



Analysis of University Students' Perception on Agricultural Entrepreneurship Option Towards Tackling Unemployment Among Educated Youths

Kemi Funmilayo OMOTESHO^{1*} Oluwafemi Peter OLABANJI¹
Debora Adedoyin OLABODE¹ Israel OGUNLADE¹

¹Department of Agricultural Extension and Rural Development, University of Ilorin, Ilorin, Nigeria

*e-mail: kfomotesho@gmail.com

Alındığı tarih (Received): 30.06.2017

Kabul tarihi (Accepted): 10.12.2017

Online Baskı tarihi (Printed Online): 17.12.2017

Yazılı baskı tarihi (Printed): 29.12.2017

Abstract: Despite the scourge of unemployment among university graduates in Nigeria and the potentials of agriculture in employment generation, there is low participation of educated Nigerian youths in the agricultural sector. This study analysed the factors associated with undergraduate students' perception on self-employment through agricultural enterprises. A multi-stage sampling procedure was used to select three hundred and seventy-two respondents. Data for the study was obtained with a well-structured questionnaire. Precision counts, frequencies, percentages, and the Pearson's Product Moment Correlation were used for data analysis. The results reveal a high (68 %) negative perception on agricultural entrepreneurship. This perception was significantly related to the respondents' sex (0.638), parents' occupation (0.738), home background (0.737), sources of agricultural information (0.439), and prior interest in agriculture (-0.917) at $p < 0.05$. Poultry (84.7 %) and fish farming (79.6 %) were the most preferred agricultural ventures among the respondents. Access to start-up capital and availability of ready markets for produce was identified as major motivational factors for the engagement of educated youths in Agriculture. The study concluded that educated youths had a negative perception of self-employment in agricultural ventures but could be motivated towards same. It also put forward, some recommendations towards enhancing self-employment in agriculture among youths.

Keywords: Agricultural entrepreneurship, perception, self-employment, youth, unemployment

1. Introduction

Employment and job creation for the youths remain frontline issues in developing countries. Although the United Nations defines youth as individuals aged between 15 and 24, the Federal Government of Nigeria (2001) modified the age limits to include all persons of ages 18 to 35. The country's population of about 167 million (National Bureau of Statistics, 2012) comprises of over 40 % youth (National Population Commission, 2013). It is however unfortunately that as the youth population grows in Nigeria so does the unemployment rate. National Bureau of Statistics (2016) reported an increase in the unemployment rate in the third quarter of 2016 from 13.3 % to 13.9 %. Patterson et al., (2006) described youth unemployment as one of the developmental problems that are being faced by

every developing economy. Fajana (2000) opined that unemployment is a situation where people who are willing and able to work are unable to find suitable paid employment. It is a macro-economic problem since it impacts poverty level negatively, with associated welfare challenges. While it is believed that people who lack skills, knowledge, tools, beliefs, and values to perform financially rewarded activities are not usually employable, the reality of the situation in Nigeria is that of millions who have skills, knowledge and all the wherewithal and yet cannot lay hands on jobs. With over a hundred Government and privately-owned Universities in the country, graduates of various disciplines are released annually into the already oversaturated labour market. This situation has been blamed on the lack of visionary leadership, corruption and

insincerity that has characterized governance in Nigeria. The resultant direct poverty effects, considerable cognitive, health, nutrition and psychological deficits are some of the identified consequences of youth employment (Sum, 2002). Youth unemployment is also associated with increased incidence of criminal behavior (ILO, 2000 2006; Kotloff, 2004 as cited in Manpower Group, 2012). More importantly, youth unemployment represents a huge waste of the resources of developing economies.

Agriculture is uniquely positioned to provide self-employment and means of livelihood for the unemployed in Nigeria. This is possible through the creation of entrepreneurial activities in agronomy, soil science, animal science, agricultural engineering, agricultural economics, agricultural extension, home economics, horticulture, forestry, aquaculture, veterinary medicine, etc. In addition to the array of options available, the possibility of establishing agricultural enterprises on small-scale levels and growing it gradually makes small start-ups easy and hence reduces the pressure for huge capital as may be required in some other sectors. Production cycles are also short for food crops, fisheries, poultry, etc. hence returns are quick and may be reinvested for growth. The labour- intensive and highly innovation-driven nature of agricultural production in Nigeria places the youth in an advantageous position in agricultural entrepreneurship (Oyekale, 2011).

