

**CONSTRAINTS TO RURAL FARMERS' ENGAGEMENT IN NON-FARM INCOME GENERATING ACTIVITIES IN NSUKKA AGRICULTURAL ZONE, ENUGU STATE, NIGERIA.**

\***Ukoha, J. C. I., Agu-Aguiyi, F. N., Nwadike, F. U. and Abonyi, U. C.**

College of Agricultural Economics, Rural Sociology and Extension

Michael Okpara University of Agriculture, Umudike,

P.M.B 7267 Umuahia, Abia State, Nigeria

\*Corresponding author email [joyciroukoha@gmail.com](mailto:joyciroukoha@gmail.com)

**ABSTRACT**

The study ascertained the constraints to rural farmers' engagement in non-farm income generating activities in Nsukka Agricultural Zone of Enugu State, Nigeria. A multi-staged sampling procedure was used in selecting 120 rural farmers that participated in the study and structured questionnaire was used to elicit information. Both descriptive and inferential statistics were used in analyzing the data. Major results showed that 71.7% of the respondents had no access to credit while majority (60.05%) were engaged in trading. Also, over 67% undertook more than one non-farm income generating activity. Inadequate information on how to start non-farm income generating activities ranked highest as a major constraint ( $\bar{x}=3.09$ ) to rural farmers' engagement in non-farm activities in the zone. However, high tax rate was not a constraint ( $\bar{x}=2.40$ ) on a benchmark mean score of 2.5. The study concluded that most of the rural farmers do not have adequate information to help them venture into viable non-farm activity. It therefore recommended that both governmental and non-governmental agencies should incorporate sensitization and awareness programme on various entrepreneurship skills including trainings in order to better inform and equip farmers on how best to choose non-farm activities and diversify their income for improved standard of living.

**Keywords:** Rural Farmers, Engagement, Non-Farm income generating activities

**INTRODUCTION**

Nowadays the issue of diversification of household income has become a burning issue all over the World especially among poor rural households so as to ensure sustainable food security and better standard of living. Diversification of livelihood activities help to generate more income for rural households thereby helping families to make ends meet as well as improve their well-being. This suggests the fact why non-farm activities have been seen as very important livelihood strategies among rural households (Awoniyi and Salman, 2011). Rural farm families are often involved in various non-farm income generating activities to help cushion the effect of hunger due to the seasonal variation observed with traditional crop and livestock production. Similarly, rural farmers engage in non-farm activities to create a continuous stream of income to cater for the starring exigencies of life

(Ovwigho, 2014). On this note, LIFCHASA, (2012) described non-income generating activities to include all economic activities in rural areas except agriculture, livestock, fishing and hunting in addition to off-farm activities such as processing, marketing, manufacturing, wage and casual local employment in the rural villages.

Furthermore, Jabo *et. al.*, (2014) opined that non-farm income generating activities play an important role in breaking the vicious cycle of poverty through their income-smoothing effects on the rural population and the resultant effect on the food security status of rural dwellers. Therefore, participation in non-farm activities is the farmers' strategy for diversifying their household earnings portfolio to sustain their household income and stabilize their household consumption over a prolonged period of time (Reardon *et. al.*, 2007).

However, according to Awoniyi and Salman, (2011), rural farmers engaging in non-farm income generating activities is often necessitated by uncertainties associated with agricultural production such as variability in soil quality, households and crop diseases, price shock, unpredictable rainfall and other weather related events which could lead to low productivity, low output as well as low income. Similarly, Adepoju and Obayelu, (2013) agreed that the Nigerian agricultural sector is bedeviled with myriads of problems ranging from low soil fertility to poor infrastructural facilities in the rural areas, therefore can neither sustain the rural farm families' income nor adequately employ the teeming rural population that need to continually make a living from their farms.

This study would therefore, assess empirically those factors serve as constraints to rural farmers engagement in non-farm income generating activities in Nsukka Agricultural Zone, Enugu State, Nigeria which will assist the rural farmers in making right decision regarding their involvement in any profitable venture. Also, findings from this study will be of help to the Government, Policy makers and other Developmental agencies in programme planning and implementation, to strategically institutes small and medium-scale enterprises in rural areas in order to facilitate the engagement of rural farm families in various non-farm income generating activities to improve their well-being. Thus the specific objectives of the study are to: describe the socio-economic characteristics of the rural farmers; determine the various non-farm income generating activities carried out by the respondents; ascertain the

number of non-farm income generating activities engaged in by the respondents; and analyze the constraints to rural farmers' engagement in non-farm activities in Nsukka zone of Enugu state, Nigeria.

