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# Socio – Economic Challenges Associated with Marketing System of Agricultural Produce in Itas Gadau Local Government Area Bauchi State Nigeria.

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## Abstract

This work aimed to discover the Socio - economic challenges associated with the marketing system of the products in Itas Gadau Local Government Area, Bauchi State, Nigeria. The study area was classified into three basic groups based on the accessibility characteristics in order to enticement an effective sample. These include areas located along a major road (good); those with available moderate access (moderate) and those sited far away from the main road (poor). This research used a total of 1462 registered farmers obtained from Bauchi State Agricultural Development project (BSADP). A total of 292 respondents were selected from the six (6) sampled areas. Questionnaire, focus group Discussion and Filed observation were adopted in soliciting the information used in this study. The study used both primary and secondary data. The primary data includes data on the socio-economic attributes of the respondents, which is collected with the aid of a questionnaire. The data collected were analyzed using simple percentage since it was qualitative data that was sourced using Statistical Package for Social Sciences (SPSS Version16). The findings revealed that transportation cost was the major challenge being experience in marketing agricultural produce in the study area. It was therefore recommended among others that alternative means of transportation of agricultural commodities should be sourced and used.

*Key Words: Socio – Economic impacts, challenges of transportation of agricultural produce, Marketing, System, Produce*

## Introduction

Nigeria is faced with the challenges of providing adequate food for its teeming population. The country is among the most populous in Africa. Despite the plentiful potentials for agricultural development and its oil wealth, food shortages and poverty are widespread. Over 70% of the population is classified as poor, with 35% living in absolute poverty (Annon, 2008). Hine and Ellis (2001) argued that efficient transport system is critically important to efficient agricultural marketing. To these authors, if transport services are infrequent, of poor quality or expensive, then farmers will be at a disadvantage when they attempt to sell their crops. Therefore, transport services should be effective and efficient to facilitate agricultural marketing. Access to markets requires good and low cost transport. Agricultural produce produced in the areas of production must be transported to the areas of consumption (home, market, etc.).

Mawazo, et. al, (2015) established that selling of agricultural produce by rural farmers pose a challenge as their access to markets is limited. Due to this, the concept of agricultural marketing has gained more ground in the debate as farmers have failed to sell their crops or the prices paid have been lower than expected (Eskola, 2005). In Nigeria as a developing economy, most of the roads linking rural areas where agricultural production takes place and urban centers where markets for the products are found, are of poor quality and in some cases inaccessible. Infrastructural development is largely observed in developing countries' urban centers while virtually absent in rural communities. Rural dwellers dominate agriculture, but remain poor due to poor transport services and high costs of inputs which in turn lead to low marketing of agricultural products. Quality road linking areas of production (rural and urban farms) and areas of consumption are essential for effective agricultural marketing. This will eventually increase income level of both commercial and subsistent farmers in our poor rural settlements and this will in turn create good atmosphere for agricultural development in the whole of the country; Nigeria.

Bonsu (2014) revealed that adequate road transport system provides suitable means of transportation and distribution of agricultural produce to the market. The author used interview and informal conversation to receive information for the study. In the course of the study, 60 farmers

were selected for interview and findings shows that the farmers in a community that is link with roads are the one that have quick access to the farm input on time. The author concludes that with adequate road accessibility, agricultural production will be on high. Although, the author did not provide information on the transportation problems hindering the farmers in the study area.

Authors like Barago, (2013) found that food security has three components, these components include: availability of food, access to food and ability to utilize the available food. The author went further to state that availability of food implies implicitly that there must be sufficient production of food to import or export to meet the dietary needs of the people. This author further observed that the extent of food sufficiency is measured by the number of individuals whose targets is met in terms of food needed. The author still maintained that access to food means that those who need the food or agricultural produce at any given time to have it to buy or eat. This implies the transportation of agricultural produce to every nook and crannies of the country.

This situation compelled the author to state categorically that agriculture is a basic and fundamental means of ensuring food security and it is one of the most important sectors of the Nigerian economy. Adegboye (2004) however earlier observed that agriculture contributes more than 30% of the total annual GDP of Nigeria, employing about 70% of the labor force and also accounts for well over 70% of the non-oil exports, providing over 80% of the food needs of the country. The first decade of Nigerian independence (1960-1970) opened the way to food shortages as a result of oil discovery that brought about declining agricultural production and increasing population growth rate. The increase in population at a rate considerably higher than the rate of increase in food production has continued to widen the gap between domestic food supply and domestic demands. This disparity has led to rising food prices (85-125% increases in many Nigerian cities) and declining foreign exchange earnings from agricultural exports.

