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ASSESSING THE ROLES OF WOMEN IN SMALLHOLDER FOOD PRODUCTION IN EDO STATE, NIGERIA

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ABSTRACT

This study investigates the critical role played by women in smallholder food production enhanced food security in Esan Central and Igueben Local government area of Edo State, Nigeria. Women constitute a significant proportion of the agricultural labour force and also plays a vital responsibility in ensuring food availability, accessibility and utilization within their various communities. However, their contributions are often overlooked and undervalued in policy frameworks and development interventions. The research employs a mixed methods approach, combining qualitative survey like, focus group discussions (FGD) and quantitative surveys to assess the diverse roles women play in smallholder farming and food production. A purposive sampling technique was adopted. Data were collected from women farmers, and community leaders,. Data on; socio- economic characteristics of women farmers, the role they played in local food production and the challenges faced by them Findings from this study revealed that women in the study area played a significant role in smallholder farming such as planting, harvesting and processing of the farm produce into consumable forms which has been contributing immensely to household food availability and income generation. They are involved in the various agri-food systems activities like crop cultivation, livestock rearing, fisheries and agro- processing, utilizing traditional knowledge and modern agricultural practices. However, women encounter numerous challenges, including limited access to land, credit inputs, technology extension services and market as well as cultural and gender-based barriers. The study recommends that targeted training and resources should be provided to enhance women's capacity in agricultural productivity, focusing on areas such as modern farming techniques, financial management, and marketing strategies.

Keywords: Food production, Women farmers, Small scale, Edo State, Nigeria

INTRODUCTION

The role of women in smallholder food production is a vital component of agri-food system development in Edo State, Nigeria. Women play a crucial part in ensuring food security and sustainability, contributing significantly to the production, processing, and marketing of food crops. Despite their importance, they often face numerous challenges, including limited access to credit, technology, and extension services. Additionally, cultural and social norms can restrict their participation in decision-making processes,

hindering their ability to fully contribute to the sector (Okolo, 2018).

In Edo State, women are engaged in various aspects of smallholder food production, processing, and marketing. They are responsible for cultivating crops such as cassava, maize, and vegetables, and are also involved in livestock production. However, their contributions are often underestimated and undervalued, leading to inadequate recognition and support. This study aims to assess the roles of women in smallholder food production in Edo State, Nigeria, with a focus on their contributions, challenges, and opportunities (FAO, 2017). By

examining the experiences of women in this sector, this research seeks to provide insights into the ways in which their participation can be enhanced, and their contributions valued and supported.

In Nigeria, women are the major food producers and are active in production, trade and informal economy, but they continue to be hampered by inadequate access to the right resources and economic opportunities. Their participation in economic and social development is being held back (Enwa Gbigbi, Oyita and Ikenga (2024)). Local food production in Edo State is vital for food security, providing fresh agro commodity produce to both urban and rural communities. However, challenges in this sector directly affect rural women and hinder food production, ultimately affecting the country's economy.

Women play a vital role in local food production, ensuring food availability in rural households where market access is limited. Additionally, their farming activities preserve biodiversity, maintain traditional knowledge and promote sustainable agriculture, (Doss, (2018).).

Women play a critical role in smallholder agriculture and local food production, yet they encounter substantial barriers, including limited access to land, inadequate credit, and insufficient resources, which stifle their agricultural potential and undermine their contributions to the agri-food system in Nigeria (Falola *et al.*, 2020). Please recast the whole of this sentence. Moreover, pervasive gender-based discrimination hampers their decision-making authority and control over resources, while entrenched social norms and cultural practices perpetuate gender inequality, Edeoghon,*et al* (2018).

This study seeks to provide a comprehensive overview of the vital role women play in smallholder- food production, emphasizing their indispensable significance in ensuring food security within the study area Specifically, it aimed to; assess the roles played by them and the specific objectives of the study are to;

- i) Identify the socio-economic characteristics of respondents in the study area
- ii) Assess the roles of women in smallholder food production

- iii) Identify the challenges faced by smallholder women farmers in Edo State

METHODOLOGY

Study Area: Edo State is located in the South-South region of Nigeria with a total area of 19,187 square kilometers. The State capital is Benin City.. It is bordered by Kogi State to the North, Anambra State to the South, and Ondo State to the West (Kehinde *et al* 2021). Its geographical location is endowed with rich and fertile soil making it an ideal location for the cultivation of various food and cash crops. The state's soil is predominately composed of sandy, loam, clay and alluvial deposits, which are suitable for farming. Edo State has a tropical climate with an average annual rainfall of 2,000mm, and a temperature range of 20-30°C creating a favourable condition for crop growth. Some of the food crop commonly cultivated in the study area include yam, cassava, maize, rice, plantain, banana etc. (Enwa and Achoja, 2024). The fertile land and favourable climate of Edo State make it an important agricultural hub in Nigeria, with significant contributions to the country's food security and economy.



