ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 11, Issue, 04, pp.2984-2989, April, 2019
DOI: https://doi.org/10.24941/ijcr.34785.04.2019

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

SOCIO-ECONOMIC CHARACTERISTICS OF FARMERS IN FIVE AGRARIAN COMMUNITIES IN ANAMBRA STATE, SOUTHEASTERN NIGERIA

[1]Asadu, A.N., [1]Agbo, F.U., [2,*]Asadu, C. L. A. and [3]Onyeme, E.

[1]Department Agricultural Extension, University of Nigeria, Nsukka, Nigeria
[2]Department of Soil Science and Land Resources Management, University of Nigeria, Nsukka, Nigeria
[3]Neland Consultants, Government Residential Area (GRA), Enugu, Nigeria

ARTICLE INFO

Article History:
Received 24th January, 2019
Received in revised form
20th February, 2019
Accepted 27th March, 2019
Published online 30th April, 2019

Key Words:
Agrarian Communities,
Socio-economic characteristics,
Limitations,
Mitigations.

***Corresponding author:* Asadu, C. L. A.**

ABSTRACT

A socio-economic survey of farmers in five agrarian communities in Anambra State, Nigeria was conducted in 2017 to elicit the characteristics of the farmers in order to proffer solutions that can improve their productivity. Designed structured questionnaires containing over 100 questions were administered to a group of farmers in each location and individual household heads randomly selected the groups. Data were analyzed using simple statistics. Most of the farmers were in an active age group (31- 45yrs) with formal education and had farming as both their primary occupation and main source of income. Male farmers dominated the farming population. The land tenure systems identified were in decreasing order of importance: individual > family > community > government ownerships. Acquisition of land for agricultural purposes was not a challenge especially by purchase or lease or patrilineal inheritance. Cases of land dispute were few communities. Small-holder Farming System (SFS) was proposed in all the locations involving three cycles of rice production in a year. The average farm holding of ≈ 6 ha per farmer is well above the national average of < 2 ha. Only 54 % have had access to loans before but 92% of the farmers expressed the desire to have grants and loans. With adequate mitigation measures their limitations such as mechanization, provision of agrochemicals, mills, access road, loans and grants by the government, the area can produce sufficient rice to serve the entire states of the Southeast with excess for exportation to other states.

***Citation*: *Asadu, A.N., Agbo, F.U., Asadu, C. L. A. and Onyeme, E.*, 2019.** "Socio-economic characteristics of farmers in five agrarian communities in Anambra state, South-eastern Nigeria", *International Journal of Current Research*, 11, (04), 2984-2989.

INTRODUCTION

Socio-economic characteristics of farmers in any community affect their productivity and income (Cathy-Austin and Nahanga, 2017). Where such information and the limitations exist, solutions that can help improve their productivity can be proffered. The fundamental objective of agriculture is to ensure food security in a nation so that households and society have access to good nutritious food for healthy living. National food security is defined as the ability of a country to produce sufficient food all year round to meet her food requirements both in quantity and quality (FMARD, 2016). Most agrarian communities in southeastern Nigeria (SEN) are populated by small-holder farmers (Okorji, 1986). Internationally when the farm holding of a farmer is less than 10 hectares the farmer is designated a small scale or small–holder farmer (Mgbenka and Mbah, 2016). More than 80% of farmers in Nigeria are small-holder farmers and they constitute a major contributor to Nigeria's Gross Domestic Product (GDP) (Opara, 2011). Generally, small-holder farming system in Nigeria is mixed farming (growing crops and rearing of animals) and/or mixed cropping in various ways. This practice is most widespread in southern Nigeria. The major advantages are possession of own labour and land; insurance against total crop failure due to pest and disease attack and climate change; and regular food supply for family use and cash. Nigeria has a land area of about 91 million hectares, with 82 million hectares good for farming (Metzi, 1991); yet half of this arable land has not been exploited to produce crops and livestock to stem the threat of hunger and poverty through efficient production system (Mgbenka and Mbah. 2016). Current statistics indicates that the contribution of agriculture to the GDP in Nigeria is 24.18 %, to non-oil exports earnings is 75 % and 70% of the labour force is in agriculture but agriculture's share of Federal budget is ≈2.0 % only (FMARD, 2016; Emefiele, 2017). This is against Maputo Declaration that prescribed a minimum of 10% budgetary allocation to the agricultural sector (FMARD, 2016). The major constraints on agricultural production are often associated with lack of information on soil characteristics, climate variability, available technology and socioeconomic data including market access (Asadu and Nweke, 1999). The communities selected for this study are in rural areas of Anambra state known for various farming activities. The objective of this survey was to obtain an update of the current