Studies have shown that before agricultural produce are transported from the rural farm settlements to their ultimate and final consumers, they have gone half almost bad. These authors blamed the poor nature of our road networks and other infrastructures. Most of our rural

communities do not have proper road networks. For this reason, most farmers as a result do rely on mainly trucks, canoe and motor bikes to transport their agricultural produce to the markets at very exorbitant prices. Most often, this leads to delay in the produce reaching the market. Although trucks are increasingly used in transporting perishable goods, the cost is generally very high. As a result, farmers get very low returns on investments (Asogwa, Ezihe & Ater, 2013; Afolabi, Ademiluyi & Oyetubo, 2016; Olorunfemi, 2018).

Olorunfemi, (2018) posited that rural road transportation problems had served as an impediment to the production of food as evidenced in increased cost of transportation and food in rural areas. This poses threat to sustainable food security and agricultural development. The implication of this trend is that not even one farmer can do without transportation. Olamigoke and Emmanuel (2013) opined that the development of every country and the local economy can be achieved by enhancing adequate, reliable, effective, sustainable and efficient transportation system. This is the first step to take to boast the rural economy of farmers, making them fit to contribute to food security and sustainable livelihoods.

Gbadamosi & Olorunfemi, (2016) found that when analyzing transportation of agricultural produce, it is identified that transport costs has critical role in recognizing the link between accessibility and agricultural development. Good transport system is critically important to competent agricultural marketing. For distribution of agriculture produce, road transport has vital role because it is the major means of transporting agricultural produce from the farms to the markets as well as to various urban communities. It is the only means by which food produced at farm location is transported to different homes as well as markets. Transport creates market for agricultural produce, improves interaction among geographical and economic regions and opens up new areas to economic focus. Once the cost become too high, crops delivery to their final consumers may lead to the loss of perishable crops. This will in turn lead to farmers losing their revenues. This will also mean their productivity will drastically be reduced due to these losses of crops and revenues (Bonsu, 2014).

Any loss of revenue whether through lower prices or loss of crop due to transport system or delay in delivery, will affect the purchasing power of farmers going into the next crop year and therefore, potentially the demand for fertilizers, improved crop varieties and other farm inputs may become difficult for such farmers. Bottlenecks in logistics and stranded product could lead to less being applied the preceding year leading to a greater carryover of stored product and therefore less demand again for fresh supplies (Orakwue, Umeghalu & Ngini, 2015).

Ranjan, (2017) posited that though transportation cost is a significant factor in agricultural produce marketing, another salient point that is also affecting agricultural productivity is the farmer's bargaining power through the use of middlemen. Ranjan, (2017) found that a model of bargaining between farmers and middlemen in which long-term risk considerations by farmers constrain their ability to engage in hard bargaining for their agricultural produce has always served as a constraint to agricultural produce marketing. In order to avoid the risk of middlemen exiting their region in the future due to hard bargaining, farmers settle for lower prices for their produce. The risks of prolonged drought-induced decline in produce quality and future oversupply of the perishable agricultural commodity also result in lower price outcomes under bargaining. If farmers join a collective that enhances their bargaining power, they tend to be better off when the group is homogeneous. Unfortunately, most often than not, these factors contribute to discourage local farmers from enjoying the product of their labor as farmers.

Lending more voice to the problem of farmers poor bargaining power, Adewole, (2015) observed that agricultural goods, perhaps, have the longest chain of middlemen. There are a number of intermediaries in the market like the wholesalers, brokers, commission agents, retailers and so on. The agricultural goods pass through all these people before they reach the ultimate consumer. As it passes through each individual, the price increases. So, it is only the consumer who is finally made to bear the burden. Thus, the high price paid by the consumer does not reach the grower. It is pocketed only by the market intermediaries, whereas, the farmers are the ones who bear the brunt of any loss from delayed transportation of the produce to their ultimate consumers.

In the market, the intermediaries indulge in a number of undesirable practices to make quick money at the cost of the producer and the consumer. The following are some such activities:

i. Use of false weights and measurements.

ii. Adulteration.

iii. Black-marketing and hoarding and so on.

Such malpractices are considered a major problem in marketing agricultural goods

Alfred, (2018) observed that lack of market information is another critical issue that contributes to poor transportation and marketing of agricultural produce. The producers of consumer and industrial goods get information from various sources both from within and outside the organization. The availability of information should guide the farmers to understand the produce needed and at what time or season such produce may be needed in the market and the transport available to convey such goods to the markets. Unfortunately, the poor and illiterate farmers have no access to such methods of gathering information about the market for their agricultural goods.

Agbarevo & Obinne (2010) observed that another issue affecting agricultural produce marketing is the near absence of storage facilities forcing the farmers to sell their produce at the earliest at a give- away prices. Sometimes, they sell at a very low price in the market. Thus, the farmers, as the producers, get a very low or even no profit. Another problem of transporting agricultural produce is the bulky nature of agricultural goods necessitates packing. Otherwise, they cannot be taken to various market centers. Olorunfemi & Adenigbo, (2017) observed that the interaction of these factors has led to food insecurity and the idea of self-sufficiency is becoming more and more difficult to achieve due to declining agricultural production and inefficient food marketing system. This problem is not pertinent to Nigeria alone but is also felt in other countries of the world.

