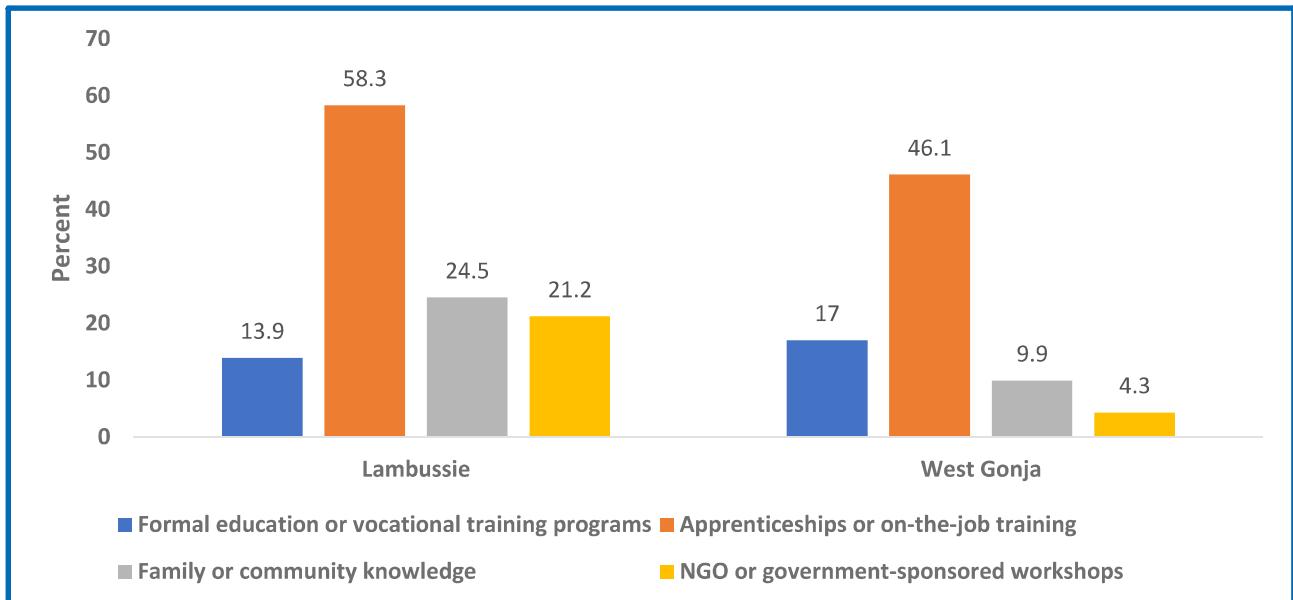
The quantitative data further highlighted vocational skills across the two districts (Figure 7). In Lambussie, 47.9% of the women reported engaging in fashion, design, and beauty-related vocations, while 29.6% were involved in catering and hospitality. A woman in Lambussie who runs a small tailoring shop explained: "Sewing has been my main source of income for the past five years. I now train young girls in the community, helping them gain skills for their future".

In contrast, 81.8% of the women in West Gonja were engaged in fashion, design, and beauty, while only 15.2% pursued catering and hospitality. A participant from West Gonja noted: "I was trained in catering because there are more customers in town. I can sell food in the market or supply to schools and offices". This finding suggests that market accessibility plays a role in shaping vocational choices. Welding and fabrication were minimally represented in both districts: 1.4% in Lambussie and 1.5% in West Gonja involved in the sector. Other vocational activities such as automobile engineering, electronics, secretarial work, and industrial mechanics were absent from both districts. The absence of such vocational activities in both districts further underscores the deep-rooted gender stereotypes that limit women's participation in traditionally male-dominated fields. This highlights the narrow scope of vocational engagement available to women, reinforcing societal norms that confine them to specific sectors.

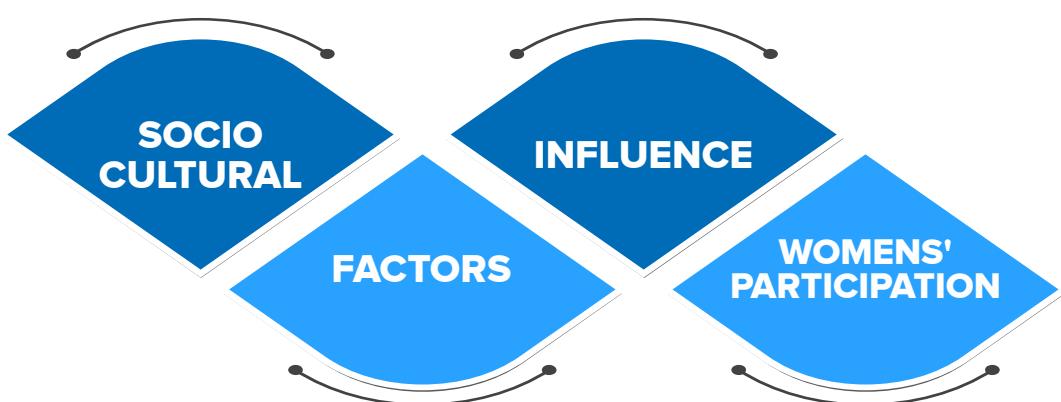
Figure 7: Types of vocational activities undertaken

Women acquire vocational skills through formal education, apprenticeships, family based knowledge transfers, and NGO/government-sponsored programs. These findings indicate that apprenticeships and on-the-job training are the most common means of skill acquisition. In Lambussie, 58.3% of the women acquired their skills through apprenticeships, while 46.1% in West Gonja followed a similar path (Figure 8). Formal education or vocational training programs accounted for a smaller percentage, with 13.9% in Lambussie and 17% in West Gonja attending structured vocational institutions. Family or community knowledge transfer played a significant role, particularly in Lambussie, where 24.5% of women informally reported acquiring vocational skills from family or community members. In contrast, only 9.9% of women in West Gonja reported learning vocational skills from family based sources, suggesting greater reliance on structured training in that district. NGO and government-sponsored training programs played a smaller role, with 21.2% of respondents in Lambussie benefiting from such programs compared to only 4.3% in West Gonja. This highlights the uneven distribution of vocational training support and suggests that Lambussie has greater access to external support systems for skill development.

Figure 8: Modes of vocational skill acquisition



A key observation from the qualitative data highlights economic constraints, a lack of training opportunities, and limited access to start-up capital as major challenges. One participant from West Gonja stated: "I want to start a small shea butter business, but I do not have the money to buy the necessary tools and materials". Another woman from Lambussie shared: "There are training sessions on dressmaking, but I cannot attend because I need to take care of my children and household duties". Another respondent in West Gonja explained: "I wanted to learn sewing, but the cost was too high, and I had to help my mother in farming instead". *These narratives emphasise that while vocational skills are valued, socioeconomic and cultural factors influence women's participation. Overall, these findings underscore the need for expanded vocational training opportunities, particularly for women who rely on apprenticeships and informal learning. Increasing access to flexible but structured training programs, offering financial assistance, and strengthening community-based knowledge-sharing mechanisms could enhance vocational skill acquisition and economic empowerment among women in both districts.*

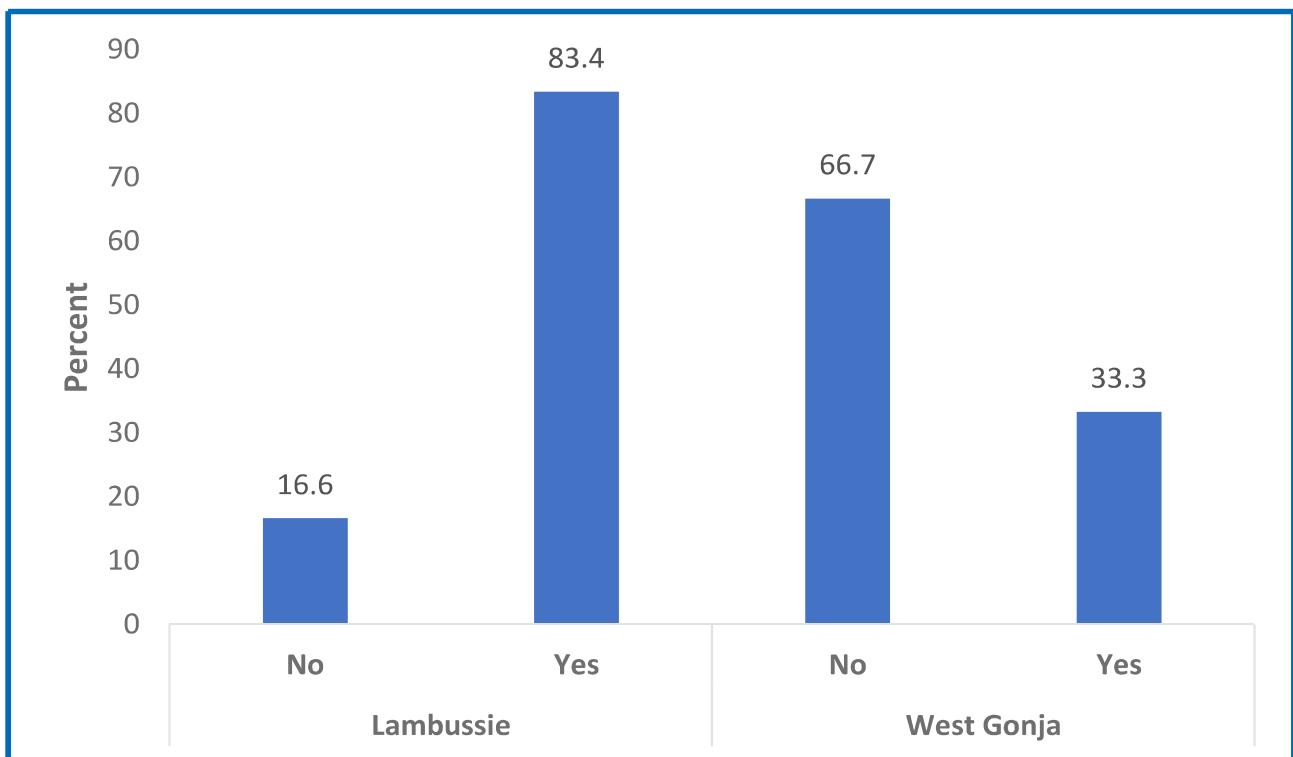


4.2.2 Entrepreneurial Skills and Women's Business Development

Entrepreneurial skills are essential for women's economic empowerment, enabling them to establish, manage, and expand their businesses successfully. As noted in both Lambussie and West Gonja, many women engage in small-scale business activities ranging from market trading to agro-processing, shea butter and ground oil production, and artisanal craft. However, their ability to grow and sustain these businesses is closely linked to their knowledge of essential entrepreneurial skills such as financial literacy, business management, bookkeeping, marketing, branding and digital sales.