farmers' socio-economic characteristics as well as constraints on agriculture in order to proffer solutions so as to encourage the farmers, governments and interested non-government organizations to invest in agriculture in the areas in order to enhance the income of the farmers and their livelihood.

MATERIALS AND METHODS

Brief description of the locations: Out of the five locations selected; four (Omasi-Agu- Lat 6° 42.053" N, Long 6° 59.451" E; Ifite Ogwari - Lat. 6° 37.896" N, Long. 6° 56.502" E, Omor - Lat 6° 30.670 " N, Long 6o 55.486 " E and Anaku Lat. 6° 29.492" N, Long. 6° 55.193" E) are in Ayamelum Local Government Area (LGA) and the remaining one (Igbariam - Lat. 6° 23.848" N, Long. 6° 57.198" E) is in Anambra East LGA, all in Anambra State of Nigeria. The Communities were accessed through Nsukka – Adani – Omasi-Agu- Ifite Ogwari– Omor – Anaku – Igbariam– Onitsha high way even though during the survey (July 22 to 29, 2017), most parts of the road were in very bad conditions with large potholes. Generally all the locations belong to the Kopen classification, an "Awi" climate which is a tropical rainy climate with distinct dry and wet seasons. The average annual rainfall amounts to approximately 1730 mm in about 110 rain days and in recent years, the rain days seem to be increasing in number (Akamigbo, 1991). The rainfall distribution is bimodal with the wet season from mid March till November, with peaks in June/July and another in September. There is a minor dry season in August called "August break" (Asadu, 2002). The dry season lasts from November to early April. It is severe and prolonged. The mean monthly temperature, calculated from averaged maximum and minimum temperatures, varies between 25'C in August and 30'C at the end of the dry season. The absolute maximum is 38'C and the absolute minimum is 12'C, both occurring during the dry season. Diurnal variations seldom exceed 11'C.The relative humidity is high in the rainy season; it drops during the dry season, especially on the occurrence of a north-easterly dry wind "harmattan" which blows intermittently between December and March (Akamigbo, 1991). The general vegetation belongs to the Derived Savannah zone due to the absence of forests that characterise virgin land occupied by tall and large trees. It is believed that the derived Savannah zone owes its existence to anthropogenic activities due to clearing the forest for cultivation and bush fire.

Method of survey adopted: The data on socio-economic characteristics of the farmers including land tenure systems, methods of land acquisition, disputes over land and methods of resolving them, acquisition of farm inputs including loans, production constraints and mitigation measures were obtained from scheduled interviews of a group of farmers in each location and households heads randomly selected from the groups using purposively designed and structured questionnaires containing over 100 questions. A minimum of ten house-hold heads made of equal number of males and females were selected in each location. From these house-hold heads basic information on age, education, main occupation and source of income were captured.

RESULTS AND DISCUSSION

Participation in Interview: Plate 1 is a cross-section of the farmers at Omasi Agu who agreed to pose for a photograph after the household-interview at Omasi Market. It was a market day and most of the men did not want to be captured in the photograph. The interviewer sat between the remaining three men and four women. The woman behind the interviewer was not enthusiastic like the other four seated during the time the photograph was taken and preferred to go behind yet peeping from there. The third man preferred to lie down.

Plate 1: A cross-section of farmers interviewed at Omasi Agu location.

