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FAMILY FARMING: A VITAL STRATEGY TO BATTLE HUNGER THREATS AND INCREASE FOOD SECURITY IN DELTA STATE, NIGERIA

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ABSTRACT

Family farming is an agricultural system managed and operated by a family to produce food and rely on family labour to improve the quality of life by promoting dignity, equity, and reducing hunger and poverty. The study looked at family farming as a critical technique for combating hunger and increasing food insecurity in Delta State, Nigeria. The objectives of this study were to: determine types of family farming practiced, identify crops that are planted and harvested by farming family and investigate the impact of family farming on their livelihood. The study's hypothesis was that family farming did not make a major contribution to family food supply. The study used a sample size of 350 respondents; these were selected through multistage sampling procedure. Data were gathered with questionnaires and were analyzed with means, percentages, and frequencies. The findings revealed that respondents increased their home gardening skills in order to combat hunger and enhance food supply for their households, as well as produce a variety of crops. Maize (74.4%) was the most popular crop, followed by cassava (68%), pumpkin (62.9%), medicinal herbs (60%), and yam (58.3%). The hypothesis was tested with Pearson Product Moment Correlation (PPMC) and the result revealed favorable and significant association between family farming and family food supply. According to the study, family farming not only increases the family's food supply but also its revenue. It is so critical to encourage individuals to develop empty plots within and adjacent to their homes for family farming.

KEYWORDS: Family Farming, Hunger Threats, Food Security and Delta State

INTRODUCTION

Family farming generates a substantial amount of the world's food, eradicating rural poverty, hunger, and all types of malnutrition while also managing the preservation and sustainability of natural resources and biodiversity. This is significant since the United Nations Food and Agriculture Organization (FAO) advocates for agricultural transformation in order to combat climate change and assure food security (Kazeem, 2024).. Nigerians have recently expressed worry about the continuous difficulties of hunger caused by inflation and the general increase in the prices of goods and commodities in all states of Nigeria. These issues not only have an impact on individual and family lives, but they also pose substantial challenges to Nigerian households' availability of food and financial sustainability. According to the UN, more than 25 million Nigerians may confront food insecurity in 2024, with 17 million at danger of being hungry, owing to persistent insecurity, protracted conflicts, and rising food costs (Kazeem, 2024).

There is no single solution to global hunger, nor is it simple. We have a wide range of strategies accessible to us, both at the institutional and individual levels, to help eradicate hunger for good. From 1991 to 2014, the globe succeeded to drastically reduce hunger; however, hunger has gradually increased since then. COVID-19's repercussions, which include inflation, violence, the climate crisis, insecurity, and pandemic, have hampered advancement worldwide in the struggle for eradicated

hunger. Although the climate problems are now having higher impacts in low and middle-income countries, the increasingly reliant arrangement of our food systems implies that entire worldwide food system is at risk. A food system is a cycle whereby food is produced, prepared for people to purchase, cooked, and consume. (Ahem, 2021; Udosen, 2021).

The Nigerian government announced state of national emergency for food insecurity due to the critical need to combat food shortages, stabilize rising prices, and safeguard farmers facing attacks from armed groups without addressing the insecurity issues. These have caused farmers to persist in their fight to feed their families and increase food output (Kazeem, 2024; Ukwe, 2025). Uzokwe et al. (2016) categorized 'food security status as food secure, food insecure, without hunger, food insecure with moderate hunger, and food insecure with severe hunger'.

