



## Problems and Prospects of Subsistence Agriculture among Peasant Farmers in Rural Area

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### Article History

Received: April 21, 2020

Revised: June 28, 2020

Accepted: July 27, 2020

Published: July 31, 2020

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### Abstract

Agriculture has been the major source of livelihood in Nigeria, primarily because the environment is favorable for Agricultural practice. On the basis of climate, topography and vegetation the country is divided into five agricultural zones, namely Dry sub humid, Sub-humid, very humid and swamp/flood. Subsistence agriculture formed the major system of farming in the olden days which provide food crops for human consumption, while surplus are transported to the local markets for sale. Subsistence agriculture also forms the basis upon which all other system of farming are built. Hence, this paper examines the problems and prospects of subsistence agriculture in Ibarapa East local Government Area of Oyo State. Ten farming centres were used as samples in the area. Questionnaires were used to collect relevant data. Percentage and T-test distribution techniques were used to analyze the data. The findings show that there is low agricultural production in the study area as a result of problems such as shortage of fund, land tenure system, inadequate transportation system among others.

**Keywords:** Agriculture; Rural area; Subsistence; Climate; Development.

### 1. Introduction

Agriculture is the backbone of Africa's economy. About 70% of Africans and roughly 80% of the continent's poor live in the rural areas and depend mainly on agriculture for their livelihood. The sector accounts for about 20% of Africa's GDP (Economic Commission for Africa, 2007), 60% of its labor force and 20% of the total merchandise exports. Agriculture is the main source of income for 90% of rural population in Africa. Agriculture represents a great part of the Africa's share in world trade. On the list of 20 top agricultural and food commodity importers in 2004, 60 % are from Sub-Saharan Africa. African countries represent also 50% of top 20 countries, in terms of the Share of total agriculture/ total exported merchandise in the world (Economic Commission for Africa, 2007).

The bedrock of agriculture and agricultural development in developing countries of sub-Saharan Africa is rural development, without which all efforts at agricultural development will be futile. A large majority of the farmers operate at the subsistence, smallholder level, with intensive agriculture being uncommon. A characteristic feature of the agricultural production system in such countries, Nigeria inclusive, is that a disproportionately large fraction of the agricultural output is in the hands of these smallholder farmers whose average holding is about 1.0-3.0 hectares (CTA, 2000). Also, there is very limited access to modern improved technologies and their general circumstance does not always merit tangible investments in capital, inputs and labour.

Strengthening of national agricultural support system has been advocated as a strategy for increasing agricultural production in Sub-Saharan Africa by governments in the region and by international development agencies. Agriculture places heavy burden on the environment in the process of providing humanity with food and fiber, while climate is the primary determinant of agricultural productivity (Apata *et al.*, 2009). The fundamental role of agriculture in human welfare, concern has been expressed by federal agencies and others regarding the potential effects of climate change on agricultural productivity.

Agriculture has been neglected over the years despite various formulated policies intended to enhance productivity because of failure to implement those efficiently, effectively and appropriately. In subsistence agriculture, there is less or low storage facilities as the production is often mainly for immediate family consumption. Again, only a few agricultural products could be stored for a long period of time.

Agricultural sector is the largest provider of employment in the rural area, producing the bulk of food for the country. Meanwhile, productivity is low and poverty is high due to lack of basic infrastructure, such as rural roads, transportation facilities, and other social amenities. Farmers suffer from high cost of mobility and input availability. Most of the time farmers walk long distances from their place of residence to their farm locations. These daily

journeys to the farm location, with its implication on farmer's health and security, could result in low agricultural productivity

Agriculture since the colonial era has therefore contributed greatly to the general economic stability of Nigeria and various governments have continued to encourage agriculture through various programmes. According to Njoku (1999), about 70% of the Nigerian workforce is employed in agriculture. Nigerian agriculture structure is composed of smallholder farms and the middle-scale farms which employs over 82% of the Nigerian food supply. Despite this, Onuekwusi and Okorie (2008) however reported a low performance of agriculture in Nigeria especially in the recent years. Several authors attributed this situation to a number of factors which among others include: lack of youths adequately trained in agriculture taking up farming as a career to replace the old and the ageing farmers, low esteem of agriculture attributed to the school curriculum and prescribed examination, which tend to be theoretical with emphasis mainly on learning (Olaitan and Uwadiae, 1993; Olusanya, 1990; Solarin, 1963).

