

## **Farmers Contribution to Agriculture in Rural Development of Fufore Local Government Area of Adamawa State, Nigeria**

**M. R. Umar<sup>1\*</sup> and I. J. Suleiman<sup>2</sup>**

<sup>1</sup>*Department of Forestry and Wildlife Management, School of Agriculture and Agricultural Technology, Modibbo Adama University of Technology, Yola, Nigeria.*

<sup>2</sup>*Department of Economics, Faculty of Social and Management Science, Adamawa State University, Mubi, Nigeria.*

### **Authors' contributions**

*Both authors designed the study, performed statistical analysis; write the protocol and the first draft of the manuscript while author IJS managed of the analyses of the study and literature searches. Both authors read and approved the final manuscript.*

### **Article Information**

DOI: 10.9734/AJAEES/2020/v38i930418

Editor(s):

(1) Dr. Zhao Chen, University of Maryland, USA.

Reviewers:

(1) Boban Dasic, Alfa B. K. University, Serbia.

(2) Anisara Pensuk Tibkaew, Kasetsart University, Thailand.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/59085>

**Original Research Article**

**Received 17 May 2020**  
**Accepted 22 July 2020**  
**Published 13 October 2020**

### **ABSTRACT**

This study was carried out to access farmer's contribution to Agriculture in Rural Development of Fufore LGA of Adamawa State, Nigeria. Seven wards within the LGA were selected (Ribadu, Gurin, Farang, Mayo-ine, Pariya, Karlahi and Yadim). Thirty (30) questionnaires were randomly distributed to the household in each ward selected through multi-state random sampling technique as primary data. A total of Two Hundred and Ten (210) farmers were selected for the study. Data were analyzed with the aid of descriptive statistics and multiple regression models. Results show that Age, Marital status, Farm size, Family size, Education level have percentage ranging from 10-28.6, 13.3-31, 4-69, 5.2-31 and 15.2-37.6% respectively while Primary occupation, Access to credit, Number of extension visit and farm income percentage values ranged from 3.8-43.9, 15.7-25.7, 5.7-53.4 and 8.1-35.7% respectively. The result further shows that the majority of the respondents are still in their youthful stage and 31% of them were married. The study further reveals that 69% of the

\*Corresponding author: E-mail: Mohammedraji11@gmail.com;

respondents cultivate on 1-5 hectares of land, the result of the multiple regression analysis indicates that farm size was negative and significant at 5% level; Education level has a positive coefficient and significant at 1% level while access to credit coefficient was positive and significant at 5% level. The findings of the regression equation determine the manner towards farmer's contribution to agriculture in rural development and examine the constraints militating farmer's contributions to agriculture in the study area. Cob-Douglas function with  $R^2$  value of 0.813 was chosen as the lead equation. Low price of farm output poor extension visits, market distance, is some of the major problems affecting the contribution of agriculture to the development of the study area. It was therefore recommended that there is need to train and provide farming equipment's, agricultural credit should also provide the needed environment to foster rural development facilities in Fufore Local Government Area of Adamawa State.

**Keywords:** Rural development; farmers; agriculture; environment.

## 1. INTRODUCTION

Agriculture" is derived from the latin word "agri" or "agris" meaning "soil" and "culture" meaning cultivation. Agriculture means the cultivation of soil. But in reality agriculture is NOT confined in soil cultivation alone; it includes all aspect of crop production, livestock farming, fisheries, forestry etc. Agriculture is the science and art of farming include the work of cultivating the soil, producing crop, planting forest plant/trees, raising livestock and rearing fish". Monteith's [1]: "Agriculture is an exploitation of solar energy made possible by an adequate supply of water and nutrients to maintain plant growth". Agriculture according to Anyanwu [2], is defined as "a cultivation of the land for the purpose of producing food for man and animals also fibre or raw materials for our industries".