The major issue discovered from the literature seems to focus on transportation of agricultural produce and marketing, food security and the role of transportation. It is therefore evident that a study that will reveal rural road transportation challenges as it affects marketing of

agricultural produce to guarantee food security in Nigeria should be examined and investigated. It is in the light of this that this research is carried out to assess the Socio - economic challenges associated with the transportation and marketing system of agricultural products in Itas Gadau Local Government Area, Bauchi State, Nigeria.

## Materials and methods

**Study Area**: Itas-Gadau is one of the local government areas of Bauchi State. It is located between latitude $11^0$44`00`` N - $12^0$05`00`` N and $09^0$40`00`` E - $10^0$25`00``E of the Greenwich Meridian. It shares border with Jigawa State in the north and west, Jama'are and Katagum Local Government Areas in the south, Gamawa Local Government Area in the east and with Zaki Local Government Area in the northeast, (See Figure 1). The Local Government Area (Itas) has two districts namely; Itas and Gadau districts, the area falls within the tropical continental climate, where temperatures are generally high for most part of the year. Temperature reaches its peak average of $36^0$C from April to May (Abdulkadir, 2006).

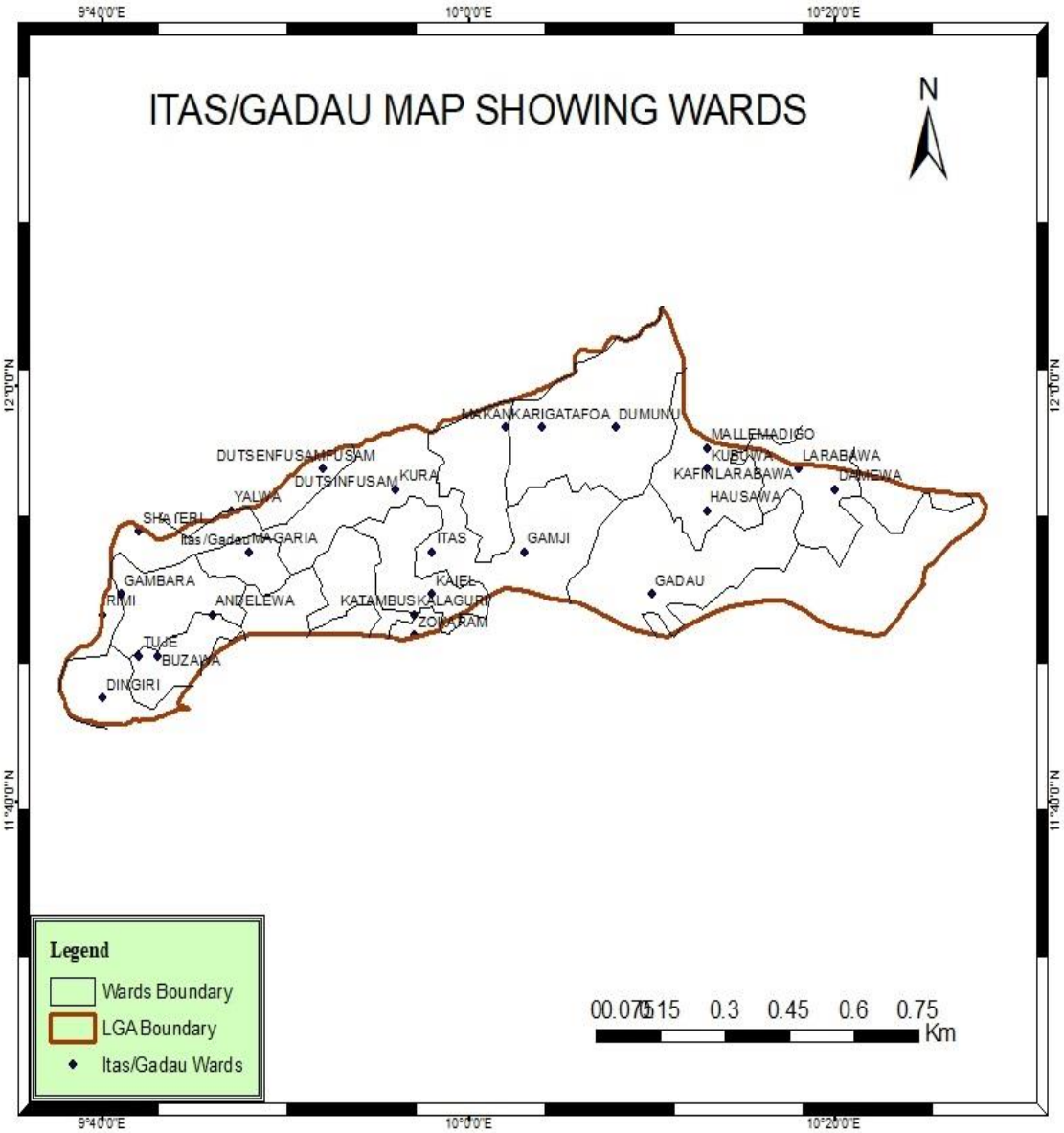
General weather may be divided into three based on the temperature, relative humidity and rainfall. Its hottest period is between February/March to May, and the coldest period is between October/November to February. Rainfall starts between May and June and terminates around September and October. Itas-Gadau Local Government area experiences a single maxima rainfall. Two seasons, however, are experienced, namely; rainy and the dry seasons. Rainy season is short while the dry season is longer. Annual rainfall ranges from 500 to 1000mm$^3$ and relative humidity is about 40% (Emielu, 2008). The area is largely dominated by a plain interspaced by rocky areas. It is characterized by flat and undulating land and sand dunes of sedimentary formations. The geology has partly affected the soil type, rate of erosion, agricultural activities and occurrences of ground water and seasonally water logged. Main river system is the Jama'are River which originates from the highlands of the Jos Plateau and flows in a northeasterly direction (Abdulkadir 2006).