The youths constitute a formidable force for the development of agriculture in any nation particularly the agrarian ones (Iwala 2006). Nnadi and Akwiwu (2008) asserted that youths possess a lot of energy and other inestimable assets for productivity. According to Muhammad-Lawal et al. (2009), since agricultural development is the basic tool for economic development, there is the need for more emphasis to be placed on the role youth can play in agriculture. Amadi (2012) opined that the rapid decline in agricultural production is connected to the continuous decline in agricultural labour which he attributed to the continued efflux of the youth and school leavers

from the rural farming communities in search of employment in fields other than agriculture.

The agricultural entrepreneurship option to youth unemployment can also address food security concerns (Bahaman et. al., 2010; Abdullah and Sulaiman, 2013). However, despite the enormous opportunities for self-employment in the agricultural sector, most Nigerian graduates continue to hunt for office jobs that are no longer available. The task of attracting the educated Nigerian youths to agriculture has proven to be a monumental one. Many studies have reported the poor perception of the youths on career options and enterprises in agriculture. However, an understanding of the factors which influence this perception will assist in promoting high positive perception of agricultural entrepreneurship among the youths. Knowledge of the factors that could motivate them towards agriculture will assist in planning and implementation of youth agricultural programmes. It is against this background that this study, therefore, sought to analyse the factors associated with educated youths' willingness to engage in agricultural ventures. The specific objectives of the study were to:

1. describe the socio-economic background of the respondents;
2. assess educated youths' perception of self-employment in agriculture related enterprises;
3. identify youth's preference for agricultural enterprises; and
4. identify the factors that could motivate educated youths towards self-employment in agricultural enterprises.

Hypothesis of the Study

The hypothesis formulated for the study is stated in the null form as follows;

Ho: There is no significant relationship between the respondents' socio-economic characteristics and their perception on self-employment in agricultural enterprises.

2. Materials and Methods

The Study Area

The study was conducted at the University of Ilorin, Ilorin, and Kwara State, Nigeria. University of Ilorin main campus is situated some 19.1 km to the city of Ilorin, Kwara State, Nigeria at latitude 8.48° North and longitude 4.67° East and at a mean altitude of 290 meters above sea level (Google Map Data, 2016). The university was established in 1975 as a federal government owned tertiary institution of education. The school has approximately 35,000 students (2014/2015 academic session) spread across twelve faculties namely; Agriculture, Art, Basic Medical Sciences, Clinical Sciences, Communication and Information Sciences, Education, Engineering and Technology, Law, Life Sciences, Management Sciences, Physical Sciences and Social Sciences.

Sampling Procedure and Sample Size

A three-stage sampling procedure was used in the selection of the respondents for the study. The first stage was the purposive selection of the final year students based on the fact that they were about to complete their studies and should be expected to have ideas about what they would want to engage in after schooling. The second stage involved the random selection of six out of the twelve faculties in the institution. The selected faculties were Education, Arts, Life Sciences, Management Sciences, Communication and Information Sciences and Social Sciences. Finally, ten percent (10 %) of the final year students of each of these faculties were randomly selected to give a sample size of three hundred and seventy-two (372) respondents.

Data Collection and Analysis

Data collection was through the administration of a well-structured questionnaire. Data were elicited on the socio-economic characteristics of the respondents, perceptions on self-employment in agricultural enterprises; agricultural enterprises options preferred by the respondents and factors that could motivate them towards self-employment in agricultural enterprises. Data were

analysed using the statistical package for the Social Sciences (SPSS) software. Descriptive statistics such as precision counts, frequencies, and percentages were used to describe the data collected. The perceptions of the students on agricultural enterprises and factors that motivate them towards self-employment in agricultural enterprises were measured using a five-point Likert scale. In both cases, lists of possible factors were drawn from literature, and the respondents were required to rate the extent to which they agreed or disagreed with statements constructed based on the factors. The scale was graduated thus; strongly agreed (5), agreed (4), undecided (3), disagreed (2) and strongly disagreed (1). Mean scores were generated for individual respondents by aggregating their scores in the different items. The Pearson Product Moment Correlation (PPMC) was used to test the formulated hypothesis. PPMC was used in the hypothesis testing because it offers a base to test the null hypothesis that the true correlation coefficient ρ is equal to 0, based on the value of the sample correlation coefficient r . Another reason is to derive a confidence interval that, on repeated sampling, will have a given probability of containing ρ .