Agriculture contributes immensely to the African economy in various ways; namely, in the provision of food for the increasing population; supply of adequate raw materials to a growing industrial sector; a major source of employment; generation of foreign exchange earnings; and, provision of a market for the products of the industrial sector among others. Basically, there are factors affecting the harvest of peasant farmers, they are; inadequate capital, land tenure system, climatic factors, pests and diseases e.t.c. All these factors makes the harvest of the peasant farmer to be low, and it limits their expansion. Babajide (2003), in his research on the availability of capital for agricultural purposes. He observes that shortage of fund forms the major agricultural problem. According to him, the availability of capital will help farmers to embark on mechanized and plantation farming. It is through capital, that all needed agricultural inputs can be acquired e.g. improved seedlings and crop varieties, modern agricultural implements e.t.c. More so, he still opined that, there is inadequate extension services e.g. ADP, DFRRI, OSADEP e.t.c. He further explained that, the inadequacy of extension services to reduce rural men on the merits of use of modern tools does not bring about but the growth in agricultural sector. However, with the improvement in science and technology, mechanization of agriculture become more valuable system to boost agricultural production. This system helps to increase both quantity and quality of agricultural productions. In spite of the modern implements, brought into farming, many farmers especially in developing countries like Nigeria still stick to the use of crude implements for farming, as a result of inadequate capital to embark on a large scale farming such as mechanized farming and plantation farming.

It was confirmed by Raimi (2003) that poor roads that links farming areas to local markets and urban areas where agricultural products can be marketed profitably and at a larger scale reduces the level of agricultural production in Nigeria. He also stressed that poor or inadequate water supply and unstable power supply also forms another problem plaguing agricultural production, there should be adequate infrastructural facilities like roads, water supply and electricity. Hence the objectives of this study are: to find out major problems of subsistence agriculture in the study area; to determine the effect of these problems on the socio-economic and food production in study area and to find out the prospects, remedies to the problems confronting the study area.

## 2. Materials and Methods

The study was carried out in Ibarapa East local Government Area of Oyo State. Ibarapa East falls within latitude 7°15'N and longitude 3°00'E and 3°30'E. The area is bounded in the north by Iseyin Local Government Area, to the east by Iddo Local Government, to the west by Ibarapa North and Central while the areas are bounded in the south by Ogun State. Based on the latitudinal location of the area, it is found within the tropical hinterland climatic belt, with annual rainfall between 1500mm and 2000mm, relative humidity is over 80% in the morning and falls between 50% and 70% in the afternoon. The mean annual temperature is 27°C and annual temperature range is 18°C. The major occupation in the area is farming which is mainly subsistence in nature (Oladapo *et al.*, 2008).

Structured questionnaire as well as personal contacts was used to gather data from the selected farm centres. Two hundred (200) questionnaires were distributed randomly to the 10 selected communities in the local government. Data obtained from the questionnaire forms were subjected to analysis using frequency counts and percentages.

## 3. Results and Discussions

Table-1. Subsistence Agricultural impacts on availability of fund in rural area

| Farming Centres | Yes Frequency | % of Yes | No Frequency | % of No | Total of % |
|-----------------|---------------|----------|--------------|---------|------------|
| Maya            | 14            | 7%       | 6            | 3%      | 10%        |
| Temidire        | 16            | 8%       | 4            | 2%      | 10%        |
| Salako          | 18            | 9%       | 2            | 1%      | 10%        |
| Owode           | 18            | 9%       | 2            | 1%      | 10%        |
| Gaadi           | 20            | 10%      | 0            | 0%      | 10%        |
| Lagaye          | 18            | 9%       | 2            | 1%      | 10%        |
| Atio            | 16            | 8%       | 4            | 2%      | 10%        |
| Opoogede        | 20            | 10%      | 0            | 0%      | 10%        |
| Akeete          | 18            | 9%       | 2            | 1%      | 10%        |
| Alapa           | 20            | 10%      | 0            | 0%      | 10%        |
| Total           | 90            | 89%      | 10           | 11%     | 100%       |

