

# Prospects and Challenges of Cashew Production in Igala Land, Kogi State Nigeria

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**Abstract:-** The study has examined the prospects and challenges of cashew production in Igala land of Kogi state, north central Nigeria. The study used multistage sampling technique with a sample size of 300 respondents. Data were collected through the application of personal interviews, questionnaire and the trans –sect –walk observation. The study revealed that the study area is densely populated. Nevertheless, the area has prospects for the production of cashew. For instance, the study revealed that the area has rich soil with a favourable climatic condition. There is also a ready market for the cashew nuts. Conversely, the study has shown that cashew production in the area is facing some challenges such as fragmented land holdings, lack of extension services, and imposition of multiple taxes, inadequate government support and poor road network. The paper has thus recommended that practical steps should be taken to address the problem of land fragmentation. Productivity enhancing support services such as fertilizers, herbicides and chemicals should also be readily available and at affordable prices to farmers. An effective and efficient agricultural extension service scheme should be put in place to avail farmers with the opportunity of managing their small farms more effectively for optimal productivity. The study has also recommended that there should be a reduction in the number of taxes cashew farms face and that all tiers of government should make the construction and rehabilitation of rural roads a priority in their developmental agenda.

**Keywords:-** Prospects; Challenges; Cashew; Production, Igala Land.

## I. INTRODUCTION

Nigeria is typically an agrarian society with most of the population involved in agriculture. Though Nigeria derives much of its revenue from the oil sector, agriculture is still an important sector of the economy as agriculture is an important source of raw materials for both domestic consumption and for export. Agriculture provides the needed revenue as well as the provision of employment for the teeming population.

Agriculture in Nigeria can be classified into crop production, forestry, livestock, and fishery sub-sectors (Salau et al, 2017). The crop production sub sector is concerned with

the production and development of cocoa, oil palm, coffee, kola nut, beniseed, soyabeans, cotton, cashew and arable crops (Salau, et al 2017). Cashew, botanically known as *anacardium occidentale*, is an important industrial and export crop in Nigeria (Agboniarhuoyi, et al 2008). Nigeria is indeed the 5<sup>th</sup> largest producer of cashew in the world. Cashew grows very well everywhere in Nigeria but with high concentration in the middle belt and the south western regions. However its production is dominated by small holder farmers.

Cashew is acknowledged by nutritionists such as Bhat et al, (2008); Rico, et al; (2015); Griffin, et al (2017) as being a highly nutritious and concentrated form of food. The cashew nut kernel is generally known for its pleasant taste and flavor. The cashew nut kernel also serves as fat in the diet. It also increases the incomes of farmers (Jide, et al 2019). In Nigeria, especially in the northern part of the country, cashew has been used for re-forestation purposes to combat soil erosion and desert encroachment. The cashew tree is useful in making shade trees, fire wood and live fence (Asogwa, et al 2008).

Nigeria is one of the cheapest sources of cashew nuts supply especially to the Asian market (Ogunwolu, et al 2020). Regrettably, majority of the cashews in Nigeria are collected from the wild cashew trees and not from organized and active plantations. In fact, there is no accurate data on the total number of hectares of cashew under cultivation in Nigeria. Even the cashew farms established by the Cocoa Research Institute of Nigeria (CRIN) in the 1990s have been abandoned. However, due to increasing interest generated through exports of raw cashew nuts, farmers are now rehabilitating and protecting the existing trees while others are planting new trees. In many parts of Kogi state especially Igala land, this is vigorously being done by both the old and the young farmers. It is on the basis of the realization of the socio-economic importance of cashew that this study seeks to examine the prospects and challenges of cashew production in Igala-land of Kogi state, north central Nigeria.

## II. METHODOLOGY

### ➤ Study Area

Igala is one of the major ethnic groups in Kogi State and is located in the North central part of Nigeria. Igala society is made up of eight local government areas namely; Ankpa, Dekina, Ibaji, Idah, Igala Mela-Odolu, Ofu, Olamaboro, and

Omala. Igala people are ethnically uniform, have a fairly uniform farming system with fairly uniform tenure arrangements. The Igala society is, indeed, a homogeneous cultural group. Igala people are predominantly farmers and have an extensive arable land with a suitable climate for the production of various crops. The people typically engage in the production of cash crops such as rice, cashew, groundnuts, maize as well as subsistence crops like yams, cassava, guinea-corn and sorghum. Bush fallow and mixed cropping are the dominant systems. The place has the advantage of an all-round capacity to produce virtually all the major food crops. The settlement pattern of Igala people is concentrated and not dispersed as their Tiv neighbours. All crop farmers raise either or a combination of sheep, goats and poultry to supplement income from crop farming. Although farming is the major occupation of the people, a good percentage of the people engage in trading, carving, weaving or fishing.