The survey results show that 83.4% of women in Lambussie are engaged in entrepreneurial activities, compared to only 33.3% in West Gonja (Figure 9). This finding suggests that women in Lambussie may have greater economic incentives or access to support systems that encourage entrepreneurship. Conversely, the low participation rate in West Gonja (33.3%) suggests that structural barriers, including limited access to capital, fewer training opportunities, and market constraints may prevent women from engaging in business ventures. Additionally, qualitative insights suggest that the presence of the border in Lambussie facilitate entrepreneurship among women while urbanisation in West Gonja may encourage wage employment over entrepreneurship, leading to a lower proportion of women venturing into self-employment. One respondent from West Gonja highlighted this concern, stating: *“Many women prefer to work in offices or government jobs rather than start their businesses because getting financial support for a business is difficult”*.

Figure 9: Respondents' engagement in entrepreneurial ventures



Women entrepreneurs rely on a range of skills to successfully manage their businesses.

The qualitative findings indicate that financial literacy, small business management, record-keeping, and marketing strategies are the sought-after skills among women. Women in market trading, agro-processing, and shea butter production emphasised the importance of budgeting and pricing knowledge to maintain profitability.

In Lambussie, where entrepreneurial activity is more prominent, women frequently cite customer service, supply chain management, and digital marketing as essential skills for business growth. A woman who sold processed food products in Lambussie explained the following: *"When I started my business, I didn't know how to calculate my profits properly. After attending a financial literacy workshop, I learned to track my earnings and save money for reinvestment."* Women in West Gonja, though fewer in number, expressed interest in acquiring basic bookkeeping and branding skills to improve their businesses.

The qualitative findings indicate that women in the two districts aspire to develop a range of entrepreneurial skills that enhance their business operations. These skills are broadly categorised into financial, business operations, and digital and marketing skills, as summarised in Table 7.

Table 7: Key entrepreneurial skills identified from qualitative data

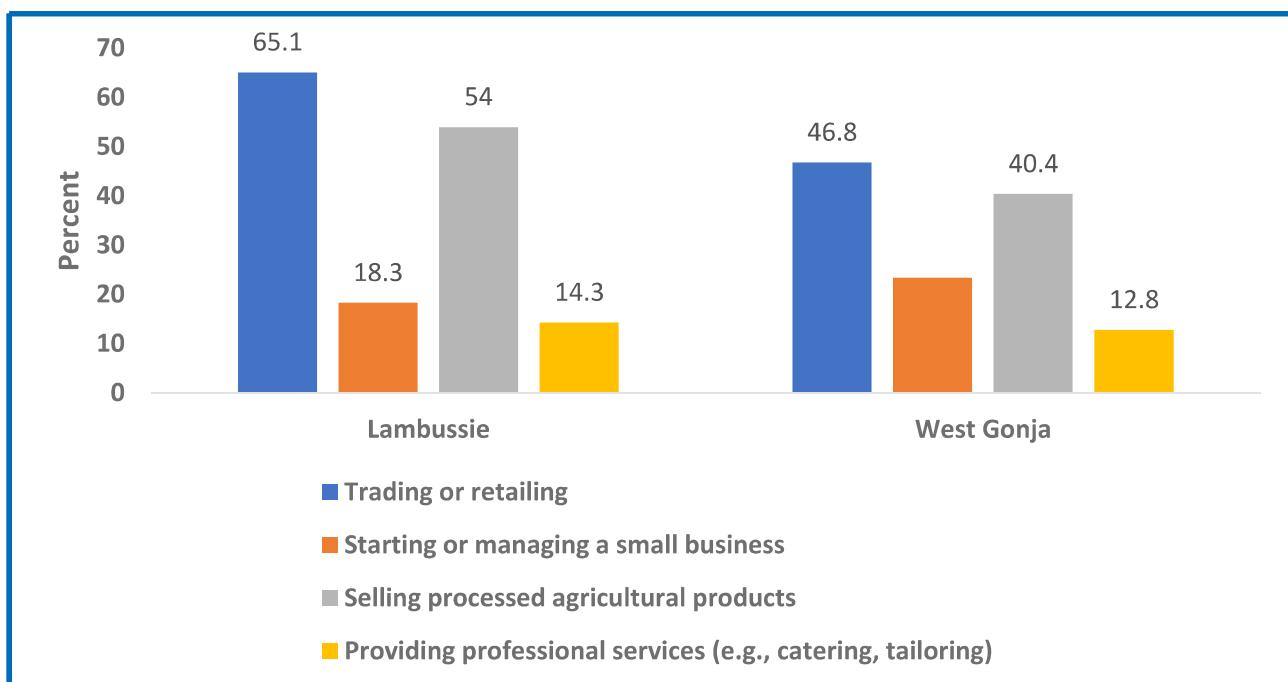
Category	Specific Skills	Examples from Qualitative Data
Financial Skills	Budgeting, bookkeeping, pricing, record-keeping	<i>"I learned how to calculate profits and save money better for my business".</i> - Market trader, Lambussie
Business Operations	Customer service, supply chain management, time management	<i>"We were trained on how to plan our work and deal with suppliers".</i> - Agro-processor, West Gonja
Marketing & Digital	Branding, digital sales, online marketing, social media sales	<i>"I now use WhatsApp to advertise my products to more people".</i> - Fashion designer, Lambussie

These skills are critical for helping women manage their small businesses efficiently, reduce financial losses, and expand their market reach. While some women have developed entrepreneurial skills through experience, community-based training programs, and informal mentorship from family and friends, others have benefited from NGO and government-led business-training initiatives. Women's associations, microfinance institutions, and faith-based organisations have played roles in delivering financial literacy and business development training. Some women have had the opportunity to attend training programs on bookkeeping and marketing through government-sponsored initiatives, whereas others, especially those in remote areas, have

relied on informal learning. A woman in Lambussie noted: “I joined a women's savings group where they taught us how to track our sales and plan for business growth. Without this, I didn't know how much profit I was making”.

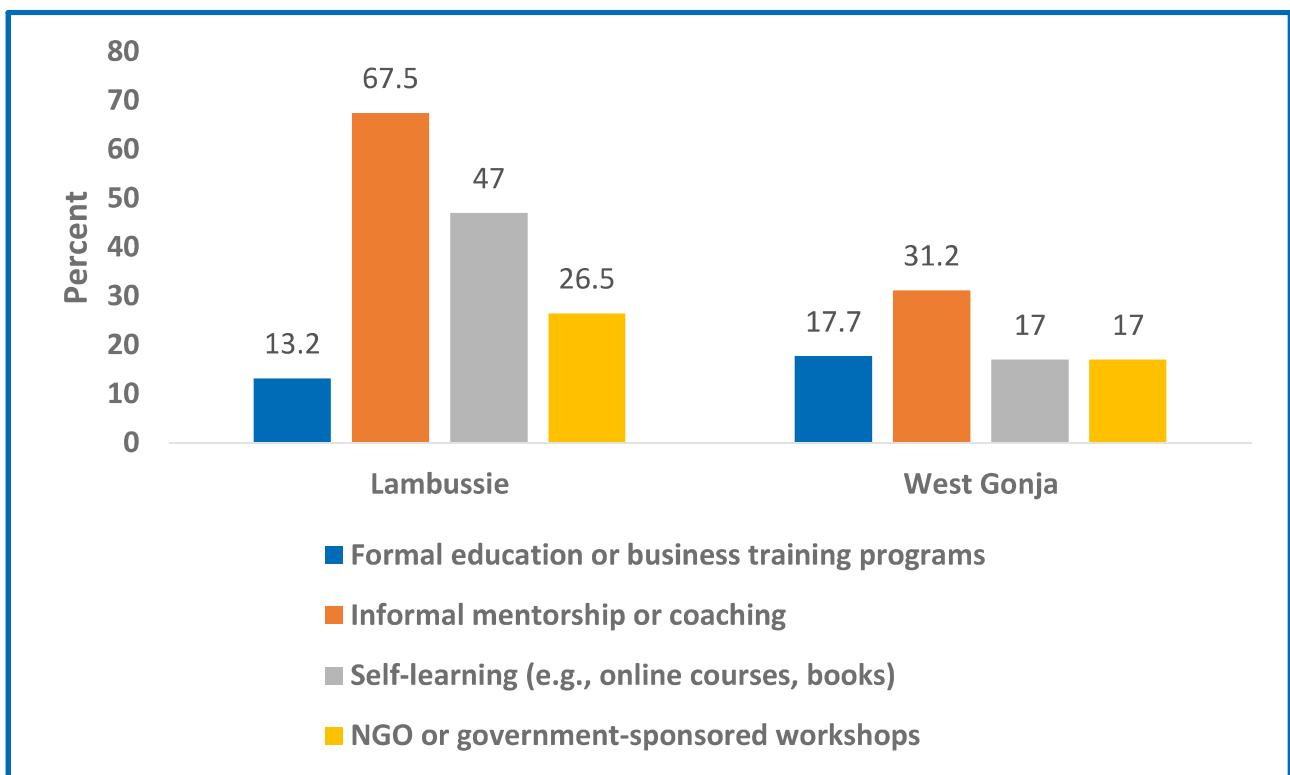
Regarding specific entrepreneurial activities, 65.1% of women in Lambussie engaged in trading or retailing, compared to 46.8% in West Gonja (Figure 10). Additionally, 54% of women in Lambussie sell processed agricultural products such as cowpea, groundnut, millet, maize among others, while 40.4% in West Gonja engage in similar activities. Small business management was slightly more common in West Gonja (23.4%) than Lambussie (18.3%). Meanwhile, 14.3% of women in Lambussie and 12.8% in West Gonja provided professional services such as catering and tailoring. Women who received business training or mentorship reports showed improved financial management, increased business stability, and higher income levels. Many women in trading and agro-processing noted that bookkeeping skills helped them better manage their inventory and pricing. Moreover, women who incorporate digital marketing and online sales have broader market access, which increases their chances of business success. A fashion designer in Lambussie explained how social media marketing transformed her business, “*Before, I used to sell only in the local market, but now I take pictures of my designs and post them on WhatsApp. I have gained customers from other districts.*”

Figure 10: Types of entrepreneurial activities undertaken



How women acquire entrepreneurial skills differs across districts. Informal mentorship and coaching emerged as the most common methods of skill acquisition in Lambussie, where 67.5% of women reported learning from experienced business owners or community mentors (Figure 11). In West Gonja, this number dropped to 31.2%, indicating a limited mentorship culture or fewer available mentors in the district. Self-learning through online courses, books, and other independent study methods is also important, with 47% of women in Lambussie and 17% in West Gonja relying on this approach. Formal education or structured business training programs were less common, with 13.2% in Lambussie and 17.7% in West Gonja accessing such training. Notably, 26.5% of women in Lambussie benefitted from NGO or government-sponsored entrepreneurial workshops, compared to 17% in West Gonja, suggesting that external support organisations for the purposes of entrepreneurship are more active in Lambussie.