Source: Field Survey, 2020

The above table shows the relationship between the level of agricultural production and the availability of fund in the study area. It is clearly shown that most farmers suffers from the shortage of fund as shows that 89% of the respondents taken the larger percentages represent the responses of those support non-availability of fund and 11% taken those who supports the availability of fund for farmers in the study area. This envisaged that farmers are suffering from inadequate capital and infrastructure for their farming activities. Therefore, as a result, the numbers of farmers that have access to modern implements and improved seedlings are very minimal. In other words, farmer of the study area are suffering from inaccessibility to credit facilities or loans. Technology, in addition, can also be possible, if there is enough capital to fund project. The personal interview conducted by the researcher shown that association of farmers such as co-operative societies e.t.c. are also weak in the study area.

**Table-2.** Effects of Climate on Agricultural Development in Rural Areas

| Farming Centres | Yes Frequency | % of Yes   | No Frequency | % of No    | Total of %  |
|-----------------|---------------|------------|--------------|------------|-------------|
| Maya            | 12            | 6%         | 8            | 4%         | 10%         |
| Temidire        | 10            | 5%         | 10           | 5%         | 10%         |
| Salako          | 14            | 7%         | 6            | 3%         | 10%         |
| Owode           | 18            | 9%         | 2            | 1%         | 10%         |
| Gaadi           | 16            | 8%         | 4            | 2%         | 10%         |
| Lagaye          | 10            | 55         | 10           | 5%         | 10%         |
| Atio            | 8             | 4%         | 12           | 6%         | 10%         |
| Opoogede        | 12            | 6%         | 8            | 4%         | 10%         |
| Akeete          | 14            | 7%         | 6            | 3%         | 10%         |
| Alapa           | 12            | 6%         | 6            | 4%         | 10%         |
| <b>Total</b>    | <b>128</b>    | <b>64%</b> | <b>72</b>    | <b>36%</b> | <b>100%</b> |

Source: Field Survey, 2020

Table 2 shows that relationship between climatic condition and agricultural production in percentages. 64% of the responses support the favourable climatic condition for the growth of crops in the study area. And 36% of the respondents support otherwise. It is obvious from the above tables that the relationship between the climatic condition and agricultural production is a strong one. Rainfall as a climatic factor is a major determinant of planting or growing season. The absence or inadequate of rainfall in the early planting period would lead to delay in planting, and later compel the farmers to have low yield in their agricultural produce. Extreme rainfall conditions characterized by droughts and floods can have devastating impacts on rural household's engaged in agricultural production, especially in low-income regions around the world. The absence of access to financial services by these households implies that they cannot mitigate the short-run effects of adverse weather conditions (Abdulraheem *et al.*, 2017; Deschenes and Greenstone, 2007). Another considerable fact is drought during the dry season. A prolong drought many affect crops, crop leaves would be dried for crops as a result of insufficient water in the ground to sustain the growth of crops. Other factor that can also responsible for low yield in the study area may include sunny period or sunshine for ripening of grains and wheat e.g. Guinea corn.

**Table-3.** Impact of Farm Implements on Agricultural output in Rural Areas

| Farming Centres | Yes Frequency | % of Yes   | No Frequency | % of No    | Total of %  |
|-----------------|---------------|------------|--------------|------------|-------------|
| Maya            | 12            | 6%         | 8            | 4%         | 10%         |
| Temidire        | 10            | 5%         | 10           | 5%         | 10%         |
| Salako          | 6             | 3%         | 14           | 7%         | 10%         |
| Owode           | 0             | 0%         | 20           | 10%        | 10%         |
| Gaadi           | 8             | 4%         | 12           | 6%         | 10%         |
| Lagaye          | 4             | 2%         | 16           | 8%         | 10%         |
| Atio            | 10            | 5%         | 10           | 5%         | 10%         |
| Opoogede        | 2             | 1%         | 18           | 9%         | 10%         |
| Akeete          | 8             | 4%         | 12           | 6%         | 10%         |
| Alapa           | 6             | 3%         | 14           | 7%         | 10%         |
| <b>Total</b>    | <b>66</b>     | <b>33%</b> | <b>134</b>   | <b>67%</b> | <b>100%</b> |