Agriculture is a productive unit where the free gift of natural land, light, air, temperature, rainfall, humidity, etc. are integrated into a simple primary unit (crop plant or their useable parts) indispensable for human beings. The history of Agriculture is the story of human kind development and cultivation of processes for producing food, feed, fibre, fuel, and other goods for cultivation, human beings where hunters and gatherers [3]. The knowledge and skills of learning to care for soil and growth of plants advanced the development of human society, allowing clans and tribes to stay in one location generation after generation. Archeological evidence indicates that such developments occurred 10,000 or more years ago. Nation that wants to develop must look inwards to identify areas where it comparative advantage others nation and seek to develop the identified areas. Apart from hydrocarbon of which Nigeria is the six (6) largest export of crude oil and has the second largest known deposit of natural gas in

the world [4]. Nigeria also has comparative advantage in the agricultural sector where varieties of crops and animals are produced and reared respectively due to favorable climatic condition, good soil structure and the fact that over 70% of the entire land mass of the country is arable, though only about 48% are presently been cultivated. Since independent most rural people have been migrating to urban cities in search for job which offer a better good living condition and because of this, agriculture is neglected. This problem affects the development of agriculture in rural areas. Another problem lied on the subsistence and traditional system of agriculture.

The third tier of government in Nigeria (Local Government) was conceived to be the fulcrum of grass roots development and Fufore Local Government is communities namely: Malabu, Gurin, Mayo-Ine, Verre Ribadu, Nyibago and Daware, the LGA as remain a beacon of admiration by both the State Government and it's visitor for being rich in water ways and most notably its promise for economic supremacy of the State [5]. Efforts have been made to improve agricultural production in this country more especially rural communities. The ministry of agriculture arrange for effecting the collecting of agro technological data to ensure successful timing of agricultural activities. The ministry established Young Farmer Club (YFC) to encourage youth under twenty five years to farm in their localities. Other programmes had been mapped out to achieve self-sufficiency in food production in the country such as Operation Feed the Nation (OFN), Green Revolution (GR), Agricultural Development Programme (ADP), etc better life for rural Development to avoid moving (migrating) to urban centers in searching for white collar jobs. The agricultural sector in Nigeria is undoubtedly the highest employer of labour,

employing about 70% of Nigeria unemployment work force. The Nigeria agriculture sector has also suffered low output which has led to massive importation of food items to feed the ever increasing population.

After a thorough study of agricultural sector in Nigeria is self-inflicted and can improve, if properly addressed. Adamawa State is considered one of the leading producers of various food products in the country. However, like most farmers in Nigeria, they faces similar challenges such as mechanization services, which are often acquired through the use of middle men, who hire them at a very high price, similar to that in rural centers especially in the study area as well as the transportation of harvested products from the farms to the store house.

Problems militating farmers to agriculture in terms of rural developments in the Fufore LGA includes:

Ignorance; people greatly and relatively undermined; and or even over-look as mere "Backyard Business". Some youth even regard farming as an odd job that is meant for the illiterate Rural People.

Illiteracy; the greatest number of dedicate neither full time farmers in the rural areas can neither read nor write.

Lack of road, water and electricity; the rural farming communities have neither road nor water nor electricity. Some do not even have hospitals around them. Hence there is need for the study of agriculture to the development of Fufore LGA, and to what extent agriculture has impacted to their living standard.

Agriculture is a major employer of labour in Fufore LGA and as such is an important sector of the region's economy. As an agrarian community, virtually all the households in the region engage in one form of the farming or the other but mostly on subsistence level. Bulk of the crop production takes place under the traditional system, without the use of mechanical power. This has limited the farm size of the farmers [6].

## 2. MATERIALS AND METHODS

### 2.1 The Study Area

Fufore area is situated roughly between latitude  $8^{\circ}45'$  and  $9^{\circ}35'$  North and longitude  $12^{\circ}15'$  and

