

September 2018, Vol.8 (2)

Youth Studies

and

Annals of Child

Annals of Child and Youth Studies
September 2018 Vol. 8 (2)



CYAP-Network Publishing

Annals of Child and Youth Studies
September 2018 Vol. 8 (2)



CYIAP-Network Publishing

(c) Annals of Child and Youth Studies

All right reserved. Reproduction and dissemination of materials in this publication for educational or other non commercial purposes are unauthorized without any prior written permission from the copy right holders provided the source is fully acknowledged.

ISSN: 0795 - 1663

BRIEF HISTORY OF THE JOURNAL

At the 7th Annual General Meeting of the International Research and Development Network of Children and Youth in Agriculture Programme (CYIAP-Network: visit our website www.cyiap_network.org for more information) held at Tai Solarin University of Education, Ijagun, Ijebu-Ode, Nigeria on the 28th November, 2006, it was resolved that a journal named *Annals of Child and Youth Studies* (ACYS) of the Network be established. Dr. Dixon Olutade Torimiro, an Associate Professor in the Department of Agricultural Extension and Rural Development, Obafemi Awolowo University, Ile-Ife, Nigeria was unanimously appointed as the Editor-in-Chief and the Department was chosen as the Editorial Office of the Journal.

The Network/Editorial Board are:
Editor-in Chief:

Dr. B. O. Adisa
Department of Agricultural Extension & Rural Development,
Obafemi Awolowo University,
Ile-Ife, Nigeria.

E-mail:
banjiolalere@yahoo.com ;
olalerebanji@gmail.com
G.S.M.: 08034238364;
08058871672

Managing Editor

Dr. Adeloje Kolawole A.
Department of Agricultural Extension & Rural Development,
Obafemi Awolowo University,
Ile-Ife, Nigeria.;
kaylog@yahoo.com;
08062224790

Associate Editors

Dr. T. F. Ojo
Dr. A. O. Adekunmi
Dr. O. T. Alao

Editorial Advisers

Prof. D. O. Torimiro
Prof. C. T. C. Akubulo
Prof. C. I. Sodiya
Prof. Yomi Alfred
Dr. Grace Adebo
Prof. S. K. Subair
Prof. T. T. Pur

Foreign Editors

Dr. Nelson M. Tselaesele
Botswana University of
Agriculture & Natural
Resources, Gaborone,
Botswana.
E-mail: ntselaes@bca.bw
[:netson.tselaesele@gmail.com](mailto:netson.tselaesele@gmail.com)
G.S.M. +26771498036

Prof. Festus Annor-Frempong
Dept. of Agric Economics &
Extension University of Cope
Coast, University Post Office,
Cape Coast Central Region,
Ghana.
E-Mail: papaanor@yahoo.com
fannor-frempong.l@ucc.edu.gh
G.S.M.: +233244741679



Table of Contents

Brief History of the Journal	i - iii
Table of Contents	iv
Youth Farmers' Willingness to Pay for Agricultural Extension Services in Oyo State Adelakun O. E. and J. A., Adeniyi	1 - 21
Factors Influencing Rural Youths Involvement in Agricultural Production in South West Nigeria. Akinsulu A .A., C. A., Afolami and O. A., Odusina	22 - 38
Youth's Participation in Apiary Agro Business in Oke-Ero Local Government Area Kwara State, Nigeria. Jolayemi, J.O., A.T. Olawumi and I.O., Ewebiyi	39 - 54
Spatial Analysis of Network Coverage and Its Availability to Artisanal Fishermen in Coastal Fishing Communities of South-Western, Nigeria Matthew Oose, Tajudeen Banmeke, Omowumi Olowa. Gbolahan Otufale, and Waheed Salami	55 - 70
Assessment of Social Media Usage for Agricultural Information Dissemination among Farm Youth in Rural Communities of Federal Capital Territory, Abuja Bankole, O., D.O., Torimori, J.O., Filusi and S.M. Tongshuwal	71 - 84
Socio-economic Factors Influencing Youth Participation in Fadama III Project in Osun State. Olaniyi, O.A., T., Ogunkunle and I. F. Oladipo	85 - 100
Assessment of Income Pattern of Youths in Eriwe Farm Village, Ogun State, Nigeria Sodique, F. R., A. A. Mako and V. O. Akinwande	101 - 124



Rural Youth Participation in Family Farming in Ila Local Government Area of Osun State, Nigeria Ajayi, F. O., O. Agbana, and J. O. Ayinde	125 – 144
Involvement of Female Youths in the Exploitation of Non-Timber Forest Products as Livelihood Choice in Selected Forests in Southwestern Nigeria Bamiwuye, O. A. and B. O. Adisa	145 – 164
Effect of Street Hawking on the Educational Performance of In-School Children in Akinyele Local Government Area of Oyo State, Nigeria Abdulsalam-Saghir, O. O., Adeuyi and W. G. Ojebiyi	165 – 186
Profitability Analysis of Fruit Marketing among Youths in Osun State, Nigeria Adisa, O. D. and A. B. Ayanwale	187 - 203
Notes to Contributors	204 - 207

YOUNG FARMERS' WILLINGNESS TO PAY FOR AGRICULTURAL EXTENSION SERVICES IN OYO STATE

Adelakun O. E. and J. A., Adeniyi

Department of Agricultural extension and Rural Development
University of Ibadan, Ibadan
07030716939; flakyonline@yahoo.com

Abstract

The sustainability of agriculture calls for effective agricultural extension service delivery. However, the public agricultural extension system is grossly ineffective owing to diverse challenges including lack of funding, therefore in searching for new funding and delivery alternatives in addition to government's input, issues such as willingness of farmers to pay are extremely important. This study assessed the willingness of young farmers to pay for agricultural extension services in Ibarapa Areas of Oyo State. The population of the study consisted of all young farmers in Ibarapa Zone of Oyo State i.e. Ibarapa East, Ibarapa Central and Ibarapa North Local Government Area. Multi-stage sampling procedure was used to select one hundred and twenty young farmers. Data were collected with the aid of interview schedule. Frequency and percentages were used to describe the dependent and independent variables of the study while Pearson Product Moment Correlation (PPMC) and Chi-square were employed for hypotheses testing. The result of the findings revealed that the mean age was 32 ± 2.8 years, majority (80.8%) were male, married (80.8%) with household size of 1-4. More than half of the respondents (54.2%) had tertiary education. Friends and family (1.85) ranked 1st as respondents' source of information on agricultural practices. Information on credit sources (0.87) ranked 1st as the preferred agricultural service the respondents were willing to pay for. Also, less than half (47.5%) of the respondents had favourable attitude towards public extension services. However, willingness of young farmers to pay for extension services was high (51.7%). The results also revealed that there was a significant relationship between household size ($\chi^2=9.498$, $p=0.023$), level of education ($\chi^2=17.454$, $p=0.002$) and

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

willingness to pay for extension services. Nevertheless, there was no significant relationship between respondents' attitude towards public extension service ($r=-0.150$, $p=0.102$) and willingness to pay for extension services. The study concluded that young farmers in the study area were willing to pay for extension service.

Keywords: Public extension service, private extension service, willingness to pay, young farmers.

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

Introduction

Agriculture undoubtedly is the mainstay of Nigeria's economy. A large proportion of the population engages in agriculture directly or otherwise. The key role played by agriculture can be inferred from its contribution to the nation's economy. Commendably, Nigerian government is striving hard to diversify the nation's economy by investing in agriculture. Effort of the government to follow this path stems from the fact that agriculture can provide employment for the teeming population, provide raw materials for local agro-allied industries, generate foreign earnings, among other benefits. Effort to diversify the nation's economy by investing in agriculture is laudable, nevertheless to achieve success, farmers need to be technically supported and exposed to agricultural best practices, market information and so on. The only system that can successfully fill this gap is Agricultural extension.

In developing countries like Nigeria, agricultural development is hinged on extension services by helping farmers to identify, analyze and link up with research

on their production problems, for improvement of farm yields leading to increased income and better standard of living (Van den ban and Hawking, 1998). Agbamu (2005) maintained that agricultural extension services afford farmers the opportunities to get relevant information on agricultural technologies, improved practices, capacity building opportunities and others. The provision of extension service to farmers in Nigeria has largely been regarded as a public good that should be rendered without payment and has been publicly funded since the Nigerian independence (Babalola and Ipadeola, 2015). Unfortunately, the public extension has been criticized for its lack of purpose and effectiveness in delivering extension services to the farmers (Adejo, Okwu and Ibrahim, 2012). Agbamu (2005) affirmed that the public agricultural extension system is grossly ineffective owing to problems such as inadequate funding, inadequate staffing, unacceptable farmer/ extension ratio, among others. Of all these problems, inadequate funding is a major problem. With the withdrawal of

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

the financial support of the World Bank, agricultural extension service delivery received a major blow. The situation has since worsened, leading to other problems. For instance, the extension/farmer ratio in Nigeria is beyond what is acceptable—one extension officer to three thousand farm families (1:3000), as against FAO recommendation of one extension officer to eight hundred farm families (1:800) (International Institute of Tropical Agriculture, 2015). In searching for new funding and delivery alternatives in addition to government's input, issues such as willingness of farmers to pay, for which services and how much they are willing to pay are extremely important. Efforts should therefore be directed at making farmers recognize the relevance of agricultural extension service. It is when the relevance of the service is appreciated that recipients can be persuaded to pay. Furthermore, the call to revitalize agriculture no doubt calls for young involvement in agriculture. The present labor force engaged in agriculture which comprise of old rural

farmers cannot meet the present food demand of the populace. In addition, old farmers are usually reluctant to adopt innovation as a result of mentality based on age (Adekoya and Tijani, 2015). The call for youth involvement in agriculture is not only timely but imperative. Although the involvement of youths in agriculture is not without its challenges as they lack sufficient knowledge on agricultural production. It is therefore crucial that they are trained by extension officers on techniques involved in agricultural production. Given the challenges facing public agricultural extension service in Nigeria however, young farmers' willingness to pay for extension service comes to the fore. There is therefore need to assess the willingness of farmers especially the young farmers to pay for extension services. Though, several studies have investigated the farmers' willingness to pay for agricultural extension services for instance; Ajayi (2017) examined farmers' willingness to participate in the financing of agricultural extension services, Oladele and Obuh (2008) analyzed perceived effect of

privatization of extension services, nevertheless limited studies exist on the willingness of young farmers to pay for extension services, which this study therefore addressed. Specifically, the study;

1. described the socio-economic characteristics of the respondents;
2. identified enterprise characteristics of the respondents;
3. determined the agricultural services that respondents are willing to pay for;
4. ascertained the attitude of respondents towards public extension service;
5. examine the effectiveness of information sources;
6. determined the willingness of respondents to pay for extension service.

Hypotheses

HO₁: There is no significant relationship between farmer's socio-economic characteristic and willingness to pay for agricultural extension services.

HO₂: There is no significant relationship between farmer's attitude to public extension service and willingness to pay for agricultural extension services.

Methodology

The study was carried out in Ibarapa zone of Oyo state. Ibarapa zone is made up of three local government areas, namely: Ibarapa East, Ibarapa Central and Ibarapa North. Majority of the inhabitants are farmer who engage in cultivation of food crops such as maize, melon, yam, cassava, vegetables and fruits. The population of the study consisted of all young farmers in Ibarapa Zone of Oyo State i.e. Ibarapa East, Ibarapa Central and Ibarapa North Local Government Area who are within the age range of 18 and 35 according to National Youth Policy of Nigeria. The list of registered farmers was obtained from Agricultural Development Programme Ibadan-Ibarapa zone and stratified by age. Multi-stage sampling procedure was employed for selecting respondents for the study. First stage include simple random sampling of two wards from each of the three LGAs that made up Ibadan-Ibarapa zone in the area to give a total of six wards; Anko, Isale-Baale, Okeserin, Oke-Odo, Imofin and Iki. In the second stage, one community was purposively selected from

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

each of the ward due to large number of young farmers. Twenty respondents were randomly selected from each of the communities to provide for a sample size of 120 respondents. Relevant data for this study were collected using interview schedule.