Source: Field Survey, 2020

The relationship between the level of agricultural production and type of implements in use in the study area is depicted in percentage the table 3 above. Majority of the respondents 67% oppose the use of modern farm implements use of modern farm implements with only 33% that support that the farmers using crude implements in the study area. The analysis above discloses the greater number of farmers that have no access to modern farm implements such as planter, plough, ridger, sprayer e.t.c .in other words, the number of farmer that have access to machineries are so, infinitesimal. The major impeding factor may be lack of adequate capital for farmers of the study area to acquire those needed machineries and equipments.

More over, other factors that may account for the refusal of using machineries, and modern farm equipments in the study area may include land tenure system, small land area per farmer, topography of land. e.t.c.

**Table-4.** Outbreak of Pests and Diseases on Agricultural Development in Rural Area

| Farming Centres | Yes Frequency | % of Yes | No Frequency | % of No | Total of % |
|-----------------|---------------|----------|--------------|---------|------------|
| Maya            | 20            | 10%      | 0            | 0%      | 10%        |
| Temidire        | 16            | 8%       | 4            | 2%      | 10%        |
| Salako          | 12            | 6%       | 8            | 4%      | 10%        |
| Owode           | 14            | 7%       | 6            | 3%      | 10%        |
| Gaadi           | 20            | 10%      | 0            | 0%      | 10%        |
| Lagaye          | 18            | 9%       | 2            | 1%      | 10%        |
| Atio            | 14            | 7%       | 6            | 3%      | 10%        |
| Opoogede        | 12            | 6%       | 8            | 4%      | 10%        |
| Akeete          | 16            | 8%       | 4            | 2%      | 10%        |
| Alapa           | 12            | 6%       | 8            | 4%      | 10%        |
| Total           | 154           | 77%      | 46           | 23%     | 100%       |

Source: Field Survey, 2020

The relationship between the level of agricultural production and the presence of diseases and pest is shown in the table above. 77% of the responses supported the presence of diseases and pest while the data in 23% represents the responses that talk otherwise.

#### 4. Conclusion

The characteristics of subsistence agriculture in the study area include the use of crude implements such as hoes and cutlasses, inadequate capital, presence of diseases and pest, family labour, low product for sale, illiteracy of most farmers, non adoption of innovation e.t.c. More so, the farmer do not have access to the use of improved seedlings, modern equipments, fertilizers and chemicals, to boost agricultural production in the study area.

In other words, the effects of these are felt on the socio-economic and food production of the study area in that the agricultural level is low which invariably brings low income. The government networks, electricity, water supply e.t.c. as well as good storage facilities for farmers to preserve their products for long time usually a year without spoilage.

Moreso, there should be reduction in importation of food items from abroad through government effort, to enable people patronize the local products. This will increase farmers revenue and enable them to have more capital base, and be able to afford modern farm machineries such as harvester, planter, ridger, sprayer e.t.c. Agricultural sector play a dominant role in the development of any country. In developed countries of the world, about 8% of population engage in agriculture while it is about 70-75% in developing countries like Nigeria.

In other words, this study is pointing to the fact that attention should be focused on this sector of the economy. However, in order to complete the smooth transition from agrarian based economy to a technologically sound one, there should be diversification of economy.

#### Recommendations

Based on the results of this study, the following recommendations are made to avert the problems facing agricultural productivity in the study area and in the nation at large;

- The farmers should attempt by all means to stop using old implements and adopt modern mechanized farming system to increase their production (rent can be done where they are not capable of purchasing them).
- Seminars, workshop, symposium and programmes should organize frequently to the rural farmers to enlighten them on new method of plating, harvesting, fertilizers use and chemicals.
- There is need for government adequate intervention in the agricultural sector.
- Government should motivate farmer by supplying them certain agricultural inputs in subsidy.
- Availabilities of loan from Banks for farmers at all the time with low interest rate will enable farmers to have enough capital to adequately finance their farms.

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