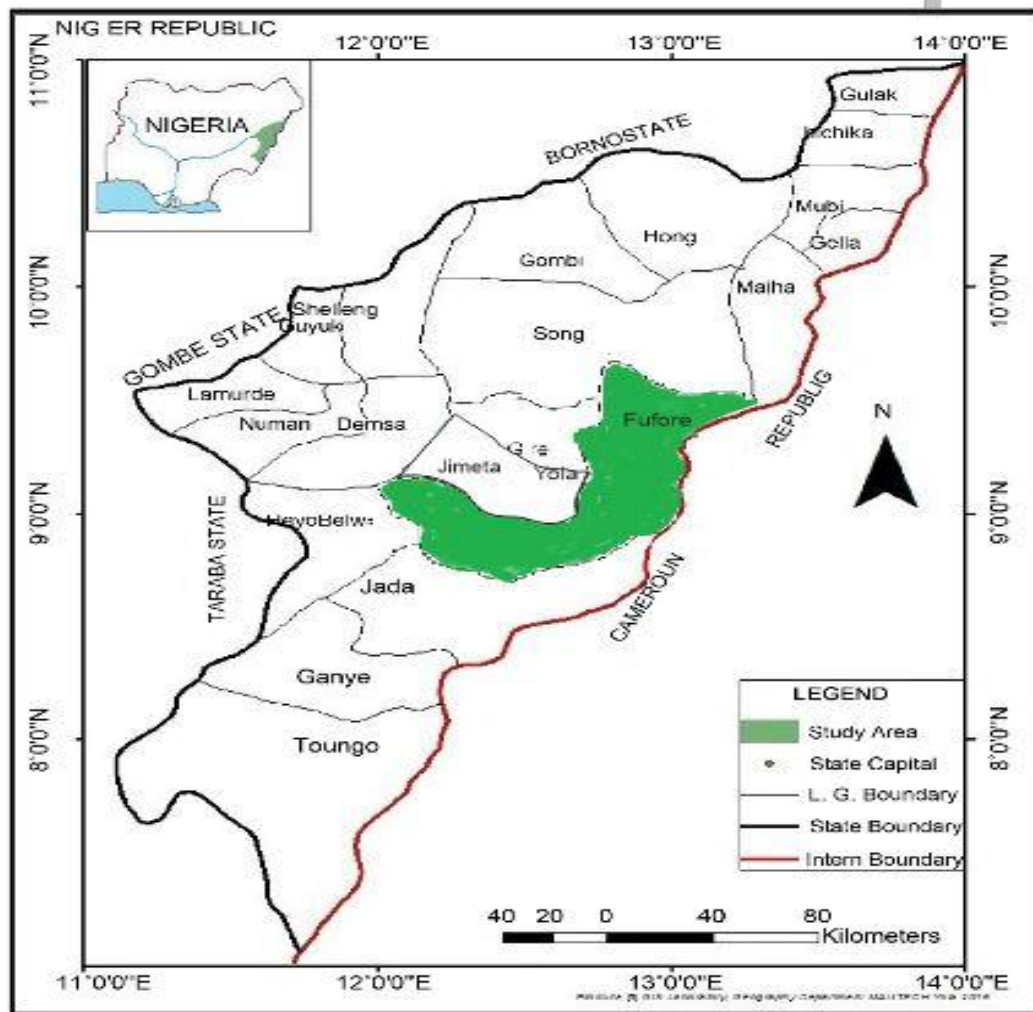
$13^{\circ}15'$  East. It has a total land mass of about 3,666 sqkm [7]. The local government has a total population of 209,460 [8] that comprises of 105,626 males and 103,834 females which is projected to be 279, 900 by 2016 (NPC, 2006). The area is regarded as low lying with about 80% of the entire area being at less than 300m above sea level, while the remaining 20% are hills and mountains. The area is drained by a series of rivers and streams such as River Benue which takes its source from Cameroon, River Faro e.t.c., which all encourage arable cropping, livestock rearing and fishing [9]. The area experiences distinct dry and wet seasons with temperature and humidity varying with season. The wet season is between April and October with average annual rainfall of 750 to 1000 mm. The dry season period is between December and March and characterized by dry, dusty and hazy north – east trade winds that blow over the area from Sahara desert. Temperatures are relatively high almost all the year round. The temperature of the area ranges from  $30^{\circ}\text{C}$  to  $42^{\circ}\text{C}$  with cold dry winds that reduce the temperatures to about  $15^{\circ}\text{C}$  during Harmattan period with the hottest months being April and May, with mean average temperature of  $34^{\circ}\text{C}$  [10]. It is bounded by Song and Girei Local Government to the North Ganye Local Government Area to the South, Mayo-Belwa Local Government area to the west and to the east with Maiha and Cameroon Republic [11]. The predominant ethnic groups found in the area include Fulani, Verre and Bwetiye. Majority of the inhabitants engaged in crop farming activities, few inhabitants are civil servant, traders and cattle rearers. Major crops cultivated in the area include maize, guinea corn, rice, groundnuts, bambara nuts, potatoes, cocoyam among others.