Plate 1: Some of the respondents pose in a group photograph at Omasi Agu Market

Preliminary Information on 100 Household Heads Ten each from the Five Communities

From Table 1 almost 50% of the farmers were in the active age (31-45yrs) category indicating that majority of the farmers would benefit from the results of this research for a long time before they retire from farming. Again only ≈13 % of the farmers had no formal education while ≈ 87 % had formal education, an advantage for quick response to technology adoption in the entire area. Again farming was found to be both the main occupation and main source of income of > 70 % of the people with artisanship, trading and teaching trailing in decreasing order far behind farming. Thus the locations represent true agrarian communities.

Table 1. Percentage average of preliminary information on 100 household heads ten each from the five communities

Age		Formal Educational attainment		Primary Occupation		Main source of income
<30yrs	10.4	No formal	12.8	Farming	72.6	75.5
31-45	50.3	Primary	45.5	Trading	12.2	10.2
>45	30.3	Secondary	36.1	Artisanship	13.4	11.5
		Tertiary	5.6	Teaching	1.8	2.8
Total	100.0		100.0		100.00	100.00

Gender of farmers in the five locations: Generally, adult male and female farmers owned the farms in the area while their children offered their labour based on their age and type of farm activity. From over 500 farmers across the locations male farmers constituted the larger proportion of about 52% while the female were about 48% (Fig.1). This supports earlier survey result in Nigeria (Mohammed and Abdulquadri, 2012) which revealed that involvement of women in agricultural activities though less than that of men was on the increase (from 32 to 36%), while that of men declined relatively (from 68 to 64%) men dominated over women population in farming. However, it has been reported that small-holder farmers form

over 75 per cent farming population in Nigeria with less than two hectares of land per household and women farmers constituted about 80 per cent of this workforce (Igbine, 2018). The skewed data in favour of men farmers in the area could be that rice cultivation which ranked first in importance in all the locations was most tedious compared to other crops like maize, cassava and okra especially with respect to land preparation and men could do that much better than women. In addition, yam cultivation identified in the locations like in the entire southeastern Nigeria is generally exclusive to men because yam is known as a "man's" crop and has many cultural values in idol worships, marriage ceremonies, cultural festivals and the only crop that has annual festival (Asadu, 1989; 2010).

Preferred land ownership arrangements: The bar chart (Fig. 2) presents multiple responses of preferred land ownership arrangements among farmers in the study areas. Individual land ownership constituted about 95%, family ownership arrangement constituted about 76% while community and government had 54% and 19% respectively. This indicates that farmers in the local government areas preferred individual and family land ownership arrangements in the area. Some of the reasons for the preference as indicated by the farmers included the fact that the two arrangements would increase farmers' access to land for improved agricultural activities and productivities in the area. In addition, the two arrangements appeared easy to operate without much conflict among farmers and communities.

Rates and areas of effects of land use arrangements: Figure 3 presents the effects and the rate at which the present land ownership arrangements affects major sectors of the economy of the area. The present land ownership arrangement has greatly affected agriculture and building of residential houses with percentage ratings of about 75% and 92% respectively. The construction of roads and government projects were less affected with percentage ratings of about 22% and 20% respectively.

Non-indigenes' Right to Own Land: The result in Figure 4 presents the right of non-indigenes to own a land in the areas with *Yes* and *No* dichotomous responses. The *No* responses constituted about 90% while *Yes* responses were only 10%. This indicates that non-indigene has less access to land for any economic activities in the area. The reason for this is because, the power over lands rests more on the communities and not individuals.

Methods of land acquisition: Figure 5 presents multiple responses of common methods of land acquisition among farmers in study area of Anambra State. Lands were mostly acquired through purchase (≈ 87%), lease (≈ 81 %) and rent (≈72.%). Family inheritance and grant (dash) were ≈ 11 % and ≈ 9 % respectively. From these figures, farmers in the locations acquire their lands mostly through purchase, rent and lease.

Nature of family inheritance: The result in Figure 6 presents the gender-based inheritance of land in study area of Anambra State. The patrilineal (men) had higher (95.3%) access to land inheritance while matrilineal (women) had less (4.7%) access to land inheritance in the area. This indicates that women are greatly disadvantaged in terms of land inheritance in entire area. This is a common practice in the entire Igbo land of southeastern Nigeria.