Agricultural services respondents were willing to pay for was determined by asking respond to indicate from a list of agricultural services the services they are willing to pay for and the extent to which they are willing to pay using 3-point rating scale of 'to a large extent (2), 'to some extent' (1) and 'not at all'(0).

Sources of information and the frequency of acquiring such information was measured by exposing respondents to a list of sources of information and asked them to indicate how frequent they source for information using 3 points scale of always (2), occasionally (1) and never (0).

Effectiveness of sources of information was measured using response options of very effective (2), effective (1) and not effective (0).

Attitude of respondents towards public agricultural extension services was measured on a 5-

point likert type scale of strongly agree, agree, undecided, disagree and strongly disagree with assigned scores of 5,4,3,2 and 1 respectively for positive statements while it was in reverse order for negative statements. Mean score was obtained and was used to categorize into favourable and unfavourable attitude towards public agricultural extension services.

The dependent variable of the study is willingness to pay for extension service and it was measured on a 5-point rating scale of strongly agree, agree, undecided, disagree and strongly disagree with assigned score of 5,4,3,2 and 1 respectively for positive statements while it was in reverse order for negative statements. Mean score was generated and was used to categorize into high and low willingness to pay for extension services.

Results and Discussion

Socio-economic characteristic of the respondents

Result in Table 1 reveals that 50.8% of the respondents were between 32-35 years with a mean age of 32±2.8. This implies that respondents were within their

productive economic life. Studies have revealed that younger people are likely to be more receptive to innovations which may positively influence their need for extension service and their willingness to pay for it. Majority (80.8%) were male, married (80.8%) and educated (61.7%). Education makes farmers better managers of resources and more receptive to innovations offered by extension service as affirmed by Onuche, Adejoh and Adah (2015). About 80.0% of respondents had a household size of 1-4 which is the national recommended household size in Nigeria. Having dependants that one is directly responsible for may necessitate increased production in order to increase income which could influence yearning for extension service.

Respondents' enterprise characteristics

Result in Table 2 shows that majority (64.2%) of the respondents cultivated cassava, 25.8% cultivated maize, while about 10.0 per cent cultivated yam, tomato and cowpea. Furthermore, 69.2% of the respondents acquire their

farmland through inheritance. On source of credit facilities, majority (71.7%) of the respondents use their personal savings for farming operation, while 8.3% obtain bank loan and credit facilities from cooperative society. Result in Table 2 further shows that majority (61.7%) of the respondents were visited by extension agents while 38.3% of them were not visited. Also, 31.7% of the respondents were visited by extension agents fortnightly while very few (7.5%) were visited daily.

Agricultural extension service respondents are willing to pay for

As shown in Table 3, prominent extension service respondents were willing to pay for was information on credit sources (0.87). This was followed by information on storage methods and techniques (0.80) and improved planting materials (0.77) ranked 3rd. The least agricultural service the respondents were willing to pay for is linkage with market (0.50) which ranked 10th. This suggests that respondents in the study area have need of access to credit facilities such as offered by

financial institutions as most of their farming operations cost was from their personal savings which may not be sufficient to enhance their production. According to Ololade and Olagunju (2013) agricultural credit is critical to sustainable agricultural development, it enhances productivity and promotes standard of living by breaking vicious cycle of poverty of small scale farmers.

Sources of agricultural information

Result in Table 4 reveals that friends and family (1.85) ranked 1st as the source respondents acquire agricultural information, fellow farmers (1.73) ranked 2nd while radio (1.51) ranked 3rd. The least utilized source of agricultural information was agricultural journal (0.66). This implies that respondents lack access to direct information from extension agents who are saddled with responsibilities of delivering latest agricultural information that can enhance farmers's production. (Adio, Abu, Yusuf, Sheriff and Nansoh , 2016) asserted that through agricultural information farmers can adopt new technologies or farming

systems, know when to plant and harvest, which crop to produce and which animal to rear and where to sell. It is also through agricultural information that farmers can know where to acquire bank loans and other farming inputs, as well as how to control pests and diseases. Such information can be adequately obtained from extension agents.

Effectiveness of sources of information

Result on Table 5 shows that information from friends and family (1.48) ranked 1st as the most effective source of information to the respondents followed by fellow farmers (1.45) which ranked 2nd Television (1.07) ranked 3rd as the most effective source of information for the young farmers, in the study area. However, extension agents ranked 7th in effectiveness, this suggests that the extension agents have not been able to justify their responsibility of providing adequate and timely information to farmers in the study area. This may be as a result of several challenges being encountered by extension agents as expressed by Agbamu (2005) that public

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

agricultural extension system is grossly ineffective owing to problems such as inadequate funding, inadequate staffing, unacceptable farmer/extension ratio, among others.

**Attitude of respondents
towards public agricultural
extension services**

The finding in Table 6 reveals the attitude of respondents towards public agricultural extension services. A larger percentage of the respondents (62.4%) agreed that they rarely benefit from government extension agents in their communities, more than half (55.8%) asserted that government extension agents do not always provide them with current agricultural information. Also, 55.0% agreed that the services rendered are not sufficient to increase their production. As regards climate change, majority (72.5%) agreed that public extension services have not helped to reduce risk, 58.3% agreed that there is no proper monitoring and evaluation by public extension agents. However more respondents 64.1% agreed that government extension service are not time

consuming, 63.3% also agreed that training given by public extension agents are useful and understandable. Babalola and Ipadeola (2015) opined that the public extension has been criticized for its lack of purpose and effectiveness in delivering extension services to the farmers.

Furthermore, the result on Table 7 shows that less than half (47.5%) of the respondents had favourable attitude towards public extension services while (52.5%) had unfavourable attitude. The type of services obtained by farmers from extension agents and constraint encountered in receiving such services could influence their attitude towards services rendered. Ayansina, Adekunle, Oyeyinka and Ayandiji (2013) observed that extension services rendered by extension agents are weakened by excessive cost of input delivery, bureaucratic inefficiencies leading to poor formulation and implementation of extension programmes and failure to address the peculiar needs of farmers.

**Respondents' willingness to
pay for extension services**

Result in Table 8 shows that most of the respondents (78.3%) agreed to pay for extension services if it is relevant to their farming experience, and if it will increase their knowledge about farm management (78.3%). Also, majority (79.1%) of the respondents agreed to pay for extension service if it is not too expensive, majority (81.7%) were willing to pay for extension services if the organization that will render it have qualified and trained personnel and more than half (54.2%) of them agreed to pay for extension services if the service will be more reliable and efficient than public extension service. As evident on the table, majority (69.2%) of the respondents agreed to pay for extension services if the service will provide information on reduction on risks of climate change. This implies that respondents are willing to pay for extension service if the service will be better than what the public extension service offers and if it will be relevant to their farming businesses and eventually increase their production.

In addition, result in Table 9 reveals high level of willingness (51.7%) to pay for extension service. This is in tandem with the findings of Adamu (2014) who reported that majority of small scale farmers are willing to pay for extension services if the service will improve their farming activities. This further corroborates Ajayi (2006) who maintained that some farmers would be willing to pay for extension services if it would profit them and if it would not be financially more than what they can bear.

Test of Hypotheses

Ho₁: There is no significant relationship between socio-economic characteristics and willingness to pay for agricultural extension service.

Table 10 showed that there is a significant relationship between household size ($\chi^2=9.498$, $p=0.023$), level of education ($\chi^2=17.454$, $p=0.002$) and willingness to pay for extension services. Thus, the null hypothesis is rejected. However, there exists no significant relationship between sex ($\chi^2=0.764$, $p=0.382$), religion

($\chi^2=5.976$, $p=0.050$) marital status ($\chi^2=0.458$, $p=0.795$) and their willingness to pay for extension services. Thus, the null hypothesis is accepted. This implies that household size and level of education may influence respondents' willingness to pay for extension services. Young farmers in the study area had small household size which is an indication that they have minimum financial responsibilities and could therefore afford to pay for relevant services that will enhance their production and increase profits. Also, education makes the adoption of innovation easier due to the exposure and the ability to decipher information it confers. Education is thought to create a favourable mental attitude towards for the acceptance of new practices (Onuche, Adejoh and Adah, 2015).

H_{02} : There is no significant relationship between farmer's attitude to public extension service and willingness to pay for agricultural extension services. Result in Table 11 shows that there was no significant relationship between

respondents' attitude to public extension ($r=-0.150$, $p=0.102$) and willingness to pay for extension services. Thus, the null hypothesis is accepted. This implies that the attitude of respondents towards public extension services does not influence their decision to pay for extension services or not.

Conclusion and recommendations

The study concluded that most of the respondents were male, Muslim, married, literate, had more than two or more people in their households and belong to a social group. Also, majority, acquire land through inheritance and cultivates cassava. The respondents had personal savings as source of finance and were visited by extension agent fortnightly. Friends and family was the information source most of the respondents seek information from and were willing to pay for information on credit sources. Young farmers in the study area had unfavourable attitude towards public extension services and were willing to pay for agricultural extension services.

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

It was recommended that private extension service should provide agricultural services that will increase agricultural production and meet the needs of farmers. Also government agencies should design programmes that is locally oriented and of benefit to farmers.

References

Adamu C. O (2014) Extension Users' View on Alternative Sources of Fund for Extension Services in Ogun State *Journal of Biology, Agriculture and Healthcare* 4(12): 4-10

Adejo, P. E., Okwu, O. J. and Ibrahim, M. K. (2012) Challenges and prospects of privatization of agricultural extension service delivery in Nigeria. *Journal of Agricultural Extension and rural Development*, 4 (3): 63-68.

Adekoya E.A and Tijani S (2015) *Diffusion and Adoption of Innovation*. Unpublished lecture note of department of Agricultural Extension and Rural Development University of Ibadan.

Adio, E O. Abu, Y. Yusuf, S. K. and Nansoh, S. (2016) Use of Agricultural Information Sources and Services by Farmers for Improve Productivity in Kwara State. *Library Philosophy and Practice (e-journal)*. 1456. <http://digitalcommons.unl.edu/libphilprac/145>

Agbamu, J. U (2005) Problem and Propects of Agricultural Extension Service in Developing Countries in: S. F. Afolayan (Ed) *Agricultural Extension in Nigeria*. Ilorin AESON, 159-169.

Ajayi A.O. (2006) An Assessment of Farmers Willingness to Pay for Extension Services Using the Contingent Valuation Method (CVM): The Case of Oyo State, Nigeria. *The Journal of Agricultural Education and Extension*. 12(2): 97-108.

Ajayi, A. O. (2017) Farmers Willingness to Participate in the Financing of Agricultural Extension Services in Oyo State, *Nigeria Journal of Sustainable Development* 1(2): 2-11

Ayansina, S.O., Adekunle, O.A., Oyeyinka, R.A. and Ayandiji

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

(2013). Assessment of Public and Private Extension Administration in Southwestern Nigeria. *Journal of Biology, Agriculture and Healthcare* 3 (19): 45-49 www.iiste.org

Babalola, K.S and Ipadeola W.A, (2015). Prospects and challenges of privatization of agricultural extension service delivery in Nigeria, *International Journal of Agricultural Extension and Rural Development* 2 (2): 056-060.

Katz E. (2002) Innovative Approaches to Financing Extension for Agriculture and Natural Resources Management: Conceptual Consideration and Analysis of Experience. LBL, Swiss Centre for Agricultural Extension: Switzerland, 135.

Oladele O.I. and Obuh James (2008). Perceived Effect of Privatization of Extension Services among Researchers, Extension Agents and Farmers in Oyo State, Nigeria. *Agricultural Journal*, 3(5): 409-413.

Ololade R.A. and Olagunju F.I. (2013) Determinants of Access to Credit among Rural Farmers in Oyo State Nigeria. *Global*

Journal of Science Frontier Research Agriculture and Veterinary Sciences 13(2): 17-22.