### METHODOLOGY

The study was conducted in Nsukka Agricultural Zone, Enugu State, Nigeria. Nsukka Agricultural Zone is one of the three agricultural zones in Enugu state, Nigeria. It is made up of six local government areas (LGAs) namely: Nsukka, Igbo-Eze North, Igbo-Eze South, Isi-Uzo, Udenu and Uzo-Uwani Local Government Areas. Enugu State is one of the states in Southeastern Nigeria, created in 1991 from part of old Anambra State. Enugu is located at 6°30'N 7°30'E of the Equator and the Greenwich Meridian, 6.500°N 7.500°E.

Enugu State has a good soil-land and climatic conditions all year round, sitting at about 223 metres (732 ft) above sea level, and the soil is well drained during its rainy season. The mean temperature in Enugu State in the hottest month of February is about 87.16°F (30.64°C) while the lowest temperatures occur in the month of November, reaching 15.86°C. The lowest rainfall of about 0.16 cubic centimeters (0.0098 cu in) is normal in February, while the highest is about 35.7 cubic centimeters (2.18 cu in) in July. Nsukka had a population of 309,633 people at the census held in 2006 (Post Office, 2009)

Multi-stage random sampling technique was adopted for the selection of respondents for this study. Three out of six LGAs were randomly selected for the study based on the existence of farmers in the areas. They included Nsukka, Isi-Uzo and Uzo-Uwani LGAs.

Also two communities were randomly selected from each of the three LGAs for the same reason. They included Nsukka and Eha-Alumona for Nsukka LGA, Eha-Amufu and Umuro for Isi-Uzo, Nkpologu and Adani for Uzo-Uwani LGA. Furthermore, through random sampling, 20 farmers were selected from each community for study based on their involvements in non-farm activities to give a total of 120 respondents.

Data for the study were collected through the use of questionnaire and Objectives 1, 2 and 3 were analyzed using descriptive statistics such as frequency counts, percentages and means while objective 4 was realized using a 4-point likert type of rating scale namely: Strongly Agree= 4, Agree= 3, Disagree= 2 and Strongly Disagree = 1. The bench mark was obtained thus: 4+3+2+1 = 10, divided by 4 to give 2.5 mean score. This implies that any mean score responses above the bench mark of 2.5 were adjudged to be constraints to rural farmers' engagement in non-farm activities in Nsukka Agricultural Zone of Enugu State, Nigeria while any mean score responses lower than the bench mark were viewed as otherwise.

### RESULTS AND DISCUSSION

#### Socio-Economic Characteristics of Respondents

**Table 1: Distribution of Respondents Based on their socio-economic characteristics n =120**

Variables	Frequency	Percentage (%)	Mean ( $\bar{x}$ )
<b>Marital Status</b>			
Single	18	15.0	
Married	78	65.0	
Widowed	24	20.0	
<b>Sex</b>			
Female	56	46.7	
Male	64	53.3	
<b>Age (Years)</b>			
less than 21	9	7.5	
21-30	28	23.3	
31-40	58	48.3	42 years
41-50	13	10.8	
greater than 50	12	10.0	
<b>Educational Qualification</b>			
No Formal Education	8	6.7	
Primary Education	18	15.0	
Secondary Education	31	25.8	
OND/NCE	16	13.3	6 Persons
HND/BSC	41	34.2	
M.Sc./Ph.D	6	5.0	
<b>Household size (number)</b>			
1-3	16	13.3	
4-6	54	45.0	
7-9	33	27.5	
greater than 9	17	14.2	

**Access to Credit**

Yes	34	28.3
No	86	71.7

**Source: Field survey data, 2019.**

The results in Table 1 show that a greater percentage (65%) of the respondents were married. The significance of marital status on agricultural production and source of income can be explained in terms of the supply of agricultural family labour. Marital status may influence the size of households as married farmers may have larger household sizes which may increase consumption expenditure thereby making them more prone to go into more than one income generating activities and many a times they go for the ones with higher profit per input because of family demands and expenses. Also, over fifty percent (53.5%) of the respondents were males. The result is in tandem with the findings of Otitoju and Arene (2010) that Nigerian Agriculture is dominated by men.