$$\rho_{X,Y} = \frac{COV(X,Y)}{\sigma_X\sigma_Y}$$

Where:

- COV is the covariance
- σ_X is the standard deviation of X

The formula for ρ can also be written as

$$\rho_{X,Y} = \frac{E[XY] - E[X]E[Y]}{\sqrt{E[X^2] - E[X]^2} \sqrt{E[Y^2] - E[Y]^2}}$$

3. Result and Discussion

Socio-economic Characteristics of the Respondents

Data presented in Table 1 reveals that more (53.2 %) of the respondents were female. The age distribution ranged between 19 and 37 years, with a mean of 24.7 years and a modal age of 24 years.

The age bracket is an economically active one and people in this bracket are usually motivated and innovative (Matanmi and Olabanji, 2013). Only a few (5.1 %) of the respondents were married. A notable proportion of the respondents (85.0 %) resided in the urban areas, while 12.6 % and 2.4 % live in semi-urban areas and rural areas respectively. Life in rural areas increases exposure to agricultural activities as rural dwellers are predominantly farmers (Matanmi and Olabanji, 2013). Urban areas provide lower experience in agricultural activities. Hence, majority of the respondents may not have enough agriculture related experience or exposure that drive their interest in career options in agriculture. Most of the respondents' parents were employed workers as most of their fathers (81.7 %), and mothers (61.8 %) were government/private sector employees. Parents are role models; they set examples, provide opportunities, and give advice to their children most times based on their level of exposure and experiences in life. About half (50.8 %) of the respondents preferred a career path in civil service, 25.8 % hoped to be self-employed while 23.4 % aspired to work in the private sector. Internet was revealed by most of the respondents (78.8 %) as their main source of agricultural information. About 51.1 % of the respondents were interested in agricultural business.

Perception of Youth on self-employment in Agricultural Enterprises

Table 2 shows the distribution of the respondents based on their perception of agricultural ventures. The respondents showed negative perception with an average mean score (MS) of 3.40 and Standard deviation (S.D) 1.221. The respondents perceived agriculture as labour-

intensive (MS=3.58, S.D=1.456), and an alternative job option of last resort due to difficulties in accessing white collar jobs' (MS=3.01, S.D=1.332). Also, they perceived that becoming an entrepreneur in the agricultural sector was highly risky (MS=3.10, S.D=1.305) and that agribusiness is seasonal in nature meaning there could be periods of waiting without income (MS=3.11, S.D=1.386). Furthermore, they perceived food security as government's responsibility (MS=3.72, S.D=1.087). They, however, disagreed that farming was an inferior occupation that is suitable for the uneducated or retirees (MS=2.94, S.D=1.563). Also, the respondents viewed agribusiness as profitable only for youths with right skills (MS=4.04, S.D=0.907) and that agricultural entrepreneurship is not a good job creation strategy (MS=3.23, S.D=1.117). Finally, they would rather practice in their areas of disciplines (MS=3.40, S.D=1.063) and that self-employment in agriculture is for graduates of agricultural related disciplines (MS=3.89, S.D=0.995). This result gives credence to the view expressed by Muthee (2010) that the youths are not involved in agricultural activities because agriculture as a career choice is largely burdened with misperceptions and a lack of information and awareness.

Respondents Preference among Agricultural Enterprises options

The result in Table 3 reveals the responses of the respondents to the question of the kind of agricultural business they preferred if they were to be self-employed in agricultural ventures.

Table 1. Distribution of the Respondents according to their Socio-economic Characteristics

Variables	Frequency (n=372)	Percentages (%)	Mean
Sex			
Male	174	46.8	
Female	198	53.2	
Age (in years)			
≥ 20	6	1.4	
21-25	230	62.1	
26-30	98	26.3	24.7
31-35	33	8.9	years
36 and above	5	1.3	
Religion			
Christianity	198	53.2	
Islam	165	44.4	
Traditional worshippers	2	0.5	
Atheist	7	1.9	
Marital Status			
Single (Never Married)	351	94.4	
Currently Married	19	5.1	
Widowed/Divorced/Separated	2	0.5	
Home Background			
Urban area	316	85.0	
Semi-urban area	47	12.6	
Rural area	9	2.4	
Fathers' Occupation			
Trader	23	6.2	
Artisan	32	8.6	
Government employee	156	41.9	
Private sector employee	148	39.8	
others	13	3.5	
Mothers' Occupation			
Trader	69	18.6	
Artisan	46	12.4	
Government employee	121	32.5	
Private sector employee	109	29.3	
others	27	7.2	
Career Path envisaged			
Self-employment	96	25.8	
Civil service Job	189	50.8	
Private sector employment	87	23.4	
Main accessible Source of Agricultural Information			
Friends/Relatives	45	12.1	
Internet	293	78.8	
Television/Radio/Newspaper	21	5.6	
Agricultural Journals/textbook/Farm magazines	13	3.5	
Interest in Agricultural business			
Yes	190	51.1	
No	182	48.9	

