

*Full Length Research Paper*

# Analysis of entrepreneurial agricultural activities of youths in Michika Local Government Area of Adamawa State, Nigeria

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The study analyzed the entrepreneurial agricultural activities of youths in Michika Local Government Area of Adamawa State. Data were collected through the use of structured questionnaire administered to 100 youths, randomly sampled across the study area. Data collected were analysed using both descriptive and inferential statistical tools in the forms of frequencies, percentages and correlation analysis. Result of the study revealed that all most all (91%) of the youths had a least secondary education with a high proportion (46%) within age bracket of 27 to 32 years. Majority (55%) were males, singles were 61% and those involved in farming as a primary occupation constituted 63%. Result of paired correlation analysis between socio-economic characteristics and level of involvement in agriculture by the respondents indicated a significant and positive relationship with age ( $r = 0.424$ ), gender ( $r = 0.265$ ), marital status ( $r = 0.474$ ), family size ( $r = 0.654$ ), farm size ( $r = 0.265$ ), primary occupation ( $r = 0.271$ ) and years of schooling ( $r = 0.440$ ) all at 1% level of significance. Result of rank correlation between ranking of constraints by male and female youths in their agricultural enterprises, revealed a high degree of agreement ( $r = 0.842$ ). The respondents indicated lack of capital as their major constraint of their agricultural enterprises. It was recommended that financial institutions need to be encouraged by the government to provide assistance to the youths and that the youth themselves should engage more in other non-agricultural enterprises to generate supplementary incomes.

**Key words:** Entrepreneurial, youth, agriculture, Adamawa State.

## INTRODUCTION

Agricultural activities can contribute immensely to youth development and act as source of empowerment for them. These activities serve as a tool for providing employment opportunities for the youths, thereby alleviating poverty and youth delinquencies. It is therefore, of paramount importance to encourage youth involvement in agriculture. Young people can develop the attitude, knowledge and skills that enable or make them to pursue active functions in the society and collaborate with adults to assess critical issues and react favourably to finding solutions to their needs and problems (Gobeli, 2004).

Significant section of the population in Nigeria are the

youths, therefore the importance of youth involvement in agriculture cannot be overemphasized. Youth are strong and possess abundant energy that needs proper channelling and harnessing for increased agricultural production (Ogunbameru, 2001). Youth involvement in agricultural activities will not only create career opportunities for the youths but also increase food production and to a large extent reduce the gap between food production and its demand in the community (NDE, 2003). Youth can develop the skills, knowledge and attitude that enable them to take an active role in the society and to cooperate with adults in their communities to determine critical issues and responses to solving problems (Gobeli, 2004). Youths are young people in a society who are characterized by ample ideas, energy, and new ways to see life and face problems (Onyeoziri, 2002). Educated youths are more likely to adopt new innovations, have

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access to extension services and utilize agricultural loans more effectively (Amaza and Tashikalma, 2003).

Entrepreneurship is the process by which individuals become conscious of business ownership as an option or viable alternative, develop ideas for business, learn the process of becoming an entrepreneur and undertake the initiation and development of a business. Youth entrepreneurship signifies the practical application of enterprise qualities, such as initiation, creativity, innovation and risk taking into work environment, either in self-employment or employment in small start-up firms, using the appropriate skills necessary for success in that environment (Adepeju, 2009). Among the possible entrepreneurship activities in agriculture which provides opportunities for youth are in the areas of; crop production, livestock production, Orchard, fisheries, mechanization, marketing, processing and forestry.

This study was conceived based on the premise that many young people are not used to their full potentials. Moreover most of the unemployed people in Nigeria are young people and some of them are graduates. It is thus clear that the agricultural sector had the most potential for diversifying the economy and providing a platform for young people to use a lot of their skills.

The aim of this study therefore was to analyse the entrepreneurial activities of youth in agriculture. Specifically, the study would identify the socio-economic characteristics of the youth; analyze their level of involvement; determine the benefits accruing to them and analyze the constraints facing them in operating their agricultural enterprises. The research equally tested the null hypotheses that: There is no significant relationship between the socio-economic characteristics of the youths and their level of involvement in agriculture; and, there is no significant relationship between the ranking of problems associated with involvement in agricultural enterprises by male and female youths, in the study area.