Figure 1: Map of Edo State showing the study area (Osadolor, 2001)

Data Collection and Techniques

This study utilized purposive sampling where questionnaire, focus group discussion (FGD) were employed to select 200 female farmers, who were then stratified into three categories based on their production levels; Stratification Criteria: Farm Size, High Production: 80 respondents (40%) cultivated above 3 hectares,3 Medium Production:

70 respondents (35%) - cultivated below 3 hectares and Low Production: 50 respondents (25%) - cultivated below 1.5 hectares respectively. This stratification enabled the examination of differences in experiences, challenges, and perspectives among female farmers with varying levels of scale of agricultural productivity, Folorunso, *et al* (2021).

RESULTS AND DISCUSSION

Table 1 reveals the socio-economic characteristics of women engaged in smallholder -scale farming engaged in local food production in Edo State, Nigeria. Notably, 44.9% of respondents fall within the young adult category (20-30 years), with a mean age of 35. This suggests that younger women are significantly involved in farming activities, supporting (Ayoade, 2009) observation that married, young, and educated women play a vital role in agricultural production

Marital Status: Over half (53.7%) of the respondents are married, indicating marital stability that can foster a stable household environment, which is needed for an efficient farm management and productivity.

Household Size: About 53.7% of households have fewer than five members, with a mean size of six. This large household size can provide family labor, supporting farm operations, (Ayodeji.*et al.* 2021) noted that household size contributes to labor availability, enhancing food security through agro-processing activities.

Educational Levels; The study revealed that 50.2% possess secondary education

While 26.3% \ have tertiary education. This relatively high level of education can facilitate better adoption of modern farming techniques and an efficient management practices of the farm, bolstering productivity and food security Rathnachandra, and Malkanthi, (2021)

Farm Characteristics: This result also revealed that 24.9% of respondents operate farms between 1.51-2.0 hectares, with a mean farm size of 1.3 hectares, indicating relatively smallholder farm sizes that may limit economies of scale but allow for diverse and intensive farming practices.

Mean annual income: The result showed that the mean annual income of women farmers was

₦1,725,000, demonstrating significant economic impact on women farmers' livelihoods, (Aqeela *et al.* 2005).

Access to Support Services: The findings of this study revealed that 60.5% of respondents have access to extension services, providing essential support in farming techniques, pest control, and crop management. Zelda, and Tari. (2023) emphasize the importance of access to economic resources and decision-making processes in empowering women farmers and reducing poverty.

The results in Table 2 illustrates the roles women played in smallholder farming in Edo State. The respondents agreed that women are significantly involved in activities such as planting (= 2.5), bush burning (= 2.5), household chores??? Is this an agricultural based activity? (2.7), harvesting (3.2), marketing of produce (= 3.0), land clearing (= 3.0), and transporting produce to market (= 3.2). These tasks are critical to the agricultural process, highlighting women's indispensable contribution to the agricultural value chain. Their engagement in planting and harvesting underscores their hands-on role in crop production, while their involvement in household chores and marketing points to their dual responsibility in managing both domestic and commercial agricultural tasks. This dual role aligns with findings by Enwa and Achoja (2023), who noted that rural women in agro- processing activities enhance household food security by improving annual income and managing household responsibilities effectively.

However, the respondents disagreed on women's involvement in ridge making for planting (2.1) and tree felling (2.3). This could be attributed to the physically demanding nature of these tasks, which may be traditionally assigned to men. The differentiation in roles reflects the gendered division of labour in agricultural practices. Despite this, the overall active participation of women in various stages of farming and marketing demonstrates their pivotal role in ensuring food security.FAO, 2011. emphasized that rural women's involvement in agriculture significantly improved their food production highlighting that their contributions to food production is crucial in overcoming food insecurity challenges. According to Anuoluwapo and Azeez (2019) empowering women through better access to resources and

reducing physical labour constraints can further enhance their role in agricultural productivity.

The results in Table 3 sheds light on the challenges and constraints faced by women in food production in Edo State, as evaluated by their mean scores. The study showed that women strongly agreed that household chores ($= 3.0$), bush burning ($= 2.7$), harvesting ($= 2.6$), and ridge making for planting ($= 2.8$) pose significant challenges. The high mean scores for household chores and ridge making indicate that these tasks demand considerable time and physical effort, which can be burdensome. This study's findings align with Ayoade et al. (2009), who identified transportation, capital, and farm resources as major constraints for rural women in agro-processing. The challenges of bush burning and harvesting highlight the physically demanding nature of these tasks.