Family farming is an agricultural system managed and operated by a family to produce food and rely on family labour to improve the quality of life by promoting dignity, equity, and reducing hunger and poverty (Reliefweb, 2024). Family farmers are those that understand better the realities associated with cultivating the land, raising livestock, the aquatic and the forests. They can provide the majority of family meals. Family farming played an important part in developing sustainable agrifood systems for families, addressing the effects of food production issues in Nigeria, and

exploring strategies to better assist progress in food security and sustainable development (Reliefweb, 2024). It is appropriate for the government to emphasize investment in families, particularly in technology, which has the potential to dramatically improve small farmers' production capacity and worth of life. FAO's knowledge platform on family farming offers valuable resources and promotes sharing of knowledge. For example, in the Dominican Republic, a new law on family farming and procurement by the government as well as school feeding was developed following the setting up of national action plan for family farming (FAO, 2024). The Delta State government launched the Live and Own a Farm (LOAF) programme in 2004, which aimed to promote young people participation in agriculture and ran for three years, from April 2004 to December 2007. The primary goal of the programme was to motivate Delta State residents to make a living from farming and to increase agricultural productivity (Ovwigbo, 2010). To live and own a farm in Delta State, Nigeria, we can look into opportunities and benefits of the Delta State Government Live and Own a Farm (LOAF) programme and consider focusing on agricultural operations that correspond with the state's strengths, such as maize, oil palm, and cassava cultivation. According to Uzokwe et al. (2016), maize, cassava, legumes, yam, pepper, pumpkin, plantain, banana, cocoyam, sweet potato, okra, green leaves, tomato, water melon, cucumber, spices, medicinal plants, and others are examples of crops that can be grown in home gardens and raised animals for family protein supply. Therefore, the objectives of this study were to: determine types of family farming practiced, identify crops that are planted and harvested by farming family and examine the impact of family farming to their livelihood. The hypothesis of the study was family farming does not significantly contribute to family food supply.

METHODOLOGY

The study was done in Delta State. Delta State is made up of three (3) agricultural zones namely: Delta north, Delta central and Delta south. Delta central agricultural zone was purposively selected for the study due to its vast land mass and agricultural production. Hence, the need to intensify agricultural production in the zone. Delta central agricultural zone has eleven (11) Local Government Areas (LGAs). Out of the eleven (11) LGAs six (6) LGAs were randomly selected namely; Sapele,

Isoko north, Ethiope east, Ughelli north, Okpe and Udu. Proportion random sampling was used to select the number of respondents used in each LGA. These were selected with the use of table of random numbers, which resulted the selection of 71 respondents in Sapele, 70 in Isoko north, 55 in Ethiope east, 60 from Ughelli north, 50 from Okpe and 44 from Udu. This gave 350 sample size. The data for this study were collected with the used of structure questionnaires and interview schedules in where the respondents were not literate in English Language. Information collected was used to achieve the type of family farming practiced by the respondents and crops that are planted and harvested by farming family. Data were organized using frequency counts and analyzed using percentages. The impact of family farming in tackling threats of hunger and supply family food were measured on 4 –point Likert type scale with values of very important = 4, important = 3 less important = 2 and not important = 1. A cut-off point of 2.5 was used to determine important benefits. The hypothesis was tested with Pearson Product Moment Correlation (PPMC).

RESULTS AND DISCUSSION

Types of family farming

Table 1 showed that 64% of respondents preferred farming at the back of their house, 31% owned a farm front of their house, 20.6% cultivated at road side to supply food to their family. 24.2% engaged in farming side of the house to supply their family food. 70 % of the respondents engaged in farming within their community to ensure availability of food to their family. 11% of the respondents reared animals and 2.3% of respondents are engaged in aquatics for sales and for family consumption to meet the protein needs of their family. Majority of the respondents maintained farming on fixed plots. According to the respondents farming information and patterns, it means family production practices are crucial strategy to challenge hunger threats and guarantee family food security all year round but requires intensification in the study area to defeat hunger threats and ensure food security. Hence, there is need for increase family farming advocacy in the study area to defy hunger threats and achieve all year round food production and supply. This corroborates the assertion of Reliefweb (2024) who stated that family farming could provide most of family food and has vital role in building sustainable agricultural food systems to families.