The Igala society falls within the guinea savannah zone. Like the entire Kogi state, the area enjoys what can be described as a tropical climate with two clearly marked seasons of wet (April-October) and dry (October-April). While the wet season is usually under the influence of the South-Westerly winds, the dry season is influenced by the harmattan wind that blows across the Sahara. Rainfall is of the conventional type. The area is endowed with a favourable climate and vegetative traits which make the production of assorted agricultural products conducive.

#### ➤ *Sample Size And Sampling Technique*

The study used cluster sampling technique. Igala land is made up of eight local government areas. All these local government areas were taken as clusters. Five of the local government areas namely Ankpa, Dekina, Igala Mela/Odolu, Olamaboro and Ofu were purposively selected and surveyed because they are the local government areas where much of the cashew farming activities are mostly concentrated. Not much cashew farming is done in Ibaji local government area because it is a swampy area. Idah local government area has very little arable land because it is surrounded by river Niger while the clayey nature of the soil in Omala local government area does not permit quality yields from cashew.

Each of these local government areas has three districts making a total of fifteen districts. Two districts were selected randomly from each local government area making a total of ten districts. From each of the randomly selected districts, three communities were randomly selected making a total of thirty communities and surveyed. And from each of the randomly selected communities, 10 farmers were interviewed randomly making a sample size of 300 respondents.

#### ➤ *Data Collection*

Data for the study were obtained through the use of personal interview; questionnaire and trans-sect- walk observation. The unstructured interview method was made up of open-ended questions and was conducted with leaders of

stakeholders in the cashew industry. That is leaders of National Cashew Association of Nigeria (NCAN), Cashew farmers' Association and the various cooperative societies. The reason for the choice of open-ended questions was to allow free responses from the respondents. This means no particular structure of responses was suggested as this was to give respondents a better opportunity to answer the questions in their own terms and in their frame of reference. Considering the low level of literacy in Kogi state, the interview method was appropriate because the majority of the rural population in the state is illiterate. It was suitable especially for the respondents who were unwilling or unable to read and write.

The questionnaire method on the other hand enabled the researchers to get information on the socio-demographic characteristics of the respondents, years of experience in cashew farming, size of farms and the prospects and challenges involved in cashew farming. The trans-sect -walk observation was also used to compliment the personal interview and the questionnaire methods. This is a qualitative research technique that gave the researchers the opportunity to have a structured observation and interview. It involved taking a ride or walk around the area under investigation. It provided the opportunity to take note of the size of farms, quality of cashew trees and the general management of the farms.

Data collected from the field were analyzed using the descriptive analytical method involving a critical examination and explanation of information and data collected. Prospects and challenges of cashew production are presented in qualitative and analytic forms.

### III. RESULTS AND DISCUSSIONS

#### ➤ *Socio Demographic Characteristics Of Respondents*

Table 1 shows that 213 (71%) were males while 87 (29%) were female. The disparity between the males and females can be explained on the basis of culture. Traditionally, women are not entitled to inherit land and therefore cannot be said to be farmers in the strict sense. Only those whose parents willed land to them were found to be involved in farming activities. Also, those who have been widows for so many years; or have grown up children who themselves are opinion leaders in the communities. This category of women is no longer seen culturally as women.

With regards to age, the table shows that 25 (8.33%) were within the 18-27 age bracket, 98 (32.67%) belonged to 28- 37 while 92 (30.67%) were within the 38 - 47 age bracket. Forty three (14.33%) were within 48 -57; 23 (7.67%) were between 58 – 67 while 19 (6.33%) were within the age bracket of 68 -77. The age composition of the respondents gave a mean age of 42.43 which shows that majority of the respondents were adults capable of understanding and appreciating the prospects of cashew production as well as the challenges cashew production faces in the study area.