### 2.2 Data Collection

Data was obtained from primary sources which elicited for the purpose of this study. The use of structure questionnaires was administered to the respondents. In case where the respondents could not read or write, their responses were interview. Fufore LGA comprised of seven (7) districts communities namely, Ribadu, Gurin, Malabu, Mayo-ine, Vere, Nyibango and Daware. Fufore LGA has eleven wards which are Beti, Frang, Gurin, Karlahi, Mayo-ine, Pariya, Ribadu, Uki-Tuki, Wuro bokki, and Yadim. Languages spoken in Fufore LGA are Fulani, Gengle, Koma, Kugama, Kumba, Mboi, Mumuye, Vere and Bata. Seven out of the eleven wards that constitute the seven districts was randomly selected from each district as follows: Ribadu, Gurin, Farang, Mayo-

ine, Pariya, Karlahi and Yadim respectively. The number of population of the selected wards are 19,137, 29,188, 30,905, 31,843, 23,199, 11,049, 9,333 respectively (NPC, 2006) which is projected to be 29,954, 45,684, 48,372, 49,840, 36,311, 17,291, 14,608 by 2020 respectively (NPC, 2006). Thirty (30) questionnaires were randomly distributed to household in each ward selected in Fufore LGA. A total of Two Hundred and Ten (210) farmers were selected for the study. The seven wards has different socio economic characteristic as follows:

1. Ribadu: This ward has problem of extension visit per season and farm income and access to credit e.g loans, grand etc.
2. Gurin: Lack of educational knowledge in agricultural activities, access to credit and farm size.
3. Farang: Access to credit, age and lack of extension visit.
4. Mayo-ine: Family size, farm income, educational knowledge and farm size.
5. Pariya: Access to credit, marital status and age.
6. Karlahi: Acces to credit, lack of extension visit and age
7. Yadim: Primary occupation, family size, access to credit and farm income.



**Map 1. Map of adamawa state showing the local government area were the study site is located**

Source: Adebayo and Tukur [1]

## 2.3 Analysis of Data

A multi-state random sampling technique was use. Descriptive statistics such as frequencies, tables and percentages was use to analyze and describe the socio-economic characteristics of the respondents in the study area; determine the manner toward which the rural people conceive and perceive the development of agriculture in the study area and examine the constraints militating farmer's contribution to agriculture in the study area. Multiple regression models such as linear, semi-log and double log-form were used to examine farmer's contribution to agriculture toward the living standard of the rural people in the study area.

## 3. RESULTS AND DISCUSSION

### 3.1 Socio-economic Characteristics of the Respondents

#### 3.1.1 Age of the respondents

The Socio-economic characteristics of the respondents considered include: age, marital status, farm size, family size, educational level, primary occupation, access to credit, number of extension visit per season and farm income.

Table 1 show that 28.6% of the respondents were within the age range of fifty or greater than fifty years, 24.8% are within the age of 41-50

years, 20.9% were within the age of 39-40 years while only 10% of the respondents were within the age of 10-20. This is an indication that majority of the respondents within the study area are youths.

#### 3.1.2 Marital status of the respondents

Table 2 reveals that good proportions (30%) of the respondents in the study area were married, while 28.1% of them were single. Also, 27.6% of them were deserted while only 13.3% of them were divorced. The implication of this is that there may be large population per household since there will be multiplication in number of birth and there will be more labour forces to help out in the farming activities also many mouth to feed.

#### 3.1.3 Farm size of the respondents

The result from Table 3 shows that 69.0% of the respondents cultivate 1-5 hectares and 17% of the population cultivates 6-10 hectares of land in the study area. Also from the Table 11-15 and 16-20 of the people used 10% and 4% hectares of land respectively. This indicates that the majority of the respondents in the study area are small-scale farmers, usually in farming activities the smaller the area of farm the lower the output and consequently the lower the income generated and consequently low level of livelihood and standard of living.