Figure 11: Sources of entrepreneurial skills acquisition



Despite their interest and potential benefits, several barriers hinder women from acquiring entrepreneurial skills. The qualitative findings highlight the key challenges that limit their ability to participate in training programs and develop their businesses. The barriers are listed in Table 8.

Table 8: Barriers to women's acquisition of entrepreneurial skills

Barrier	Description	Direct Quotation from Respondents
Limited Access to Formal Training	Many women lack opportunities to enrol in structured entrepreneurial training programs due to location, cost, or lack of awareness.	<i>"I have always wanted to attend business training, but they are usually held in the city, and I cannot travel that far". – Woman trader, Lambussie</i>
Financial Constraints	Costly business training programs and workshops prevent low-income women from participating. Limited access to credit also restricts their ability to invest in skill development.	<i>"Even if I get a chance to learn, where will I get the money to start? Banks don't give us loans". – Female entrepreneur, West Gonja</i>
Time Constraints	Women managing households and businesses simultaneously find it difficult to attend scheduled training sessions, making it harder to acquire necessary skills.	<i>"I have children to care for and a business to run. Where will I find the time to sit in a training session all day?" – Female business owner, Lambussie</i>
Digital Illiteracy	Many women, particularly older entrepreneurs, lack the necessary digital skills to leverage e-commerce platforms, mobile-based business tools, and online marketing.	<i>"My daughter helps me with my mobile money business because I don't know how to use the phone well". – Elderly market woman, West Gonja</i>
Lack of Mentorship and Business Networks	Women often lack access to mentors and structured business networks that could support their entrepreneurial journeys.	<i>"We are just doing business on our own. No one comes to teach us how to make it bigger". – Young female trader, Lambussie</i>

These barriers highlight the systemic challenges that limit women's ability to acquire entrepreneurial skills and grow sustainable business. Addressing these obstacles through targeted interventions, such as subsidised training programs, flexible learning schedules, and digital literacy initiatives, is essential in promoting women's entrepreneurship in the targeted districts.

4.3 Challenges Affecting Women's Access to Livelihood Skills and Economic Opportunities

Persistent structural and socioeconomic barriers continue to hinder women's ability to fully participate in livelihood activities and economic ventures. In Lambussie and West Gonja, many women struggle to secure land for farming, access financial resources, and overcome restrictive gender norms that limit economic mobility. Additionally, educational barriers and inadequate vocational training prevented them from acquiring the skills necessary for career advancement and entrepreneurship.

Beyond these structural challenges, climate change and economic instability further disrupt women's livelihoods, particularly those engaged in farming and small-scale business. Erratic weather patterns, land degradation, and fluctuating market conditions create additional vulnerabilities that make it difficult for women to achieve financial security and long-term sustainability in their work.

This section explores these barriers in depth, focusing on five key areas: (i) access to land and productive resources; (ii) financial exclusion; (iii) gender biases and household responsibilities; (iv) literacy and vocational training gaps; and (v) the impact of climate change. These challenges highlight the systemic obstacles that women face, offering insights into the broader economic and social dynamics that shape their livelihoods.

4.3.1 Limited Access to Land and Productive Resources

As discussed in section 4.1.3, access to farmland remains a significant challenge for women in Lambussie and West Gonja. While most women in both districts reported having access to farmland, the security of tenure and control over these lands remains precarious because of traditional inheritance structures and communal land allocation systems. Women are often allocated family- or community-owned lands rather than owning farmland outright, leaving them vulnerable to displacement or reallocation at the discretion of male relatives or local authorities. This uncertainty limits their ability to make long-term agricultural investments, thereby reducing their productivity and economic stability.

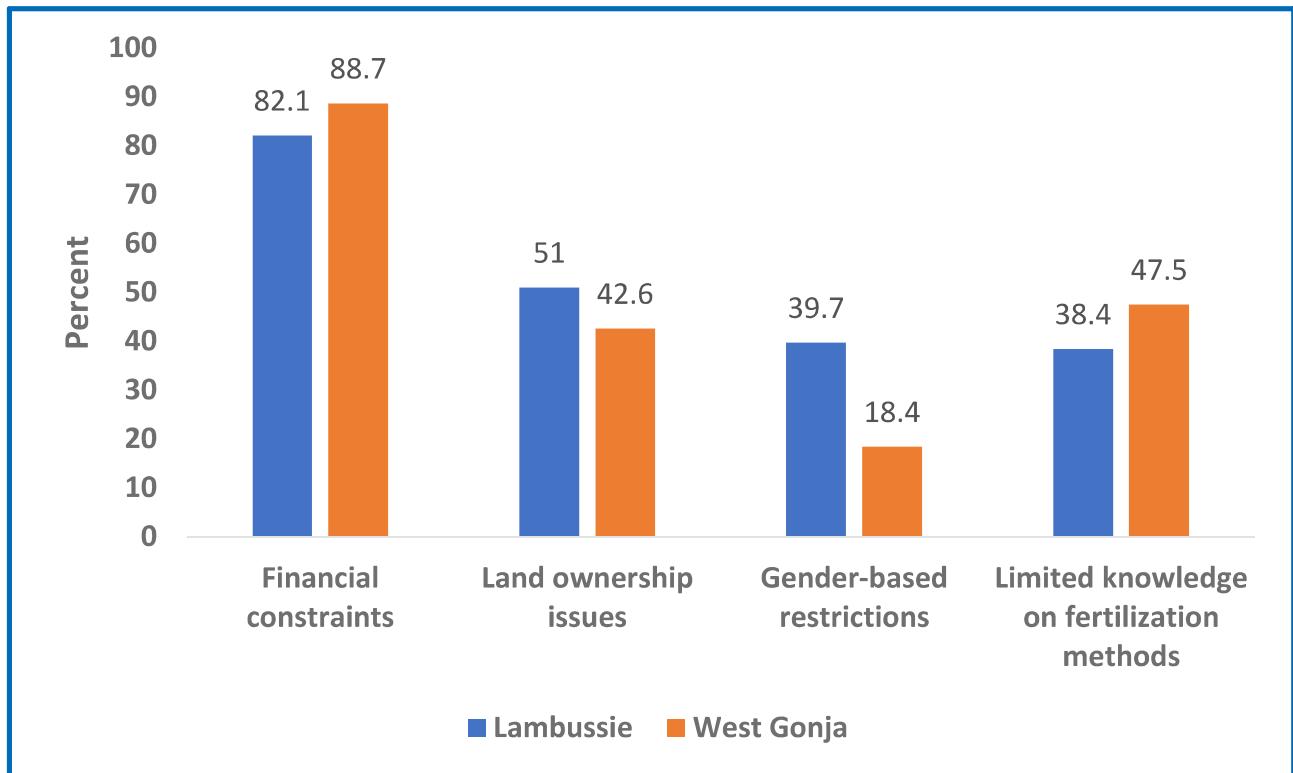
Beyond land access, women also struggle to obtain critical farming inputs, such as fertilised land, mechanised water systems, high-yielding seeds, and modern irrigation technology. As seen in previous discussions, access to fertilised land was notably low, with only 26.5% of women in Lambussie and 3.5% in West Gonja. Similarly, mechanised water systems were almost non-existent, with only 2% in Lambussie and less than 1% in West Gonja having access. These constraints significantly affect productivity, particularly in an era in which climate variability demands more resilient agricultural practices.

Although some women benefit from government subsidies on fertilisers and extension services, these programmes are often difficult to access due to financial constraints, bureaucratic hurdles, and male-dominated distribution networks. As a result, women remain heavily reliant on traditional farming methods, which limits their ability to improve yields and sustain their livelihoods.

As discussed earlier, most women in both districts had access to farmland. However, the tenure security of these lands remains unclear. Land ownership remains a male-dominated asset, with 51% of women in Lambussie and 42.6% in West Gonja reporting land ownership issues. Family inheritance and community allocation dictate land distribution, often leaving women with insecure and temporary access. Beyond ownership, financial constraints were the most significant barrier to acquiring and utilising fertilised lands. Limited financial resources emerged as a key constraint, as indicated by 82.1% of respondents in Lambussie