Onuche U., Adejoh S.O. and Adah O. C. (2015) Analysis of Willingness to Pay for Agricultural Extension Services by Rural Small-scale Fish and Crops Producers in Kogi State, North central Nigeria: Imperative for Sustainable Agricultural Development. *Asian Journal of Agriculture and Food Sciences* 3 (4): 380-387.

Rivera W. (2002) *Agricultural and Rural Extension Worldwide: Options for Institutional Reform in the Developing Countries*. FAO, Rome.

Van den Ban, A. W. and H. S Hawkins (1996) *Agricultural Extension* (Second Edition) Oxford Blackwell science.

Table 1: Distribution of respondents' socio-economic characteristics

Socio-economic characteristics	Frequency	Percentage
Age		
23-25		
26-28	7	5.8
29-31	10	8.3
32-35	42	35.0
Mean=32	61	50.8
S.D=2.8		
Sex		
Male	97	80.8
Female	23	19.2
Marital status		
Single	20	16.7
Married	97	80.8
Divorced	3	2.5
Household size		
1-4	96	80.0
5-7	19	15.8
8-11	4	3.3
12 and above	1	0.8
Level of education		
Primary education	11	9.2
Secondary education	35	29.2
Tertiary education	74	61.7

Source: Field survey, 2016

Table 2: Distribution of respondents' enterprise characteristics

Enterprise characteristics	Frequency	Percentage
Crop cultivated		
Cassava	77	64.2
Maize	31	25.8
Yam	8	6.7
Tomato	3	2.5
Cowpea	1	0.8
Land acquisition		
Inheritance	83	69.2
Purchase	20	16.7
Rent	16	13.3
Lease	1	0.8
Source of credit facilities		
Personal savings	86	71.7
Family and friends	24	20.0
Bank loan	7	5.8
Cooperative society	3	2.5
Visit by extension agent		
Yes	74	61.7
No	46	38.3
Frequency of visit		
Daily	9	7.5
Weekly	6	5.0
Forth nightly	38	31.7
Monthly	14	11.7

Source: Field survey, 2016

Table 3: Distribution of agricultural extension service respondents are willing to pay for

Agricultural services	Not at all %	To some extent %	To a large extent %	Mean	Rank
Information credit sources	30.0	58.3	11.7	0.87	1 st
Information on storage methods and techniques	31.7	56.7	11.7	0.80	2 nd
Improved planting materials	37.5	48.3	14.2	0.77	3 rd
Advisory services on pest control	45.0	40.8	14.2	0.69	4 th
Advisory services on disease control	45.8	40.0	14.2	0.68	5 th
Education and training	42.5	47.5	10.0	0.67	6 th
Linkage with input sources	43.3	48.3	8.3	0.65	7 th
Farm management	50.0	38.3	11.7	0.62	8 th
Advisory services on crop	54.2	35.8	10.0	0.59	9 th
Linkage with market	54.2	41.7	4.2	0.50	10 th

Source: Field survey, 2016

Table 4: Distribution of sources of agricultural information

Sources	Always s %	Occasional ly %	Never r %	Mean n	Rank
Fellow farmers	80.0	11.7	7.5	1.73	2 nd
Friends and family	88.3	8.3	3.3	1.85	1 st
Radio	55.8	40.0	4.2	1.51	3 rd
Television	17.5	53.3	29.2	0.91	5 th
Social groups	22.5	60.8	16.7	1.06	4 th
Extension agents	11.7	53.3	35.0	0.77	6 th
Internet	13.3	38.3	48.3	0.65	8 th
Whatsapp/Facebook/twitter	11.7	41.7	46.7	0.66	7 th
Agric journal	10.0	43.3	46.7	0.63	9 th

Source: Field survey, 2016

Table 5: Distribution of effectiveness of the sources of information

Sources	Very effective e %	Effective e %	Not effective e %	Mean n	Rank
Fellow farmers	60.8	24.2	15.0	1.45	2 nd
Friends and family	64.2	20.0	15.8	1.48	1 st
Television	32.5	41.7	25.8	1.07	3 rd
Social groups	23.3	56.7	20.0	1.03	4 th
Radio	13.3	64.2	22.5	0.91	5 th
Extension agents	3.3	50.0	46.7	0.57	7 th
Internet	9.2	37.5	53.3	0.56	8 th
Whatsapp/Facebook/twitter	6.7	42.5	50.8	0.55	9 th
Agric journal	5.8	54.2	40.0	0.67	6 th

Source: Field survey, 2016

Table 6: Distribution of Attitude of respondents towards public extension service

Attitude statement	SA %	A %	U %	D %	SD %
The contact with government extension agents is more regular	28.3	18.3	3.3	35.0	15.0
The government extension agents do not always give current information on farming	20.0	35.8	3.3	23.3	17.5
The services rendered are not sufficient to increase agricultural productivity	25.8	29.2	5.0	26.7	13.3
Public extension services have not helped to reduce risk of climate change	20.8	51.7	5.8	13.3	8.3
We don't usually benefit from the government extension agents in our community	37.4	25.0	0.8	23.3	12.5
The information on improved technology provided by government extension agents is not reliable	22.5	42.5	4.2	12.5	18.3
Public extension services have helped to solve production problems	21.7	38.3	6.7	16.7	16.7
The services from public extension help increase income	13.3	40.8	8.3	22.5	15.0
The public extension services satisfy peoples' needs and interest	11.7	35.8	7.5	34.2	10.8
The training giving by public extension agents are useful and understandable	10.8	52.5	7.5	18.3	10.8
Result demonstrations conduct by government extension	8.3	40.8	8.3	25.0	17.5

agents is successful most of the time					
Government extension services are not time consuming	13.3	50.8	10.0	17.5	8.3
Public extension do not have proper monitoring	20.0	38.3	6.7	16.7	18.3

Source: Field survey, 2016

Table 7: Distribution of respondents' attitude level towards public extension services

Attitude level	Frequency	Percentage
Favourable (38-57)	57	47.5
Unfavourable (25-37)	63	52.5

Mean= 38, Minimum= 25, Maximum= 57
Source: Field survey, 2016

Table 8: Distribution respondents' willingness to pay for extension services

Willingness to pay	SA	A	U	D	SD
I will pay for extension services if it is relevant to my farming experience	40.0	38.3	2.5	13.3	5.8
There is no need to pay for extension services since I have good knowledge of agricultural practices	20.0	20.0	5.0	23.3	31.7
Paying for extension services amount to waste of money	15.0	14.2	4.2	38.3	28.3
I am willing to pay for extension service if my production will increase	40.0	38.3	3.3	14.2	4.2

Adelakun O. E. and Adeniyi J. A.

**YOUNG FARMERS' WILLINGNESS
TO PAY FOR AGRICULTURAL
EXTENSION SERVICES IN OYO
STATE**

I will pay for extension service if is not too expensive	18.3	60.8	5.0	12.5	3.3
I will pay for extension service if they have qualified and trained personnel	30.0	51.7	5.0	10.0	3.3
I will pay for extension service if it can help to control the effect of pest and diseases	22.5	60.8	5.8	10.0	0.8
Services render by extension agent do not improve my livelihood, therefore I cannot pay for it	14.2	24.2	8.3	20.0	33.3
I can pay for extension service if it will increase my knowledge about farm management	30.8	46.7	5.0	13.3	4.2
Even if extension service grants me access to credit facilities, I will not pay	5.0	23.3	7.5	22.5	41.7
I cannot pay for extension service that is time consuming even though useful	7.5	25.8	8.3	29.2	29.2
If there is no easy accessibility to extension personnel I will not pay for extension personnel	15.0	46.7	7.5	20.0	10.8
If extension service is more reliable and efficient, I will pay for the cost	28.3	54.2	5.8	10.0	1.7
If extension service provides information on reduction on risk of climate change	12.5	69.2	5.0	12.5	0.8
I will not pay for any advisory service render by extension agent because it is suppose to be free	9.2	24.2	6.7	25.0	35.0

I don't have to pay extension agent for information storage methods and techniques because extension services is meant to be a public good	11.7	13.3	7.5	34.2	33.3
--	------	------	-----	------	------

Source: Field survey, 2016

Table 9: Categorization of respondents' willingness level to pay for extension services

Willingness level	Frequency	Percentage
High (52-98)	62	51.7
Low (41-51)	58	48.3

Mean= 52, Minimum= 41, Maximum= 98

Source: Field survey, 2016

Table 10: Chi-square analysis of respondents' selected socioeconomic characteristics and willingness to pay for agricultural extension services

Variables	χ^2	df	p-value	decision
Sex	0.764	1	0.382	NS
Religion	5.976	2	0.050	NS
Marital status	0.458	2	0.795	NS
Household size	9.498	3	0.023	S
Level of Education	17.454	4	0.002	S

Source: Field Survey, 2016

Table 11 Correlation of farmers' attitude and willingness to pay for agricultural extension services

Variable	r-value	p-value	Decision
Attitude towards public extension service and willingness to pay	-0.150	0.102	NS

Source: Field Survey, 2016

FACTORS INFLUENCING RURAL YOUTHS INVOLVEMENT IN AGRICULTURAL PRODUCTION IN SOUTH WEST NIGERIA

¹Akinsulu A .A., ²C. A., Afolami and ³O. A., Odusina

¹and ³ Department of Agricultural Sciences,
Tai Solarin University of Education,
Ijagun, Ijebu- Ode, Ogun State, Nigeria.

² Department of Agricultural Economics And Farm Management,
Federal University of Agriculture Abeokuta.
Corresponding Author akinsulula@gmail.com

Abstract

This study was carried out to determine factors which influence rural youth's involvement in Agricultural Production in South-West Nigeria. A multi-stage sampling procedure was used with the aid of structured questionnaire to obtain information from 300 respondents. Data gathered was analysed using descriptive statistics such as frequency count, percentage, mean and inferential statistics using Probit model was used to determine those factors which influenced rural youths' involvements in agriculture. The result showed that the mean age of the respondents was 31 years, with mean household size of 4 and 70 percent were married with all of the respondents (100%) able to read and write. The major agricultural production activities which the youths were involved in were Land clearing (72.00%), Land preparation (72.67%), Making of heaps and ridges (71.67%), Animal production (30.00%), Fish farming (40.00%), Marketing of agricultural products (74.00), Fertilizer application (80.00), and all the youths (100.00%) were involved in Planting, Weeding, Harvesting , and Processing. Probit result revealed that those factors that influence youths activities were household size ($p < 0.01$), family occupation, ($p < 0.01$), access to credit ($p < 0.05$), and availability of inputs ($p < 0.01$) were positively related to their involvements in agricultural production, while education of the respondents ($p < 0.01$), income from non-agricultural sources ($p < 0.05$), were negatively correlated with their involvement in agricultural production. Major constraints were poor infrastructural facilities, poor access to enough credit and quicker

Akinsulu A .A., C. A., Afolami
and O. A., Odusina

**FACTORS INFLUENCING RURAL YOUTHS'
INVOLVEMENT IN AGRICULTURAL
PRODUCTION IN SOUTH WEST NIGERIA**

income from other non-agricultural sources. It was recommended that youths in the rural area should organize cooperative society to enable them obtain loan and buy agro-chemicals and modern farm equipment. The government at all level should provide basic social amenities such as good roads, stable electricity, and reactivate farm settlement scheme in rural areas.

Keywords: Rural youths, Rural area, Involvement, Agricultural Production.

Introduction

The roles of agriculture in human existence cannot be overestimated; it is the main source of livelihood for rural people, accounting for about 20 percent of Sub-Saharan nation's Gross Domestic Product (GDP) (Butler and Mazur, 2007). In Nigeria, agriculture has been described as one of the most important economic sector in terms of its contribution to the GDP after oil (Bakare, 2013, Enoma, 2010). It contributed about 41 percent of the country's GDP, employed about 65 percent of the total population and provides employment to about 80 percent of the rural population (Bakare, 2013, African Development Fund, 2005).

The importance of agriculture as a means of livelihood is more pronounced in the developing countries like Nigeria, where it is the base of rural household economy, employment, and food. Youth involvement in agriculture remains critical given the direct and indirect benefits of agriculture, given that it is a fundamental contributor to poverty reduction and economic growth (World Bank, 2008).