Itas-Gadau Local Government area falls within the Sudan Savanna belt of the Nigeria's vegetation zone. A sandy type of soil is dominant in the area. It is of fine texture with a very high

percolation rate. Along the fadama sites, alluvial soil is found. During rainy, the soil becomes waterlogged unfavourable for cultivation, but during season the dry season, it provides good ground for irrigation farming. (Abdulkadir, 2006). The villages in the study area were categorized into three basic groups based on the accessibility characteristics in order to draw an effective sample. The three classes therefore include; those located along a major road (good); those with available moderate access (moderate) and those far away from the main road (poor). The above classification of the villages based on access characteristics is based on the criteria adopted by Dambazau (2011) in rural Kano region. The methods of data collection include the use of structured questionnaire administered to respondents to check and fill. Those found unable to read and write were guided and responses recorded accordingly. Focus group discussion was also used in generating the data for this research. A group of 12 male farmers in the area of study gathered in a location agreed upon by them and discussed issues pertaining the state of agricultural products marketing system in the area.

The culture and tradition of the people did not warrant female's participation in the discussion, hence excluded. This discussion was geared toward identifying areas of lapses/problems and the possible ways of addressing them. Focus Group Discussion has enabled the retrieval of further information which were not earlier captured/derived from the questionnaire schedule. It also aided further understanding of certain issues which were not clear. Thus, Focus Group Discussion has helped in complementing what were not clearly understood during data collection. This research employed the use of primary and secondary data in soliciting the information in this study. The primary data included all the data derived directly from the respondents. This data includes the socio-economic attributes of the respondents, which is collected with the aid of a questionnaire. Whereas the secondary data included information from journal articles on population of registered farmers, literature on agricultural marketing and transport services, etc, relevant texts, conferences, government and non-government agencies reports on relevant areas, World Bank report, data from population agencies; internet, etc.

The data collected was analyzed using Statistical Package for Social Sciences (SPSS Version16). While the statistical analytic method adopted for the study is the simple percentage since the data generated was qualitative in nature.




**SOURCE: GIS LAB MAUTECH, YOLA**

Both descriptive and inferential statistical techniques were used to analyzed the data.

## Results and Discussions

### Socio-Economic and Demographic characteristics of the Respondents:

From the result of data analysis shown on table 1, the respondents' age, majority of them falls within the ages of 16 – 30 and 31 – 40 years. This signifies that youths were largely engaged in the farming activities in the study area. The high level of youths' participation in farming activities is relatively due to their active nature. The age range portrays 'strength' which facilitates full and active participation in any energy required activities such as farming. The older population becomes weak and unable to actively participate in farming works. The few engaged in farming only produce smaller quantity of agricultural products. Very few among older ones in farming have significant yields and this is observed by employing labor to carry out the task not by them. Supervision is also by proxy among older farmers.

Further analysis of the data shows that the rural population had some form of education. In the area of good access, large number of the respondents had secondary and Islamic education. The number of those in tertiary and primary education was also significant. In areas with moderate accessibility, majority of them had primary and secondary education while in the poorly accessible locations, Islamic and Primary education carried the highest percentage. Slight dissimilarity was observed in the trend of education in the three areas categorized. Thus, majority of the respondents attained some level of education though at lower level. This is expected to stimulate their productivity status especially in agriculture. Understanding the efficient use of modern agricultural facilities requires some level of education and we are in modern technological era today. The high level of literacy observed in the good access areas (Melendige and Itas) must be connected to their locations, population and infrastructural progress especially when compared to other two locations/areas (moderate and poor access). The case is also distinguished among the moderate and poor accessible areas as the former portrays high literacy level than the latter. The implication of

education in agriculture is positively seen in the method of farming practices; in the yields level and in marketing strategies

