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#### **Research Article**

# Challenges faced by crop farmers: A survey of subsistent farmers in Kwara State, Nigeria

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## **Abstract**

Subsistence crop farming accounts for 70% of the total food production in Nigeria. However, it is faced with a plethora of challenges. Hence, this study assessed the challenges faced by rural subsistents farmers in Kwara state under four thematic areas: 1. access to Agricultural loans and credit facilities, 2. availability of agricultural inputs, 3. access to a competitive market, and 4. access to information.

This qualitative survey was conducted like a one on one interview with 20 subsistent farmers between January and April 2021 in the three senatorial zones of the state. Results of the study were analyzed as frequencies and percentages.

All of the farmers considered access to agricultural loans and credit facilities as well as unavailability of agricultural inputs as the main challenges and setbacks they face in their farming experience. Access to competitive markets and information was further considered as the secondary challenges encountered.

This study has an overall objective of assessing the impact of the four thematic challenges associated with subsistent crop farming in Kwara state and to profer possible ways to bridge the gap in other to achieve food security in the state. The study reports the impediments of rural subsistence farming in Kwara state while the provision of agricultural credit facilities and subsidized agricultural inputs for subsistent farmers to achieve food safety and security was recommended.

# Introduction

Nigeria with its abundant arable land and over 160 million people, combined with its ability to grow a broad range of agricultural produce can become a leading agricultural power in the continent (FAO). The need to increase agricultural productivity becomes imperative as a result of the ever-increasing population of Nigeria which is projected at over 401 million by 2050 [1].

Despite various efforts geared at improving the agricultural industry -at all levels- across the entire value chain, the much-needed transformation is yet to be perceived. Though much improvement may have been recorded in the last few

decades in the agricultural sector, the sector is still faced with a plethora of challenges, which threatens the survival of the industry. Nigeria is listed by the food and agriculture organization among nations that are unable to meet their food needs due to low level of agricultural production input and appear likely to remain so despite intermediate input between 2011 to 2025 (FAO).

Against all odds, agriculture remains the main source of livelihood and source of employment for millions of Nigerians, and lucrative industry to drive her economy (FAO). As one of the largest food producers in Africa, Nigeria has about 34 million hectares of arable land: 30.3 million hectares on meadows and pastures and 6.5 million hectares for permanent crops [2].

According to the 2016 National Bureau of Statistics report, Kwara state has a population of about 3.586 million. Despite being endowed with abundant natural resources and substantial agricultural potentials, subsistent farmers are faced with enormous challenges whereas, approximately 70% of the Nigerian population engages in agricultural production at a subsistent level [3]. In other to adequately feed this population, several challenges faced by the rural subsistent farmers have to be addressed in a bid to bridge the gap between policymakers and rural subsistent farmers.

However, there's a pulsitty of "qualitative studies" on the challenges associated with subsistence farming in Kwara state. Hence, as the first qualitative survey on subsistence crop farming in the state, this survey aims at evaluating the plethora of challenges faced by subsistence crop farmers under the four thematic areas. These are; access to agricultural loans and credit facilities, availability of agricultural inputs, access to a competitive market, and access to information. The survey will contribute significantly to decision-making as it impacts food productivity and availability.

# Methodology

#### Ethical clearance

Ethical clearance for this survey was granted by the ethical review board of the Kwara State Ministry of agriculture and rural development Reference no KW/OM/E0112. Participants were briefed about the importance of the survey and a written consent form was signed by all participants. Participants were assured of anonymity and utmost confidentiality.

#### Survey methodology

The primary data for this survey was obtained from interviews conducted among 20 subsistent farmers (n=20) between February to April 2021 across the 3 senatorial districts of Kwara state to give a better understanding of the challenges associated with subsistent farming. The study focused on the Kwara central senatorial district having four local governments and 40 administrative wards (n=40) out of which 10 communities were selected using a simple random sampling technique. Two respondents were chosen from each of the selected communities making a total of 20 respondents. Only subsistent farmers (< 3 hectares of land) were included in this survey. The survey instrument has three main sub-sections. Section A obtained information on farmer demographics whereas sections B and C focused on the thematic areas associated with challenges faced by subsistent farmers in Kwara state. The thematic areas included in this survey were: access to agricultural loans and credit facilities, availability of agricultural input, access to competitive markets, and finally access to information. These thematic areas were chosen based on a pilot study conducted by the Kwara Agriculture Network (unpublished).