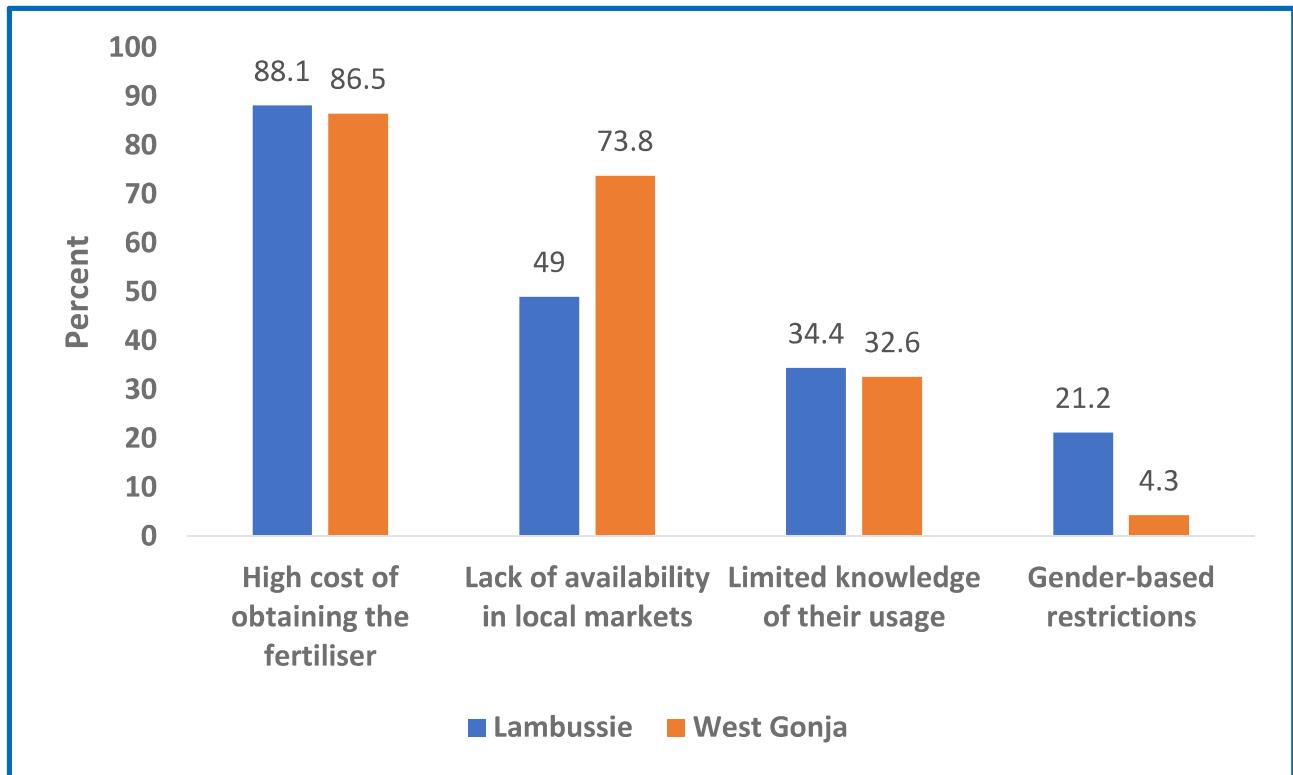
and 88.7% in West Gonja. Additionally, gender-based restrictions were noted by 39.7% of the women in Lambussie and 18.4% in West Gonja, suggesting that women continue to struggle against cultural barriers when seeking independent land ownership or control. Qualitative interviews reinforce this finding, with one respondent noting: “In our community, land is passed down to men. Even if a woman wants to farm, she must get permission from her husband or male relatives”.

Figure 12: Challenges faced in accessing fertilised lands



Female farmers also struggle to access subsidised fertilisers, which are crucial for improving soil fertility (see Figure 13). This high cost remains a major barrier, affecting 88.1% of women in Lambussie and 86.5% in West Gonja. A participant from Lambussie explained, “Even when we get land, it is not always fertile. We can't afford fertilisers, so we plant the same way every year, and the yields keep reducing”. Additionally, the availability of fertilisers in local markets is inconsistent, with 73.8% of respondents in West Gonja and 49% in Lambussie stating that they struggle to find fertilisers when needed. Gender-based restrictions further compound the issue, with 21.2% of women in Lambussie reporting that fertiliser programmes prioritise male farmers, compared to 4.3% in West Gonja. As one respondent from West Gonja explained: “When fertilisers arrive, men are given priority. If you do not come early or do not have the right connections, you may not get any”. Another woman in West Gonja shared her frustration: “We hear on the radio that fertiliser has arrived, but by the time we go to buy, it is already finished or given to the men first”.

Figure 13: Challenges faced in accessing subsidised fertilisers



Water access is essential for year-round farming and agro-processing; however, mechanised irrigation systems remain largely unavailable. The high cost of irrigation equipment was cited as a major barrier, affecting 74.2% of women in Lambussie and 83.7% of women in West Gonja. Additionally, many women lack the technical knowledge to operate mechanised irrigation systems, with 56.3% of respondents in Lambussie and 59.6% in West Gonja reporting limited familiarity with irrigation technology. The limited availability of irrigation systems within communities is another major issue, affecting 51% of women in Lambussie and 47.5% in West Gonja. A respondent from West Gonja expressed her frustration: "Even if I had the money to buy an irrigation system, I would not have anywhere to install it. Our community lacks access to proper water infrastructure". Another participant from West Gonja noted: "Even if I could afford a pump, there are no water sources nearby. We depend on rain, and when it doesn't come, our crops suffer".

Agricultural extension services provide crucial support for improving farming techniques, accessing modern agricultural knowledge, and productivity-enhancing inputs. Farmers do not pay for public extension services. However, women in both districts reported significant challenges in accessing the extension officers. As shown in Figure 14, the lack of availability of extension agents was the most frequently cited challenge, affecting 74.8% of women in Lambussie and 60.3% of women in West Gonja. Many women noted that extension services tend to prioritise large-scale male farmers over smallholder female farmers. Additionally, cost barriers prevented women from seeking extension services, with 62.3% in Lambussie

Table 9: Summary of key challenges in accessing productive resources

Challenge	Lambussie (%)	West Gonja (%)
Financial constraints (fertilised lands)	82.1	88.7
Land ownership issues	51.0	42.6
Gender-based restrictions (land)	39.7	18.4
High cost of fertiliser	88.1	86.5
Fertiliser scarcity	49.0	73.8
Gender-based restrictions (fertiliser access)	21.2	4.3
High cost of mechanised water systems	74.2	83.7
Lack of technical knowledge (irrigation)	56.3	59.6
Limited availability of irrigation systems	51.0	47.5
High cost of extension services	62.3	38.3
Lack of available extension agents	74.8	60.3
Gender-based restrictions (extension access)	27.2	14.2

The findings highlight the significant barriers that hinder women's access to land and other productive resources. While many women are actively engaged in agriculture, their ability to expand and improve productivity is constrained by land tenure insecurity, financial constraints, gender-based restrictions, and a limited knowledge of modern farming techniques. The data reveal that high costs and lack of availability are major challenges in accessing key agricultural inputs, including fertilisers, mechanised water systems, and extension services. Moreover, cultural norms and gender biases continue to limit women's opportunities to fully benefit from these resources, particularly in Lambussie, where gender-based restrictions are more pronounced.

Another significant barrier is the inaccessibility of valuable and timely information relating to farming. With increasing climate variability and extreme weather events, access to climate-sensitive information is crucial for farmers to adapt their practices, mitigate risks, and ensure sustainable agricultural production. Despite the growing importance of such information, many farmers, particularly in the study area, face significant barriers to accessing and utilizing it effectively. One of the barriers is access to technology. The District Director of Agriculture in the Lambussie District indicated: "The District has no Meteorological Service, nor do they have a radio station to access such information". Most women did not have access to the requisite technology (smartphone and internet connectivity), preventing them from accessing climate-sensitive information. Those who had smartphones also did not know how to access climate-sensitive information. This could be due to the low literacy rate in the area. One woman indicated: "We use our mobile phones to receive and make calls. We do not know that we can use it to access this information". The Agricultural extension officer in West Gonja District remarked:

and 38.3% in West Gonja, indicating that they cannot afford private extension support when public extension officers are unavailable. Gender-based restrictions were also noted, affecting 27.2% of women in Lambussie and 14.2% in West Gonja, reinforcing the perception that women are often excluded from agricultural training opportunities. A woman from Lambussie shared her experience: "When extension officers come, they speak to the men in the village. They assume women don't need technical training. We have to learn from our husbands or neighbours instead". According to the District Director of Agriculture, "Lambussie District has 12 operational areas, and each operational area should have one extension agent. However, the district currently has only three agricultural extension officers... We have an estimated 30,000 farmers in the district, so the current ratio is about 1:10,0000 farmers. Meanwhile, the internationally accepted farmer-to-extension officer ratio is 1:500 ". One of the district extension officers remarked that he has over 50 farmer groups to contend with which makes cover very challenging thereby making their services inaccessible to most farmer groups.

Figure 14: Challenges faced in accessing extension services

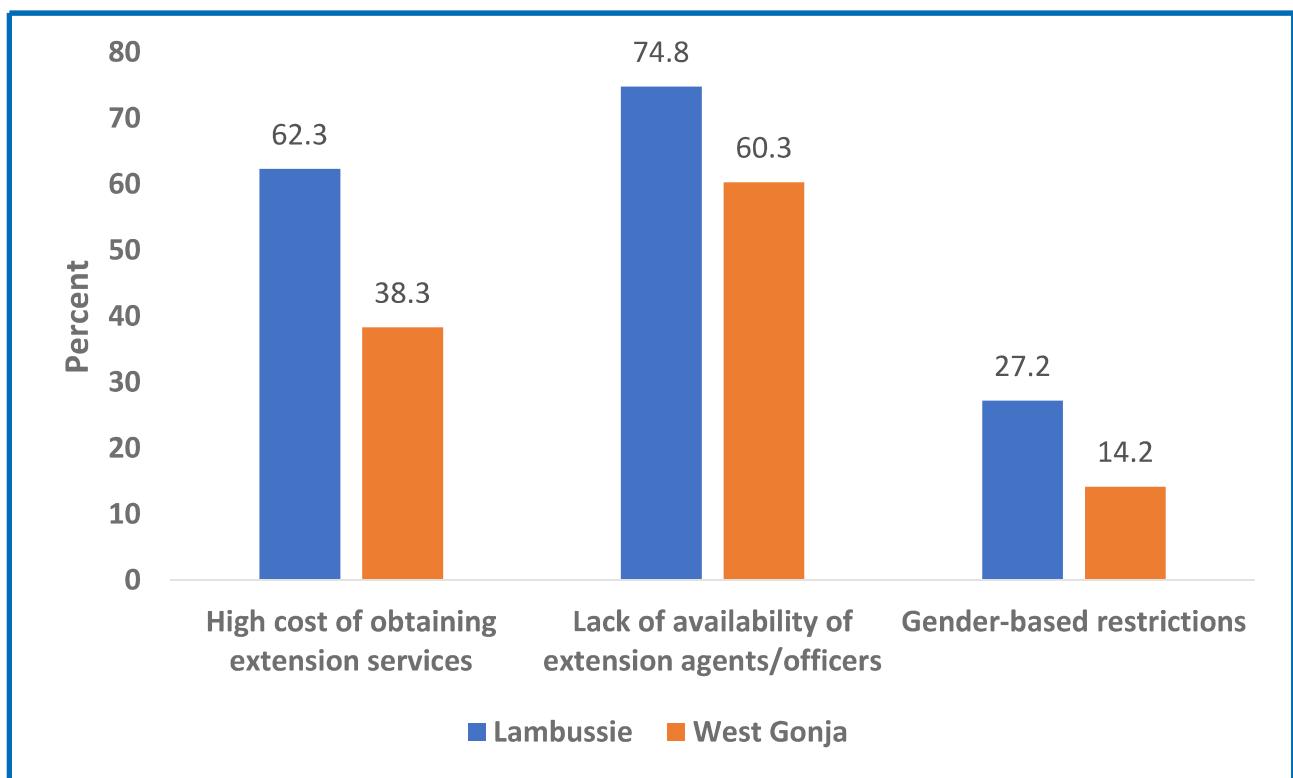


Table 9 provides a summary of the key challenges women in Lambussie and West Gonja face in accessing productive resources. These challenges, drawn from the quantitative data, highlight barriers related to land ownership, access to subsidised fertilisers, mechanised water systems, and extension services. The data underscores the significant financial constraints, limited availability of resources, and gender-based restrictions that hinder women's ability to fully engage in productive agricultural and livelihood activities.