The mean age of farmers in the study area as 42 years, implying that the farmers were in their active age group, where their energies could be harnessed and utilized for productive ventures especially in on-farm and non-farm activities. This result conformed to the findings of Nze and Azubuike (2016) that most farmers in Abia State were in their productive ages and were thus able to cope with the challenges of agriculture. It also agrees with the report of Mazzaet al (2017) that most farmers are within the middle-age and vibrant in agricultural production. The older the farmers, the less likely they are able to adopt new practices as they place confidence in their old ways and methods (Abdoulayeet al. 2014).

Furthermore, majority of the respondents (93.3 %) had one form of formal education or the other. According to Ibe (2013), educated farmers are expected to be more receptive to improved

techniques while farmers with little or no education are less receptive to improved technologies. Education attainment increases an individual's choice and involvement in on-farm and non-farm income generating activities.

The results equally showed that the average household size was 6 members. This finding is in agreement with that of Muhammed (2012), who reported that the mean average household size of farmers in the study area was 6. Household size may enhance labour availability that can be used for on-farm and non-farm activities. However, the implication of household size for non-farm and on-farm income source is that a higher household size will mean a higher demand for food and necessary survival needs and this will lead to involvement in more than one farm and non-farm income activity. Ahmed (2012) also argued that large household size is associated with increased household consumption expenditure which reduces the money that could be used for agricultural production purposes.

Furthermore, the results reveal that 71.7% of the respondents had no access to credit while 28.3% had access to credit. Asawalam (2019) agreed that low level of credit allocation cannot encourage agricultural production, processing and marketing. Similarly, Akpabio (2019) opined that there is an urgent need to improve smallholder access to financial services adapted to their needs. This includes facilitating monetary transactions (such as mobile-phone based money transfers), safe savings deposits (with incentives to save), low-priced credit (such as through joint-liability group lending), and insurance (such as index-based weather insurance).

**Non-Farm Income Generating Activities of Farmers**

**Table 2: Distribution of the respondents based on Non-farm Income Generating Activities Undertaken by Respondents**

*Categories of Activities	Frequency	Percentage	Ranking
Trading	73	60.0	1 <sup>st</sup>
Business services	66	55.0	2 <sup>nd</sup>
Construction	47	39.2	3 <sup>rd</sup>
Transportation	46	38.3	4 <sup>th</sup>
Mining	24	20.0	5 <sup>th</sup>
Restaurants and hotels	32	26.7	6 <sup>th</sup>

**\*\* Multiple responses recorded**

**Source: Field survey data, 2019**

The Results in Table 2 show that majority of the farmers (60.05%) were into trading which include sale of shoes, fairly used clothes, drinks/water, snacks etc, about 55% of the respondents engaged in business services. It was observed that the business services undertaken by the farmers include land agent business, barbing, hair dressing etc.

The result further reveals that 39.2% were engaged in construction work such as furniture construction, house construction, welding etc, while 38.3%, were into transportation business which include taxis, motorcycle and tri-cycle business. Then 20% of the respondents took up mining as business and 26.7% were involved in restaurant/hotel business.

The vast proportion of farmers that diversified into non-farm activities can be ascribed to the limited land mass in South East Zone of Nigeria with the population competing for the little available arable land. Furthermore, Obinna and Onu (2017) opined that the meager income derived from farm enterprises compels households in rural African

societies to engage in non-farm activities to supplement income, in order to lessen risk inherent in income from agricultural activities. They went ahead to explain that in places with limited land, the non-farm activities serve as vital economic option for the poor rural households.