#### **Data analysis**

Data obtained from this survey were analyzed using Microsoft Excel 2019. Data were summarized as frequencies and proportions.

### Results

#### Respondents demographics

A total of 20 subsistent farmers were included in this survey spanning various tribes across the three senatorial districts of Kwara state. The subsistent farmers have a wide variety of crops cultivated including vegetables, maize, cassava, cowpea, and soybean Table 1.

The result of the survey revealed how the four major thematic areas impede the growth and productivity of subsistent farmers in Kwara state. These thematic areas are access to loans and credit facilities, availability of agricultural inputs, access to a competitive market, and access to information.

Farmers aged 18-25 (10% n=2) preferred the ease of access to loans and credit facilities and subsidies on agricultural inputs to availability of markets and access to information. This is because farmers in that age bracket incur more expenses on the cost of labor due to low family size unlike farmers with the age range of 25-30 (35% n=7) and those aged 31-35 (45% n=9) with a family size of 3-5 dependents (15% n=3) and 5-10 (75% n=15) respectively.

Since most rural subsistent farmers source labor from households, the size of the family (number of dependents) becomes a major comparative advantage to the farmer. The households of subsistent farmers play a significant role in the production, processing, storage, transport, and marketing of

Table 1: Demographic structure of study participants (n=20).

Variable	Frequency (%)
Age (years)	
18-25	2(10)
25-30	7(35)
31-35	9(45)
>35	2(10)
Number of dependents	
<3c	0(0)
3-5	3(15)
6-10	15(75)
>10	2(10)
Size of farm	
0-1 hectare	9(45)
2-3 hectares	11(55)
Monthly allowance	
<50,000	8(40)
50,000-100,000	10(50)
>100,000	2(10)
Highest level of education	
Primary	2(10)
Secondary	12(60)
First Degree	6(30)
Others	0(0)

food crops and livestock. Although, farmers with relatively large family sizes (number of dependents) tend to spend more on their livelihood thereby reducing their monthly income to an average of #50,000-#100,000 monthly.

However, farmers with 2- 3 hectares (55% n=11) with several dependent > 10 was reported to have the highest yield and returns on sales with a monthly income > #100,000 (10% n=2) while farmers with 3-5 dependents (family size) and a farm size of 0-1 hectares have the lowest yield of < #50,000 (40% n=8) monthly.

Meanwhile, the result of the survey identified access to agricultural loans and credit facilities as the major challenge impeding subsistence farming in Kwara state rated at about 91% whereas availability of agricultural inputs was rated at 72%. Other factors including access to a competitive market and access to information were rated 63% and 61% respectively.

To cushion these effects, 65% (n=13) of the farmers advocated for subsidies and incentives on quality seedlings and fertilizer, while 20% (n=4) and 15% (n=3) opined and encouraged prompt access to loans and flow of access to information respectively.

#### Discussion

The result of the survey revealed that most of the respondents (90%) were affected by at least 3 of the four thematic areas considered in this survey. This was a result of the similarities in the major farming practices of the farmers. The survey highlighted the basic impediments of the smallscale farmers under four thematic areas. Due to the absence of qualitative data on the subject matter in the state, it was difficult to get studies to compare our results with. However, Eze, et al. [4] asserted that agricultural financing is a key driving force for sustainable agricultural production and has to be improved to sustain subsistence farming in most African countries. Developing reliable strategies to ensure timely access to quality seedlings, fertilizers, and chemicals -as suggested by study respondents- as well as providing links to most competitive markets for rural subsistence farmers and creating a sustainable pathway to information dissemination among the geographically marginalized individuals especially farmers in rural areas will go a long way in enhancing productive subsistence farming in Kwara state. This is similar to the report of Misaki, et al. [5 and Maiangwa, et al. [6]who assert the significant role of access to information, market availability, and access to quality inputs in sustaining smallscale food production.