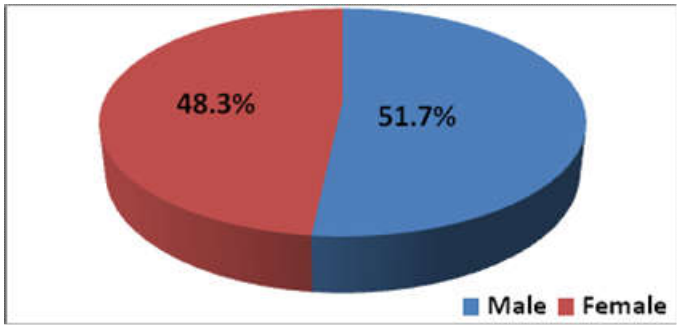

Figure 1. Pie chart of the gender of farmers in all the locations

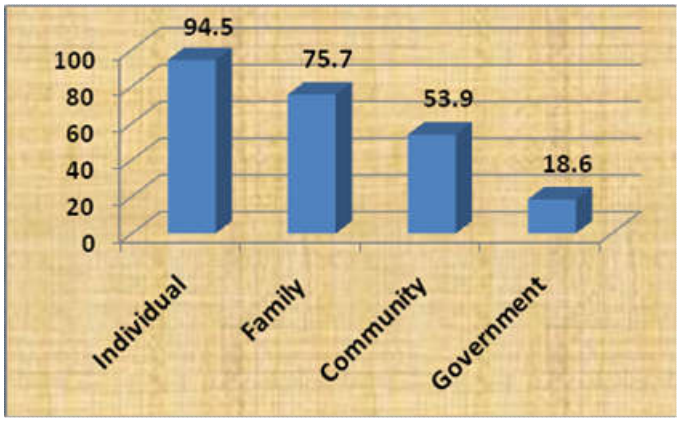

Figure 2. Bar chart of multiple responses of preferred land ownership arrangements in all the locations

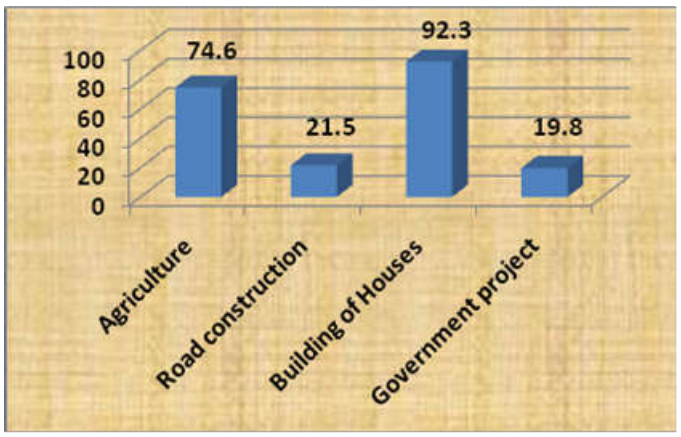

Figure 3. Bar chart of multiple responses of effects of land use arrangements in all the locations