## METHODOLOGY

This study was undertaken in Michika Local Government Area in Borno state. The Local Government Area is situated on latitude 10.62° and longitude 13.39° in the northern part of Adamawa State. The study area shares borders or boundaries with Madagali Local Government Area of Adamawa State, in the north east region, Mubi and Hong Local Government Areas of Adamawa State, in the south of Askira Uba Local Government Area of Borno State, in the West.

The physical features of the study area include a wide range of mountains forming the Nigerian/Cameroon border-plains and valleys in the east. The study area covers a total land area of 901 km<sup>2</sup> and a population of 155,302, with males constituting 74,428 and females 80,874 (National Population Commission (NPC) (2006)). Michika Local Government Area is highly blessed with arable and fertile lands suitable for agricultural production.

The targeted population of this study were the youths. The study area has 16 council wards. From the 16 council wards, 10 wards that have preponderance of youth population were selected through simple random sampling and 10 respondents in each ward were administered with structured questionnaire giving making a total of 100 respondents.

Primary and secondary data were collected. The primary data were collected through the use of structured questionnaire to elicit information from the respondents. The primary data covers the socio-economic characteristics of the respondents, level of involvement in agriculture by the respondents, entrepreneurship opportunities of the respondents and constraints associated with the respondents' involvement in agriculture. The secondary data with respect to population, sampling frame and size as well as background information on the study area were collected from the National Population Commission (NPC), local government publications, state ministries and relevant youth establishment.

Data analysis utilized both the descriptive and inferential statistics. The descriptive statistics such as frequencies and percentages were employed to summarize and organise the data. Paired sample correlation and the rank correlation were used to test the relationship between the socio-economic characteristics of the respondents (independent variables, Xs) and level of involvement by the respondents in agriculture (dependent variable, Y) as well as the relationship between the ranking by male and female respondents of the constraints associated with their agricultural enterprises. The paired correlation model is expressed as:

$$Y = X_1 + X_2 + X_3 + X_4 + \dots + X_n$$

Where;

Y = Level of youth involvement in agriculture (proxied by number of years involved in farming activities),

X<sub>1</sub> = Age (Years),

X<sub>2</sub> = Gender (1 if male; 0 if female),

X<sub>3</sub> = Marital status (married 1; Not married 0),

X<sub>4</sub> = Estimated farm size (Hectares),

X<sub>5</sub> = Family size (No. in family),

X<sub>6</sub> = Primary occupation,

X<sub>7</sub> = Secondary occupation, and

X<sub>8</sub> = Educational qualification (Proxied by numbers of years in formal school).

Rank correlation was used in testing the hypotheses: There is no significant relationship between the ranking of constraints of agricultural entrepreneurial activities by male and female respondents.

The rank correlation model used was the Spearman rank correlation formula (Lerche, 1983) and specified in the context of the study as follows:

$$r_s = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where; r<sub>s</sub> = Rank correlation coefficient = Difference between two sets of rank (d<sub>1</sub> and d<sub>2</sub>); d<sub>1</sub> = Ranking by male; d<sub>2</sub> = Ranking by female;  $\sum$  = Summation; 6 = Constant; D = Difference between two sets of rank (d<sub>1</sub> and d<sub>2</sub>);  $\sum D^2$  = Summation of the difference between two sets of rank (d<sub>1</sub> and d<sub>2</sub>); N = Total number of constraints; D<sup>2</sup> = Square of the product difference between two sets of rank (d<sub>1</sub> and d<sub>2</sub>);

## RESULTS AND DISCUSSION

In Table 1, the result on the socio-economic characteristics of the respondents is presented. The table indicated that most of the respondents (46%) fall within the age bracket of 27 to 32 years, with 18% under 15 to 20 years, 9% each for under 33 to 38 years and above 38 years, respectively. The result implies that, most of the respondents were youths between 27 to 32 years. The