Source: Field Survey, 2015

Table 2. Distribution of Respondents based on their Perception of Agricultural Ventures

SN	Perception Statement	SA F (%)	A F (%)	U F (%)	D F (%)	SD F (%)	WMS	Std Dev.	Remark
1.	Agriculture is too labour-intensive for me.	156 (41.9)	68 (18.3)	14 (3.8)	105 (28.2)	29 (7.8)	3.58	1.456	Agreed
2.	Agriculture is an alternative job option of last resort due to difficulties in accessing white collar jobs	51 (13.7)	129 (34.7)	15 (3.7)	128 (34.6)	49 (13.2)	3.01	1.332	Agreed
3.	Becoming an entrepreneur in agricultural sector is highly risky	46 (12.4)	150 (40.3)	19 (5.1)	109 (29.3)	48 (12.9)	3.10	1.305	Agreed
4.	Farming is an inferior occupation that is suitable for the uneducated or retirees	90 (24.2)	79 (21.2)	17 (4.6)	92 (24.7)	94 (25.3)	2.94	1.563	Disagreed
5.	Agribusiness is seasonal in nature meaning there could be periods of waiting without income	64 (17.2)	131 (35.2)	15 (4.0)	106 (28.5)	56 (15.1)	3.11	1.386	Agreed
6.	Agribusiness can be profitable for youths with right skills	110 (29.6)	208 (55.9)	20 (5.4)	26 (7.0)	8 (2.2)	4.04	0.907	Agreed
7.	Agricultural entrepreneurship is not a good job creation strategy	18 (4.8)	198 (53.2)	42 (11.3)	81 (21.8)	33 (8.9)	3.23	1.117	Agreed
8.	I will rather practice within my discipline of study	25 (6.7)	216 (58.1)	39 (10.5)	68 (18.3)	24 (6.5)	3.40	1.063	Agreed
9.	Self-employment in agriculture is for graduates of agriculture.	91 (24.5)	208 (55.9)	27 (7.3)	32 (8.6)	14 (3.8)	3.89	0.995	Agreed
10.	Food security is government's responsibility	79 (21.2)	195 (52.4)	33 (8.9)	46 (12.4)	19 (5.1)	3.72	1.087	Agreed
Average Weighted Mean and Standard Deviation Total							3.40	1.221	Positive

Source: Field Survey, 2015

Table 3. Percentage Distribution of Respondents based on Preferred Agricultural Enterprises

S/N	Agriventure options	Frequency	Percentages
1.	Greenhouse vegetable farming	98	26.3
2.	Arable crop farming	185	49.7
3.	Cash crop farming	57	15.3
4.	Horticulture	32	8.6
5.	Fish farming	296	79.6
6.	Livestock farming	124	33.3
7.	Poultry farming	315	84.7
8.	Sale of agricultural commodity	104	28.0
9.	Sale of agro inputs	82	22.0
10.	Apiary	47	12.6
11.	Agro-processing	51	13.7
12.	Others	17	4.6

*Multiple Responses

Source: Field Survey, 2015

Poultry farming was the most indicated option with over two-third of the respondents (84.7 %) revealing an interest in it. About 80% indicated interest in fish farming, 49.7 % in arable crop farming, and 33.3 % considered livestock farming. Also, 28.0 % of the respondents preferred the sale of agricultural commodities, 26.3 % viewed greenhouse farming as a considerable option. Also, 22.0 % indicated the sale of agro inputs, 15.3 % were interested in cash crop farming, 13.7 % considered agro-processing ventures. Furthermore, 12.6 % of the respondents admitted that they could own apiary businesses. The findings revealed that poultry and fish farming was the most preferred agricultural enterprises among the students.