**Table 1: Socio-Economic and Demographic Characteristics of the Respondents**

| | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | **No** | **%** | **No** | **%** | **No** | **%** | **No** | **%** |
| **Gender** | | | | | | | | |
| Male | 220 | 95.65 | 18 | 100 | 44 | 100 | 282 | 96.58 |
| Female | 10 | 4.35 | 0 | 0 | 0 | 0 | 10 | 3.42 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |
| Age | | | | | | | | |
| 0 – 15 | 2 | 0.87 | 0 | 0 | 0 | 0 | 2 | 0.68 |
| 16 – 30 | 82 | 35.7 | 4 | 22.2 | 13 | 29.6 | 99 | 33.9 |
| 31 – 40 | 110 | 47.7 | 4 | 22.2 | 18 | 40.9 | 132 | 45.2 |
| 41 and above | 36 | 15.65 | 10 | 55.6 | 13 | 29.6 | 59 | 20.2 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |
| **Education** | | | | | | | | |
| Primary | 45 | 19.6 | 5 | 27.8 | 14 | 31.8 | 64 | 21.9 |
| Secondary | 73 | 31.7 | 6 | 33.3 | 11 | 25 | 90 | 30.8 |
| Tertiary | 51 | 22.2 | 3 | 16.7 | 3 | 6.82 | 57 | 19.5 |
| Islamic | 61 | 26.5 | 4 | 22.2 | 16 | 36.4 | 81 | 27.7 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 100 | 100 |
| **Income** | | | | | | | | |
| Less than ₦10,000 | 4 | 1.74 | 0 | 0 | 0 | 0 | 4 | 1.37 |
| 10,000 – ₦25,000 | 55 | 23.9 | 2 | 11.1 | 17 | 38.6 | 74 | 26.3 |
| 26,000 – ₦40,000 | 65 | 28.3 | 0 | 0 | 13 | 29.6 | 78 | 26.7 |
| Above 40,000 | 106 | 46.1 | 16 | 88.9 | 14 | 31.8 | 136 | 46.6 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |
| **Occupation** | | | | | | | | |
| Crop Farming | 202 | 87.8 | 17 | 94.4 | 42 | 95.5 | 261 | 89.4 |
| Fishing | 13 | 5.7 | 0 | 0 | 0 | 0 | 13 | 4.45 |
| Animal Rearing | 15 | 6.5 | 1 | 5.56 | 2 | 4.55 | 18 | 6.16 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |
| **Duration in Farming** | | | | | | | | |
| | No | % | No | % | No | % | No | % |
| Less than 5 years | 17 | 7.40 | 1 | 5.56 | 1 | 2.7 | 19 | 6.51 |
| 6 – 10 years | 104 | 45.2 | 3 | 16.7 | 14 | 31.8 | 121 | 41.4 |
| 11 – 20 years | 82 | 35.7 | 9 | 50 | 19 | 43.2 | 110 | 37.7 |
| 21 years and above | 27 | 11.7 | 5 | 27.8 | 10 | 22.7 | 42 | 14.4 |
| Total | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Source: Fieldwork, 2019**

The more literates' farmers are, the more advanced their productivity and income gains from the sales. This finding is similar to the finding of Rabirou et al (2012) who saw low level of education as a cause of inefficiency in agricultural productions.

With regard to the annual income from agricultural activities, more especially farming, the respondents' responses revealed from the Table 1 that most of them get annual income above N40,000. Respondents in the areas of good access have more income compared to other areas under study as shown in Table 1. This could be as a result of much use of Intermediate Means of Transport (IMT) in conveying farm input to the farm and output to the market as revealed on table 3. The use of IMT played a vital role in minimizing the cost of transport in the study area. The

income level differences are as a result of high enlightenment level which is greatly observed in the areas of good access followed by moderate access and low in poor access areas. Improved farming techniques are adopted in Melendige and Gadau, hence generating more/high yields which in turn brings high income. The difference in income generation is recognized among moderate and poor locations. This corresponds with the assertion of Hine and Ellis (2001) who argued that IMT enables farmers to sell their produce when road conditions are bad. This result is a confirmation of the finding of Eze, et al., (2010) who found that because of the delay to wait for public transport system to transport perishable goods to the market, farmers have now devised alternative means of transport, these means include canoe, horse/donkey, motor bike among others. This has reduced their losses and improve their income from agricultural produce considerably. This position had earlier been canvassed by authors like Agbarevo & Obinne; (2010); Adewole, (2015) and Olorunfemi, (2018) in their respective studies.

