### academicJournals

Vol. 11(46), pp. 4742-4748, 17 November, 2016 DOI: 10.5897/AJAR2015.9708 Article Number: F0D580461715 ISSN 1991-637X Copyright ©2016 Author(s) retain the copyright of this article http://www.academicjournals.org/AJAR

## African Journal of Agricultural Research

### Full Length Research Paper

# Analysis of trend in agricultural services received by farmers in Benue State, Nigeria

Iwuchukwu J. C. and Nwobodo Cynthia E.\*

Department of Agricultural Extension, University of Nigeria Nsukka, Nigeria.

Received 13 March, 2015; Accepted 9 December, 2015

The study was carried out to assess trend in agricultural services received by farmers in Benue State, Nigeria. The three agricultural zones in the state, twelve blocks, thirty cells and four hundred and thirty two farmers constituted the samples for the study. Data were analyzed with percentage and mean score while some were presented in charts. Findings revealed that majority (86.8%) of the respondents were males, married (89.6%) with a mean household size of 8 persons and mean age of about 48 years, respectively. On average, they had about 20 years of farming experience, owned and cultivated 4 and 3 hectares of land, respectively. Extension visit was agricultural service that was relatively enjoyed by the respondents. The study advocated for private sector investment in agriculture especially in provision of farm credit and other crucial agricultural services to farmers in order to increase productivity and output.

**Key words:** Agricultural services, farmers, agricultural inputs, Benue State.

#### INTRODUCTION

Smallholder farmers constitute majority of farmers producing over 80% of the food supply in developing countries (The UK Hunger Alliance, 2013); but they depend on a large extent on external inputs and services. Their reliance on these external provisions is as a result of their lack of sufficient access to inputs (seeds, fertilizers, planting materials, etc.), services, credit (African Smallholder Framers Group (ASFG), 2011), livestock, financial capital, and other productive assets, such as land and water. Farmers access to productive inputs and services are critical to increased agricultural productivity. Therefore, helping small-scale farmers

improve their level of living which is critically important not only for the farming families themselves, but for society as a whole (FAO, 1994).

In sub-Saharan Africa, the need to improve agricultural services and infrastructure provision has resulted in recent initiatives, including: the Comprehensive African Agricultural Development Programme (CAADP), which calls for 6% agricultural growth rates; the Maputo Declaration, which calls for 10% of the total public spending to be used for agriculture; and the 2006 Abuja Declaration, which calls for a substantial increase in fertilizer use (Akramov, 2009).

\*Corresponding author. E-mail: Cynthia.nwobodo@unn.edu.ng or cynthynice@yahoo.com.

Author(s) agree that this article remain permanently open access under the terms of the <u>Creative Commons Attribution</u> <u>License 4.0 International License</u>

In Nigeria, agricultural support services are mainly provided by the public sector mainly through the establishment of institutional support in the form of agricultural research, extension, commodity marketing, input supply, and land use legislation. The private sector also contributes to agriculture support services through investment in financing, sponsorship of research and breakthrough on agricultural issues in universities, capacity building for farmers, and provision of financing to farm businesses. On the other hand, international governmental and non-governmental agencies including the World Bank, Food and Agricultural Organization of the United Nations, etc., also contribute through on-farm and off-farm support in form of finance, input supply, and strengthening of technical capacity of other support institutions, etc. (Eze et al., 2010). There is therefore a general commitment of government, private sector and donor agencies towards the provision of agricultural services to small-scale farmers. In view of these, it is expected that over the years, farmers' access to agricultural service should improve with the concomitant improvement in their production. This study was a survey of the trend on these services that farmers in the area have received for the period before year 2007, 2007, 2008, 2009, and 2010.

### Purpose of the study

The overall purpose of the study was to analyze the trend in agricultural services received by farmers in Benue State, Nigeria. Specifically, the study sought to:

- i. Describe the socio-economic characteristics of respondents,
- ii. Determine the trend in agricultural services received by farmers in the area.