Majority of agricultural production take place in the rural area, which calls for large involvement of the energetic youths, they have been noted for their unique capabilities and they could constitute a formidable force in agricultural production activities in any nation. IFAD (2013) revealed that, young men and women are critical to the prosperity of agriculture in Sub Saharan Africa and for efforts to ensure food security. They are the most active segment of the population that can produce most of the needs in the society (Aphunu *et al.*, 2010).

Rural youths' activities constitute a hope of future food security, because in many rural areas, agricultural knowledge and farming know-how are passed on from parents to their children. The sustenance of food security to a large extent depend on the readiness of the youths to take farming business as a means of their livelihood, as this will enable them to gear efforts at increasing efficiency and productivity. Youths have the potential to overcome some major constraints in agricultural development as they are more open to new ideas and practices

than adult farmers (Daudu, 2009). Yet around the world, few young people see a future prospect for themselves in agriculture and rural areas most especially in developing countries such as Nigeria where the rural areas lack basic amenities with high rate of market speculators.

Though youths have desirable qualities and capabilities that can promote agricultural production activities, but most of them do not want to participate in it (Butler *et al*, 2007). This has resulted in mass unemployment and lack of sustainable livelihood activities among the youths (Breitenbach, 2006). In Nigeria, this has led most youths into political thuggery, cultism, terrorism, human rituals, pick pocket, armed robbery, kidnapping activities across the country.

Rural youths face many hurdles in trying to earn a livelihood, some of these include: pressure on arable land is high in many parts of the world, making it difficult to start a farm. Youth often lack access to credit, and many other productive resources necessary for agriculture. Many countries in Africa and Sub-

Saharan regions for instance Nigeria have realized that, in order to reduce food insecurity there must be policies for youth integration in agricultural activities. This is through providing incentives to young people who are engaged in agriculture, availing fair market opportunities for youth, providing training opportunities in new technology and presenting agriculture as profitable venture (Ommani, 2011). The Nigerian government in recognising this has made so many attempts to encourage the youths to take agricultural production and agro-processing as career. Some of these include the National Directorate of Employment (NDE) in 1986 to provide vocational training to the youth, the Better Life Programme in 1987 to empower young women in the rural areas through skills acquisition and healthcare training. Also People's Bank in 1989 and the Community Banks were given licence in various towns and villages in 1990, to provide credit facilities to low income earners in rural areas where majority of them depend on agricultural production and other

micro enterprises. Fadama program was initiated in 1992 to enhance food self-sufficiency, reduce poverty, and create opportunities for employment for youths in the rural areas (Akpan, 2010).

Various state governments also initiated graduate and school leavers' agricultural loan schemes in an attempt to encouraged youth involvement in agricultural production empower those engaged in agricultural activities, and combat youth unemployment. Despite these incentives and the expanding markets for primary and secondary agricultural commodities, the involvement of the youth in agricultural activities has steadily declined in recent years (Adekunle *et al.* 2009, Akpan , 2010).

Objectives of the Study

The main objective of this study is to analyze factors influencing rural youths involvement in agricultural production in Southwest Nigeria

The specific objectives are to: describe the socio-demographic characteristics of the youths; identify the types of farm production activities they

engaged in, determine the extent of their involvement, and determine the factors influencing rural youths' involvement in agricultural production in the study area.

Research methodology

Study Area

This study was carried out in the South-western, Nigeria. It comprises of six states which are Lagos, Ogun, Ondo, Osun, Oyo and Ekiti State. Three states, Ogun, Ondo and Osun State were randomly selected for the study; this constitutes 50 percent of the states in South-western, Nigeria.. Ogun State borders Oyo and Osun State to the north, Ondo State to the east and republic of Benin to the west. In the south by Lagos and Atlantic Ocean, it has a population of 3,728,098 (National Population Census, NPC, 2006), land area of 16, 409, 26 square kilometres. The major crops include rice, maize, cassava, yam, cocoyam, banana, oil palm and palm kernel. It is one of the largest producer of kolanut. It has twenty (20) Local Government Areas made up of six ethnic groups (Egba, Ijebu, Remo, Egbado, Awori and the Egun) it

lies within latitude 6°N and 8°N and longitude 3°E .

Ondo State was created on the 3rd February, 1976, bounded in the north by Osun and Ogun State and in the south by the Atlantic Ocean, Kwara, Kogi and Ekiti States in the north, Delta and Edo States in the east, Oyo and Ogun States in the west and Atlantic Ocean in the south. The temperature throughout the year ranges between 21°C and 29°C with high relative humidity. The state enjoys luxuriant vegetation with high forest zone. It lies between longitude 4°E and 6°E and latitude 5.45°N and 8.15° . It has 18 Local Government Areas divided into three senatorial districts (Ondo north, Ondo south and Ondo central). It has land area of 14,793 square kilometers with a population of 3,441,024 (NPC, 2006).

Osun State was created on August 27, 1991. It is an inland state in south-western Nigeria. Its capital is Osogbo. It is bounded in the north by Kwara State, in the east partly by Ekiti State and partly by Ondo State, in the south by Ogun State and in the west by Oyo State. It has land area of $9,251\text{ km}^2$. It has

population of 3,423,535 (NPC, 2006). The people of the state are mostly farmers, producing such food crops as yam, maize, cassava, beans and cocoyam. The cash crops grown include tobacco and palm produce.

Sampling techniques

A multistage sampling technique was used to select 300 respondents for the study. The first stage was random selection of Ogun, Ondo and Osun States. At the second stage, five Local Government Areas (LGAs) were randomly selected from each of the states; and the third stage involved the selection of two communities from each local government area, finally one youth each from ten households were randomly selected from each selected community, this gave a total number of 300 respondents.

Method of data analysis

Data obtained were analysed using descriptive statistics (percentage, frequency count, mean) to describe the socio-economic characteristics of the respondents, types and extent of agricultural production these children engaged in, the

constraints these children encountered in the course of their involvements in agricultural production and Probit regression model was estimated to identify the determinants of youths' involvement in agricultural production in South-West, Nigeria.

Model Specification

The probit model is specified thus:

$$Y_i^* = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki} + \epsilon_i$$

and that:

$$Y_i = 1 \text{ If } y^* > 0$$

$$Y_i = 0 \text{ otherwise;}$$

Where: $X_1, X_2, X_3, \dots, X_k$, represent vector of random variables, β_i represents a vector of unknown parameters estimated and ϵ_i represent a random disturbance term which accounts for error associated with the result.

According to Nagler (2002), probit model constrains the estimated probabilities to be between 0 and 1 and relaxes the constraint that the effect of the independent variable is constant across different predicted values of the dependent variable. This is normally experienced with the

linear probability model (LPM). The probit model assumes that while we only observe the values of 0 and 1 for the variable Y , there is a latent, unobserved continuous variable Y^* that determines the value of Y . The other advantages of the probit model include believable error term distribution as well as realistic probabilities (Nagler, 1994).

The explicit model for this study is;

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + V_i$$

and that:

$$Y_i = 1 \text{ If } y^* > 0$$

$$Y_i = 0 \text{ otherwise;}$$

Where:

Y_i = youths involvement in agriculture =1, 0 otherwise

X_1 = sex (Male=1, Female=0)

X_2 = education (Years)

X_3 = involvement in other business (Yes = 1, No = 0)

X_4 = Family occupation (Agriculture alone =1, Non agriculture =0)

X_5 = Household size (Number 1,2,3.....)

X_6 = Access to credit (Dummy Yes =1, No =0)

X_7 = Availability of agrochemicals (Dummy Yes =1, No =0)

X_8 = Availability of social amenities (Dummy Yes =1, No =0)

Discussions of results

From Table 1, 19.33 % of the respondents were between the age 18 and 23yrs, 10.00 percent fall between 24 and 29yrs, 30.00 percent were between 30 and 35yrs, 24.00 percent fell between 36 and 40yrs, with the mean age of 31. The mean household size was 4.

The educational attainment of the respondents in the area showed that all of them had formal education at different level. Those with primary and secondary education were 22 percent, 57.33 percent, while 20.67 percent attained tertiary education. The marital status showed that 19.33 percent of them were single and 70.00 percent were married, 4 percent and 6.67 percent were divorced and widow respectively. The occupational distributions of the respondents showed that 3.33 percent engaged themselves as hired labourers, 10.00 percent combined hired labour with

farming, 43.33 percent engaged in farming alone, while 28.33 percent combine farming with artisanal work and 15.00 percent combined farming with government work as their sources of their livelihood.

Various farm activities engaged by the youths

The results in Table 2 showed that 72 percent of the youths engaged in land clearing, 72.67 percent were involved in land preparation, 71.67 percent, actively participated in heap and ridge making, 80.00 percent participated in application of fertilizer in the farms; Those that actively involved in animal production, fish farming and marketing of agricultural are 30.00 percent, 40.00 percent and 74.00 percent respectively and all the respondent youths participated in planting, weeding, harvesting and on-the-farm processing. This showed that youths actively involved in all farm activities.

Factors that determines Rural Youths' involvement in agricultural Production in South-West Nigeria.

From Table 3, the determinants of youths' involvement in agricultural Production are education, Income from other business, Family occupation, House hold size, Access to credit, Availability of agro-chemicals and Availability of social amenities. Education level was negatively significant at 10 percent level of probability. Showing an inverse relationship between the educational attainment of the youths and their involvement in agricultural production as a means of livelihood. This could be induced that when youths attain higher education their believe of gaining employment in a white collar job increases, therefore, they want to leave rural farming communities. This result is in line with Akpan (2010) but in contrast to Nnadi *et al* (2008) with the opinion that increased educational opportunities increased the probability of participating in rural agriculture by the youths.

Income from other non-agricultural business was

negatively related at 5 percent level. This is evidenced from the fact that most of them are agile and can easily change occupation to other non- farm sources of income most especially when it give quicker return and higher profit; this will reduce their interest in investing in agriculture. As noted by Sicular *et al*, (2002) that returns to non-agricultural business are higher than for agricultural labour hours. Generally most youths in rural areas do not rely on income from agricultural products alone as a means of sustenance. This reduces their activities in committing all of their energy and resources to farming.

The family occupation of the youths was positively related. This showed that there is probability that those whose parents are farmer will show greater interest in agricultural activities, most especially if they have access to modern farm equipment coupled with rural infrastructures such as good road, good communication network.

Family size has positive relationship with youths' activities in agriculture. This

implies that the larger the family size, the greater the probability of investing in agriculture among the youths. Because farming is an inherited occupation and a sure means of providing food for the immediate family, avoiding hunger and ensure food security in the rural area.

Access to credit was positively significant at 1 percent probability level. This means that when rural youths have a means of obtaining loan, there is probability of increased in productivity that will stimulate their interest into investing in agricultural business. This can be evidenced from the fact that most farming works require high initial capital. As noted by Development Bank of South Africa (2005), that access to credit is regarded as one of the key elements in raising agricultural productivity.

Availability of agro-chemicals was positively significant at 1 percent probability level, this means that if agro-chemicals and other modern equipment are readily available there is high probability of increasing the interest of rural youths in agriculture. As can be noted that

readily availability of agro-chemical such as fertilizer, herbicide, insecticide and others could lead to increase in output, reduce drudgery of weeding, pests control and in other farm works.

Availability of social amenities such as good road, regular electricity, readily available market, functioning telecommunication services was positive related. Therefore, availability of these facilities in the rural areas will encourage youths to stay and involve in production of crops and animals in the rural areas. This result is in line with Olayiwola (2005) and Echebiri (2005) with the assertion that lack of social amenities in the rural areas is one of those reasons for rural youth involvement in nonfarm activities and migrating to urban areas.