"We do not have meteorological service here, and poor internet connectivity and limited smartphone access prevented farmers from accessing weather forecasts and other climate-sensitive information. During the rainy season, we provide weather information and other general information on agriculture every Friday on a radio station in Damongo. Still, the challenge here is that the information is in English and Gonja, so those who do not speak these two languages are disadvantaged". Another woman in Karni asserted: "We don't have a weather forecast. I belong to several WhatsApp platforms, so sometimes, I get general information about the weather, which is often unreliable".

Addressing these barriers requires targeted intervention to ensure equitable access to productive resources. Strengthening women's land rights, increasing the availability of agricultural inputs, expanding financial support, access to climate sensitive information and enhancing extension services are crucial in improving productivity and economic resilience.

4.3.2 Limited Access to Credit and Financial Services

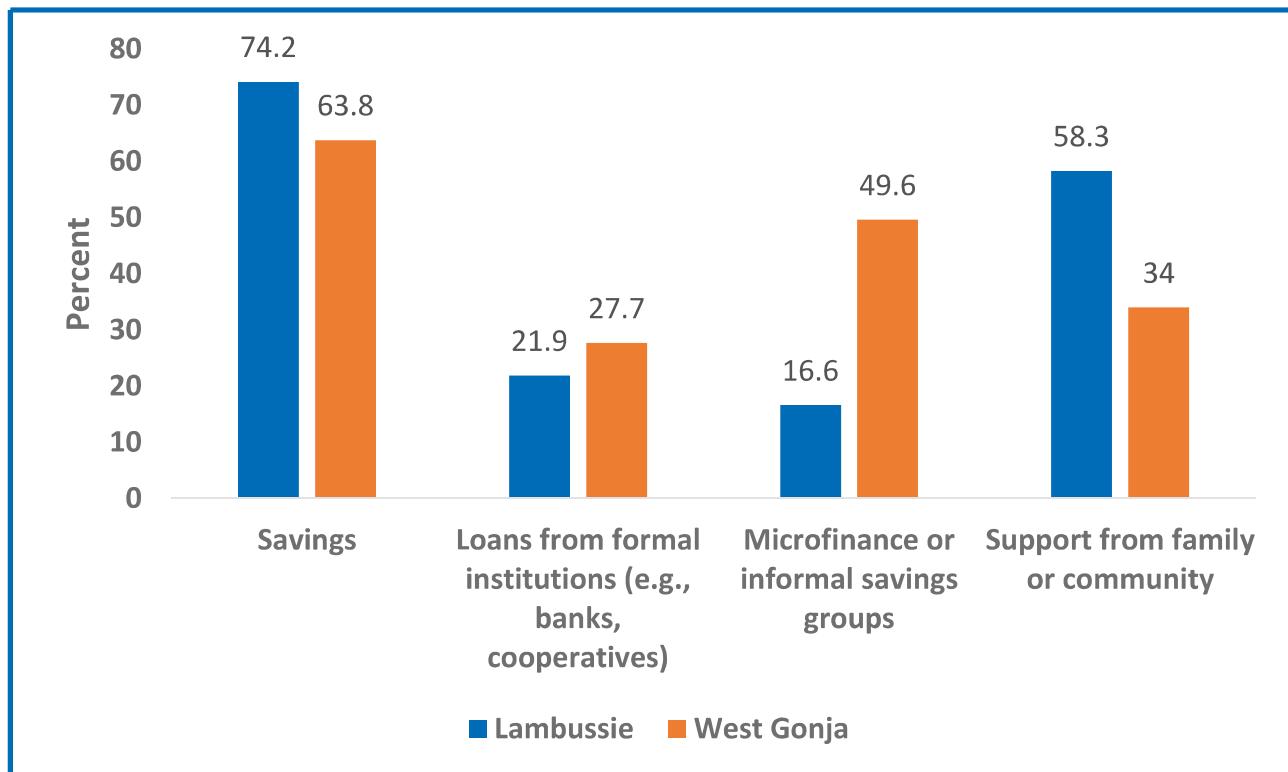
Access to credit and financial services is a crucial enabler of women's economic empowerment, allowing them to invest in business, improve agricultural productivity, and secure sustainable livelihoods. However, many women in Lambussie and West Gonja struggled to secure adequate funding for their economic activities. The findings indicate that women rely on multiple financial sources including savings, loans, microfinance, and family or community support, but each option presents its own challenges. The survey data, as depicted in Figure 15, show that personal savings are the most common financial source, with 74.2% of women in Lambussie and 63.8% in West Gonja relying on their savings to finance farming and other livelihood activities. This finding suggests that many women cannot access formal credit. Loans from formal financial institutions, such as banks and cooperatives, are significantly lower, with only 21.9% in Lambussie and 27.7% in West Gonja accessing bank loans.

The relatively low figures indicate that formal financial institutions remain out of reach for many women, likely because of high collateral requirements, bureaucratic processes, or financial literacy gaps.

Microfinance and informal savings groups are alternative financing options, though their use varies between the districts. 16.6% of women in Lambussie and 49.6% in West Gonja access financial support through microfinance or village savings and loan associations (VSLAs). A higher percentage in West Gonja suggests a stronger presence of microfinance institutions and informal savings networks in that district. However, family and community

support remain critical financial safety nets, with 58.3% of women in Lambussie relying on them compared to only 34% in West Gonja. This finding suggests that women in Lambussie may have stronger social support systems for financial assistance.

Figure 15: Sources of financial support for farming and livelihood activities



Despite these financing mechanisms, women face significant barriers to accessing financial services. The qualitative findings, summarised in Table 10, highlight several challenges.

Table 10: Challenges faced by women in accessing credit and financial services

Challenge	Description	Direct Quotation
Limited Access to Formal Credit	Women struggle to secure loans due to high collateral requirements (e.g., land titles) and stringent application processes.	<i>"The bank asked for land documents before they could give me a loan, but I don't have any land in my name. My husband owns it".</i>
High-Interest Rates on Microfinance Loans	Loans from microfinance institutions are available but have high interest rates, making repayment difficult and sometimes leading to asset loss.	<i>"The microfinance group gave me a loan, but the interest was too high. I had to sell some of my farm produce early to pay back".</i>

Limited Financial Literacy and Business Training	Many women lack financial management skills, affecting their ability to track expenses, manage loans, and reinvest profits effectively.	<i>"I took a loan but didn't understand how to plan my repayments, so I ran into problems".</i>
Gender Bias in Loan Approval	Financial institutions often prioritize men over women for loans, considering men to be more reliable borrowers.	<i>"They gave my brother a loan, but when I applied, they said my business was too small".</i>
Reliance on Informal Financial Support	Due to formal credit constraints, women rely on susu groups, village savings associations, and family contributions , which provide only small amounts of capital.	<i>"I save in a local susu group, but the money I get is not enough to expand my business".</i>

The findings underscore the structural and socioeconomic barriers limiting women's access to financial services. The high cost of borrowing, lack of collateral, and gender bias prevent many women from securing the funding needed to expand their businesses. In addition, limited financial literacy means that even those who access credit often struggle with repayment plans and business sustainability. Addressing these challenges requires expanding financial literacy programs, enhancing access to alternative financing mechanisms, such as microfinance and cooperative loans, and promoting gender-inclusive policies in formal financial institutions. Strengthening community-based savings and credit initiatives such as women-led savings groups could provide women with more accessible and flexible financial support to sustain and grow their businesses.

4.3.3 Gender Biases, Social Constraints, and Household Responsibilities

Gender biases and societal expectations significantly shaped women's economic participation in the study area.

Traditional gender roles often dictate that women prioritise household responsibilities over economic activities, limiting their ability to engage in full-time employment or business ventures.

These social constraints manifest in various ways, from exclusion in decision-making spaces to restricted access to high-income vocational sectors.

The survey data reveal that a small proportion of respondents explicitly acknowledged facing cultural or systemic barriers to livelihood opportunities: 22.5% in Lambussie and 17% in West Gonja. However, deeper structural issues were identified among these respondents, highlighting the significant role of social norms in limiting women's economic participation. Among those who acknowledged cultural or systemic barriers, the majority

identified deep-rooted traditional beliefs favouring men in leadership roles, with 79.4% in Lambussie and 66.7% in West Gonja, citing this as a challenge (Table 10). Additionally, 85.3% of the surveyed women in Lambussie and 87.5% of West Gonja stated that women are expected to prioritise household responsibilities over income-generating activities. These findings suggest that traditional gender roles continue to shape women's engagement in economic activities, particularly in rural settings. A female respondent from Lambussie indicated, "Even if a woman has the skills, she is expected to take care of the home first. If she fails at that, she is seen as irresponsible". Another woman in West Gonja highlighted, "Men dominate most of the businesses here. Even when a woman is capable, people assume she should be at home taking care of the family" These perspectives illustrate how societal expectations discourage women from fully engaging in economic activity or leadership positions.

Beyond household responsibilities, women struggle with limited decision-making power within households and communities. Among those who acknowledged facing cultural barriers, 67.6% of women in Lambussie and 54.2% in West Gonja stated that household structures often excluded them from financial and livelihood-related decisions (Table 11). This restriction affects their ability to start businesses, access credit, or make independent financial choices. One woman from Lambussie explained: "If I want to start something new, I must first convince my husband or my brothers. Even if I have the money, they have to agree". This finding aligns with earlier discussions on land access, in which family and community structures often dictate women's ability to own or use productive resources.