**Table 1.** Socio-economic characteristics of the respondents (n = 100).

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age</b>		
15 - 20	18	18.0
21 - 26	18	18.0
27 - 32	46	46.0
33 - 38	9	9.0
Above 38	9	9.0
<b>Gender</b>		
Male	55	55.0
Female	45	45.0
<b>Marital status</b>		
Single	61	61.0
Married	23	23.0
Widowed	11	11.0
Divorced	5	5.0
<b>Farm size (ha)</b>		
< 1	46	46.0
1- 3	18	18.0
Above 6	36	36.0
<b>Family size</b>		
1 - 5	40	40.0
6 - 10	46	46.0
11 - 15	4	4.0
Above 15	10	10.0
<b>Primary occupation</b>		
Civil servant	18	18.0
Tailor	9	9.0
Farmer	63	63.0
Business person	10	10.0
<b>Secondary occupation</b>		
Mechanic	28	28.0
Welding	20	20.0
Farming	28	28.0
Civil servant	24	24.0
<b>Education</b>		
Secondary	37	37.0
NCE	24	24.0
HND	22	22.0
Degree qualification	8	8.0
No formal education	9	9.0

Source: Field survey, 2009.

youths are within their productive and active working age range, and appear to be more receptive to agriculture

than their aged counterparts (Ogunbameru, 2001). On gender distribution of the respondents, the data in Table 1

Table 1. Continued.

Years of schooling		
12	37	37.0
14	24	24.0
15	22	22.0
16	8	8.0

shows that males constituted the highest percentage (55%) than their female counterparts (45%). This signified that more males are involved in agricultural activities than females in the study area. Gender is said to exert influence on agricultural activities as male and female carry out different agricultural tasks (Mustapha, 2007). In terms of marital status of the respondents, the table showed that 61% of the youths were single, 23% were married, 11% were widowed and 5% were divorced. The majority of the respondents (61%) were single. Marital status, background and place of residence influence agricultural activities (Mustapha, 2007). It is apparent from Table 1 that, 46% of the respondents have less than 1 ha of land, 36% have above 6 ha and 18% have 1 to 3 ha. It is implied from the result from the table that most (46%) of the respondents has less than a hectare of land for their agricultural purposes. This may be attributed to shortage or inadequate savings and capital to cultivate a large piece of land for agriculture by the respondents. Results from Table 1 show that 46% of the respondents have 6 to 10 persons as their family size, 40% have 1 to 5, 10% have 15 and 4% have 11 to 15 persons. Majority of the respondent's family size falls within the household size of 6 to 10 persons. Adegbite and Oluwalana (2004), affirmed that, relatively large household size may likely enhance family labour supply on farms, hence supporting the favourably, productive capacities of the farmers already enhanced by their ages.

It can also be observed from Table 1 that 63% of the respondents are farmers, 18% are civil servants, 10% are business persons and 9% are tailors. The result revealed that, most of the respondents (63%) were farmers and deemed farming as their primary occupation. Ogunbameru (2001) posited that, youths are strong and are characterized by ample strength which requires appropriate harnessing and channelling for increasing agricultural production. Farming requires a high level of physical strength or fitness, and thus youth involvement in farming is one of the channels for upgrading economic efficiency and productivity (Okike et al., 2001). Information in Table 1 also depicts the distribution of the secondary occupation of the respondents. Result from the table, revealed that, 28% of the respondents are mechanics, 28% are farmers, 24% are civil servants and 20% are welders. This implies that, most of the respondents are into farming (28%) and mechanic (28%) respectively. They are into secondary occupation to

supplement their income from farming.

The educational attainment of the respondents in terms of type of education and number of years of schooling are equally shown in Table 1. It is obvious from the data in the table that, most (37%) of the respondents had secondary education, 24% (NCE), 22% (HND), 9% no formal education and 8% had degree qualification. The result revealed that most of the respondents had only secondary school education. Amaza and Tashikalma (2003) disclosed that, the level of education provides the privilege to acquire better skills, results and impacts, as well as relevant variation on adoption of innovation among people. From the table, it is observed that, 37% of the respondents had 12 years of schooling, 24% had 14 years, 22% had 15 years, 8% had 16 years of schooling and the remaining fewer percentages had no formal years of schooling. This implies that, majority of the respondents had 12 years of schooling which corresponds with the secondary level qualification.