Conclusion and recommendations

The study revealed that the youth in the study area were involved in agricultural production such as clearing of land, land preparation, planting, weeding, application of fertilizer, harvesting, processing,

marketing, The major factors influencing youths involvements in agricultural production were household size, occupation of the family, access to credit, availability of social amenities (good road, electricity among others). The major constraints faced by youths in agricultural production were, majority of them that were educated do not want to settle with farming in rural areas also some of them do engage in other business and take farming as secondary occupation and poor access to credit,

It can therefore be recommended that youths in the rural areas should organize cooperative society to enable them obtain loan and buy agro-chemicals and modern farm equipment. The government should provide basic social amenities such as good road network and stable electricity in rural areas, this will encourage the youths to stay in rural area where there is opportunities for innovation in agriculture rather than migrating to cities searching for jobs.

References

- African Development Fund (2005). Report by the Boards of Directors of the African Development Bank and the African Development Fund Covering the period January 1 to December 31, 2005
- Akpan S. B. (2010) Encouraging youth's in agricultural production and processing, International Food Policy Research Institute. Nigeria Strategy Support Programme, Policy note no. 29.
- Aphunu A. and Atoma C.N. (2010). Rural Youths' involvement in Agricultural production in Delta Central Agricultural Zone: Challenges to agricultural extension development in Delta State. *Journal of Agricultural Extension*, 14(2), 46-55.
- Adekunle, O. A., L. L. Oladipo, F. O. Adisa, R.S., Fatoye, A. D., (2009). Constraints to Youth's Involvement in Agricultural Production in Kwara State, Nigeria. *Journal of Agricultural Extension*, 13(1), 102-108.

- Bakare, A.S. (2013). Value added tax and output growth in Nigeria. *Proceeding of 8th Annual London Business Research Conference* Imperial College, London, UK, .8-9
- Breitenbach M. C.(2006). A Model for Rural Youth Participation in Local Government: A South African case study. *Journals of Child and Youth Studies*, 1(1),72 – 84.
- Bulter L M., Mazur R.E. (2007). Principles and processes for enhancing sustainable rural livelihoods: collaborative learning in Uganda. *International Journal of Sustainable Development & World Ecology*, 14, 604-617.
- Daudu, S., (2009). Roles of Youths in Agricultural Development in Makurdi local Government Area of Benue State in Nigeria: *Journal of Agricultural Extension* 13 (2): 107-109
- Development Bank of South Africa (2005). Development report. Agriculture in South Africa Second Economy.
- Echebiri, N., (2005). Characteristics and determinants of urban youth unemployment in Umuhia, Nigeria. A paper presented at World Bank Conference on Share growth in Africa held at Accra Ghana.
- International Fund for Agricultural Development, (2013). Improving young rural women's and men's livelihood: the most sustainable means for moving to a brighter future. (www.ifad.org) site visited on 13/09/2013.
- Nagler J (1994). Interpreting probit analysis. New York University. Webpage: <http://www.nyu.edu/classes/nagler/quant2/notes/probit1.pdf>.
- Nagler J (2002). Interpreting probit analysis. New York University. www.nyu.edu/classes/nagler/quant1/probit1_post.pdf.
- National Population Census (NPC) of Nigeria, (2006).
- Nnadi F.N. and. Akwiwu C.D,(2008). Determinants of Youths' Participation in Rural Agriculture in Imo State, Nigeria. *Journal of Applied Sciences*, 8: 328-333.

Akinsulu A. A., C. A., Afolami and O. A., Odusina **FACTORS INFLUENCING RURAL YOUTHS' INVOLVEMENT IN AGRICULTURAL PRODUCTION IN SOUTH WEST NIGERIA**

- Olayiwola, O. F.,(2005). Perception of rural- urban migration in selected rural communities in Ondo state, Nigeria. A publication from Department of Sociology, Adekunle Ajasin University Akungba, Nigeria.
- Journal of American Science 2011; 7(1):969-972]. (ISSN: 1545-1003). <http://www.american science.org>.
- Sicular and Zhao (2002). Employment and earning in rural China, Mimeographed.
- Ommani A.R (2011). Strategies of Rural Development in Shoushtar Township of Iran (Applying SWOT method).
- World Bank. (2008). World development report 2008: Agriculture for development. Washington, D.C.: World Bank.

Table 1 Socio-economic characteristics of the respondents.

Variables	Frequency	Percentage (%)
Age (Years)		
18-23	58	19.33
24-29	80	26.67
30-35	90	30.00
36- 40	72	24.00
Total	300	100.00
Mean = 31		
Household Size		
1-3	60	20.00
4-6	150	50.00
Above 6	90	30.00
Total	300	100.00
Mean = 4		
Educational attainment		
Primary education	66	22.00
Secondary education	172	57.33
Tertiary education	62	20.67
Marital Status		
Single	58	19.33
Married	210	70.00
Divorced	12	4.00
Widow/widower	20	6.67
Total	300	100.00
Occupation (Farming and others)		
Selling their labour	10	3.33

Akinsulu A. A., C. A., Afolami
and O. A., Odusina

**FACTORS INFLUENCING RURAL YOUTHS'
INVOLVEMENT IN AGRICULTURAL
PRODUCTION IN SOUTH WEST NIGERIA**

power		
Farming and hired labour	30	10
Farming alone	130	43.33
Farming and Artisan	85	28.33
Farming and Civil servants	45	15.00
Total	300	100.00

Source: Field survey 2018.

Table 2: Distribution by various farm activities engaged by the youths

Types of agricultural activitie	Freq.	Percent
Land clearing	216	72.00
Land preparation	218	72.67
Making of heaps and ridges	215	71.67
Planting	300	100.00
Weeding	300	100.00
Fertilizer application	240	80.00
Harvesting	300	100.00
Processing	300	100.00
Animal production	90	30.00
Fish farming	120	40.00
Marketing of agricultural products	222	74.00

Source: Field survey 2018.

Table 3. Estimation of factors that determines Rural Youths involvement in agricultural Production in South-West Nigeria.

Determinants	Coefficient	Standard error	Z
Sex	0.0235	0.0521	0.45
Education	-0.0655 *	0.0287	-2.28
Income from other business	-0.0889**	0.0324	-2.74
Family occupation	0.0087 ***	0.0025	3.48
House hold size	0.0692 ***	0.0285	2.48
Access to credit	3.5920 **	1.3261	2.71
Availability of agro-chemicals	0.8567 ***	0.2810	3.05
Availability of social amenities	0.2312***	0.0893	2.59

Source: Field survey 2018

$$\chi^2 = 34.315$$

$$R^2 = 0.731$$

*= significant at 10 %,

**=significant at 5%

*** = significant at 1%

YOUTH'S PARTICIPATION IN APIARY AGRIBUSINESS IN OKE-ERO LOCAL GOVERNMENT AREA KWARA STATE, NIGERIA.

¹Jolayemi, J. O., ²A. T. Olawumi and ³I. O., Ewebiyi

¹Kwara State College of Education, P.M.B 309, Oro.

² and ³Tai Solarin University of Education, Ijagun, Ogun State, Nigeria.
jjohnlere9@gmail.com

Abstract

Apiary agribusiness is an area of agriculture that is just gaining recognition among Nigerian youths, considering its enormous contribution to national economy. Therefore, youth participation in apiary agribusiness in Oke-Ero Local Government Area (Local Government Area) of Kwara state was investigated. A total of 110 youths were randomly selected from 10 political wards in the LGA. Data were collected with the aid of structured questionnaire and analyzed using frequency counts, percentage and mean. Inferential statistics used was Pearson Moment Correlations (PPMC) to test formulated hypotheses at 5% level of significance. Most respondents (76.12%) were within the age range of 41-60years, 67.37 are married, 16.4% had non-formal education, while 70.0% of the respondents were male. Sex ($\chi^2 = 0.2810$, $p = 0.003$) was significantly related with youth participation in apiary agribusiness in the study area. The results of PPMC revealed that socio-economic variables, such as age $\chi^2 = -0.075$, $p = 0.433$, marital status $\chi^2 = 0.029$, $p = 0.765$, and education attainment $\chi^2 = -0.115$, $p = 0.323$ did not make any significant contribution to youth participation in apiary agribusiness. Level of youth participation in apiary agro-business was low in the study area. Youth participation in apiary agribusiness will be better enhanced if practical training, loans and adequate extension agents are provided by both the NGOs and government appropriately.

Keywords: Youths, Participation, Apiary, Agribusiness.

Introduction

Apiary or modern beekeeping is the art and science of rearing or breeding and managing honey bee colonies in artificial hives for economic benefits (Ikediobi, obi and Achoba, 1985; Morse, 1989; Ahmad, Joshi and Gurung, 2007). The most common species utilized for this purpose is *Apis mellifera* (Hymenoptera: Apidae) of which about 25 species of economic importance occur in Europe, Middle East of Asia and Africa (Segeren, 1997). *Apis mellifera* *Adansonni*, native species of West Africa, is the one most commonly used in Nigeria. Apiary has evolved into a farming enterprise that involved the use of sophisticated and artificial techniques to keep honey bees for their products such as honey, propolis, wax, pollen, bee venom and royal jelly (Oyeleye, 1999), it contributes significantly to securing sustainable livelihoods by assisting in transforming vulnerabilities into security (Ahmad *et al.*, 2007). Honey is sweet made by bees using nectar from flower, which is collected by bee keeper and consumed by human. It has long history of human consumption, and is used

in various foods and beverages as a sweetener and flavor. Honey has been used since ancient times both as food and as medicine, apiculture dates back to at 700BC. For many centuries, honey was also used for a variety of medicinal and domestic purposes.

Apiary is also carried out by small farmers, and it is particularly suitable for underprivileged landless and low-income, low-resource individuals and groups. According to Ahmad and Partap (2009), beekeeping requires minimal start up investment and generally yields profits within the first year of operation. In addition to the direct income from bee products, beekeeping enterprise stimulates various sectors within a society like hive carpentry, honey trading, renting and hiring of bee colonies for pollination, and other bee value addition (Chazovachii, *et al.*, 2013). Beekeeping does not require large size of land nor fertile land to produce as hives can be located on poor land, on top of trees, and rocky areas.

The nutritional consumption of honey includes, energy, carbohydrates, proteins, fat,

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

dietary, fiber, water, riboflavin (Vit B2), niacin (Vit. B3), pantholentic acid (vit.B5), vitamin B6, foliate (Vit. B9), vitamin C2 calcium, iron, zinc magnesium, phosphorus and sodium. Honeybee produces honey and their life task is directly related to what the season brings and what is going on around them. The honey bee lifecycle goes through four basic stages. These are: egg, larva, pupa and adult. Honey starts out as nectar that bees collect from flowers. Basically, nectar is a reward that plant produce to attract pollinating insect and birds. It is a sugary fluid which includes the aromatic oil that gives flower their scent, as well as other trace substances. Bees collect their nectar by drawing it through their proboscis and storing it in their honey stomach. Honey then carry back to their hive in tiny, 40 milligram loadbees regurgitate the nectar and pass it to workers bees in the hive. These bees then gradually transform the nectar into honey by evaporating most of the water from it. Nectar is as much as 70percent water, while honey is only 20 percent water. Most flowering plants depend on bees

to pollinate them; the flowers therefore attract bees by producing large, brightlycolored flowers, sweet smelling odor, or by exuding sugary nectar from the base of the flower. The secretion of nectar varies considerably throughout the year due to climatic factors. These factors affect the bloom and quality of nectar produced by the flowers in order to harvest good honey crop.

Statement of the Problem

The problem of youth unemployment is largely evident in Nigeria (Okafor, 2011). Apiary Agribusiness has a potential of engaging youth in a meaningful livelihood; has the capacities of contributing significantly to economy of a developing country including Nigeria. However, the implementation of various programs targeted at poverty reduction and creation of job has not focus much attention on beekeeping as an enterprise, despite the fact that, honey has a great value and advantages both as food and medicine. Therefore, youth participation in apiary agribusiness in Oke-Ero LGA of

Kwara State, Nigeria was investigated.

The following research questions were raised to guide the study:

- i. What are the socio-economic characteristics of respondents' that are involved in apiary agribusiness in the study area?
- ii. What is the level of respondents' participation in apiary agribusiness in the study area?
- iii. What are the benefits derived from participation in apiary agribusiness?