The data analysis in Table 1 also revealed that the major sources of income to the populace of the study area have been crop farming carrying the greater percentage. In all the three locations, crop farming was found to be the dominant economic activity. However, in areas with good accessibility, animal rearing and fishing became second and third to crop farming but significant in moderate and poorly accessible areas covered by this work. The major occupation of the people of the study area was crop farming from which both income and food are derived to sustain their lives and improve their wellbeing.

From the analysis of the data on the Table 1, it can be seen that majority of the respondents stay in the farming occupation was largely between 6 – 10 years and 11 – 20 years. Thus, the two ranges carried the highest percentage followed by 21 years and above. The least category was found to be in less than five (5) years. Expertise is therefore assumed as the years spent by the respondents in farming occupation was considerable in the study area. It also revealed that farming was the major economic activity to the people of the area, as analyzed in Table 1. It was also observed that more than half of the respondents in Itas village spent 6 – 10 years while more were found within the range of 11 – 20 years in Melendige despite belonging to the same category. It

can therefore be correct to say that farming activity takes much of rural dwellers time and energy as majority of them are in it for around six to twenty years. This buttressed the assertion of Federal Ministry of Agriculture and Rural Development (FMARD, 2003) and Afolabi, et al., (2016) who found that farming activity is not only the dominant economic activity in the rural areas but also their major income source and instrument of their welfare improvement. The trend is greatly observed in the long-established settlements which formed the category of good access areas (Melendige and Itas villages). Yields from these locations are higher than in moderate and poor access areas. This can be related to the experience gathered from the long time spent in the farming activities.

**Agricultural Products:** The Table 2 reveals that, of all the crops being cultivated in the study area, rice was the dominant. Majority of the respondents in all the areas covered were found to be in rice production. Tomatoes and water melon became second and third after rice as shown on the Table 2. This was found to be in all the areas and may not be unconnected to the fact that the products are fast gaining commercial status. Rice production recorded its highest percentage at Melendige village. Magarya and Garin Ganji too greatly produced rice as observed from the Table.

**Table 2: Major Crops Cultivated**

| Major Crops Cultivated | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **Rice** | 157 | 68.3 | 9 | 50 | 36 | 81.8 | 202 | 69.2 |
| **Tomatoes** | 38 | 16.5 | 1 | 5.56 | 1 | 2.27 | 40 | 13.7 |
| **Wheat** | 1 | 0.43 | 0 | 0 | 0 | 0 | 1 | 0.34 |
| **Pepper** | 8 | 3.48 | 0 | 0 | 1 | 2.27 | 9 | 3.08 |
| **Onion** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Greanleaf** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Sweet Melon** | 4 | 1.74 | 1 | 5.56 | 4 | 9.10 | 9 | 3.08 |
| **Water Melon** | 22 | 9.57 | 7 | 38.9 | 2 | 4.55 | 31 | 10.6 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Source: Fieldwork, 2019**

Other major crops cultivated in the study area were sweet melon, pepper and wheat. Comparatively speaking, their production was by far lower than that of rice, tomato and water melon. Onion and Greenleaf were scarcely cultivated in the area. Water availability and accessibility to transport services at Melendige were found to be among the major factors responsible for the high production of rice in the area. River Jama'are passes through Melendige on its way to Zaki and finally Lake-Chad. The river provided a good ground for rice cultivation hence captures large number of farmers engaged in its production during both rainy and the dry seasons.

The major road linking Azare, Zaki, Hadejia, Kano and other locations passes through the village also adding impetus to the production of a highly commercial specie (rice) in the area, the product is easily transported to market locations – both within and outside Bauchi State. The production of cereals (e.g. rice, wheat) and vegetables in the study area corresponds with the market research findings on the major agricultural products in Nigeria.

**Markets for the Products:** Table 3 reveals the analysis of the data for the markets in which farm outputs are transported to and sold. It shows that majority of the respondents sold their goods within the local Government Area, with an average distance of 5km. This was found to be mostly done at the best areas of accessibility (Melendige and Itas). The occurrence is linked to the large size of the markets in these locations, people from various parts of the state and beyond patronize these markets and purchase farm outputs from the farmers/producers.

Other important markets were found within the locality, outside the Local Government Area but within the state and outside the state. This scenario of selling the products within the local government area is practicable in all the three categories of the sampled locations; this in all the villages sampled as it carried the highest percentage as indicated on the table. Significant percentage is shown with regards to the market for the farm produce in the areas mentioned. The respondents revealed during the interview that Gombe, Adamawa, Kano and Yobe states were some of the market's locations outside the state in which farm produce from Itas – Gadau Local Government Area were sold.