Furthermore, the respondents disagreed on planting ($X=2.1$) challenge, suggesting that this task is more manageable or better supported within their communities. This could be due to community cooperation or more accessible techniques and tools for planting, which reduce its perceived difficulties. As noted by Jirgi, Osegahale, and Okafor, (2021); Ogisi. and Enwa (2024), addressing these challenges requires targeted interventions such as social welfare programs, financial inclusion policies, and empowerment schemes to enhance women's capacity to manage these tasks effectively. The study underscores the need for comprehensive support systems that address both the physical and socio-economic constraints faced by women in food production thereby improving their productivity and overall food security in Edo State.

CONCLUSION AND RECOMMENDATIONS
This study unequivocally highlights the vital role women play in smallholder farming in Edo State, Nigeria. The findings demonstrate that women are indispensable actors in the various agro commodities value chains, contributing significantly to household food security and income generation. Women's active participation in planting, harvesting, marketing, and other critical crops husbandry tasks underscores their hands-on role in production and management. The study also revealed that women's dual responsibility in managing domestic and commercial agricultural tasks emphasizes the need for comprehensive

support systems. Based on the findings of the study, several recommendations can be made to enhance the role of women in small-holder farming in Edo State, Nigeria:

- i. Empowerment through Training and Resources: Provide targeted training and resources to enhance women's capacity in agricultural productivity, focusing on areas such as modern farming techniques, financial management, and marketing strategies.
- ii. Social Welfare Programs and Financial Inclusion: Implement social welfare programs and financial inclusion policies to alleviate household chores and physical labor constraints, ensuring women have access to necessary resources and support.
- iii. Community-Based Initiatives: Establish community-based initiatives promoting cooperative farming practices, shared labor, and knowledge sharing to reduce the workload and physical demands associated with tasks like bush burning, harvesting, and ridge making.
- iv. Policy Reforms and Gender-Sensitive Interventions: Advocate for policy reforms and gender-sensitive interventions addressing the gendered division of labor, ensuring equal access to resources, credit facilities, and decision-making processes, thereby promoting women's active participation in agriculture and enhancing food security.

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Table 1: Socioeconomic characteristics of the respondents

Variable	Percent (%)	Mean	
Age			
20-30years	44.9	35years	
31-40	21.5		
41--50	28.8		
Above 50 years		10	4.9
Marital Status			
Single	74	36.1	
Married	110	53.7	
Divorced/Separated	10	4.9	
Widowed	11	5.4	
Household size (persons)			
Below 5	110	53.7	
6 – 10	33	16.1	6 persons
Above 10	62	30.2	
Educational level			
No formal	15	7.3	
Primary	33	16.1	
Secondary	103	50.2	
Tertiary	54	26.3	
Farm size (Hectare)			
Below 0.5	18	8.8	
0.5 – 1.0	44	21.5	
1.1 – 1.5	48	23.4	1.3 hectares
1.51 – 2.0	51	24.9	
Above 2.0	44	21.5	
Work Experience			
1-5 years	33	16.1	
6-10 years	85	41.5	10 years
11-15 years	59	28.8	
Above 15 years	28	13.7	
Annual Income			
Below ₦1,000,000	85	41.5	
₦1,000,000 - ₦2,000,000	21	10.2	₦1,725,000
₦2,000,001 - ₦3,000,000	69	33.7	
Above ₦3,000,000	30	14.6	
Access to extension services			
Yes	124	60.5	
No	81	39.5	

Source: Author's findings (2024)

Table 2: Role of women in smallholder farming in Edo State

Role of women in smallholder farming	Mean	Standard deviation	Remark
Planting	2.5	1.136	Agreed
Bush burning	2.5	1.266	Agreed
House hold chores	2.7	1.135	Agreed
Harvesting	3.2	0.997	Agreed
Ridge making for planting	2.1	1.099	Disagreed
Marketing of produce	3.0	1.204	Agreed
Land clearing	3.0	0.899	Agreed
Tree felling	2.3	1.055	Disagreed
Transporting to market	3.2	0.853	Agreed

Source: Field Survey, (2024)

Table 3: Challenges and constraints faced by women in food production

Challenges and constraints faced by women in agriculture	Mean	Standard deviation	Remark
Planting	2.1	0.967	Disagreed
Norms/culture	2.7	1.302	Agreed
House hold chores	3.0	1.117	Agreed
Harvesting	2.6	1.376	Agreed
Ridge making for planting	2.8	1.119	Agreed

Source Author's finding