Objectives of the study

The main objective of the study was to investigate Youth participation in apiary agribusiness in Oke-Ero LGA of Kwara State, Nigeria, while specific objective are to

- i. describe the socioeconomic characteristic of respondents participated in apiary agribusiness in the study area;
- ii. determine the respondents level of participation in apiary agribusiness
- iii. identify benefit derived by the respondents that are

participated in apiary agribusiness.

Hypotheses of the Study

The hypotheses of the study are stated in the null forms.

Ho₁: There is no significant relationship between selected socio-economic characteristics of the respondents and their participation in apiary agribusiness.

Ho₂: There is no significant relationship between benefits derived from apiary agribusiness and participants of respondents.

Methodology

The study was carried out in Oke-Ero Local Government area of Kwara State Nigeria. Oke-Ero Local Government has its headquarter in the town of Illofa. It has a land area of 438km² and a population of 57,619 as at the 2006 census (National Population Commission, (NPC), 2006). The postal code of the area is 252(1) Oke-Ero local government area is subdivided into 10 political wards. These are; Ekan ward, Ilale/Erin-mope/Moji ward, Egosi Monde ward, Illofa ward, Odo-owa 9(i), Odo-owa (ii).

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

Idofin –Odoase ward, Idofin-Igbana ward (i) and Idofin-Igbanaward(ii) Oke-Ero Local government area in Kwara state is a Yoruba speaking, precisely Ekitidialect with traditional head called an Oba. The inhabitant of the Local Government Area are mainly Christians and Muslims whose main occupation is farming of arable crops, tree crops farming, and livestock production. Eleven youths that are from rural farming households were selected from each political ward within the LGA through simple random technique. This makes a total sample size of 110 respondents that were used for the study.

Results and Discussion
Socio-economic characteristic
of respondents:

Results in Table 1 reveals that 70.0 percent of the respondents were males, indicating male dominance in apiary agribusiness in Oke-Ero Local Government area of Kwara State as earlier reported by Matanmi, Adesiji and Adegoke (2008) that majority of beekeepers in Nigeria are males.

In terms of age distribution, 0.9 percent of respondents are below 30 years of age, 9.0 percent were between 31-40 years (the targeted group), about 39.0 percent of the total respondents were between 50-51 years, and 37.2 percent of the respondents were between 61 and above. This means that, youths are less participated in apiary agribusiness when compared with old ones.

In another vein, 16.4 percent of the respondents had non-formal education, 18% attempted Quranic School, 10.9 percent of the respondent's attempted primary education, 10.9 percent had the primary leaving certificate, 12.7 percent had secondary education, and few respondents 0.9 percent had tertiary education. This implies that majority of the honey producers are not educated which may have negative effect on their production because they might not apply modern technologies in Oke-Ero Local Government Area of Kwara State as opined by Caswell, *et al*, (2001). Education creates a favorable mental attitude for acceptance of new technologies

(Caswell, Fuglie, Ingram, Jans, and Kascak, 2001).

Result of the analysis further revealed that 67.3 percent were married, 10.35 percent of the respondents were separated, 14.5 percent widowed of respondents 5.5 percent were divorced, while 1.8 percent of them are single. This result implies that high percentage of married respondents participated in apiary agribusiness.

Level of youth participation in Apiary Agribusiness

The result of analysis in Table 2 revealed that less than half of respondents (36.4%) involved in site selection for apiary agribusiness in the study area. In the same vein 37.3%, 31.8%, 18.2% and 9.1% of the respondents respectively involved in construction of hive, soaking of cotton into original honey to use as bait for bees attraction adequate monitoring of the hive to know presence of bees in the hive and protection hive from theft.

The result in Table 2 also revealed that infinitesimal numbers of the respondent 10.0%, 7.3%, 4.6% and 6.4%

involved in found out if the tape has been formed and matured in the hive, harvesting, processing and extraction of honey from the honey comb, packaging into a clean and safe container and marketing.

The fact that (65.0%) of youths in Oke-Ero Local Government of Kwara State, Nigeria as clearly shown in Table 3 had low level of participation in apiary agribusiness, suggest the need to create more awareness on the viability and economic importance of apiary agribusiness in the study area.

Respondents' benefits derived from apiary agribusiness

Result in Table 4 revealed that majority of the respondents (98.2%) said apiary agribusiness is source of their income occasionally, (53.6%) claimed that honey is a source of food, only few (0.9%) said they never used the honey as a source of food, (47.3%) of the respondents said that, occasionally they used the honey as source of the medicine. Foreign exchange majority of the respondents (80.0%) used them always, (37.2%) use it in marriage

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

ceremony. Majority (81.8%) used the honey occasionally for marriage ceremony, (57.3%) of the respondents claimed occasionally use of honey for appeasing gods, (92.7%) occasionally used the honey for naming ceremony while (93.6%) said it serve as source of employment opportunity.

**Constraints to Youth
Participation in Apiary
Agribusiness**

Table 5 revealed the constraints to youth participation in apiary agribusiness in the study area. The table revealed that 68.2% of the youth are not into business because of the lack of awareness of the benefit that can be derived from the bee keeping. While 72.7%, 73.8%, 81.8% of the youth are not into the business because of inadequate training of the business, financial constraint, scarcity of land in an urban area and fear of dangers that associated with the harvesting of the honey

Table 6 revealed that (54.5%) of respondents in the study area are seriously faced with high constraints to the youth participation in apiary

agribusiness. The study therefore suggested the following possible solution to enhance more youth participation in the business: Creation of awareness on the benefits of the business, training of the youth, soft loan from the government as well as Non-Governmental Organization (NGO) to youth in the study area and active involvement of the extension workers in the local government area.

Testing of hypotheses

Ho₁: There is no significant relationship between selected socio-economic characteristics of the respondents and their participation in apiary agribusiness.

This hypothesis was tested with the aid of Pearson Product Moment Correlation (PPMC) and result in Table 7 revealed that there is a significant relationship between sex and respondents' participated in apiary agribusiness. This implies that youth's participated in apiary agribusiness in the study area is a determinant of respondents. 'Sex'

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

Ho₂: There is no significant relationship between benefits derived from apiary agribusiness and participation of respondents.

This hypothesis was also tested with the aid of PPMC and the result of analysis revealed that there is significant relationship between benefits derived and participation of respondents in apiary agribusiness as shown in table 8. ($r = 0.220$, $P = 0.021$) this implies that respondents involvement in apiary agribusiness may be as a result of income and other benefits they derived from it.

**Conclusion and
Recommendations**

Base on the findings of this study. It was concluded that youth participation in apiary or beekeeping agribusiness in Oke-Ero local Government area of Kwara State was too low, the study therefore put the following forward as recommendations to increase meaningful participation of the youth in apiary agribusiness in the study area.

Intensification of practical training alongside theories

taught in entrepreneurial training programme received at both secondary and tertiary education.

The government should also help in giving out loans to the youth farmers (Youth) to practice apiary agribusiness.

Extension must be proactive in their services delivered to encompass entrepreneurial training in apiary agribusiness so that youth will develop interest and participate meaningfully in apiary agribusiness.

References

Ahmad, F. and Partap U. (2009). Improving livelihoods, through Beekeeping: knowledge partnerships and value chains for bee products and services in the International Centre for Integrated Mountain Development, Lalipu, NepalInfo Sheet No 4/09.

Ahmed, F, Joshi., S.R and Grurung, M.B. (2007). Beekeeping and Development International Centre for Integrated Mountain Development.Khumaltar, Lalitpur, Kathmandn, Nepal.

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

Caswell, M., Fugil, K.O.,
Ingram, C., Jan's, S and Kascak,
C., Cheizovachil, B., Chuma,
M., Mushuku, A., Chinenje, A.,
Chitongo, H., and Mudyaniwa,
R.(2013). Livelihood resilient
Strategies through Beekeeping
in Chitanga Village, Mivenezi
districts Zimbabwe. *Sustainable
Agriculture Research*: 2(1):124-
132. <http://nen.m.wikipedia.prg>.
downloaded. 10/ 4/ 2018

Ikedioyi, C.O Obi, V.C; and
Achoba, I.A (1985). Beekeeping
and honey production in
Nigeria. *Nigerian field*, 50:59-
70. In Oyerinde, A.A and Ande,
A.I Distribution and impact of
honey bee pests on colony
development in Kwara State,
Nigeria. *Jul. Agriculture social
science* 5:85-92

Matanmi, B.M; Adesiji, G.B
and Adegoke, M.A. (2008).An
analysis of activities of bee
hunters and beekeepers on Oyo
state, Nigeria. *African Journal
of Livestock Extension* (6) 7-11.

Morse, R. A. (1989) History of
Subsection; Beekeeping and
Social Insects" Bulletin
Ectomology. Sec. America,
35:116-118 in Oyerinde, A.A
and Ande, A.T Distribution and
impact of honey bee pests on
colony development in Kwara
State, Nigeria. *Journal.
Agriculture Social Science*:
5:85-88

National population
commission, (2006).
www.sciepub.com.

Ojeleye, B.(1999). Foundation
of beekeeping in the tropics:
CEBRAD press Ibadan,
Nigeria.

Okafor, E.E., (2011). Youth
unemployment and implications
for stability of democracy in
Nigeria. *Journal of Sustainable
Development in Africa*. 13 (1):
23-31.

Segeren, P. (1997). Beekeeping
in the tropics, Agro dok.32
Publication, Netherlands.

Table 1: Distribution of respondents according to socio-economic Characteristics (n=110)

Sex	Frequency	Percentage
Male	77	70
Female	33	30
Ages (years)		
30	1	0.9
31-40	10	9.0
41-50	43	38.9
51-60	41	37.2
61 and above	15	13.5
Educational level		
Non –formal	18	16.4
Quranic Attempted	2	1.8
Quranic Completed	9	8.2
Primary Attempted	12	10.9
Primary Completed	12	10.9
Secondary Completed	14	12.7
NCE/OND Attempted	1	0.9
NCE/OND Completed	24	21.8
HND/1 st Degree Completed	18	16.4
Marital status		
Single	2	1.8
Divorced	6	5.5
Widowed	16	14.5
Separated	12	10.9
Married	74	67.3
Mean= 14.05		Source: Field Survey, 2017

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.

Table 2: Distribution of respondent's participation in apiary agribusiness.

Apiary activities	Yes		No	
	F	%	F	%
Site selection	40	36.4	70	63.6
Construction of hive	41	37.3	69	62.7
Soaking of cotton into original honey to use as bate for bees attraction	35	31.8	85	68.2
Adequate monitoring of the hive to know the presence of bees in the hive	20	18.2	90.0	81.8
Protection of hive from theft	10	9.1	100	90.9
Find out if the tape has been formed matured in the hive	11	10.0	99	90.0
Harvesting	08	7.3	102	92.7
Processing and extraction of honey from the honey comb	05	4.6	105	95.5
Packing into a clean and safe container	05	4.6	105	95.5
Store a room temperature in a cool place	04	3.6	106	96.4
Marketing	07	6.4	103	93.6
Mean = 18.23				

Source: Field Survey, 2017

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.

**Table 3: Distribution by level of youth participation in
apiary
agribusiness**

Level participation	of %	Mean	Minimum	Maximum
Low	65.0	18.23	0.00	11.00
High	35			

Source: Field Survey, 2017

Table 4: Distribution of respondents according to the benefits derived from apiary Agribusiness.