**Table 3: Markets for the Farm Outputs**

| Market for the products | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **In the village** | 9 | 3.91 | 4 | 22.2 | 2 | 4.55 | 15 | 5.14 |
| **Within the locality** | 60 | 26.1 | 1 | 5.56 | 1 | 2.27 | 62 | 21.2 |
| **Within L. G. A.** | 80 | 34.8 | 9 | 50 | 24 | 54.5 | 113 | 38.7 |
| **Outside LGA but within state** | 45 | 19.6 | 4 | 22.2 | 11 | 25 | 60 | 20.5 |
| **Outside the State** | 36 | 15.7 | 0 | 0 | 6 | 13.6 | 42 | 14.4 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Sources: Fieldwork, 2019**

However, it is vital to recognize the fact that market is as well provided in the villages, though at a lower level. This fact is stressed on the same Table 4.8. Significant proportion of the farm outputs in good access areas are also sold within the locality, but insignificant in both (moderate access) and poor access locations.

Selling the products outside the local government area but within the state came second in poor access areas as indicated in the table 3 immoderate access villages, no trace was made of the sales outside the state as portrayed in the table. During the Focus Group Discussion, some of the respondents stressed that their farm produce was at times sold right from the farm without transporting them to the near or far away market. To them, this situation is occasional and not frequent.

**Marketing Strategy in Selling the Products (Agric):** With regards to the strategies adopted by the farmers of the study area in selling out their farm produce, the data analysis in Table 4 revealed that selling them at the market was the best marketing strategy. The percentage portraying sales at the market is higher than that of the farm. The data analysis also showed that sales of farm produce were carried out at the point of production (farm) in the area as opined by some of the respondents. In general, it can be said that, farm produce remained being sold at both production units and

markets. Sales of the products at the market dominate all the villages sampled but at both market and production point (farm) is more pronounced in Melendige and Itas (good access). No sale at farm was recorded at Kashuri and Gidan Ganji (moderate access) but small proportion was carried out at Magarya and Atafowa (poor access).

**Table 4: Marketing Strategy Adopted**

| Marketing Strategy | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **Sales at the point of Production** | **28** | **12.2** | **0** | **0** | **4** | **9.10** | **32** | **11.0** |
| **Sales at Market** | 85 | 37.0 | 16 | 88.9 | 23 | 52.3 | 124 | 42.5 |
| **Both** | 117 | 50.9 | 2 | 11.1 | 17 | 38.6 | 136 | 46.6 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Sources: Fieldwork, 2019**

It can therefore be concluded that all the cherished sales are at market than the point of production (farm). This could be linked to the fact that profitability is higher at the market than elsewhere. This coincides with the findings of http://. com.org efarms (2018) which reveals that lack of market facilities poses serious threat to farmers hindering the sale of their produce at good rates.

**Major Challenges Experienced in Marketing Agricultural Product:** From the analysis of the data in the Table 5 and 6, majority of the respondents in the three categories of sampled villages opined that high transport cost was the major challenges being experienced in marketing their agricultural products. Other challenges incurred were unavailability of vehicles, delay in taking the products to the market, poor accessibility of the area, poor road condition and infrequent transport service. However, poor accessibility was found to be the cause of high transportation cost experienced in the study area. The poor road condition was found to be the major factor responsible for the delay in conveying the good/products to the areas of consumption. It was the opinion of the majority of respondents interviewed that high cost of transportation affects the prices of their commodities in markets.

To them, they had to increase their prices in order to compensate the higher amount paid for transport. Thus, when goods/commodities reached market under high cost of transport, they have to increase their prices escalates to avoid loss. This revelation is ascertained in the hypothesis tested. High costs of transport being the major challenge in marketing agricultural produce in the study area correlate with the finding of Oluwaseyim Olalekan and Temitofe (2018).

**Table 5 Challenges in Marketing Agricultural Products**

| Challenges in Marketing | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **High Transport cost** | 134 | 58.3 | 6 | 33.3 | 16 | 36.4 | 156 | 53.4 |
| **Lack of Vehicle** | 34 | 14.8 | 1 | 5.56 | 5 | 11.4 | 40 | 13.7 |
| **Delay** | 20 | 8.69 | 4 | 22.2 | 4 | 9.10 | 28 | 9.60 |
| **Infrequent Transport** | 12 | 5.22 | 1 | 5.56 | 4 | 9.10 | 17 | 5.82 |
| **Poor road condition** | 17 | 7.39 | 3 | 16.7 | 4 | 9.10 | 24 | 8.22 |
| **Poor Accessibility** | 13 | 5.65 | 3 | 16.7 | 11 | 25 | 27 | 9.25 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Sources: Fieldwork, 2019**

**Challenges Experienced in Transporting Farm Products to the Market:** result on table 6 depicts the poor accessibility was found to be the dominant challenge faced in moving farm produce to the market in especially the good and moderate access locations. Distance to the market and high transport cost come second and third respectively in only the good access areas. However, in the poor access location, poor accessibility and distance to the market were found to be the dominant opinion of the respondents. This is surprising considering their poor access location yet, gave credence to distance to the market instead of generally poor accessibility.