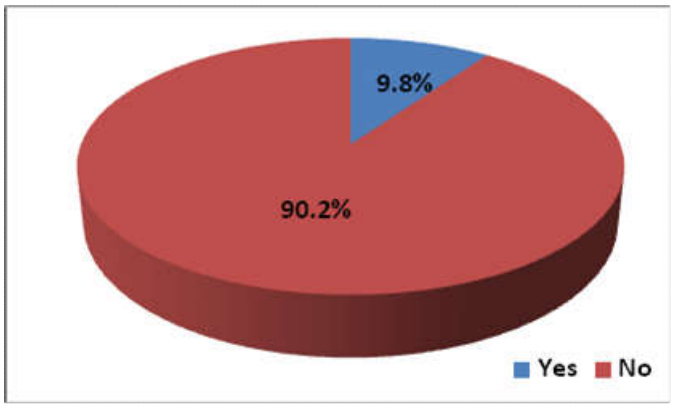

Figure 4. Pie chart of non-indigene right to own land in all the locations

Cost of Securing a plot of land under different arrangements: The results in Table 2 shows that the average cost of a plot (≈ 0.07 ha) of land in study area was three hundred and eighty thousand naira (N380 000.00; 1USD ≈ N365.00). The range was from one hundred thousand naira (N100,000.00) to one million naira (N1,000,000.00) per plot of land. The minimum cost of renting a plot of land was five thousand naira (N5,000.00) while the maximum naira value was fifty thousand naira (N50,000.00) with an average value of twenty four thousand naira (N24,000.00) per plot of land. The minimum number of years for land lease was five years while the maximum was 20 years with an average value of nine years.

Table 2. The cost of securing a plot of land under three different arrangements in all the locations

	Minimum	Maximum	Mean	Std. Deviation
Purchase (N)	100 000.00	1 000 000.00	380 000.00	325 414.71
Rent (N)	5 000.00	50,000.00	24,000.00	17044.83
Lease (in years)	5.00	20.00	9.00	6.15

Occurrence of land dispute in the communities: Figure 7 presents the rate of occurrence of land disputes in the area with Yes and No dichotomous responses. The Yes responses constituted about 59% while No responses were only 41%. This indicates that there were cases of land dispute among farmers, families and villages in the area.

The nature of land disputes in the area: The bar chart in Figure 8 presents multiple responses of common nature of land disputes among farmers in the villages. About 74% of the land disputes occurred between individuals, ≈ 68% occurred between communities while ≈ 23% of land disputes occurred between families. Hence, cases of land dispute among individual and communities are common in the area. All the land disputes mentioned were mainly boundary disputes not involving the entire parcels of land.

Multiple responses of different means of resolving land disputes: The bar chart in Figure 9 presents multiple responses of common methods of land dispute resolution among farmers in the study area.. Majority of about 85% of land disputes were settled through the efforts of community elders, ≈ 75% of land dispute were settled through formal court of justice, while ≈ 44% and ≈ 23% of such cases were settled through the efforts of community committees and government intervention respectively. Hence, community elders and court interventions settled most of the land dispute problems in area.

Hectare coverage of the farmers: Table 2 shows that the minimum holding per farmer (hectare) in area was one hectare; the maximum was 15 ha the average was ≈ 5.9 ha. This average is more than national average of < 2.0 ha (FMARD, 2016) but only ≈ 60% of 10.0 ha used to classify farmers as small-holder farmers world-wide (Mgbenka and Mbah, 2016).

Table 2. Hectare Coverage of the farmers in all the locations

	Minimum	Maximum	Mean	Std. Deviation
Hectarage (ha)	1.00	15.00	5.9100	3.32409

Loan acquisition from government in previous years: The result in Figure 10 presents the acquisition of loan by farmers in previous years with Yes and No dichotomous responses. The Yes responses constituted about 54% while No responses were only 46%.