Motivational Factors for Respondents' Involvement in Self-Employment in Agricultural Enterprises

Table 4 shows responses of the respondents on factors that could motivate them to engage in agricultural ventures. Availability of ready market and delivery centres for agricultural produce (M=4.34, S.D=0.970) was the most prominent factor that could encourage the consideration of agricultural ventures among the respondents. This

was followed by the availability of start-up fund (M=4.22, S.D=1.067). Access to Land (M=4.13, S.D=1.132) ranked third while adequate farming knowledge and information on agriculture was considered fourth. According to the international labour office (2006), the level of knowledge and familiarity with the concept of entrepreneurship are factors that encourage youths to engage in a business and become entrepreneurs. Also, sufficient entrepreneurial skill and training, as well as quick returns to investment (M=4.06) ranked fifth. Also, access to market information for agricultural products was considered the seventh determinant. Access to technical support (M=3.99, S.D=1.186) ranked eighth as access to adequate financial services (Credit and insurance) and modernizing agriculture/provision of training opportunities in new technologies (M=3.98) was considered as the ninth factor.

Test of Hypothesis

H₀₁: There is no significant relationship between the socio-economic characteristics of the respondents and their perception of self-employment in agricultural enterprises.

Table 4. Distribution of Respondents by the Factors Which Motivate them towards Agricultural Entrepreneurship

S/N	Determinant Factors	Mean	Std Deviation	Rank
1.	Adequate farming knowledge and information on agriculture	4.08	1.152	4 th
2.	Access to Land	4.13	1.132	3 rd
3.	Availability of ready market and delivery centres for agricultural produce	4.34	0.970	1 st
4.	Modernizing agriculture/Provision of training opportunities in new technologies	3.98	1.074	9 th
5.	Adequate entrepreneurial skill and training	4.06	1.155	5 th
6.	Access to adequate financial services (Credit and insurance)	3.98	1.210	9 th
7.	Quick returns to investment	4.06	1.172	5 th
8.	Access to market information for agricultural products	4.04	1.175	7 th
9.	Availability of start-up fund	4.22	1.067	2 nd
10.	Access to technical support	3.99	1.186	8 th

Source: Field Survey, 2015

Table 5. Relationship between Respondents’ Socio-economic Background and their Perception on Self-employment in Agricultural Enterprises

Variable	r-value	p-value	Decision
Gender	0.638**	0.013	Significant
Age	0.042	0.393	Not Significant
Religion	0.029	0.623	Not Significant
Marital Status	0.221	0.540	Not Significant
Home Background	0.373***	0.000	Significant
Father’s Occupation	0.738**	0.031	Significant
Mothers’ Occupation	0.780**	0.011	Significant
Career Path Envisaged	-0.032	0.534	Not Significant
Source of Agricultural Information	0.439***	0.000	Significant
Interest in Agricultural Business	-0.917***	0.000	Significant

**Correlation is significant at $p < 0.05$

***Correlation is significant at $p < 0.01$ (2 tailed)

Source: Computed from field data, 2015

The result of the Pearson Product Moment Correlation (PPMC) analysis of the responses shows that sex ($r=0.638$), fathers’ occupation ($r=0.738$) and mothers’ occupation ($r=0.780$) were significantly associated with perception at $p < 0.05$. Home background ($r=0.373$), source of agricultural information ($r=0.439$) as well as interest in agricultural business ($r=-0.917$) were significant at $p < 0.01$ while age ($r=0.042$), religion ($r=0.029$) and career path envisaged ($r=-0.032$) were however not significantly associated with the respondents’ perception. This implies that age,

religion and career path envisaged had no significant relationship with students’ perception. The positive coefficients confirm that the relationships are direct. This implies that male students on the average showed a higher negative perception on self-employment in agriculture. In likewise manner, respondents whose parents were employees also had higher negative perception. Also, there was a significant relationship between the students’ gender, home background, father and mothers’ occupation, the source of agricultural information as well as

interest in agricultural business. This finding supports the ascertainment by Mwiria (2005) that home backgrounds of students and parental influence contribute in determining the vocational choice of students.