On the basis of marital status, the table reveals that most of the respondents (194 or 64.67%) were married while 83 (27.67%) were single. Only 23 (7.67%) were widows. These are the women who have become old and whose husbands died long time ago but have remained with the late husband’s people because of their children. This category of women is no longer regarded as women in the strict cultural sense.

In terms of educational level, 26 (8.67%) had no formal education, 100 (33.33%) had primary education while 113 (37.67%) had secondary education. Sixty one (20.33%) of the respondents had tertiary education with the following break down; NCE =47, HND/Degree -14

The table also shows that 57 (19%) had spent between 5-9 years in cashew production; 51 (17%) had spent 10 -14 years experience; 38 (12.67%) had between 15 – 19 years experience; 33 (11%) had between 20 – 24 ; 59 (19.67%) had 25 – 29 years experience while 62 (20.67%) between 30 -34 years experience in cashew farming. This shows a mean of 19.87 years of experience which is significant

With regards to farm size, the table shows that majority of the respondents were smallholder farmers as they operated far below the recommended 10 hectares by the FAO for big time farmers. In other words, most of the respondents were smallholder cashew farmers. For example, three quarters of the respondents (277 or 92.33%) had farm size of between 1 – 10 hectares while only 23 (7.67%) had farm size of 11 -20 hectares

Table 1: Socio-economic characteristics of respondents

Characteristics	Frequency	Percentage
<b>Sex</b>		
Male	213	71
Female	87	29
<b>Age</b>		
18 – 27	25	8.33
28 -37	98	32.67
38 – 47	92	30.67
48 – 57	43	14.33
58 – 67	23	7.67
68 – 77	19	6.33
<b>Marital status</b>		
Married	194	64.67
Single	83	27.67
Widowed	23	7.67
<b>Educational level</b>		
No formal education	26	8.67
Primary education	100	33.33
Secondary education	113	37.67
Tertiary education	61	20.33
<b>Farming experience (years)</b>		
5 – 9	57	19
10 -14	51	17
15 – 19	38	12.67
20 -24	33	11
25 29	59	19.67
30 -34	62	20.67

<b>Farm size</b>							
Size in ha	No of farmers Ankpa	No of farmers Dekina	No of farmers Igala Mela/Odolu	No of farmers Ofu	No of farmers Olamaboro	Total no of farmers	Percentage
1-5	31	42	30	40	41	184	61.33
6-10	15	21	18	23	16	93	31
11-15	3	3	3	3	2	14	4.67
16-20	1	2	1	2	3	9	3.00

Source: Field Survey, 2023

➤ *Population Density of The Selected Local Government Areas*

Table 2 shows the 2022 estimated population of the local government areas surveyed. A critical examination of the table shows that Ankpa local government has the highest population of 358,800 and is followed by Dekina with a population of 351,700. Ofu local government has a population of 258,100 while Olamaboro has 213,600 and Igala Mela/Odolu has 198,200.

In terms of density, the table shows that Ankpa is the most densely populated with over 310 people per square kilometer. Next to Ankpa is Olamaboro LGA with 188 people per square kilometer. Ofu has 153, Dekina 142 while Igala mela/odolu has 91 people per square kilometer respectively.

On the average, the entire study area has a population density of 160 people per square kilometer. This shows that the study area is densely populated

Table 2: Population distribution and density of the study area

LGA	2022 estimated population	Landmass	Density
Ankpa	358,800	1155 km <sup>2</sup>	310.65/km <sup>2</sup>
Dekina	351, 700	2461km <sup>2</sup>	142.91/km <sup>2</sup>
Igala-Mela Odolu	198,200	2174 km <sup>2</sup>	91.17/ km <sup>2</sup>
Ofu	258,100	1680 km <sup>2</sup>	153.63/km <sup>2</sup>
Olamaboro	213, 600	1132 km <sup>2</sup>	188.69/ km <sup>2</sup>
	Combined population = <b>1,380,400</b>	Combined land mass = <b>8602km<sup>2</sup></b>	Combined density = <b>160.47/ km<sup>2</sup></b>

➤ *Membership of Social Groups*

Three major social groups operate in the cashew industry in Kogi state. These are the National Cashew Association of Nigeria (NCAN) which major objective is to build a sustainable Nigeria cashew industry for the benefit of all stakeholders in the cashew value chain. This body operates under the framework of Cocoa Research Institute of Nigeria (CRIN) to train and update farmers’ knowledge on ways to boost production, improve yield to meet international standards and generate more income. At the state level we have the Cashew Farmers Association while at the local level there are the various cashew farmers’ cooperative societies.