#### Number of Non-Farm Generating Activities

**Table 3: Distribution of the respondents based on Number of non-Farm Generating Activities  
n = 120**

Number of Non-Farm Activities	Frequency	Percentage
One	0	0
Two	81	67.5
Three	26	21.7
Four	13	10.8

**Source: Field survey data, 2019**

The entries in Table 3 show that 67.5%, 21.7% and 10.8% undertook two, three and four non-farm income generating activities respectively. None of the respondents undertook just one income generating activity. This is so because many of the respondents have a large household size which infers high financial demands on the family and domestic

matters therefore multiple non-farm activities are undertaken to ensure that more finances are made available for immediate family needs such as food, housing, clothing etc. Effiong (2012) agreed that this has implication on the labour supply by reducing the cost of labour and creating avenues for improved production within the enterprise.

#### Constraints to Rural farmers' engagement in Non-Farm Activities in Nsukka Agricultural Zone

**Table 4: Distribution of the respondents based on the Constraints to Rural farmers' engagement in Non-Farm Activities  
n = 120**

Factors	SA	A	U	D	Mean( $\bar{x}$ )	Decision
Lack of information on how to start	49 (40.8)	39 (32.5)	26 (21.7)	6 (5.0)	3.09	Constraint
Age of household members	32 (26.7)	60 (50.0)	22 (18.3)	6 (5.0)	2.98	Constraint
Development and projects	65 (54.2)	11 (9.2)	19 (15.8)	25 (20.8)	2.97	Constraint
Level of education	4 (36)	3 (50)	28 (23.3)	6 (5.0)	2.97	Constraint
Income/capital to invest in non-farm business	49 (40.8)	33 (27.5)	19 (15.8)	19 (15.8)	2.93	Constraint
Profitability of rural non-farm activities	54 (45.0)	20 (16.7)	13 (10.8)	33 (27.5)	2.79	Constraint
Scarcity of space/landlessness	56 (46.7)	14 (11.7)	16 (13.3)	34 (28.3)	2.77	Constraint
Access to credit facilities	56 (46.7)	12 (10.0)	15 (11.7)	38 (31.6)	2.73	Constraint
Poor farm income	29 (24.2)	34 (28.3)	29 (24.2)	28 (23.3)	2.53	Constraint
High tax rate	9 (7.5)	39 (32.5)	15 (12.5)	57 (47.5)	2.40	Not a Constraint

Note: Mean Score greater than 2.5 = Constraint, Mean Score less than 2.5 = Not Constraint (Values in bracket are percentages %)

SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree

Source: Field survey, 2019

The findings in Table 4 showed that certain factors serve as constraints to farmers' engagement in non-farm activities. However, the mean score of 2.5 and above was used as a decision rule, which implies that any factor equal to or greater than 2.5 was considered as a constraint and that any factor less than 2.5 was considered as not a constraint. Factors such as inadequate information on how to start the non-farm income generating activity ( $\bar{x}$ =3.09), age of household members ( $\bar{x}$ =2.98), development and projects ( $\bar{x}$ =2.97), level of education ( $\bar{x}$ =2.97), income capital to invest in non-farm business ( $\bar{x}$ =2.93), profitability of rural non-farm ( $\bar{x}$ =2.79), scarcity of space/landlessness activities ( $\bar{x}$ =2.77), access to credit facilities ( $\bar{x}$ =2.73) and poor farm income ( $\bar{x}$ =2.53) were all constraints to rural farmers' engagement in non-farm activities in Nsukka Agricultural Zone. However, the only factor that was not considered as a constraint was high tax rate ( $\bar{x}$ =2.40).

#### CONCLUSION AND RECOMMENDATION

Findings from the study showed that inadequate information on how to start a business was a major constraint to rural farmers' engagement in non-farm income generating activities. Therefore, since non-farm income generating activities contributed a lot to rural household income and help guard against food insecurity and hunger especially during crop failure or drought, both governmental and non-governmental agencies should incorporate sensitization and awareness programme on various entrepreneurship skills including trainings in order to better inform and equip farmers on how best to choose non-farm activities for income diversification.