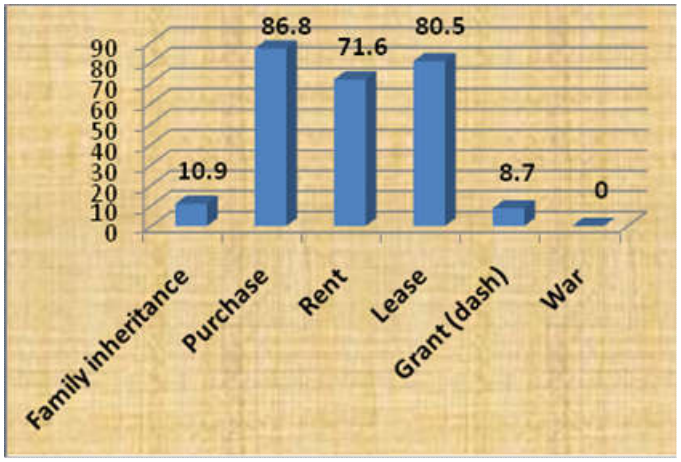

Figure 5. Bar chart of methods of land acquisition in all the locations

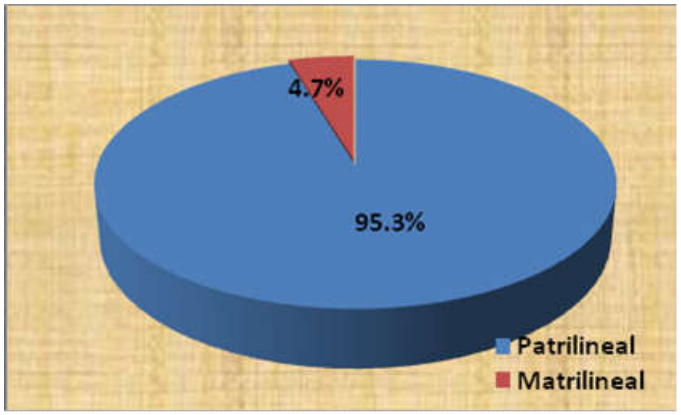

Figure 6, Pie chart of nature of family inheritance in all the locations

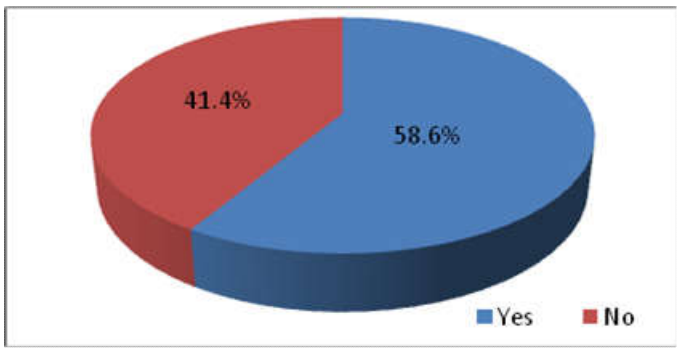

Figure 7. Pie chart of rate of occurrence of land dispute in all the locations

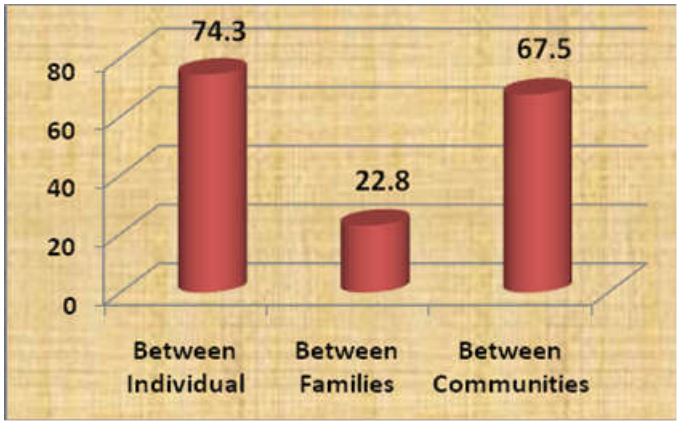

Figure 8. Bar chart of multiple responses of nature of land dispute in all the locations

This narrow margin of 8% indicates that majority of the farmers in the area had received loans from government in the time past but that was only in 2016. For those that indicated Yes, an average of two hundred thousand naira (N200 000.00) only was given to each farmer in 2016 farm year.

Response of the farmers on the need for loans and grants: The bar chart in Figure 11 presents multiple responses of farmers on their requirement or need for grants and loans. Majority (≈ 93 %) of the farmers indicated interest in grant while only ≈ 7% showed no interest. Majority (≈ 91 %) of the farmers indicated interest in loans for improved agricultural production while only ≈ 9% showed no interest. About 92% of the farmers indicated interest in both grant and loan while only ≈ 9 % showed no interest in both means of accessing financial for boosting agricultural production of the state.