**Table 1. Age of respondents**

Variable	Frequency	Percentage (%)
10-20	21	10.0
20-30	33	15.7
31-40	44	20.9
41-50	52	24.8
≥51	60	28.6
Total	210	100

Source: Field Survey, 2018

**Table 2. Marital status**

Variable	Frequency	Percentage (%)
Single	59	28.1
Married	65	31.0
Divorced	28	13.3
Deserted	58	27.6
Total	210	100

Source: Field Survey, 2018

**Table 3. Farm size (ha)**

Variable	Frequency	Percentage (%)
1-5	145	69.0
6-10	36	17.0
11-15	21	10.0
16-20	8	4.0
Total	210	100

Source: Field survey, 2018

**Table 4. Family size**

Variable	Frequency	Percentage (%)
1-5	59	28.1
6-10	58	27.6
11-15	65	31.0
16-20	17	8.1
≥20	11	5.2
Total	210	100

Source: Field survey, 2018

**Table 5. Education level**

Variable	Frequency	Percentage (%)
Non-formal Education	79	37.6
Primary	57	27.1
Secondary	42	20.1
Tertiary	32	15.2
Total	210	100

Source: Field Survey, 2018

**Table 6. Primary occupation**

Variable	Frequency	Percentage (%)
Artisan	20	9.5
Business	45	21.4
Farming	92	43.9
Civil Servant	45	21.4
Others	8	3.8
Total	210	100

Source: Field Survey, 2018

### 3.1.4 Family size of the respondents

Table 4 reveals that 31.0% of the respondents has household sizes of between 11-15 persons, 28.1% have 1-5 persons, 27.6% of the have 6-10 house hold while 8.1% and 5.2% of them have 16-20 and 20 above person respectively. This indicates that majority of the respondents have many mouth to feed but practice small scale farming. These may equally affect their standard of living and development in their livelihoods.

### 3.1.5 Educational level

Results from Table 5 shows that 37.6% of the respondents have Non-formal Education, 27.1% had Primary Education, 20.1% Secondary

School Education. Tertiary Education account for 15.2% from the population in the study area. However, 37.6% of the respondents in the study area were literate, that is, they could read and write and stand a better change of understanding and adopting new farming techniques and will therefore be more responsive to new and improved method of cultivation.

### 3.1.6 Primary occupation

Table 6 below shows the distribution of the respondents according to their primary occupation which they engaged in. the table shows that a good proportion of (43.9%) of the respondents are farmers 21.4% of them are into business and civil servants respectively. Only

9.5% of the populations are artisan who engaged in hand work like tailoring and mechanics as their other occupation in order to improve their standard of living in the study area. This indicates that farming is their primary occupation in Fufere LGA. 3.8% of the population engaged in other activities such as politics etc.

### 3.1.7 Access to credit

The results from the finding indicates that 25.7% of the respondents sources their credit from Agricultural Banks, 22.4% of the respondent source their credit Non-Commercial Banks, 21.4% of the Commercial Banks while only 14.8% of the respondents source their credit from friends and family, this indicates that majority of the farmers in the study area have access to credit.

### 3.1.8 Number of extension visit per season

The result from the analysis shows that a good (53.4%) proportion of the

respondents reported that they have not been visited by any extension service worker. 17.1% of the respondent says they have been visited once. 9% says of the respondent say they have been visited twice while 5.7% reported that they were visited thrice. This shows that majority of the respondents have no access to information, new techniques in farming to improve their farming skills. This may also have a negative impact towards farmer's contribution to agricultural development in the study area.

### 3.1.9 Farm income

From the result in Table 9 shows that after harvest of produce from their farms, 35.7% of the respondent report to generate farm income ranging from 51, 000-100,000 Naira, 32.4% generate 101,000-150,000, 14.8% generates 151,000-200,000, while 9% and 8.1% generates 1,000-5,000 and 201,000 and above respectively.