### **MATERIALS AND METHODS**

The study was carried out in Benue State, Nigeria. The state is referred to as the food basket of Nigeria, because of the abundance agricultural resources which invariably attracts farmers from other areas. Proportionate sampling technique was used to select twenty five percent of blocks in each of the three agricultural zones in the state; hence, five, three and four blocks were selected from zones A, B, and C, respectively giving a total of twelve blocks. Three cells were randomly selected from each of the selected blocks giving a total of 36 cells. Twelve farming households were selected from each cell. This gave a total sample size of four hundred and thirty two households. Data for the study were collected using interview schedule. Data on the socio-economic characteristics of respondents were collected by asking respondents to indicate their age in years, sex (either male or female), number of people in their household, farming experience in years, and whether they belonged to any social organization. Data on agricultural services received were collected by asking respondents to indicate the agricultural services they received during the period under study (that is, before 2007, 2007, 2008, 2009, and 2010). Agricultural training, loans from public and private sectors were some of these agricultural services in the list. Data were analyzed with percentage, while some were further presented in bar charts.

#### **RESULTS AND DISCUSSION**

### Socio-economic characteristics of respondents

Data in Table 1 show that majority (86.8%) of the farmers were male, majority (89.6%) were married, and the mean age of the respondents was 47.9 years. Greater proportion (30.1%) had secondary education. This shows that the respondents had some level of formal education which could enhance their ability to participate in programmes aimed at providing agricultural services to farmers in the area. The mean household size was 9 persons, while mean farming experience of the respondents was 19.7 years. Generally, the farmers had long years of farming experience. Greater proportion (55.0%) of the respondents belonged to 1 or 2 social organizations, 29.4% did not belong to any organization, while 15.6% belonged to 3 or 4 organizations. This implies that farmers in the area belonged to one or more social organizations. According to Ekong (2003), rural dwellers belong to organizations that help in satisfying their innate need for belonging and affiliation and in solving their problems through collective efforts. The existence of these social organizations is a veritable opportunity for government and other development agencies interested in providing agricultural services to reach a large number of farmers in the area. However, farmers in the area belonged to trading/artisan union more than other organizations including farmers' cooperatives. This may suggest interest of these farmers on trading and artisanship organizations more than farmers' organizations. This calls for a need to encourage formation of more farmers' groups in the area which will enhance their ability to obtain available agricultural services.

### Agricultural services received by the respondents before 2007 to 2010

### **Extension visit**

Figure 1 shows that about 50% of the respondents had extension visits before 2007 with decline (49%) in 2007 and increase (59% and 64%) in 2008 and 2009, respectively and another decline (60%) in 2010. Findings reveal that respondents had more extension contact in 2010 than before 2007 irrespective of high farmer-extension agent ratio being experienced in countries like Nigeria especially as years go on due to poor remuneration and consequent high turnover as well as labour drift in the profession. This scenario suggests that there will be improved agricultural productivity among farmers since experiences with extension programmes

**Table 1.** Percentage distribution of the respondents according to their socio-economic characteristics (Field Survey Novovember, 2011).

Characteristic	Percentage (n=432)	Mean
Age (years)		
21-30	4.9	-
31-40	22.4	47.9
41-50	39.6	-
51-60	22.5	-
>60	10.6	-
Sex		
Male	86.8	-
Female	13.2	-
Marital status		
Married	89.6	-
Single	5.1	-
Separated	0.9	-
Widowed	4.4	-
Educational qualification		
No formal education	18.3	-
Primary education	28.9	-
Secondary education	30.1	-
OND/NCE	16.0	-
HND/degree	3.9	-
Higher degree	2.8	-
Household size		
1-5	29.6	-
6-10	47.5	-
11-15	13.9	8
16 and above	9.4	-
Farming experience		
1-10	26.6	-
11-20	39.4	-
21-30	19.4	-
>30	14.6	19.7
Organizational membership		
Farmers cooperatives	50.5	-
Family/Community organization	22.4	-
Religious organization	32.9	-
Trade /artisan union	55.1	-
Political group	1.2	-

<sup>\*</sup>Multiple responses.

show positive impact on productivity and incomes (Global Forum for Rural Advisory Services (GFRAS), 2012).