Another significant challenge is the persistence of gender stereotypes that continue to restrict women's participation in high-income sectors. Among those who acknowledged cultural barriers, 79.4% of women in Lambussie cited gender-based stereotypes as a barrier, compared to 37.5% in West Gonja. This suggests that while cultural biases persist in both districts, they may be more deeply entrenched in some areas. A vocational trainer from West Gonja explained: "Women are pushed into catering, dressmaking, and hairdressing because those are seen as 'women's jobs.' A woman will face resistance if she wants to learn welding or mechanics".

Table 11: Cultural barriers to women's economic participation

Barrier	Lambussie (%)	West Gonja (%)
Social norms favouring men in leadership	79.4	66.7
Expectation for women to prioritize household responsibilities	85.3	87.5
Limited decision-making power within households and communities	67.6	54.2
Gender stereotypes restricting women's economic participation	79.4	37.5

Efforts to overcome these barriers must focus on promoting gender-inclusive policies, community awareness programs, and mentorship initiatives to encourage women's participation in diverse economic sectors. Increasing male allyship, advocating for shared household responsibilities, and expanding childcare support are also critical for creating an environment where women can thrive economically. Additionally, integrating gender-sensitivity training into community programs and vocational education can help challenge stereotypes and create more opportunities for women in high-income sectors.

4.3.4 Low Literacy and Inadequate Vocational Training

Limited access to education and vocational training continues to be a major challenge for women, restricting their ability to participate fully in economic activities. Many women in the study area faced educational barriers that prevented them from acquiring the technical skills needed for employment and entrepreneurship. This challenge is particularly pronounced in rural areas, where traditional gender norms, financial constraints, and limited educational infrastructure exacerbate the situation.

Survey findings show that over 38% of women in both districts have no formal education, while only 6% in Lambussie and 3.5% in West Gonja have attained a tertiary education. Similarly, vocational training participation remains low, with only 11.3% of women in Lambussie and 4.3% in West Gonja attending vocational training programmes. These statistics highlight limited access to formal education and skill development, which is critical for economic participation. A respondent from Lambussie described her challenges in pursuing vocational training: "I wanted to learn dressmaking, but there was no school nearby, and my family could not afford to send me to town". This situation presents a significant challenge, as many women lack the foundational skills required to enrol in structured training programs or business development initiatives.

Women face multiple barriers to accessing training, including financial constraints, household responsibilities, and cultural norms. Lack of information about available training programs was the most cited challenge, with 80.1% of respondents in Lambussie and 91.5% in West Gonja stating that they were unaware of training opportunities (Figure 16). This suggests that the communication and outreach efforts were inadequate. The cost of training programs also poses a major challenge, with 64.2% of women in Lambussie and 54.6% in West Gonja unable to afford training fees. Additionally, 40.4% of women in Lambussie and 64.5% in West Gonja reported that training centres were too far from their communities, making participation difficult due to transportation costs. Household responsibilities further limit women's access to training, with 64.9% of respondents in Lambussie and 29.1% in West Gonja stating that family duties prevent them from enrolling in programs. In many households, women are expected to prioritise caregiving and domestic work, making allocating time for skill development difficult. A woman from Lambussie emphasised, "If I leave my home for training, who will take care of my children and the farm?" Cultural and social restrictions also played a role, particularly in Lambussie, where

Household responsibilities	Women's caregiving and domestic roles limit the time they can dedicate to training.	<i>"I cannot leave my children alone to go for training. Who will look after them?"</i>
Cultural and social restrictions	Some communities discourage women from participating in skill development.	<i>"People say a woman who is always out learning is not serious about her home".</i>

The findings highlight that with a substantial percentage of women lacking formal education and vocational training, their access to skill development remains constrained by financial costs, household responsibilities, and cultural norms. The lack of information about training programs and the distance to training centres further exacerbate the situation, preventing many women from acquiring skills essential for business and employment.

Addressing these challenges requires targeted interventions, including improved outreach and awareness, financial support mechanisms, localised training centres, and flexible learning models that accommodate women's responsibilities. Community engagement and advocacy are also crucial for shifting societal norms and encouraging women's active participation in training programs.

4.3.5 Climate Change and its Impact on Women's Livelihoods

Climate change poses a major threat to women's livelihoods in Lambussie and West Gonja, particularly to those involved in agriculture and related economic activities. Unpredictable weather patterns, prolonged droughts, and irregular rainfall have disrupted traditional farming cycles, leading to declining yields, food insecurity, and financial instability.

The survey data indicated that only 27.7% of women in West Gonja and 61.6% in Lambussie reported having access to weather forecasts and rainfall patterns (Figure 17). Further inquiries revealed that farmers previously received weather information through ESOKO, but this service has since been discontinued. In Lambussie, an interaction with the District Agricultural Extension Officer indicated that he provides climate-sensitive and agricultural-related information to farmers once a week through a local FM station in Nandom. However, it is important to note that Nandom is outside the Lambussie district, and language barriers pose a challenge, as not all residents of Lambussie speak English or Dagaare. Similarly, in West Gonja, the Agricultural Extension Officer shared that they also broadcast climate-sensitive agricultural information through local FM stations. However, these programs are conducted in Gonja and English, making it difficult for farmers who do not speak these languages to access critical information. This explains the disparity and suggests that women in West Gonja are at a greater disadvantage when making informed decisions about farming activities.

31.8% of women cited cultural norms as preventing them from attending training.

In contrast, only 4.3% in West Gonja reported this challenge. A participant in Lambussie explained: "Many people here believe that women should not spend time in training programs. If a woman is always out learning, they think she is neglecting her duties".

Figure 16: Main challenges faced in accessing training opportunities

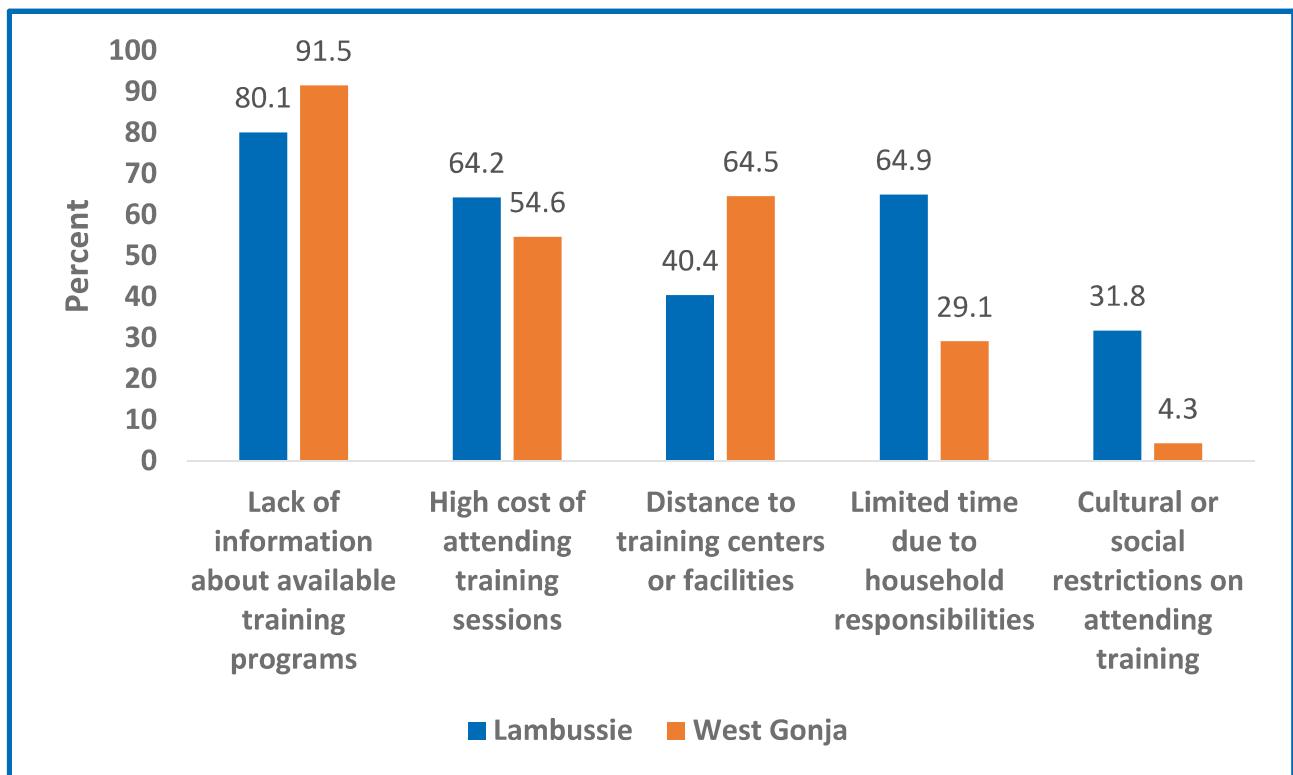
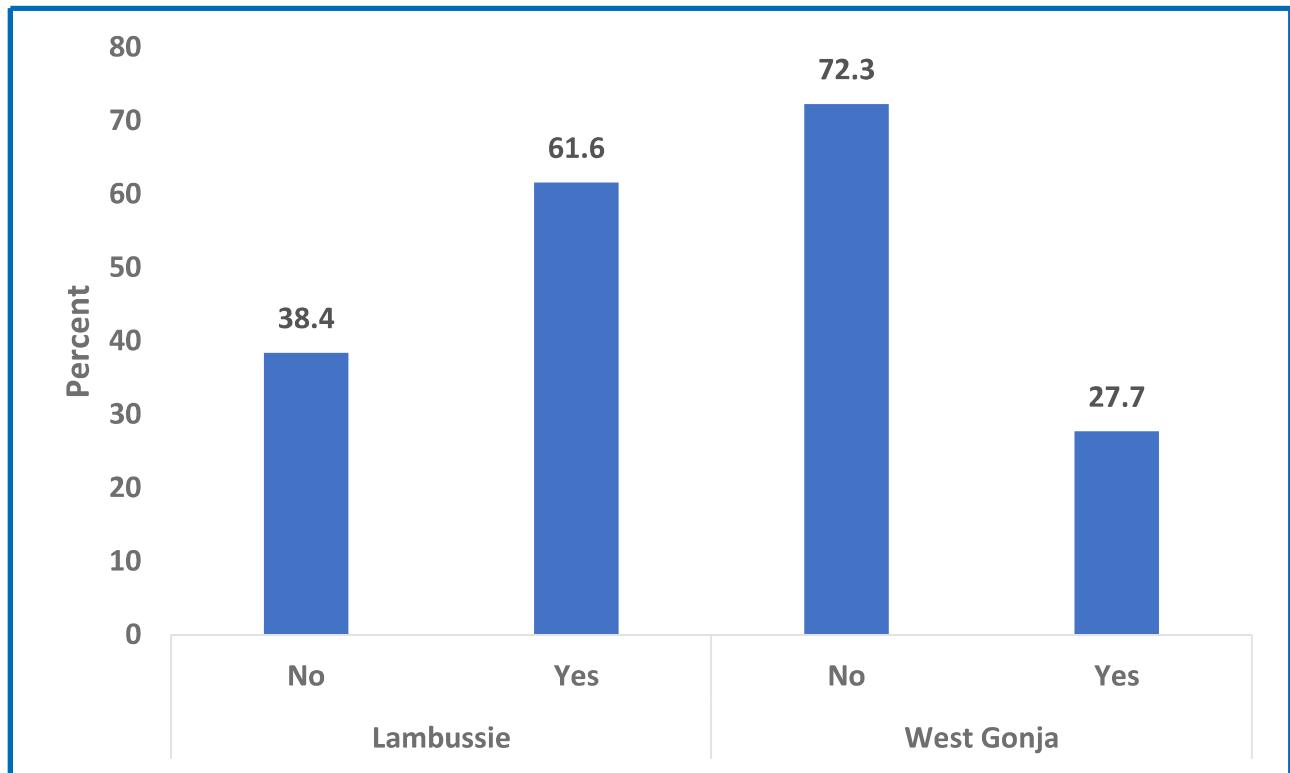


Table 12 summarises the key barriers identified in the qualitative findings.