**Table 7. Source of credit**

Variable	Frequency	Percentage (%)
Friends and family	31	14.8
Agricultural Banks	54	25.7
Commercial Banks	45	21.4
Non-Commercial Banks	47	22.4
Others	33	15.7
Total	210	100

Source: Field Survey, 2018

**Table 8. Number of extension visit per season**

Variable	Frequency	Percentage (%)
Once	36	17.1
Twice	19	9.0
Thrice	12	5.7
Non	112	53.4
Others	31	14.8
Total	210	100

Source: Field Survey, 2018

**Table 9. Farm income**

Variable	Frequency	Percentage (%)
1,000-50,000	19	9.0
51,000-100,000	75	35.7
101,000-150,000	68	32.4
151,000-200,000	31	14.8
≥201,000	17	8.1
Total	210	100

Source: Field Survey, 2018

**Table 10. Do you benefit from farming**

Variable	Frequency	Percentage (%)
Yes	189	90
No	21	10
Total	210	100

Source: Field Survey, 2018

**Table 11. Do you think agricultural activities brought development to your area?**

Variable	Frequency	Percentage (%)
Yes	76	36.2
No	134	63.8
Total	210	100

Source: Field Survey, 2018

**Table 12. Do you wish to continue with farming activities?**

Variable	Frequency	Percentage (%)
Yes	67	31.9
No	143	68.1
Total	210	100

Source: Field Survey, 2018

**Table 13. Do you think farming has addressed the level of unemployment in your locality?**

Variable	Frequency	Percentage (%)
Yes	125	59.5
No	85	40.5
Total	210	100

Source: Field Survey, 2018

**Table 14. Do you think farming has contributed meaningful towards eradicating of poverty in your area?**

Variable	Frequency	Percentage (%)
Yes	112	53.3
No	98	46.7
Total	210	100

Source: Field Survey, 2018

### 3.1.10 Benefit derived from farming by the respondents

Result from the Table 10 shows that a greater percentage (90%) of the respondents does not benefit from their farming activities while only 10% of them agreed to benefit from their farming outputs. This is not surprising since majority of the people do not generate up to 200,000 naira from their farming as indicate in table above. This will definitely have a negative impact in their standard of living and economic growth in the study area.

### 3.1.11 Farmers contribution to agricultural activities in the development of the area

The result in Table 11 reveals that 63.8% of the respondents say that agricultural activities do not brought development to their area only 36.2% of

the respondents believe that agriculture has brought development to their area.

### 3.1.12 Respondent willingness to continue with farming activities

As a result of poor farmer's contribution to agricultural activities in the development of the study area, Table 12 reveals that majority (68.1%) of the respondents out of farming while 31.9% of the respondents still wish to continue with farming activities.

### 3.1.13 Farming addressing the level of unemployment in the study area

From the results in the Table 13. 59.5% of the respondent they believe that farming has addressed the level of unemployment in their



locality while 40.5% of them think that farming has not addressed the level of unemployment in their locality.

### 3.1.14 Farming towards eradication of poverty in the study area

From the responses received, 53.3% of the respondents agreed that farming has contributed meaningful towards eradicating poverty in their area while 46.7% of them believed that it has not contributed meaningful towards eradicating poverty in their area.

### 3.1.15 Farming toward improving the standard of living of the respondents

The Table 15 reveals that 53.8% of the respondents says that farming has not improve their standard of living while 46.2% of them belief that farming has improve their standard of living.

### 3.1.16 Farming as source of income of the respondents

A greater proportion (72.4%) of the respondent believe that farming has not contribute meaningfully to their source of income while only 27.6% of the respondent believe that farming has contributed meaningfully to their source of income.

### 3.1.17 Farming towards infrastructural development in the study area

Majority of the respondent (71.9%) does not agree that farming has brought infrastructural development in their area but 28.1% of the respondent believe that farming has brought infrastructural development in their area.