### Youth involvement in agricultural enterprises

Youth involvement in agricultural enterprises in the study area was assessed based on the respondents' response as to whether they are engaged in any agricultural activity, specification of the kind of farming activity, number of years of such involvement and reasons for involvement in the activity (Table 2). From the results in Table 2, it is evident that, majority (81%) of the respondents are involved in agricultural activities in the study area. The result signifies that, most of the respondents in the study are engaged in farming. In terms of the distribution of agricultural activities engaged by the respondents, the result indicated that, 67% are involved mostly in crop production, while 21% are into mechanization, 10% are into livestock, 1% into fisheries and forestry respectively. This implies that, crop production predominates over other agricultural activities involved by the youths. Youth involvement in agricultural activities provides the opportunity to increase food production and reduce the gap between food production and its demand (NDE, 2003).

The distribution of respondents per years of farming experience is detailed in Table 2. It is obvious from the result that, most (45%) of the respondents are into farming greater than 7 years. This may be attributed to

**Table 2.** Distribution of the respondents based on their involvement in agriculture (n = 100).

Indicator	Frequency	Percentage
<b>Whether involved in any agricultural activity</b>		
Yes	81	81.00
No	19	19.00
<b>Nature of agricultural activity</b>		
Livestock production	10	10.00
Crop production	67	67.0
Fisheries	1	1.0
Mechanization	21	21.0
Forestry	1	1.0
<b>Years of involvement in farming (years)</b>		
< 2	9	9.0
2 - 4	18	18.0
5 - 7	28	28.0
> 7	45	45.0
<b>Reasons for involvement</b>		
By provision of capital	41	41.0
By provision of basic amenities	27	27.0
Creating awareness on agriculture	32	32.0

Source: Field survey, 2009.

the fact that, they may have realised a lot of economic benefits from farming. It is also evident from the results in Table 2 that 55% of the respondents are involved in agriculture as means for self-reliance. This implies that, majority (55%) are into farming for their sustenance or to earn their living. There underlies a need to influence the youths by empowering them to be able to make informed choices, so that they can have meaningful and enjoyable lives and contribute to the sustenance of increased agricultural productivity. It is also apparent from the result in Table 2 that a high proportion (41%) of the respondents perceived provision of capital as a way of encouraging them to be involved in farming while 32% perceived creating of awareness on agriculture and 27% perceived provision of basic amenities. This implies that, provision of capital constituted the greatest motivator for the respondents to be involved in agriculture. Young people can develop the knowledge, attitude and skills which make them pursue active roles in the society and to collaborate with adults to finding solutions to their needs and problems (Gobeli, 2004).

### Pair-wise correlation analysis

In Table 3 is presented the results of pair-wise correlation analysis between socio-economic variables and years of involvement in agriculture. From the analysis presented

in Table 4, it is evident that there is significant relationship between age and years of involvement in agriculture ( $r = 0.424$ ). This implies that, age has significant impact in influencing the rate of involvement in agriculture by the respondents. Older people are more predisposed to participate in agricultural activities to meet up to their family obligations.

The data in Table 3 also indicated a significant relationship between gender and years of involvement in agriculture ( $r = 0.265$ ). This implies that, gender has significant role in enhancing activities of the respondents in agriculture. In the study area, there is gender disaggregation in terms of activities and responsibilities of male and female in agricultural production. Moreover some married women are not allowed to participate in agricultural activities because of 'purdah', an Islamic injunction which precludes them from engaging in activities outside the home.

The result of the analysis depicted in Table 3 also indicated significant relationship between years of involvement in agriculture and the marital status ( $r = 0.474$ ), family size ( $r = 0.654$ ), farm size ( $r = 0.265$ ) primary occupation ( $r = 0.271$ ) and years of schooling ( $r = 0.440$ ). The implication of these results are that; married respondents are involved in agriculture to provide food for their families; relatively large house hold size may likely enhance family labour supply on the farms; educated respondents are more likely expose to variety of skills,

**Table 3.** Correlation analysis between the socio-economic characteristics of the respondents and years of involvement in agriculture.