Table 12: Summary of key barriers to training access

Barrier	Description	Participant Quote
Lack of information about available training programs	Many women are unaware of training opportunities due to poor outreach and communication.	<i>"We only hear about training after it has happened. No one tells us early enough to plan and join".</i>
High cost of training programs	Women struggle to afford fees and related expenses such as transport and materials.	<i>"Even if the training is free, transport money is a problem. I can't afford to travel for training".</i>
Distance to training centres	Training facilities are far from communities, making participation difficult.	<i>"The nearest place to learn dressmaking is over two hours away. How can I go there every day?".</i>

Figure 17: Access to climatological information



Further data revealed that among women who reported difficulties in accessing or using climate information, 62.3% in Lambussie and 59.6% in West Gonja cited a lack of access to reliable sources. Moreover, 60.3% of women in Lambussie and 36.2% in West Gonja struggled to understand technical climate predictions, making the information less useful for their farming activities. In addition, 25.2% of respondents in Lambussie and 29.1% in West Gonja noted that information often arrives too late, limiting their ability to take timely action. One woman in Lambussie shared her frustration: "We rely on our instincts and experience to decide when to plant, but sometimes the rain doesn't come as expected, and we lose everything". Another farmer from West Gonja added: "If we knew when the rain would come, we could prepare better. However, right now, we just plant and hope for the best".

These findings underscore the significant impact of climate variability on women's livelihoods in Lambussie and West Gonja.

Limited access to timely and area-specific climatological information exacerbates vulnerability, making it difficult to plan agricultural activities effectively.

4.4 Gap Analysis and Opportunities for Vocational and Entrepreneurial Growth

A comprehensive analysis of vocational and entrepreneurial initiatives in Lambussie and West Gonja revealed critical gaps and missed opportunities that hinder women's economic advancement. Challenges such as limited access to training programs, inadequate funding, lack of awareness, and cultural barriers prevent women from fully engaging in livelihoods and business opportunities. However, emerging economic trends, innovative training models, and financial support mechanisms offer significant potential to bridge these gaps.

4.4.1 Key Gaps in Vocational and Entrepreneurial Training

Despite the potential of vocational and entrepreneurial training to enhance women's economic participation, several critical gaps hinder their ability to leverage these opportunities in Lambussie and West Gonja fully. These gaps stem from systemic barriers, such as the limited availability of structured training programs, misalignment between existing training initiatives and market demands, and multiple obstacles preventing women from developing skills. This study reveals several gaps in the availability and effectiveness of vocational and entrepreneurial training programs. Quantitative data indicated that 66.2% of respondents in Lambussie and 68.8% in West Gonja cited limited coverage of training programs in their communities. Many existing initiatives fail to reach many women owing to inadequate infrastructure and logistical constraints. A participant from Lambussie remarked: "We hear about training opportunities, but they are mostly in big towns. We do not have vocational centres close by, and travelling is expensive". This statement highlights geographical disparities in training availability, making it difficult for rural women to access formal vocational education. Furthermore, 50.3% in Lambussie and 66% in West Gonja reported that insufficient funding limits the expansion and sustainability of such programs, making it difficult for women to access consistent and high-quality training.

Another major gap is the lack of awareness among women about available programs, with 85.4% in Lambussie and 49.6% in West Gonja acknowledging that they were unaware of vocational and entrepreneurial opportunities in their districts. This finding suggests a communication gap between program implementers and potential beneficiaries, highlighting the need for more robust outreach and engagement strategies. Additionally, 29.8% in Lambussie and 19.1% in West Gonja pointed to cultural and systemic barriers that hinder the successful implementation of these programs, reflecting deep-rooted gender norms that discourage women from engaging in certain economic activities.

The mismatch between training programs and market demand is also a concern. While existing training opportunities focus heavily on traditional trade, they often fail to equip women with skills relevant to emerging industries such as agro-processing, digital entrepreneurship, and sustainable crafts. Many women who participated in the qualitative interviews emphasised that the available training did not adequately prepare them for

programs. Expanding scholarships, fee subsidies, and government-sponsored training programs targeting women can help alleviate this financial burden. Collaboration among government agencies, NGOs, and private sector stakeholders can ensure that more women gain access to structured skill development.

Beyond formal training, informal skill-building mechanisms remain a valuable tool for many women, particularly for those who cannot afford structured programs. Community-based apprenticeships, peer mentoring,

and women's cooperatives provide culturally sensitive learning spaces where women can gain hands-on experiences. The survey findings indicate that a significant number of women acquired vocational skills through informal mentorship or coaching, emphasising the need to strengthen such systems. Women's savings and loan groups, rotating credit schemes, and cooperatives also serve as training hubs in which members learn financial management, entrepreneurship, and investment strategies. Encouraging these community-led initiatives can be a cost-effective way to enhance skill acquisition, while also providing social support networks for women entrepreneurs. A participant from Lambussie highlighted the effectiveness of these informal systems: "I learned how to process shea butter from my mother and other women in the community. We teach each other different methods, and that is how we survive".

Access to financial resources is essential for women to translate their vocational skills into economic opportunities. The findings show that many women rely on savings, informal lending groups, and family support to fund their training and businesses. There is only one rural bank in Lambussie and a couple of commercial banks in West Gonja but according to interviewees "these banks neglect small-scale agro-businesses due to their inherent default risk and business uncertainties surrounding their viability and continuity". Another lady in Hamile said: "We do not have the documents the banks require". Again, another woman in Damongo opined that "the banks argued that the nature and maturity levels of women and youth-led businesses do not meet the target of these banks". Thus, many women rely on the Village savings and loans as formal credit institutions often impose high collateral requirements. Expanding microfinance programs, low-interest loans, and grant opportunities specifically tailored to women entrepreneurs can provide the necessary financial support.

Moreover, public-private partnerships (PPPs) can play a transformative role in enhancing training programs by leveraging corporate resources.

higher-income opportunities. One respondent from West Gonja noted: "I completed a vocational course in dressmaking, but there were too many people doing the same thing. If we had training in modern businesses, we could earn more". This sentiment underscores the need for training programs that align with evolving economic trends and labour market needs.

Many women struggle to balance vocational training with household responsibilities, limiting their ability to enrol in extended training programmes. This is further exacerbated by financial constraints, which make it difficult for them to afford tuition fees or transportation to training centres. Survey data revealed that high training costs and household obligations were among the top reasons women could not participate in skill-development programs. A woman from Lambussie explained: "Even if training is free, I still need money for transport, and I have to find someone to take care of my children". These financial and social constraints prevent many women from acquiring the skills to thrive in competitive markets.

To bridge these gaps, targeted interventions are required to expand access to training, ensure alignment with market opportunities, and reduce the structural barriers to participation. Investments in local training centres, mobile skill development initiatives, and financial assistance for women in vocational training could help close these gaps and create more inclusive economic pathways.

4.4.2 Opportunities in Formal and Informal Sectors

While women in Lambussie and West Gonja face significant challenges in accessing vocational and entrepreneurial training, multiple opportunities exist within both the formal and informal sectors to bridge these gaps. Expanding structured training programs, enhancing financial inclusion, and fostering community-driven initiatives can significantly improve women's economic participation. Strengthening formal vocational and entrepreneurial training programs by increasing accessibility in rural areas is a critical step. Currently, many training institutions are concentrated in urban centres, making it difficult for women to enrol in remote communities.

Establishing satellite training centres or integrating vocational courses into existing schools can ensure that women, particularly young girls, gain early exposure to entrepreneurial and livelihood skills. Additionally, enhancing the quality of vocational curricula to include business management, financial literacy, and digital skills can prepare women for diverse economic opportunities.

Financial constraints remain a major barrier to formal training, as identified in earlier findings. Women in both districts expressed concerns about the high cost of the training

Private companies engaged in agribusiness, handicrafts, textiles, and technology-based enterprises can collaborate with vocational centres to provide sponsorships, internships, and direct employment opportunities for female trainees. A local business owner in West Gonja noted: "If businesses and training centres work together, women can be trained in what the market needs. That way, they can start businesses or even get jobs faster".

Addressing the gaps in vocational and entrepreneurial training for women in the study area requires a multifaceted approach that strengthens both formal and informal training pathways, enhances financial accessibility, and fosters supportive policy and community frameworks. Targeted interventions, such as subsidised training programs, mentorship initiatives, microfinance schemes, and strengthened public-private partnerships, are essential. Additionally, integrating vocational training into formal education systems and ensuring gender-sensitive policies that actively encourage women's participation in male-dominated trade can provide a sustainable pathway for economic empowerment.

Ultimately, unlocking these opportunities will require collaboration between government agencies, NGOs, private sector actors, and local communities to create an inclusive and supportive ecosystem in which women can develop essential skills, access financial resources, and thrive as entrepreneurs and skilled professionals.

A blue-tinted photograph of a diverse group of people, including children and adults, sitting in rows in what appears to be a classroom or lecture hall. They are all looking towards the right side of the frame, possibly at a speaker or presentation. The lighting is soft, and the overall atmosphere is one of attentiveness and engagement.