**Table 15. Do farming improve your standard of living?**

Variable	Frequency	Percentage (%)
Yes	97	46.2
No	113	53.8
Total	210	100

Source: Field Survey, 2018

**Table 16. Do farming contributes meaningful progress to your source of income**

Variable	Frequency	Percentage (%)
Yes	152	72.4
No	58	27.6
Total	210	100

Source: Field Survey, 2018

**Table 17. Do you think farming has brought infrastructural development in your area?**

Variable	Frequency	Percentage (%)
Yes	59	28.1
No	151	71.9
Total	210	100

Source: Field Survey, 2018

**Table 18. Are you satisfied with the marketing channels and income generation from farming activities**

Variable	Frequency	Percentage (%)
Yes	87	41.4
No	123	58.6
Total	210	100

Source: Field Survey, 2018

### 3.1.18 Respondents marketing channels and income generation from farming activities

As shown in Table 18, 58.6% of the respondent are not satisfy with the marketing channels and income generation from their farming activities while 42.4% says they are satisfy with it.

**Table 19. Is there any contribution from government in boosting your farming activities?**

Variable	Frequency	Percentage (%)
Yes	96	45.7
No	114	54.3
Total	210	100

Source: Field Survey, 2018

**Table 20. Multiple regression analysis of farmer's contribution to agriculture towards the living standard of the rural people in the study area**

Variable	Linear function	Semi-log	Double log#
Constant	-225143.6(-0.940)	-3010491 (-1.829)	1.506 (0.809)*
Age of the respondents ( $X_1$ )	-5065.983 (1.028)	-31574.820 (-0.043)	-0.342(0.412)
Marital Status( $X_2$ )	9929.150 (0.782)	-5359.186 (-0.017)	-0.097 (-0.272)
Farm Size ( $X_3$ )	81451.464 (2.104)*	115067.9 (-0.204)*	-0.295 (-0.462)**
Educational level ( $X_5$ )	86556.47	63391.81	0.897
Primary occupation ( $X_6$ )	23989.733	242726.45	0.387
Access to Credit ( $X_7$ )	1.033	682187.07	0.891
Number of Extension Visit ( $X_8$ )	24000.11 (1.071)	-132585.4 (-0.227)	-0.125 (-0.189)***
$R^2$	0.447	0.612	0.813
F value	4.606**	2.567	5.246**

Source: Field Survey, 2018; Note: \*\*\*= significant at 1% probability level; \*\*= significant at 5% probability level; \*= significant at 10% probability level; # = lead equation; Figure in parenthesis are calculated t-ratios

**Table 21. Constraints militating against farmer's contribution of agriculture in the study area**

Problems	Frequency	Percentage (%)
Lack of improved seed	41	19.5
Low consumer demand	9	4.3
Market distance	36	17.1
Absent/limited access to distance	17	8.1
Low quality products	13	6.2
Lack of credit facilities	41	19.5
Pest and disease	28	13.3
Low price of farm	69	32.9
Low soil fertility	15	7.1

Source: Field Survey, 2018

\*Multiple responses exist, hence percentage greater than 100

### 3.1.19 Government in boosting farming activities in the study area

From the result in Table 19, 54.3% of the respondents say that there is no contribution of government in boosting their farming activities whereas 45.7% of them say government has contributed in boosting their farming activities through fertilizer supply, pesticide, insecticide and rodenticide at affordable price also loans to farmers at low interest rate.

### 3.2 Analysis of Farmer's Contribution to Agriculture towards Living Standard of the Rural People

The regression analysis was used to examine farmer's contribution to agriculture toward the living standard of the rural people in the study area. The double-log functional form was chosen

as the lead equation. This was selected based on the values of  $R^2$  coefficient, the magnitude of the F-ratios as well as the conformity of signs of coefficient to apriority expectations, the number of significant parameters are based on the low standard error of the estimate. The coefficient of determination ( $R^2$ ) is 0.813 with standard error of 0.19071, implying that the explanatory variables has 81.3% influence on farmer's contribution to agriculture toward the living standard of the rural people in Fufere Local Government Area of Adamawa State and F-test value of 5.246 which is significant at 5% level.

Analysis of the result revealed that farm size has a negative coefficient and significant at 5% level of significant. The negative coefficient of the farm size variable suggest that farmers with large farm size may not obtain the expected output unless other input are provided for them to improve their

output, level of income generation and living standard of the respondents.

Educational level has positive coefficient and significant at 1% level. This implies that the farmers are educated enough in farming rather other input should be provided for them to improve their output and living standard of the respondents.