#### Access to agricultural loans and credit facilities

The importance of agricultural loans and credit facilities to small-scale subsistence farmers cannot be overemphasized (Osabohein, et al. 2020). About 65% of rural dwellers in Kwara state between the ages of 23-36 are not actively engaged in Agriculture due to poor access to loan and credit facilities [4]. This survey revealed that most farmers had difficulty accessing loans either from government schemes or financial institutions.

This could be due to the bureaucratic structure of many loan/ credit facilities, lack of collateral, high interest rates, illiteracy, and unfavorable governmental policies [7].

According to the farmers: "loans are unavailable to us since the banks know we (subsistent farmers) don't have the collateral needed to obtain the loans facilities, we resulted to forming cooperatives in other to maintain a livelihood and support members with small grants for basic farming operations. This has been our way for a long time after lots of attempts proved abortive".

Though 30% (n=6) never applied for any credit facilities thus far, most farmers believed that "loans are unavailable or difficult to access for small scale farmers due to lack of collaterals and risk associated with agricultural operations especially perennial cropping." Some farmers also opined that "loans are not readily available to individual farmers but better accessed by a cluster or group in which lack of coordination, conflicting interests, and corruption often distorts the structures and organization of such clusters (cooperatives)".

Others believed that "governmental policies are not flexible enough to accommodate small scale subsistent farmers into many agricultural loans and credit facility schemes in Nigeria and demands for the formulation of better policies to incorporate subsistence farmers".

Proper financing of the subsistence farming system will not only ensure -to a great extent- food security but also stabilize the prices of much agricultural produce [7].

#### Availability of agricultural inputs

Agricultural inputs include certified seedlings, pesticides, herbicides, and fertilizers [6]. The unavailability and often time high costs of these inputs hinder the productivity of the subsistence farmers thereby leading to food scarcity and food poisoning. Access to quality seedlings -for instance- is a major determinant of crop yield in agriculture. Despite various cultural and agronomical practices, the use of fewer quality seedlings is reported to be the greatest cause of low productivity especially in staple foods [8]. Complimentarily, fertilizers are used to boost/enrich the nutrient content of the soil to improve the overall crop yield. In Nigeria today, a bag of fertilizer costs between #12,000- #15,000. This has made it unaffordable to most subsistent farmers.

In Kwara state, the government provides subsidized agricultural inputs to farmers. However, these inputs do not get to subsistent farmers due to logistic challenges and corrupt practices by some stakeholders involved. At times, the influence of middlemen cannot be overemphasized. Here, the middlemen purchase the subsidized inputs and get to sell them in retail to small farm holders at the market price or even more, where the fertilizers are unavailable. Hence the subsistent farmers still procure these inputs at a very high cost.

In the farmers' opinion: "certified seedlings and fertilizers often scare farmers away due to the high prices (especially with recent high inflation) and thus, we (farmers) resulted

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to the use of manure and the locally available seedlings without considering the yield and productivity. With this, our expectations are rarely met, our outputs reduced, and consequently, we had to increase food prices".

All of the farmers agitated for subsidies and incentives on agricultural inputs especially seedlings, chemicals, and fertilizer. Most of the farmers (75%, n=15/20) believed that: "Demand for agricultural loans will be reduced as most farmers source labor from their immediate households. Other indicators such as the cost of herbicides/insecticides and farm labor often constitute a secondary challenge in financing subsistence farming operations [9].

#### Access to competitive market

One of the duties of the government is the regulation of market prices of foodstuffs (farm produce) through favorable agricultural price policy, prudent agricultural market reforms, and agricultural produce promotion policy [10].