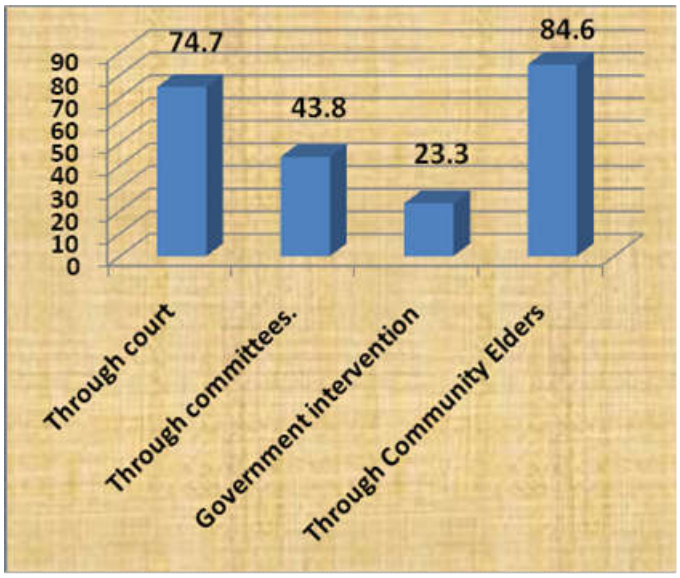

Figure 9: Bar chart of multiple responses of methods of land dispute resolution in all the locations

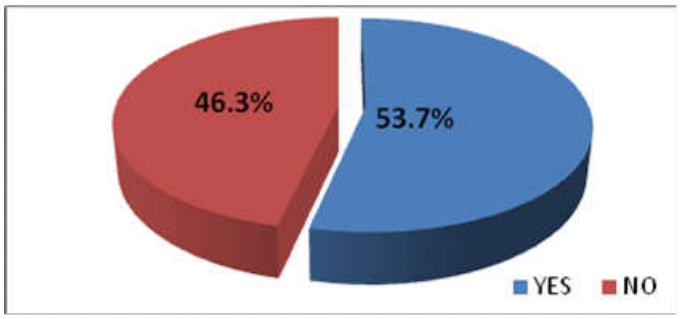

Figure 10. Pie chart of loan acquisition by farmers in all the locations

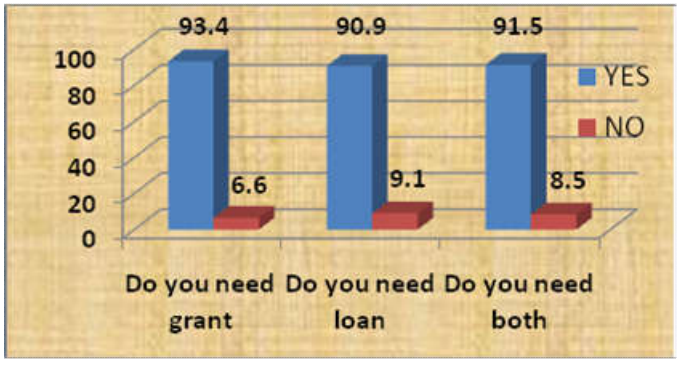

Figure 11. Bar chart of multiple responses of loan and grant requirement of farmers in all the locations

Summary and Conclusion

Socio-economic survey of farmers in five agrarian communities in Anambra State, Nigeria conducted in 2017 to elicit the characteristics of the farmers showed that farming population was dominated by male. Most of the farmers were in an active age group (31- 45yrs) with formal education and farming as both their primary occupation and main source of income. The land tenure systems identified were in decreasing order of importance: individual > family > community > government ownerships. Acquisition of land for agricultural purposes was not a challenge in the areas due to existing procedures. Acquisition of land by indigenes was mainly by patrilineal inheritance. Non-indigenes and government could acquire land through laid down procedures especially through the elders. Land purchase and lease dominated over inheritance. The mean cost of purchase was N380 000 per plot (≈ 0.07 ha) while the mean rentage per plot was N24 000 per year for an average period of nine years. Cases of land dispute were mainly boundary issues between individuals and few communities and were resolved by the elders or through court of justice. Very high potentials exist for sustainable agricultural development in all the locations. Extensive development of rice production in all the existing flood plains was proposed while other arable crops should be grown at the uplands. Small-holder Farming System (SFS) was also proposed in all the locations involving three cycles of rice production in a year. Currently the land: farmer ratio for the surveyed farms was less than 0 .05 ha per farmer. The average farm holding in the areas was ≈ 6 ha per farmer. This is encouraging because it is above the national average of < 2 ha but below the world definition for small-holder farmers which is > 8 ha per farmer. All the farmers (92%) expressed the desire to have grants and loans but only 54 % have had access to loans before. With adequate mitigation measures such as mechanization, provision of agrochemicals, mills, access road, loans and grants even in the form of inputs in support of the Small-holder Scheme by the government, the area can produce sufficient rice to serve the entire states of the Southeast with excess for exportation to other states.