### **Subsidy from government**

Figure 2 shows unsteady trend in the proportion of

farmers that received subsidy from the government during the period under study. About 18% of them received subsidies from government before 2007, which rose to 21% in 2007, declined to 19% in 2008, rose again to 25% in 2009 and declined again to 22% in 2010. The findings show that proportion of farmers that received subsidies from government was generally low hence

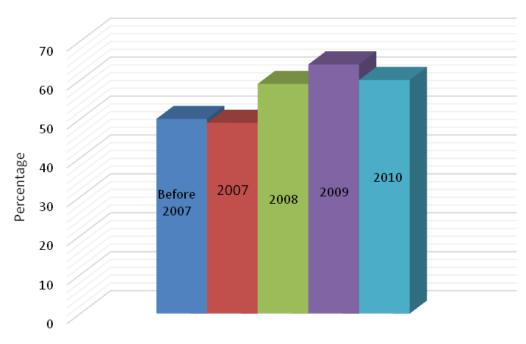


Figure 1. Proportion of farmers that had extension visit.

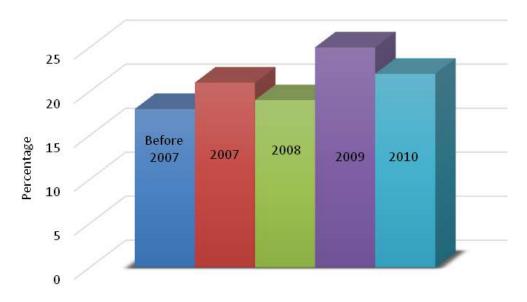


Figure 2. Proportion of farmers that received subsidy from government.

contradicting the understanding that policy of agricultural subsidy is now being followed in some countries of Africa like Tanzania, Nigeria, and Zambia (INICA, 2012).

### Loan from public sector

Only 9% of the respondents received loans from public sector before 2007 which decreased to 7% in 2007, but

increased to 9 and 13% in 2008 and 2009, respectively and rose again to 12% in 2010 (Figure 3).

Generally, loan from public sector is not always available and when available the targeted beneficiaries like farmers encounter difficulties in securing it due to corruption and lack of collateral. Other factors that may have constrained them from securing loan from this sector may be bureaucracy involved in procurement of loan and inability of majority of the beneficiaries to repay their loan

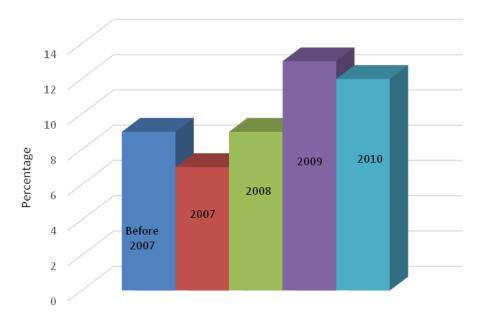


Figure 3. Proportion of farmers that received loans from public sector.

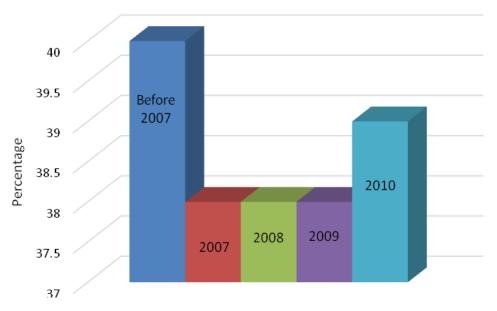


Figure 4. Proportion of farmers that received loans from private sector

on time (Aneke, 2007).

### Loan from private sector

It is evident in Figure 4 that 40% of the respondents received loan from private sector before 2007 while the proportion that received it declined to 38% each in 2007, 2008 and 2009, but slightly increased to 39% in 2010.

Generally, the proportion of respondents that received

loan from private sector was also low, but was greater than those who sourced from public sector in all the years considered irrespective of the fact that private sector banks interest rates are slightly higher as compared to public sector banks (Bank, 2011). This point to the role private sector will play in boosting agriculture if their activities are properly incorporated and harnessed toward agricultural growth. The finding also supports the fact that non-profit and for-profit private companies were found to have minimal involvement in agricultural research and

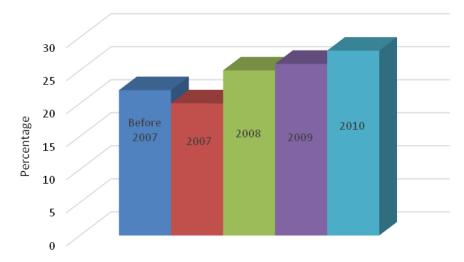


Figure 5. Proportion of farmers that participated in agricultural training/workshop.

development in Nigeria (Flaherty et al., 2010).