Benefits	Always	Occasio nally	Frequentl y	Never
Source of income	33(30.0)	17(15.5)	59(53.6)	1(0.9)
Serve as food	108(898.2)	2(1.8)	0	0
Medicinal purpose	39(35.5)	4(37.3)	7(6.4)	23(20.9)
Foreign exchange	0	63(57.3)	4(3.6)	43(39.1)
Used in marriage	5(4.5)	52(47.3)	9(8.2)	44(40.0)
Used in appeasing gods	0	6(5.5)	1(09)	103(93.6)
Used in naming ceremony	2(1.8)	90(81.8)	2(1.8)	16(14.5)
Source of employment	4(3.6)	88(80.0)	10(9.1)	8(7.3)
Other purpose	0	63(57.3)	4(3.6)	43(39.1)

Source: Field Survey, 2017

Table 5: Distribution of Respondents on Constraints to Youth Participation in Apiary Agribusiness

Constraints	High Constraints		Low Constraints		Not Constraints	
	F	%	F	%	F	%
Lack of awareness of the benefits of apiary agribusiness	75	68.2	20	18.2	15	13.6
Inadequate training on apiary agribusiness	80	72.7	20	18.2	10	9.1
Financial constraint	85	77.3	20	18.2	5	4.5
Scarcity of land in an urban area	80	72.7	20	18.2	10	9.1
Fear of danger	90	81.8	15	13.6	5	4.5

Jolayemi, J.O., A.T. Olawumi
and I.O., Ewebiyi

**YOUTH'S PARTICIPATION IN APIARY
AGRIBUSINESS IN OKE-ERO LOCAL
GOVERNMENT AREA KWARA STATE,
NIGERIA.**

associated with the harvesting Problems of	85	77.3	20	18.2	5	4.5
theft Lack of	60	54.5	30	27.3	20	18.2
interest Pest and	65	59.1	30	27.3	15	13.6
predator constraints Hive	75	68.2	25	22.7	10	9.1
Management constraint Marketing of	70	63.6	30	27.3	10	9.1
the product						

Source: Field Survey, 2017

**Table 6: Distribution of Respondents Based on
Constraints to Youths Participation in Apiary
Agribusiness**

CONSTRAINTS	%	MEAN	MINIMUM	MAXIMUM
Low	62.7%	6.954	0.00	10.0
High	54.5			

Source: Field Survey 2017

Table 7: Results of Correlation of selected socioeconomic characteristics and Involvement in Apiary Agribusiness

Variable	Coefficient (r)	P .value	decision
Sex	0.281**	0.003	Significant
Age	-0.075	0.433	Insignificant
Education	-0.115	0.323	Insignificant
Marital status	0.029	0.765	Insignificant

Source: Field Survey, 2017

Table 8: Results of correlation of Derived benefit and participation in Apiary Agribusiness

Variable	Coefficient (r)	P .value	Decision
Benefit	0.0220	0.021	Significant

Source: Field Survey, 2017



SPATIAL ANALYSIS OF NETWORK COVERAGE AND ITS AVAILABILITY TO ARTISANAL FISHERMEN IN COASTAL FISHING COMMUNITIES OF SOUTH-WESTERN, NIGERIA

***¹Matthew Oose, ¹Tajudeen Banmeke, ²Omowumi Olowa.**

³Gbolahan Otufale, and ⁴Waheed Salami

¹Department of Agricultural Extension and Rural Development, Federal University of Agriculture, Abeokuta,

²Department of Agricultural Education, Federal College Education (Technical), Akoka, Lagos,

³Department of Agricultural Education, Tai Solarin College of Education, Omu, Ijebu-Ode, Ogun State,

⁴Department of Forestry and Wildlife Management, Olabisi Onabanjo University, Ayetoro Campus, Ogun State. Corresponding Author: oosematthew@gmail.com; +2348060348644

Abstract

Before the advent of Geographical Positioning System (GPS) and mobile phones, artisanal fishermen were extremely constrained to communicate effectively. However, the availability of good network coverage of about 16 nautical miles into the sea shore has improved fishing activities. The study analyzed the distance from the landing site along the coastline to the location of network mast facilities in coastal fishing communities in Southwest, Nigeria. Purposive sampling technique was used to select ten fishing communities with Global System for Mobile Communication (GSM) network facilities of at least one of the four mobile phone service providers. Primary data were obtained using a hand held GPS and analyzed using Geographical Information System (Arc GIS). Results show that majority (99.1% and 95.8%) of the artisanal fishers indicated that Visafone and Globacom network service were available in the study area. Findings indicate that there was an overlap in the buffering of Otolu and Lekki indicating that the distance of landing site and network in Otolu and Lekki were about 4km and 2km away, respectively. Also results show that Magbon Alade was about 2km away from the landing - site to mast. In Folu however, the distance of the landing site and network mast was about 1km apart.

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Furthermore, result also shows that the only mast that provides network services for artisanal fishermen in Igbosere, Olosumeta and Bolorunduro coastal fishing communities in Ogun State was within 5km away from the communities. Also, finding indicates that artisanal fishermen in Ondo State (Araromi and Benin-Boye fishing communities) share network coverage from the same mast which was 5km apart. It was concluded that the fishing communities in the study area were far away the network masts. It was recommended that additional network masks be made available in coastal areas of southwest, Nigeria.

Keywords: Spatial Analysis, network coverage, GPS, network mask, Mobile phone and artisanal fishermen

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Introduction

Three out of every four poor people in developing countries live in rural areas. Therefore, the need to integrate Information and Communication Technologies (ICTs) such as Geographical Positioning System (GPS), mobile phone network coverage for the rural development in order to improve their lives and livelihoods. Emergence of mobile phone in Nigeria has greatly revolutionised the pattern of information exchange and interaction among the nation's citizen. Arguably, the value of GPS and mobile phone network coverage and the associated benefits are higher in rural areas. GPS and mobile phones have become the primary form of telecommunication in both developed and developing countries. In recent years, there has been a rapid growth of mobile phone networks in developing countries. Currently mobile telephony is the predominant mode of communication in the developing world (Fasina and Alfred, 2013). The number of mobile phone users is forecast to grow from 2.1 billion in 2016 to

around 2.5 billion in 2019, with mobile phone penetration rates increasing as well. Just over 36 percent of the world's population is projected to use a mobile phone by 2018.

Poor developing countries are increasingly part of this widespread use of mobile phones which is making quick inroads to rural areas where most of the poor live.

Over the years, mobile phones have revolutionized the communication process and have become all-in-one magical devices to create, store, access and share information anytime anywhere. Irrespective of age or gender, rural or urban, everyone uses a mobile phone today. Depending on ICT infrastructure, social structure and literacy, the frequency of use or the type of mobile phone may vary, but it has become a necessity and is no longer a luxury. It has become an integral part of everyday lives that its present estimated 6.8 billion subscriptions are almost equivalent to the world population (7.1 billion). All spheres of life have been touched by the device, including agriculture – the livelihood of

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

millions across the world (Saravanan, 2014).

Mobile phones are fast becoming the new agricultural extension tool. Globally, traditional agricultural extension agents are declining while the number of farmers has increased to about 2.6 billion, the number of extension workers has decreased to approximately 500,000 (Gakuru *et al.*, 2009; Anderson & Fedder, 2007; Aker and Fafahamps, 2011). Furthermore, demand has multiplied for information on weather forecast, pest, climate change and cultivation practices (Aker and Fafahamps 2011). In South-western Nigeria extension worker to farmer ratio is 1:250, in Uganda 1:4,600, while in Botswana 1:1,800 (Agbamu 2005; Aina, 1991 cited in Oose, 2017).

In sub-Saharan Africa, the penetration rate for mobile phone has reached 50 percent, with 342.6 million subscriptions as of 2010 (ITU, 2012). With so many people using mobile phones, they have become an important tool for smallholder farmers, helping them to

improve productivity, adapt to climate change, diversify crops and access market information. Mobile phones can accelerate agricultural development by facilitating knowledge management. Farmers' particularly artisanal fishermen can take full advantage of mobile phones to enhance productivity and generate more income by adopting new technologies, having access to weather information, safety practices, processing techniques, adding value and marketing their produce. In 2004, Africa became the fastest growing mobile phone market in the world. Gillwald and Esselaar (2005) also noted that Africans are willing to pay a higher proportion of their income than in developed countries for access to telephone; this indicate among other things, a significant, unfulfilled demand for telephone. In view of this, rapid spread of mobile phones and GPS offers new possibilities for poor rural agricultural households in developing countries as they allow users to overcome important barriers of physical distance and improve

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

**Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria**

access to information and services.

Furthermore, Lehr (2007) reiterated that spatial analysis using GPS and mobile phones network coverage are increasingly used in rural areas in Africa to disseminate daily prices of agricultural commodities. Also, other inherent benefits of mobile phone as espoused by Rashid and Elder (2009), The Economist (2008), Donner (2006), include; mobile phones serve as security to owners, they do not rely on physical infrastructure such as roads, phone wires and base stations and, they only require basic literacy and therefore are accessible to a large portion of the population.

This view was further corroborated by Pyramid research (2010) that as of 2009, subscription for GPS and mobile phone and had attained an enviable level of 49 percent of the Nigerian population. GPS and mobile phones have become widely spread across Nigerian rural communities with a larger percentage of the rural dwellers

deploying the tools in various ways and from different functions. With the current penetration rate of GPS and mobile phones and their potentials to open up areas to the world of information, the rural areas are granted the opportunities to have their occupation enhanced by the way of gaining easy and fast access to climate information, spatial predictions, meteorological and market price information. In view of this, it is imperative to deploy GPS and mobile phone network services for extension delivery (particularly fishery extension) in Nigeria. With so many people using mobile phones and recent deployment of GPS for extension delivery, these has become an important tools for smallholder farmers, helping them to improve productivity, adapt to climate change, diversify crops and access market information. Mobile phones and GPS can accelerate agricultural development by facilitating knowledge management. Farmers' particularly artisanal fishermen can take full advantage of mobile phones to enhance productivity and

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

**Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria**

network coverage. For this purpose, coordinate of the landing-sites and the locations of the network mast in the fishing communities across the three coastal states with hand-held global positioning system (GPS) between May and August 2015. The geographical coordinates obtained were entered into Microsoft Excel worksheet as data base file. The Data base file were loaded into Arc GIS 3.2 and then converted to GIS data layers. The maps were produced using the various display methods available in the symbology of Arc GIS. For computation of distance, all GIS layers were projected from geographic coordinates to Universal Transverse Mercator (UTM) projection. Also, there was buffering around the locations to determine the proximity of landing-sites to the nearest available network mast. The multiple buffer tools was used to buffer the location into levels of buffers (1 and 5km)

Results and discussion

Personal Characteristics of Respondents

Findings in Table 1 present the personal characteristics of the

artisanal fishers. Result reveals that the mean and standard deviation of the respondents was 43 ± 9.90 years respectively. About (40.6%) of the respondents were 40 years and below. Majority (86.9%) of the artisanal fishers were married while 61.2 percent were Christians. Meanwhile, most (86.4%) of them practised polygamy types of marriage with the mean household size of 8 persons Also, major ethnic group amidst the fisher are Yorubas.

Availability of Network Services

The results in Figure 1 show the availability of network services in the study area. The network services considered were; MTN, Visafone, Globacom, Etisalat and Airtel. Findings reveals the proportion of the respondents who indicated presence of telecom network and findings shows that the major network services used were; Visafone (99.1%), Globacom (95.8%), and MTN (81.8%).

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Distance Analysis Indicating Proximity of Landing-sites to Network Mast in Lagos State

Figure 2 shows the distance analysis of proximity to Landing sites to network mast in Ibeju Lekki coastal communities namely; Magbon Alade, Otolu, Lekki and Folu. The buffering was done to calculate the distance of the landing site to network mast. The analysis revealed that an overlap in the buffering of *Otolu* and *Lekki* indicating that artisanal fishers within this coastal communities had to travel 4km and 2km from the landing site to Otolu and Lekki respectively before they could have access to network coverage. However, artisanal fishers in Folu coastal fishing communities travelled about 1km away from the landing site to the nearest network mast for network services.

Distance Analysis Indicating Proximity of Landing-sites to Network Mast in Ogun State

Figure 3 shows artisanal fishers proximity to Landing sites to available network mast. It was depicted in the map that network masts in Ogun coastal fishing communities such as *Igbose*,

Olosumeta and *Bolorunduro* provides network services and they are within 5km away from the communities. Also, Elefon coastal fishing community is about 2km or more away from the nearest network mast.