#### REFERENCES

- Abdoulaye, T., Abass, A., Maziya-dixon B., Tarawali, G., Okechukwu, R., Rusike, J., Alene, A., Manyong, V., Ayedum, B. (2014). Awareness and Adoption of Improved Cassava Varieties and n in Nigeria. *Journal of Development Agricultural Economics* 6(2): 67 – 75.
- Adepoju, A.O and Obayelu, O.A. (2013). "Livelihood Diversification and Welfare of Rural Households in Ondo state, Nigeria" *Journal of Development and Agricultural Economics*, Vol. 5(12) PP. 482489.
- Ahmed, F F (2012), "Income Diversification Determinants Among Farming Households in Konduga, Borno State, Nigeria", *Academic Research International*, Vol. 2, No. 2, pp. 555- 561.
- Akpabio, I. A. (2019). Sustainable Agricultural Development in the Era of Rural Insecurity. A Keynote Address presented at the Society for Community & Communication Research Development (SCCDR), 2nd National Conference, held at Michael Okpara University Agriculture, Umudike, Nigeria, 13 -16 Aug. PP. 13 - 15
- Asawalam, D. O. (2019). Achieving Food Security in Nigeria: Challenges and Strategies. Lead Paper presented at the Society for Community & Communication Research Development (SCCDR), 2nd National Conference, held at Michael Okpara University Agriculture, Umudike, Nigeria, 13 -16 Aug. PP.16 - 24
- Awoniyi, A.O. and Salman, K.K.(2011). Non-farm Income Diversification and Welfare Status of Rural Households in South West Zone of Nigeria. Agricultural productivity and Food Security in Africa Conference, Addis Ababa. <http://addis2011.ifpri.info/files/2011/10/paper>
- Effiong, M. S. (2012). Review of Participatory Technology Development for Agro-Forestry Extension: An innovation-Decision Approach. Sustainable Research Institute, University of Leeds U.K African. *Journal of Agricultural Research*: 2(8):334-341
- Ibe, U.O. (2013). Family Size and Participation of Women in Socio-Economic Perception of Mbaise; Imo State, Nigeria. A Ph. D. Thesis submitted to Department of Rural Sociology and Extension, Michael Okpara University of Agriculture, Umudike 21 - 23 Pp.
- Jabo, M. S., Ismail, M. M., Shansuddin, M. N. and Abdulah, A. M. (2014). The Impact of Non-Farm Income Generating Activities on the Food Security Status of Rural Households in Nigeria. *International Journal of Agricultural Science and veterinary Medicine*. Vol. 2. No. 4
- LIFCHASA, 2012. Livelihood Improvement of Farming Communities in Haor Areas through System Approach. Annual Report 2012, Department of Agronomy, Bangladesh Agricultural University, Mymensingh
- Mazza M., Kanu R.U. and Oaya D.S. (2017). Awareness of Organic Farming among Rural Farmers in Abia State, Nigeria. *Proceeding of the 51st Annual Conf. of the Agric. Society of Nigeria*. Pp 799 – 802.

- Muhammed, A.Y. (2012). "Economic Analysis of Gum Arabic Market in Kano State, Nigeria. Ph.D thesis, Department of Agricultural Economics and Extension, Bayero University, Kano". Pp 81
- Nze, E.O. and Azubuike O. (2016). Economic performance of subsistence poultry farm in Abia State, Nigeria. *Journal of community and communication Research*; Vol.1, No.1, pp. 6-12
- Obinna, L. O. and Onu, S. E. (2017). Contributions of Rural Women Entrepreneurs in Non-Farm and Off-Farm Enterprises of Households Poverty Reduction in AbiaState. *Journal of Agricultural Extension*, 21(3), 143-151.
- Ototoju, M. A., &Arene, C. J. (2010). Constraints and determinants of technical efficiency in medium-scale soybean production in Benue state, Nigeria. *African Journal of Agricultural Research*, 5, 2276–2280.
- Ovwigbo, B. O. (2014): Factors Influencing Involvement in Non-Farm Income Generating Activities among Local Farmers: The case of Ughelli South Local Government Area of Delta State, Nigeria. *Journal of Sustainable Agriculture Research* Vol 3(1) PP 76-84
- Post Office (2009). "Post Offices- with map of LGA". NIPOST. Archived from the original on 7 October 2009. Retrieved 20 October 2009
- Reardon, T., Berdegue, T., Barrett, C. B &Stamoulis, K. (2007). Household income diversification into rural non-farm activities. In: Haggblade, S., P.B.R. Hazell and T. Reardon (eds.): *Transforming the rural non-farm economy. Opportunities and threats in the developing world: 55-79*. Johns Hopkins University Press, Baltimore, ML, USA.