### Agricultural training and workshop

Figure 5 indicates that only 22% of the farmers participated in agricultural training and workshop before 2007 which declined (20%) in 2007 and increased (25, 26, and 28%) in 2008, 2009, and 2010, respectively. lbitoye et al. (2013) stated that greater productivity could be achieved through improved knowledge and skills when farmers are exposed to proper trainings. Although the participation in agricultural training and workshop by the respondents was low thus corroborating the fact that about 82% of pineapple farmers in Enugu State had no training on agricultural matters (Udoye, 2012), trend in participation of the farmers in workshop and training had slightly, but steadily increased from 2008 to 2010. This may suggest that these farmers were participating more in these activities in recent time and if this trend is consolidated more farmers will participate in agricultural training and workshop in near future and this will impact positively on their productivity.

#### Conclusion

Based on the findings of this study, it can be deduced that the farmers were relatively young, had formal education, and large household size which when harnessed properly will provide labour for engagement in agricultural and non-agricultural activities. They owned large land, but did not cultivate the entire land they owned. Farmers received less agricultural services, in recent time. This may invariably affect agricultural production and demoralize these farmers. Private sector development and investment in agriculture especially in

the area of provision of credit and order services to farmers should be embarked upon. This can be done through establishment of commercial and micro-finance banks, thrift and cooperative societies, private extension organizations, etc., so that farmers can be provided with their agricultural needs and thus move into profitable farm ventures. Since, their services are often not biased, more available, efficient and timely to meet up profitable and time sensitive agricultural activities.

Government should provide more incentives and subsidies to farmers. Most importantly, they monitor the modalities for the distribution and acquisition of these services so that they can get to the right recipients that can deploy them in agricultural tasks for a healthier and richer nation.

### **Conflict of Interests**

The authors have not declared any conflict of interests.

### **REFERENCES**

African Smallholder Framers Group (2011). What we want to achieve. Available at: http://www.asfg.org.uk/the-challenge/the-challenge

Akramov KT (2009). Decentralization, Agricultural Services and Determinants of Input Use in Nigeria. International Food Policy Research Institute (IFPRI) Discussion Paper 00941 December 2009.

Aneke MO (2007). Impact of the Phase 1 National Special Programme on Food Security on poverty Reduction in Enugu State, Nigeria. Unpublished MSc. thesis, Department of Agricultural Extension, University of Nigeria. Nsukka.

Bank B (2011). Difference between interest rates of private and public sector banks. bankbazaar. comdesk, assessed 27/10/2012.

Ekong E (2003). Introduction to Rural Sociology. Uyo: Dove Educational Publishers.

Eze CC, Lemchi JI, Ugochukwu AI, Eze VC, Awulonu CAO, Okon AX (2010). Agricultural financing policies and rural development in Nigeria. A paper presented at the 84th Annual Conference of the Agricultural Economics Society, Edinburgh. 29th to 31st March 2010

- Flaherty K, Ayoola G, Ogbodo J, Beintema N (2010). Nigeria: Recent Developments in agricultural research. Agricultural Science and Technology Indicators. Avaiable at: http://www.asti.cgiar.org/pdf/Nigeria-Note.pdf. Retrieved on 29/11/2015
- Food and Agriculture Organization of the United Nations (1994).

  Farming systems development-A participatory approach to helping small-scale farmers. Available at: http://www.fao.org/docrep/012/t1875e/t1875e00.pdf
- Global Forum for rural Advisory Service (GFRAS) (2012). Fatc sheet on extension services. Position paper, June, 2012, www.g.fras.org. Accessed 27/10/2012.
- Ibitoye SJ, Onimisi JA (2013). Influence of training on farmers' productivity in poultry production in Kogi State, Nigeria. Int. J. Poult. Sci. 12(4):239-244.

- INICA (2012). Agricultural subsidies in Africa. Available at: http://www.inica.org/Agricultural-Subsidies-in-Africa.htm. Retrieved on: 29/11/2015
- The UK Hunger Alliance (2013). Small scale, big impact- Smallholder agriculture's contribution to better nutrition. A briefing paper from the UK Hunger Alliance. Available at: http://reliefweb.int/sites/reliefweb.int/files/resources/HA%20small%20scale%20big%20impact%2012pp\_d5.pdf.
- Udoye CE (2012). Problems and prospects of pineapple production in Enugu State. Unpublished undergraduate project, Department of Agricultural Extension, University of Nigeria, Nsukka.