Interactions with the respondents revealed that 6 (2%) of the respondents belonged to the National Cashew Association of Nigeria (NCAN), 41 (13.67%) belonged to the state ‘s Cashew Farmers Association . majority of the respondents (253 or 84.33%) belonged to the various cashew farmers’ cooperative groups in the various local government areas. Membership of these apex bodies means that farmers’ knowledge about cashew would be enhanced as it is expected

Ted that they would have a good linkage with government organizations and other agricultural unions

➤ *Prospects of Cashew Production In Igala Land*

Respondents identified several prospects for cashew production in the study area. All the respondents were in agreement that the study area is naturally endowed with rich soil for the growth of economic trees such as palm trees, mango, guava, cashew, etc. The study indeed observed that the rich soil fertility was prevalent in all the local government areas surveyed.

Another prospect identified by the respondents was the favourable climatic condition. All the respondents posited that gathering of ripped cashew nuts is at peak from February – April every year. Operating from this standpoint, a cashew farmer in Ade community of Olamaboro local government area who is a retired Director with the state Ministry of Agriculture maintained that ‘harvesting of cashew nuts has a strong relationship with climatic forces. Indeed, the study observed that the study area has the potential for the production of cashew due to the tropical climate with high temperatures. The vegetation and climate are conducive for cashew crop and thus serve as strength for cashew production.

Another prospect for cashew production is the availability of domestic market. A cashew farmer in Ochadamu community of Ofu local government area had this to say; *In spite of the activities of middlemen, we can say that there is ready domestic market for cashew nuts. In fact, the availability of market is increasing the purchasing power of cashew farmers and thus attracting other people to cashew business*

Another prospect is that of revenue and employment generation. If cashew farming is given the necessary support, it can generate employment and reduce poverty in the rural areas. For example, a cashew farmer in Dekina local government area who is the current Assistant Secretary General of Cashew Farmers’ Association in Kogi state had this to say;

In countries like China, India, Malaysia, Pakistan, plant are established in the rural areas to process cashew products into industrial requirements. In Nigeria, the presence of the industries can bring about vitality in rural life by engaging the people, especially the youth, in productive activities and thus reduce poverty.

One other important prospect of cashew production is the provision of revenue to both the state and local government areas. The revenue is obtained in the form of taxes and levies. Cashew nut production is therefore one of the sources of revenue to the government.



### ➤ Challenges Of Cashew Production In Igala Land

Although cashew farming is boosting people's income and creating employment in Kogi state in general and Igala land in particular, the sub sector is faced with a lot of challenges. These include but not limited to;

- Land tenure system: In Igala land, land is communally owned and the land tenure allows land to be fragmented. Land fragmentation thus makes land holdings to be very small and scattered or non-contiguous. Fragmented land holdings therefore have limitation in adapting innovative technologies in the cultivation of cashew.
- Cropping pattern: farmers in kogi state generally practice mixed cropping where several crops are planted alongside other ones. Unfortunately, cashew trees do not allow crops to do well if they are cropped together due to the shade the trees provide. And because farmers are mostly concerned with their food security, the expansion of the cashew farms to large plantations is problematic.
- Weak Farmer - Extension linkage: In all the local government areas surveyed, respondents lamented the absence of extension agents. Even the discussions the researchers had with the officials of Kogi State Agricultural Development Project (K-ADP), the agency saddled with the responsibility of disseminating extension information to farmers showed, regrettably though, that there is no serious farmer – extension – institute linkage. This is a serious challenge to the development of agriculture in the state generally.

The study particularly observed that most of the cashew trees had reached their productive cycle and thus the nuts they produce are of low value. In support of this observation, a cashew farmer in Ajaka community of Igala Mela/odolu local government area lamented thus;

*Most, if not all of us, have no knowledge of high yielding varieties of cashew nuts. We depend on the wild trees which produce mostly small nuts which we sell at low prices*

The study also observed that farmers generally do not apply chemical fertilizers and pesticides. Manual weeding using cutlass was observed as the practice due to the high cost of agrochemicals and herbicides.