Acknowledgments: The authors acknowledge the contributions of Nelan Consultants, Enugu for sponsoring the field surveys.

Conflict of Interest: The authors declare that there is no conflict of interest.

REFERENCES

Acta Universitatis Agriculturae Et Silviculturae Mendelianae Brunensis, Volume 65 2037- 2043 https://doi.org/10.11118/actaun201765062037

Akamigbo, F.O.R. 1991. Semi detailed soil survey of lower Anambra flood plains in Anambra State Nigeria, Final Report. Water and Dams Co. Lagos.

Asadu C.L.A 2002. Fluctuations in the characteristics of an important short tropical season, 'august break' in eastern Nigeria. *Discovery and Innovation,* 14 (1&2): 92-101.

Asadu, C.L.A. 1989. A comparative study and evaluation of yam-zone soils and the performance of six cultivars of white yam (*D. rotundata*) in southeastern Nigeria.

Asadu, C.L.A. 2010. Reverence for Food Yam in Igbo Culture: In G.E.K. Ofomata (edt), A Survey of The Igbo Nation Vol. 2: African First Publishers. Lagos.

Asadu, C.L.A. and F.I. Nweke. 1999. The soils of cassava-growing areas in sub- Saharan Africa.

Cathy-Austin O. and Nahanga V. 2017. The socioeconomic characteristics of rural farmers and their net income in Ojo and Badagry local government areas of Lagos state, Nigeria

COSCA Working Paper No 18. Collaborative Study of Cassava in Africa. RCMD, International Institute of Tropical Agriculture (IITA), Ibadan, Nigeria.199pp

Emefiele, G. 2017. A Central Bank of Nigeria, (CBN) Report for May 2017. CBN, Abuja.

Federal Ministry of Agriculture and Rural Development (FMARD). 2016. The Agriculture Promotion Policy (2016–2020). Retrieved from http://fmard.gov.ng/wp-content/uploads/2016/03/2016-Nigeria-Agric-Sector-Policy-Roadmap_June-15-2016_Final.pdf

Igbine, L. 2018. Nigerian Centenary Story: Challenges and Contributions of Women Farmers to Growth and Development AgroNigeria https://www.agronigeria.com. ng/nigerian- centenary-story-challenges-contributions-women-farmers-March 2, 2018

Metzi, R. 1991 Geography Guide, Sign up for my Newsletter, My Blog, My Forum, Sponsored Links Vsat Nigeria Satellite broadband Ku & C band Unrivaled service & prices.www.LinkSystems-uk.Com

Mgbenka, R. N. and Mbah, E.N. 2016. A review of smallholder farming in Nigeria: need for Transformation. *International Journal of Agricultural Extension and Rural Development Studies,* 3 (2): 43-54.

Mohammed, B. T. and Abdulquadri, A. F. 2012. Comparative analysis of gender involvement in agricultural production in Nigeria. *Journal of Development and Agricultural Economics,* Vol.4 (8), pp. 240-244.

Okorji, E. C. 1986. Productivity of yam under alternative cropping systems adopted by small holder farmers of southeastern Nigeria. *Agricultural Systems, 22(3),* 231-241.

Opara, S. 2011. Exploring lifeline in small-scale farming. NBF Topics *in* Mgbenka, R. N. and E.N. Mbah. 2016. A review of smallholder farming in Nigeria: need for Transformation. *International Journal of Agricultural Extension and Rural Development Studies,* 3 (2): 43-54.

****