Table 1. Types of family farming practiced

Locations of family farming	Percentage (n =350)
Farming at the back of the house	64
Farming front of the house	31
Farming at road side	20.6
Farming side of the house	24.2
Farming at front and back of the house	11.6
Farming at the edge of the field	12
Farming front, back and side of house	12.6
Farming outside your community	15.5
Farming within your community	70
Farming at other locations	14.5
Livestock production	11
Aquatics	2.3

Source: Field survey, 2025. Multiple responses

Crops that are planted and harvested by farming family

Table 2 results shows that different types of crops are produced by the respondents. The most popular crops from respondents were maize (74.4%), cassava (68%), pumpkin (62.9%), yam (58.3%) and okra (50.8%). This study established that 60% of the respondents planted

medicinal plants that are beneficial to them. This agrees with the affirmations of Zerihun et al (2011) and Uzokwe et al (2016)who stated that household with farms obtain more than 50% of their supply of vegetables and fruits including secondary staples such as plantain, cassava, yam, sweet potato, medicinal plants and others for livelihood sustainability.

Table 2 crops that are planted and harvested by farming family

Crops	Percentage (n =350)
Maize	74.4
cassava	68
pumpkin	62.9
yam	58.3
okra	50.8
Cocoyam	12.6
Sweet potato	9.2
Green leaves	55.2
Tomato	19.6
pepper	50.4
Plantain	40
Banana	18.3
Spices	13.4
Watermelon	10.4
Legumes	46.2
cucumber	10.4
Medicinal plants	60
Others	11

Source: field survey, 2025. Multiple responses applies.

Impact of family farming

Table 3 showed that family farming adds considerably to family food supply (mean=3.71). The study further showed that family consume all they produce from farming (mean = 3.53) Family farming add significantly

to your family income (mean = 3.60). This implies that the respondents sell the surplus after the family food needs had been met to generate additional income for the family. These additional incomes sustain the family for a while and defy hunger threats. Family farming help fills

the pre harvest food gap (mean=4.02). Majority of the respondents owns farms within their vicinity that empowers them harvest crops from their farms before the crops due season. It's highly very important to the respondents as it helps tackle hunger threats and increase family food supply. This corroborates the affirmation by

United Nation Development Programme (UNDP) (2012) in Uzokwe et al (2016) who stated that 'family farming offers direct access to different foods that can be harvested, prepared and fed to family members regularly on daily basis which contributes to family food security and nourishment'.

Table 3. Impact of family farming

Impacts	mean	Std Dev	Rank
You sell some of the produce from your family farms	4.14	1.01	1
Family farming helps to fill the pre harvest food gap.	4.02	0.88	2
Family farming add significantly to your family food supply	3.71	0.87	3
Family farming adds significantly to your family income.	3.60	0.94	4
You consume all the food you harvested from your family farming.	3.53	0.85	5

Source: Field survey, 2025.

Relationship between family farming and family food supply

The effect of family farming to family's food supply and conquer hunger threats shows a significant impact of family farming and family's food supply ($r=0.546$), while the level of benefits is in moderate and significant. This entails that family obtains foods, benefits and income from farming practices and challenge hunger threats by ensuring food availability always at their home. Family

that engaged in farming tends to have moderate hunger threats compare to family without farm produce. Farming family is more food secured and challenge hunger threats at all time. This confirms the assertion of FAO (2024) who stated that family faming provides valuable resources to farming family. This study corroborates the affirmation by Onianwa (2021) who stated that family farming performs a key role in tackling the challenges befalling agrifood production in Nigeria.

Table 4. Relationship between family farming and family food supply

Variable	Family farming	Family food supply
Family farming	1.000	0.546
family food supply	0.546	1.000

Source: Field survey, 2025.

CONCLUSION

This study revealed family farming among the possible answers to hunger threats and increase family food security mainly in the midst of the underprivileged landless rural families in Nigeria. It is widespread for families to cement unused portion of their land inside their compound for aesthetics and weed control as well as leave a little portion for farming. Cementing and interlocking of compound ought to be totally discourage and small parts of land should be demarcated for planting of fruits, vegetables, food crops and medicinal plants in a manner that family sustained increase food supply and defy hunger threats. This practice needs to be made compulsory for every family in Delta State and persuaded by the government using extension services, health workers and community leaders.

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