- Multiple taxation: respondents lamented the imposition of multiple taxation by the state government on farmers and buyers. All the respondents said this is making the business very expensive and therefore unattractive. For example, cashew farmers and buyers are forced to buy Kogi state jute bags at high prices, to pay for local government departmental levy, local government environmental levy, grading fee, etc. This is making the cashew business unattractive.
- Lack of processing industry: The benefit farmers in Kogi state get from cashew farming is the sale of the nuts. Otherwise the apples have no market anywhere in Nigeria. In fact, in the whole of Kogi state, there is no factory that

can process the apples. The only reward from cashew farming in the study area is the sale of the nuts

- Lack of government support: all the respondents lamented the lack of assistance from the state government. The study observed that most of the farmers were low income earners and retired civil servants that could not afford to give necessary care to their cashew trees.
- Poor road network: The study observed with dismay that the road network in all the areas surveyed is not good. Most of the laterited roads linking communities are in a deplorable state. This makes conveyance of produce to buying centres very difficult.

## IV. CONCLUSION AND RECOMMENDATIONS

The paper has examined the prospects and challenges of cashew production in Igala land. The paper has revealed that the study area is densely populated and that most of the cashew farmers are small holder farmers. The paper has however revealed that in spite of the population density, the area has prospects for the production of cashew. For example, the study area has rich soil with a favourable climatic condition. There is also a ready market for the cashew nuts. In spite of these prospects, the paper has shown that cashew production in the area is facing some challenges. First, the land tenure system operating in the area allows land to be fragmented into small holdings. Fragmented land holdings do not allow the adoption of innovative technologies in cashew farming. Secondly, there is no effective and efficient farmer – extension linkage. Thirdly, cashew farming in the area is being hampered by the imposition of multiple taxes by the state government. In addition, there is absolute lack of government support and very poor road network. The paper has thus recommended that ;

- Practical steps should be taken by the state (and federal) government to address the problem of land fragmentation. In addition, farmers' small sized farms should be made more productive by providing agricultural support services productive enhancing support services such as fertilizers, herbicides and chemicals should be readily available and at affordable prices to farmers.
- An effective and efficient agricultural extension service scheme should be put in place to avail farmers with the opportunity of managing their small farms more effectively for optimal productivity. Igala land tenure system should be modified after thorough understanding of the problems emanating from it. The land tenure system encourages land fragmentation. Fragmentation has two characteristics- the breaking up of holdings into small sizes and the dispersal of holdings. These characteristics have severe consequences on the development of agriculture. For instance, the small size of farms makes it difficult for farmers to meet their subsistence and income needs while the dispersal of holdings entails time wasting. However, the small-sized farms can be made more productive if there are support services and technical advice in agriculture. It

is therefore recommended that. Farm inputs such as fertilizers and agro-chemicals are made readily available and at affordable prices. Also, an effective extension service scheme should be put in place to avail farmers the opportunity of managing their small farms more effectively.

- There should be a strong link between cashew farmers – extension – research. Research, extension and farmers are the three main pillars of agriculture system and their effectiveness largely depends on the strong linkages among each. The linkages between agricultural research and extension are important to enhance farmers' competence. The linkage will provide the knowledge and information that will enable farmers to understand and make decisions about a particular innovation, and then for communicating that knowledge to the other farmers. In other words, farmers can benefit tremendously from effective communication and collaboration between extension officers and researchers.
- By supporting local farmers, people will not only save money within the community and improve the economy in the area, but they will also get better quality products at lower prices, which will also help with environmental problems and more.
- Taxation is one of the major fiscal policies the governments use to achieve economic stability and in the financing of capital expenditure. Various taxes are levied upon the income, wealth or gain of an individual, family and business firm by the government for the purpose or benefits of the general public. The study has revealed that cashew farmers are subjected to multiple taxations. Therefore there should be a reduction in the number of taxes cashew farms face as this has continued to increase the cost of doing cashew business and thus serving as a disincentive.
- Both the federal, state and local governments should make the construction and rehabilitation of rural roads a priority in their developmental agenda. Construction of roads and the rehabilitation of existing ones will reduce the cost of transporting goods and passengers. Local governments should be particularly empowered to open up new roads to facilitate the transportation of goods to the markets at reduced costs. This will improve the income of farmers; reduce the rate of post harvest losses.

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