Correlated variable	Mean difference	Correlated coefficient	T-value	Remark
Age	0.6400	0.424	5.563	0.000*
Gender	1.6400	0.265	13.366	0.008*
Marital status	1.7200	0.474	19.610	0.000*
Family size	0.1700	0.654	8.017	0.000*
Farm size	.8300	0.265	0.372	0.008*
Primary occupation	0.4400	0.271	2.921	0.006*
Secondary occupation	-1.67	0.025	-13,939	0.804 <sup>NS</sup>
Years schooling	11.0700	0.440	5.738	0.000*

Source: Extract from Correlation Analysis.

**Table 4.** Correlation analysis between the socio-economic characteristics of the respondents and years of involvement in agriculture.

Correlated variable	Mean difference	Correlated coefficient	T-value	Remark
Age	0.6400	0.424	5.563	0.000*
Gender	1.6400	0.265	13.366	0.008*
Marital status	1.7200	0.474	19.610	0.000*
Family size	0.1700	0.654	8.017	0.000*
Farm size	0.8300	0.265	0.372	0.008*
Primary occupation	0.4400	0.271	2.921	0.006*
Secondary occupation	-1.67	0.025	-13,939	0.804 <sup>NS</sup>
Years schooling	11.0700	.440	5.738	0.000*

Source: Extract from Correlation Analysis; \* = significant at 1% level; NS = Not significant.

knowledge and attitudes important for adoption of improved agricultural technologies than the less educated respondents. The larger the farm size, the greater the labour needed to cultivate most of the available lands for agriculture and farming as their primary occupation provides them with the opportunity to generate income for improving economic efficiency and productivity in their agricultural enterprises.

### Constraints to respondents involvement in agriculture

Rank correlation analysis of the differences between ranking by of constraints of agricultural enterprise by male and female respondents is as presented in Table 4.

Feeding the information presented in Table 5 into the Spearman rank correlation formula (Lerche, 1983), the rank correlation coefficient is computed and presented as follows:

$$\text{Spearman rank correlation (rs)} = 1 - \frac{6\sum D^2}{N(N^2 - 1)}$$

$$\sum D^2 = 26, N = 10$$

$$rs = 1 - \frac{6\sum D^2}{N(N^2 - 1)} = 1 - \frac{6\sum 26}{10(10^2 - 1)}$$

$$rs = 1 - \frac{156}{10(99)} = 1 - \frac{156}{990}$$

$$rs = 1 - 0.15758 = 0.842$$

The rank correlation coefficient between the ranking by male and female respondents of constraint in their agricultural enterprises is  $rs = 0.842$ . This implies that, there is high degree of agreement between male and female respondents pertaining to constraints limiting their involvement in agriculture.

### CONCLUSION AND RECOMMENDATIONS

It is apparent from the results that youths in the study area are really involved in agricultural activities and reaping both social and economic benefits from it. The youth have potentials which need to be tapped for agricultural development in Michika local government area, Adamawa state and Nigeria as a whole especially against

**Table 5.** Rank correlation analysis of constraints to involvement in agricultural enterprise as perceived by male and female respondents.

Constraint	X	Y	D	D <sup>2</sup>
	Male ranking	Female ranking		
Lack of capital	1	1	0	0
Lack of government support	2	3	1	1
Poor storage facilities	9	9	0	0
High price of inputs	4	7	3	9
Lack of good roads	7	6	1	1
Poor market outlets	5	4	1	1
Low price for products	6	8	2	4
Inadequate training	10	10	0	0
Lack of transportation	8	5	3	9
Land tenure system	3	2	1	1

Source: Field survey, 2009.

the backdrop of massive youth unemployment in the country. The identified constraints which include lack of capital, government support and land tenure problems need to be addressed to motivate the youth to participate more actively in agricultural activities in the study area. Based on the result of this study, the following suggestions were made:

1. Financial institutions should provide assistance to the youths to increase their capital base and enhance their economic empowerment.
2. Youth should be encouraged to engage in both agricultural and non-agricultural enterprises to generate incomes to facilitate the growth of their enterprises.
3. There is need to create agricultural programmes through more clubs or associations to ginger tremendous involvement of youths in agricultural activities, as a driving force for community development.
4. Policies that will give easy access to land for the youths should be encouraged.

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