The result also indicates that access to credit coefficient was positive and significant at 5% level. This implies that credit is an important variable for income generation, improvement to their living standard and development in Fufore LGA of Adamawa State because farm credit enhances productivity and promotes standard of living by breaking the vicious cycle of poverty hence, development of the area.

Extension visit per season coefficient was negative and significant at 1%. This mean that extension visit is an important factor to improve the productivity of the respondents but this alone may not yield a good result unless other factors of production/inputs are provided. Further, it implies that the higher the level of extension visit per season in the area, the less importance it is to the farmers.

However, age, marital status, family size and primary occupation of the farmers are not significant at any level. This implies that they have negative effects on farmer's contribution to agriculture toward the living standard of the rural people of Fufore LGA of Adamawa State.

### **3.3 Constraint Militating against Farmers Contribution of Agriculture in the Study Area**

The constraint identified by the respondents that inhibits farmer's contribution to agriculture in the study area is presented in Table 21. The respondent identified several constraints affecting the development of agriculture in their area. The main constraint is low price of farm output which was identified by 36.9%. The result also show that 19.5% of the respondents are faced with the problem of lack of credits facilities which may force them to operate on small scale bases. Problems of pest and disease also are one of the major problems militating against the development of agriculture in the study area which was identified by 13.3% of the respondent. More so, 17.1% of the respondent are faced which the problem of market distance, 19.5% of

the respondent complain the problem of lack of improved seed. Absent /limited access to import is also a problem that also affecting the respondent which account for 8.1% similarly, 7.1% of them complaining of low soil fertility in their area as a constraint affecting their farming and development to the area. 6.2% and 4.2% also pointed out that low quality product and low consumer demand are some of the constraint affecting them.

## **4. CONCLUSION**

It can be concluded that from the findings of this study rural farmers in the study area operate under subsistence farming which lead to low income generation and poor standard of living. Also inadequate credit facilities, poor market structure, poor level of extension service, lack of improved seed variety which hinder rural development. The results further express that farmers in the LGA has negative contribution towards farming as occupation because of unable to find jobs in non-agricultural sectors. It is recommended that Government, Private sectors, Organizations, Banks etc to render support to the people the LGA through the provision of modern farming implements, credit facilities, workshop, seminars to be conducted to encourage farmers of the LGA to fully participate in commercial farming to boost agricultural activities in the area and to the economy of Adamawa, State and Nigeria.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist. Yes

## **REFERENCES**

1. Monteith JL. Climatic variation and the growth of crops/trees". Quarterly Journal of the Royal Meteorological Society. 2007;107 (454):749-774.
2. Anyanwu AC. A textbook of Agriculture for Schools and Collages; 1998.
3. Ong C, Black C. John Monteith". Agriculture and Forest Meteorology. 2012;166-167:A1. DOI: 10.1016/j.agrformet.2012.10.2012
4. Yakubu M. The impact of oil on Nigeria's Economy: The Boom and Bust cycles. Bullion-central Bank of Nigeria. 2008;32(2): 41-50.
5. Anikeze N. Repositioning the Nigeria Local Government System for improved

- performance" Journal of Policy and Development studies.2012;1:166-174.
6. Gadiga BL. Livestock production' In Adebayo, A. A(ed.), Mubi region: A geograhical synthesis, Yola: Paraclete Publishers. 2004;112.
  7. Musa AA, Tukur AL. Measuring Land cover Indices of Adamawa State Using Remote Sensing and Geographic Information System (GIS) Techniques. FUTY Journal of the environment. 2009;4(1).
  8. National Population Commission: Legal Notice on Publication of the Details of the Breakdown of the National and State Provisional Totals 2006 Census B179; 2006.
  9. Fadama II: The Journey So Far In Fufore Local Government Area Adamawa State. 2008;1-3.
  10. Adebayo AA. Vegetation and forest in: Adebayo A.A. and Tukur A.L. (eds), Adamawa State in Maps, paraclete publishers Yola Nigeria; 1999.
  11. Adamawa Agricultural Development Programme; 1999.

© 2020 Umar and Suleiman; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*

*The peer review history for this paper can be accessed here:  
<http://www.sdiarticle4.com/review-history/59085>*