Conclusion and Recommendations

The study concluded that the respondents held a high negative perception of self-employment in agriculture. This perception was associated with some identified socio-economic characteristics which could be used in enhancing a more positive perception among the respondents. The students' interests were also concentrated around poultry and fish farming at the expense of other equally profitable types of agricultural enterprises. The study also concluded that with the provision of motivational factors such as ready markets and delivery centres for agricultural produce, start-up capital and access to Land, educated youths in Nigeria would embrace self-employment in

agriculture. Based on these findings, it is recommended that;

1. A good marketing system should be developed for agricultural produce. Availability of ready market and delivery centres for agricultural produce can encourage more youths to venture into agriculture
2. Efforts should be made by the government in making agriculture attractive to the youths through media campaigns demystifying the negative myths about agriculture and presenting agriculture as a profitable venture.
3. There should be a review of the country's education curricula that is oriented towards white collar employment. The curriculum should focus on self-reliance and self-employment. Agricultural entrepreneurship should be strongly integrated into the educational system from primary level.

References

- Abdullah, A.A., and Sulaiman, N.N. (2013). Factors that influence the interest of youths in agricultural entrepreneurship. *International Journal of Business and Social Science* 4(3): 288-302
- Amadi, P. N. U. (2012). Agricultural Entrepreneurship Development for Youth Empowerment in Nigeria: Constraints and Initiatives for Improvement. *Journal of Educational and Social Research*. 2 (10).
- Bahaman, A.S., Jeffery, L.S., Hayrol-Azril, M.S. and Jegak, U. (2010). Acceptance, attitude, and knowledge towards agriculture economic activity between rural and urban youth: The case of contract farming. *Applied Science*. 10(19): 2310-2315
- Fajana, S. (2000). Functioning of the Nigerian Labour Market, Labonfin and Company, Lagos.
- Federal Government of Nigeria (2001), National Youth Development Policy
- International Labour Office (2006), Stimulating youth entrepreneurship: Barriers and Incentives to enterprise start-ups by young people. SEED working paper 76: 1-117
- Iwala, O. S. (2006), Assessment of Youth in agriculture of Ondo State: Describability and effectiveness in Onibi, G. E., and Akinbuluno, M. O. (Eds) 2006, Proceedings of 2nd Annual Conference in Agricultural Research for Development in Nigeria and Agricultural Technology. Federal University of Technology, Akure Pp 223-231
- Manpower Group (2012) youth unemployment, challenges and solutions. Retrieved 02/05/2017 from http://www.3weforum.org/docs/Manpower_YouthEmploymentChallengeSolution
- Matanmi, B.M., and Olabanji, P.O. (2013), Attitude of programme presenters towards broadcasting of agricultural programmes on Electronic media in Kwara state, Nigeria. *Journal of Agricultural Research and Development*.12(2).
- Muhammad-Lawal, A., Omotesho, O. A., and Falola, A. (2009). Technical efficiency of youth participation in agriculture: A case study of the youth - in - agriculture programme in Ondo State, south western Nigeria. *Nigerian Journal of Agriculture, Food and Environment* 5(1):20-26.
- Muthee, M., (2010), Hitting the Target, Missing the Point: Youth Policies and Programmes in Kenya. Woodrow Wilson International Centre for Scholars, Washington DC. National Poverty Eradication Plan (1999-2015). Government of Kenya. Government Printers.
- Mwiria, K. (2005). Vocationalisation of Secondary Education. Nairobi- Kenya: Kenya Literature Bureau Press.
- National Bureau of Statistics, (2012) Labour Force Statistics No. 476. Abuja: The NBS Publication. Retrieved from <http://www.nigerianstat.gov.ng>
- National Bureau of Statistics, (2016) unemployment Statistics No. 476. Abuja: The NBS Publication. Retrieved from <http://www.nigerianstat.gov.ng>
- National Population Commission, NPC (2013). Nigeria's Unemployment rate rises to 23.9% -NPC, Punch Newspaper, October 13, 2013.
- Nnadi F.N. and C.D. Akwiwu (2008), "Determinants of Youths' Participation in Rural Agriculture in Imo State, Nigeria", *Journal of Applied Sciences*, 8:328-333.

- Oyekale, T. O. (2011), Impact of poverty reduction programs on multidimensional poverty in rural Nigeria. *Journal of Sustainable Development in Africa*, 13 (6): 1-11.
- Patterson, N., Okafor, O., Williams, D. (2006). Globalization and employment generation: Evaluating the impact of trade on Aggregate employment in Nigeria's I Industrial Sector" NES 2006 Annual Conference Nigeria.
- Sum, A., Fogg, N., and Mangum, G. (2002). Confronting the youth demographic challenge: The labour market prospects of out-of-school young adults, Sar, Levitan for social policy studies, John Hopkins University, Baltimore.