5. Policy and Programmatic Recommendations

A comprehensive approach is necessary to address the challenges faced by women (especially those involved in farming, vocational, and entrepreneurial activities) in Lambussie and West Gonja. Policy and programmatic interventions must be tailored to these groups to ensure effective solutions. However, past initiatives in Ghana to improve women's access to resources and economic opportunities have faced significant implementation challenges, including limited reach, poor sustainability, and cultural resistance. This section outlines targeted recommendations for enhancing women's access to resources, training, and economic opportunities.

5.1 Enhancing Support for Women Farmers

Access to Land and Secure Tenure: Ensuring that female farmers have secure access to land is essential for their economic empowerment. Policymakers should advocate for legal reforms that strengthen women's land rights, including community-level sensitisation, to challenge cultural norms that limit women's land inheritance. Strengthening land registration processes and supporting community-led land allocation mechanisms can enhance female farmers' tenure security. Despite Ghana's Land Act (2020) promoting equitable land access, enforcement remains weak at the community level due to deep-seated cultural norms. Addressing this gap requires robust community engagement and land governance reforms incorporating traditional leaders in promoting women's land rights.

Agricultural Training, Subsidised Inputs and Climate-Smart Farming Techniques: Expanding access to agricultural extension services is critical for equipping female farmers with climate-smart information and techniques. Programs should incorporate training in sustainable land management, conservation agriculture, and cost-effective irrigation techniques to improve productivity.

Increasing the presence of female agricultural extension officers can also enhance women's participation in such programmes.

Access to subsidised agricultural inputs, such as fertilisers and improved seeds, remains a crucial need for women farmers. Many women in the study districts reported limited access to fertilised land, forcing them to rely on expensive soil improvement techniques. Governments and NGOs should expand subsidy programs to provide affordable fertilisers and high-yielding, climate-resilient seeds to women farmers. Ghana's Planting for Food and Jobs (PFJ) program (2017-2024) sought to provide subsidised inputs but often failed to reach rural women due to distribution inefficiencies and gendered access barriers. Future interventions must ensure equitable targeting of female farmers, simplify procurement processes, and enhance transparency in input distribution.

Financial Inclusion for Female Farmers: Financial constraints remain a major barrier for female farmers. Expanding microfinance initiatives, cooperative-based lending, and gender-sensitive agricultural loan schemes can enhance access to credit for women. It is necessary to encourage financial institutions to reduce collateral requirements and offer flexible repayment terms tailored to seasonal agricultural cycles. While initiatives like the (GASIP) Ghana Agricultural Sector Investment Programme (2015-2021) aimed to improve women's access to agricultural finance, many women struggled with high interest rates and collateral requirements. Future policies should promote alternative financing models such as group lending schemes, asset-based financing, and community savings groups.

Expanding Market Access for Women in Agribusiness: Women farmers require improved access to markets to sell their produce at competitive prices. Establishing market linkages, cooperatives, and digital trading platforms can help women better access markets. Governments and NGOs should facilitate women's participation in agricultural trade fairs and cooperatives that provide collective bargaining power. Government-led market linkages, such as buffer stock initiatives, have often failed to integrate smallholder women farmers. A shift towards cooperative-driven marketing, mobile-based trade platforms, and investment in rural storage facilities is essential to improve market access.

Access to Climate-Smart Information and Technology

Timely and accessible climate information is crucial for women farmers in rural areas to adapt to climate change and make informed farming decisions. Programs should focus on:

- **Leveraging Mobile Technology:** Providing SMS-based weather forecasts, climate advisory services, and agricultural extension information in local languages.
- **Community Radio and Local Language Broadcasts:** Expanding the use of community radio stations to disseminate climate-smart agricultural practices in languages understood by women in Lambussie and West Gonja.
- **Digital Platforms and Mobile Applications:** Partnering with digital service providers such as ESOKO to reinstate climate information services, ensuring women farmers receive real-time updates on weather patterns and market trends.

Water Access (Boreholes, Dams, and Irrigation)

Access to water is a major constraint for women farmers in Lambussie and West Gonja. Many farming communities struggle with unreliable water sources, affecting crop yields and agro-processing activities. Targeted interventions such as constructing boreholes, wells, and small-scale irrigation schemes can help mitigate these challenges. Local training programs on borehole and dam maintenance should be introduced to ensure long-

term functionality. Previous water access initiatives often failed due to poor maintenance culture. Sustainable models should include community ownership, training in water infrastructure maintenance, and partnerships with local government authorities.

5.2 Expanding Rural Vocational Training Centres

Expanding Rural Vocational Training Centres: Vocational training programs in rural areas are limited. Establishing satellite training centres or integrating vocational training into secondary schools can increase access for women. Partnerships between the government, NGOs, and technical training institutions should focus on scaling up programs in remote areas. While Ghana's Technical and Vocational Education and Training (TVET) programs have expanded, rural areas remain underserved. Future strategies should focus on mobile training units and community-based training centres tailored to local economic activities.

Improving Informal Training and Apprenticeship Programs: Informal training remains a key pathway for women to acquire vocational skills. Community-based apprenticeship models should be strengthened through mentorship programmes, women's cooperatives, and local business partnerships. Recognising and formalising apprenticeships with certification programs can improve employability.

Integrating Digital and Financial Literacy in Vocational Education: Digital literacy is essential for vocational skills. Integrating training in digital business management, mobile banking, and online marketing can enhance women's ability to manage and grow their enterprises. Financial literacy programs should also be mainstream in vocational training curricula.

Increasing Scholarships and Fee Subsidies for Women Trainees: Financial constraints hinder many women from accessing vocational training. Expanding scholarship opportunities, reducing training fees, and introducing flexible payment structures could enhance participation. NGOs and private sector actors should collaborate to offer bursaries that specifically target women in underrepresented vocational fields.

5.3 Expanding Entrepreneurial Support and Financial Inclusion

Expanding Access to Business Financing and Microcredit: Women entrepreneurs often struggle to access start-up capital. The expansion of low-interest microloans, grant funding, and financial coaching programs can support business development. Encouraging banks to develop gender-responsive credit schemes that reduce barriers for women entrepreneurs is critical.

Strengthening Mentorship and Business Development Services: Mentorship programs are essential in guiding women through entrepreneurship. Establishing business incubators, networking events, and mentorship programs can connect women with experienced entrepreneurs, who can provide guidance and business expansion strategies.

Facilitating Women's Access to Digital Markets and E-Commerce: E-commerce is a growing sector that offers women entrepreneurs vast opportunities. Training women in digital marketing, online sales platforms, and social media branding can improve their business reach. The government and NGOs should support initiatives that connect rural female entrepreneurs to broader digital marketplaces.

Addressing Legal and Policy Barriers for Women-Owned Businesses: Bureaucratic challenges often hinder women from registering and formalising businesses. Simplifying business registration procedures, providing legal advisory services, and ensuring that government procurement policies prioritise women-led enterprises can enhance business sustainability. Additionally, training women traders on the basic requirements of international trade is essential, particularly for those operating in cross-border commerce.

5.4 Role of Government, NGOs, and Private Sector

Government Policy Frameworks Supporting Women's Livelihoods: Government agencies should strengthen policy frameworks to promote women's economic inclusion. This includes reviewing and enforcing gender-responsive agricultural policies, vocational education reforms, and entrepreneurial incentives to ensure that women benefit equitably.

NGOs' Role in Technical Training and Funding Support: NGOs play a vital role in bridging service gaps, particularly in skill development, financial inclusion, and economic empowerment. Strengthening collaborations between NGOs and government agencies can enhance training programs, funding opportunities, and gender-sensitive economic policies, ensuring that women gain access to sustainable livelihood opportunities. Additionally, NGOs should invest in advocacy campaigns to shift societal perceptions of women's economic roles, fostering a more inclusive environment for female entrepreneurs and workers.

Beyond training, strengthening village savings and loan schemes (VSLAs) is critical for increasing women's financial resilience. NGOs can provide enhanced training for existing VSLAs to improve financial literacy, business management, and investment skills. Furthermore, revitalising collapsed savings groups through targeted capacity-building programs and financial support can restore access to essential community-based financial services.

Private Sector Investment in Women-Led Enterprises: Private sector engagement is critical for creating training, employment, and investment opportunities for women. Encouraging corporate social responsibility initiatives that sponsor women entrepreneurs, provide mentorship programs, and invest in vocational training centres can significantly enhance economic participation.

Community-Driven Solutions for Sustainable Empowerment: Communities must be actively engaged in promoting women's livelihood. Community-based initiatives such as cooperatives, local business associations, and participatory development programs can help women build sustainable economic ventures. Encouraging male allies and traditional leaders to champion women's economic participation is vital for a long-term impact.

A blue-tinted photograph of a group of people, likely students, in a classroom. They are all looking towards the right side of the frame, possibly at a teacher or a presentation. The lighting is somewhat dim, and the overall atmosphere is focused and attentive.

6. Conclusion

This study has provided an in-depth analysis of the various factors influencing women's livelihoods in Lambussie and West Gonja, highlighting their sources of resilience, income-generating activities, vocational and entrepreneurial skills, and the barriers they face in accessing economic opportunities. The findings underscore the critical role women play in agriculture, informal trade, and business development, while revealing systemic constraints such as limited access to land, financial resources, vocational training, and market opportunities.

A key takeaway from this study is that despite numerous challenges, women in these districts continue to demonstrate resilience through community-based support systems, informal vocational training, and entrepreneurial activities. However, strategic interventions must be implemented to achieve sustainable economic empowerment. Expanding access to vocational and entrepreneurial training, increasing financial inclusion, and promoting policies that enhance women's economic participation are crucial in bridging the existing gaps.

This study highlights the need for multi-stakeholder collaboration involving government agencies, NGOs, and the private sector to create an enabling environment that supports women's livelihoods. Strengthening policy frameworks, increasing investment in gender-inclusive economic programs, and fostering community-led initiatives will play vital roles in ensuring that women have equitable access to resources and opportunities. By addressing structural barriers and leveraging existing opportunities, women's economic contributions can be significantly enhanced, fostering not only individual empowerment but also broader economic development in Lambussie, West Gonja, and beyond.

A blue-tinted photograph of a group of people, likely students, in a classroom. They are all looking towards the right side of the frame, possibly at a presentation or a teacher. The lighting is somewhat dim, and the overall atmosphere is focused and attentive.

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