However, it is vital to note that poor accessibility was the cause of high cost of transporting the farm outputs to the market from the point of production (farm). The distance was also stressed due to poor access of the area. Good access reduces cost of transport and as well minimizes the time to cover the distance to be covered. The area under review therefore was faced largely by

poor accessibility which hinders fast movement of farm produce to the market, the result of which caused high prices of transportation in the area. The high transportation cost discovered in the study area is similar to the findings of Rabirou et al (2012) which stated that transport costs are high in Africa as farmers receive only 30 – 50% of final market price.

**Table 6: Challenges Faced in Moving Farm Products to the Market**

| Challenges in Moving farm Products | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **Poor Accessibility** | 136 | 59.1 | 15 | 83.3 | 19 | 43.2 | 170 | 58.2 |
| **Distance to the market** | 54 | 23.5 | 1 | 5.60 | 19 | 43.2 | 74 | 25.3 |
| **High cost of transport** | 38 | 16.5 | 2 | 11.1 | 6 | 13.6 | 46 | 15.8 |
| **Armed Robbery** | 2 | 0.90 | 0 | 0 | 0 | 0 | 2 | 0.70 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Sources: Fieldwork, 2019**

This was revealed in their work "Effects of Rural Transportation System on Agricultural Productivity in Oyo State, Nigeria". This result has come to add credence to the works of Asogwa, et al., (2013) and Dominik, Matthias, Karl, Alexander and Michael, (2013) whose studies found that transportation of agricultural produce from the rural hinterlands to the urban corridors or urban markets have posed a challenge to agricultural productivities.

**Remedies to Overcome the Challenges in Transport to the Market:** The data analysis in Table 7 revealed that, majority of the respondents solicited for an increased number of feeder roads in the area in order to minimize the difficulties incurred in conveying their farm inputs and outputs to the farm and market.

Increased number of feeder roads carried the highest percentage of the respondents' responses indicated on the table above. Many of the respondents argued that subsidized transport cost and rehabilitation of the existing roads in the area could remedy the difficult situation. The existing roads were particularly damaged during rainy season making it difficult to access the area. Increasing number of feeder roads and or rehabilitation of the existing ones could help in bringing down the transport costs in the area. Another remedy opined by the respondents is the introduction

of public assisted commercial vehicles in the area. In general, improved rural transport supports the movement of essential agricultural goods in and out of rural areas as stressed by UN (2019). The increased number of feeder roads which was found to be the major remedy to challenges of transporting agricultural produce to the market in the area of study is similar to the findings of Jerry and Dieter (2000) and Peterowinje (2018), Olorunfemi & Adenigbo, (2017).

**Table 7: Remedies of Transport Challenges to the Market**

| Remedies in Place | Good Access | | Moderate Access | | Poor Access | | Total | |
|---|---|---|---|---|---|---|---|---|
| | No | % | No | % | No | % | No | % |
| **Increase number of feeder roads** | 81 | 35.2 | 7 | 38.9 | 15 | 34.1 | 103 | 35.3 |
| **Subsidized Transport Cost** | 74 | 32.2 | 0 | 0 | 7 | 15.9 | 81 | 27.7 |
| **Rehabilitation of Existing ones** | 48 | 20.9 | 11 | 61.1 | 17 | 38.6 | 76 | 26.0 |
| **Introduction of Public assisted community vehicles** | 27 | 11.7 | 0 | 0 | 5 | 11.4 | 32 | 11.0 |
| **Total** | 230 | 100 | 18 | 100 | 44 | 100 | 292 | 100 |

**Sources: Fieldwork, 2019**

## Conclusion

Going by the major findings of this work, it has been established that transportation of agricultural produce to the market is a serious impediment to the marketing of agricultural products in the study area. However, the people have devised an intermediate means of transporting their farm produce and farm inputs to their farms, this has become the most dominant transport medium in conveying inputs to the farm and produce to the markets. This by implication means that alternative means of transport especially a type that can be faster in conveying inputs to the farm is one of the major needs of the farmers in the study area. This will facilitate rapid growth and development in farm production. As effective transport services significantly influenced

marketing of agricultural products, a frequent monitoring of the services must be adhered to, so as to improve on such development or at least maintain the status quo.

Recommendation or policy directions:

Government should take the market to the rural communities where most of these agricultural products are domiciled. This can be achieve through the opening of produce value chain within the farming communities where brokers, wholesalers, retailers and others can come directly to the rural markets and buy directly from the farmers.

Markets should be established by government or a buying point should be established for the purpose of selling agricultural produce within the rural communities.

Farmers should also adopt alternative means of transportation like horse, donkey, motor bike among others.

Farmers can also form cooperative societies from within themselves, raise money and buy a source of transportation for themselves.

With the current government initiatives to empower local farmers, farming communities should take the opportunity of forming themselves into self-help group and source loans from some of these federal government intervention programs. This will go a long way to meliorate their suffering and challenges in these farming communities.

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