"The aim of selling our farm produce is to attract income to maintain ourselves and fund subsequent farming operations and this can only be achieved with a healthy competitive market". This was the viewpoint of 95% of the farmers (n=19). Though, most respondents (75% n=15) stated lack of farm market produce as a major challenge affecting subsistence farming, lack of a favorable pricing regulation often affects sales of their farm produce. Others (25% n=5) lamented the high cost of transportation from farms to the urban markets due to poor road networks/linkages, the situation of farms in remote areas, and the low quantity of transported produce. These often leave the farmers no choice but to sell to off-takers willing to buy at ridiculous prices.

Lack of processing facilities and storage mechanisms for crop harvest especially perishable goods also affects the sales and marketing of many farms' produce even at a subsistence scale. Since the quantity of produce is not comparable to a commercial-scale farming system and due to the low purchasing power of most subsistent farmers, getting a timely market for farm produce upon harvest is oftentimes difficult. They are either posed the risk from post-harvest losses or poor price negotiations with off-takers.

Some farmers posited that; "most markets are unfavorable to rural farmers with a low yield of farm produce because middlemen often want to purchase below the cost of production not minding the laborious efforts of the farmer or his household. Where farm produces are left for days, perhaps weeks and months, we are forced to sell at an unfavorable market fearing risks of losses due to spoilage and predators."

This survey identified monopoly factors, middlemen constraints (unhealthy off-taking scheme), bad market tactics, and ineffective and or lack of price regulations as major constraints in the most available market.

Competitive and accessible markets will not only improve the livelihoods of rural subsistent farmers but also encourages them to ensure continued food production [11].

#### **Access to information**

Information has received quite a range of acceptance as an essential component of this century [12]. Information on crop production and protection, agroforestry, pest and disease control, fertilizer availability, market prices, improved seed varieties, technological advancement, rainfall gauge, agricultural credit facilities are all vital in subsistence farming [12,13]. Farmer's access to first-hand information about various developments in the agricultural industry will increase their productivity. This survey was able to highlight the importance of information to subsistent farmers.

According to the farmers "when we are unaware of the ongoing agricultural credit facility schemes, subsidized inputs, and fertilizer initiatives, sensitization and training programs, we are bound to remain ancient in production practices and hence there will be no growth of subsistence farmers"

Most of the respondents (95% n=19) believed that there's a communication gap between the city and rural subsistent farmers and this has resulted in the poor orientation of the latter on agricultural developments and technologic advancements.

The poor impact of extension agents/officers was reported to be a barrier for information dissemination amongst rural subsistent farmers. Most of the extension agents were reported to be ineffective and not diligent in delivering their mandates. In other cases, government programs and initiatives are oftentimes not structured well to accommodate rural substance farmers. In cases where the design phase accommodates a target group of the said farmers, most of the goals and objectives are not usually met at the implementation phase due to poor monitoring and evaluation strategies.

However, all the farmers believed that the four thematic areas evaluated in this study were key challenges impeding subsistence farming. This study corroborates Okoruwa et al., (2020) [6] who reported that the problems confronting subsistence agriculture are multi-dimensional and, in fact, numerous.

#### Conclusion

This study reports the challenges associated with subsistence farming in Kwara state. It can be concluded that most rural subsistent farmers have little or no access to credit facilities and loans to run their basic farm operations despite the high cost of inputs and fertilizers. Even in cases of subsidies and government intervention programs, ineffective communication between the government or its agencies and the rural farmers often pose a great challenge to benefitting from most programs. Unavailability of a competitive market due to ineffective price control systems often reduces farmer's income thereby reducing the productivity of the next season. This poses a high risk to food security and accessibility.

It is recommended that financial institutions should be more flexible in their policies to accommodate subsistence farmers into various credit facility schemes. It is also recommended that youth-led organizations and non-profit groups should coordinate with the government in facilitating training and on-field demonstrations to show the latest technological advancement and yield of improved seedlings to rural subsistent farmers. Also, there should be concerted efforts by the government to increase farm income through rural infrastructure development and interventions.

#### **Declarations**

Author contributions: Authors participated equally in the study. All authors reviewed and accepted the final version for submission.

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