Distance Analysis Indicating Proximity of Landing-sites to Network Mast in Ondo State

Figure 4 presents the distance analysis of landing site and network mast in Ondo. From the result, artisanal fishers that were domiciled in Aaromi and Benin-Bye Fishing Communities shared network coverage from the same mast which is 5km apart. The overlap buffers as shown in the map imply that the two fishing communities are within close reach.

Furthermore, artisanal fisher in Araromi in Ondo State coastal fishing community reiterated during Focus Group Discussion (FGD) as follows:

"The good network coverage within the coastal areas has helped us a lot. Often times, we spend lot of our time in the sea shore away from our families and fried, and many times we

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Wahced Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

are vulnerable on the sea, but the availability of good network services help us to salvage these challenges”

Discussion

It is established that there is an urgent need to incorporate and deploys GPS as a new tool in extension services delivery. In recent time the availability of good network coverage of about 16 nautical miles into the sea has improved fishing activities in the coastal fishing communities of South West, Nigeria. The study analyzed the proximity from the landing site along the coastline to the location of the available network mast facilities. The mean age was 43 years and this implies that substantial number of the artisanal fishers in coastal communities of southwest, Nigeria were within their economically and productive age group (Oose *et al.*, 2017). On the marital status, majority (95.8%) of the artisanal fishermen are married. It was observed that few of the respondents are within the category of widowed and separated and this may be attributed to the high rate of divorced and promiscuity amidst the respondents. Furthermore,

due to the nature and terrain of the study location, Christianity – particularly white garment churches are domiciled in the area. It is also the culture of the fishers to practice polygamy type of marriage. The mean household size was 8 persons and they usually engage them for fish processing, marketing and packaging.

Furthermore, it was observed that the artisanal fishers across the three coastal states indicated the availability of prefer to use Visafone when going for fishing on the sea. This was due to the fact that the network service coverage of Visafone is very active within these terrains. With the emerging rapid development in network coverage particularly in coastal fishing communities, fishing activities had undergone unprecedented change. With regards to the proximity from the landing site to the network mast, Buor (2003) noted that distance is the most important factor that influences the utilization of basic amenities in the rural community. This observation implies that artisanal fishers in *Magbon Alade* had access to good network coverage.

**Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami**

**Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria**

Accessibility to good network coverage availed the artisanal fishers' to communication with their families and friends when on the sea shore. These findings stressed the point that the network coverage in Lekki fishing community is very active. Also, this finding corroborates the position of Tanser *et al.* (2003) who opined that accessibility to basic amenities in rural area is determined by the geographical location of users. Furthermore, it was observed that coastal fishing communities in Ogun State are characterized by their remoteness and are cut off from the good and accessible road system coming from *Ibeju – Lekki* in Lagos State.

Conclusion and recommendations

Based on the findings of this study, it could be concluded that Visafone is the main network service available in coastal communities of Southwestern, Nigeria and this may improve fishing activities and good network coverage of about 16 nautical miles into the sea shore. Most of the landing-sites in these fishing communities were far

away the network masts. It is therefore recommended that GPS and mobile phone should be incorporated in extension service delivery. Also, additional network masks be made available in coastal areas of southwest, Nigeria.

References

- Agbamu, J. U. (2005). Agricultural Extension Linkage System. An International Perspective. Agren Network Paper.106
- Aina, L. O. (1991). *Information for Successful Agriculture*. World Libraries. Retrieved from <http://www.worlib.org/vol02noilaina-voznlshtml>
- Aker, J. C., and Fafahamps, U. (2011). "Mobile Phones and Farmers Welfare in Niger". University of California, Berkeley. 56pp
- Anderson, J., and Feder, G., (2007). *Agricultural Extension Handbook of Agricultural Economics*. Evenson, R.E., Pingal; P. (eds). Elsevier Science, Amsterdam, the Netherlands, 3:2343-2378.

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

**Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria**

Buor, D. (2003). Analyzing the Primacy of Distance in the Utilization of Health Services in the Ahafo-Ano South District, Ghana. *The International Journal of Health Planning and Management*, 18: 293-311.

Donner, J. (2006). *The social and economics implication of mobile phones in Rwanda: An ownership/Access Typology, Knowledge, teaching & policy.* 19(2): 17-28

Economist, (2008). The Real Digital Divide. Accessed January 2, 2014 from <http://www.economist.com/opinion/displaystory.cfm?story-cd=3742817> *the Internet age.* 2ed: London: Aslib.

Fasina, O. O., and Alfred, S. D. Y. (2013). Institutional Support for Effective e-Agriculture in Africa. In Torimiro, Eludire. Subair and Akinjobi (ed). *Complementing Extension Rules through Young Animators and ICTs Usage in Sub-Saharan Africa: Experience from Nigeria and Botswana.* 127pp

Gakuru, M., Winter, K., and Stephan, F., (2009). Inventory of

Innovative Farmers Advisory Services using ICTs. *Forum for Agricultural Research in Africa (FARA)*, Accra, Ghana. 67pp

Gillwald, A., and Esselaar, S. (2005). A Comparative Analysis of ICT Access and Usage in 10 African Countries. In Gilward (ed). *Towards and African e-index household and individual ICT access and usage across 10 African Countries.* The ling centre, units University School of Public and Development Management, South Africa.

International Telecommunication Union TU, (2012). The World in 2013 ICT facts and figures. International Telecommunication Union. <http://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>.

Lehr, D. (2007). *Going Wireless: Dialing for Development.* Retrieved <http://mobileactive.org/dialing.development>

Oose, M. O., Banmeke, T. O. A. and Olaoye, O. J (2017) *Artisanal Fishermen's Utilization of Mobile Phone*

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Application in Coastal
Communities of South-Western,
Nigeria: Implications for
Information Dissemination.
*Ibadan Journal of Agricultural
Research* 12(2), 15-25.

Tanser, F. C., Sharp, B., Sueur,
D. (2003). Potential effect of
climate change on malaria
transmission in Africa. *The
Lancet Journal*. 362: 172-178

Pyramid Research (2010): The
Impact of Mobile Services in
Nigeria: How Mobile
Technologies are Transforming
Economic and Social Activities.
A Publication of Pyramid
Research. Retrieved from
[http://www.pyramidresearch.com/
documents/impact of mobile
service innigeria.pdf](http://www.pyramidresearch.com/documents/impact%20of%20mobile%20service%20innigeria.pdf)

Rashid, A. T and Elder, L.
(2009). Mobile Phone and
Development. An Analysis of
IDARC-Supported Project. *The
Electronic Journal on
Information Systems in
Development Countries
(EJISDC)* 36(2):1-16

Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Table 1: Personal Characteristic of Respondents (n = 214)

Variable	Freq.	Percent	Mean/Mode	SD
Age (years)				
30 & below	27	12.6	43 years	9.90
31 – 40	60	28.0		
41 – 50	82	38.2		
51 and above	45	21.0		
Marital Status				
Single	9	4.2	Married	
Married	186	86.9		
Widowed	13	6.1		
Separated	6	2.8		
Religious				
Christianity	131	61.2	Christianity	
Islam	73	34.1		
Traditional	10	4.7		
Marriage types				
Monogamy	33	15.4	Polygamy	
Polygamy	181	84.6		
Household size (person)				
6 and below	21	9.8	8 persons	3.29
7 – 12	117	54.6		
13 & below	76	35.5		
Ethnic group				
Yoruba	137	64.0	Yoruba	
Ilaje	52	24.3		
Ijaws	6	2.8		
Ghanaians	19	8.9		

Source: Field Survey, 2014

Matthew Oose, Tajudeen Banmeke,
 Omowumi Olowa, Gbolahan Otufale,
 and Waheed Salami

Spatial Analysis of Network Coverage
 and Its Availability to Artisanal
 Fishermen in Coastal Fishing
 Communities of South-Western, Nigeria

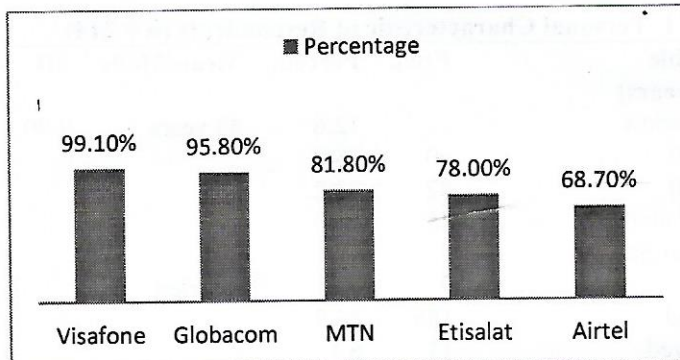
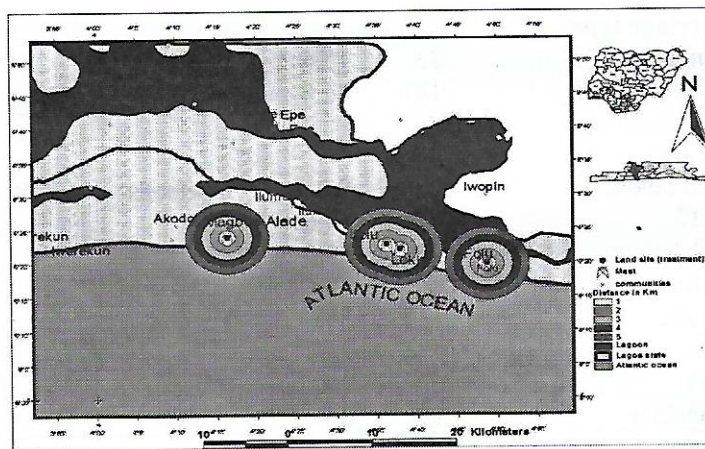


Figure 1: Availability of Network Services



Matthew Oose, Tajudeen Banmeke,
Omowumi Olowa, Gbolahan Otufale,
and Waheed Salami

Spatial Analysis of Network Coverage
and Its Availability to Artisanal
Fishermen in Coastal Fishing
Communities of South-Western, Nigeria

Figure 2: Lagos State Distance Analysis

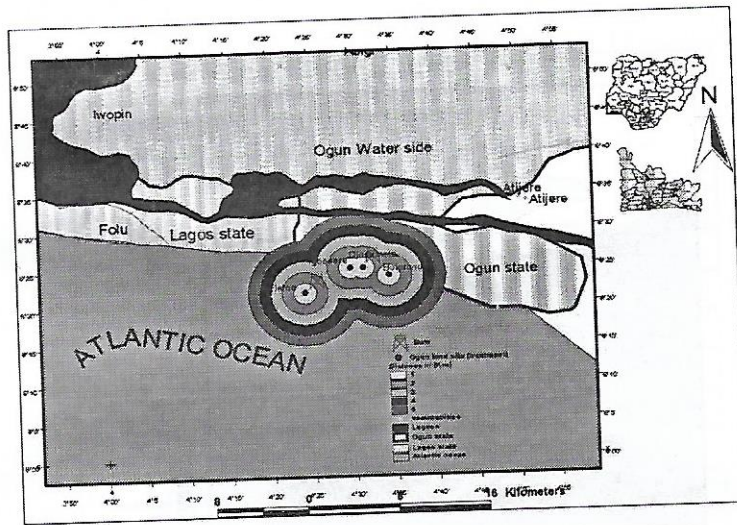


Figure 3: Ogun State Distance Analysis



ASSESSMENT OF SOCIAL MEDIA USAGE FOR AGRICULTURAL INFORMATION DISSEMINATION AMONG FARM YOUTH IN RURAL COMMUNITIES OF FEDERAL CAPITAL TERRITORY, ABUJA.

¹Bankole, O., ²D.O., Torimori, ²J.O., Filusi and ¹S.M. Tongshuwal
bankoleoluyaire@gmail.com, bobbankole@yahoo.com

¹Dept. of Agricultural Extension Management, Federal
College of Forestry Mechanization, PM.B 2273 Kaduna.

²Dept. of Agricultural Extension and Rural Development, Obafemi
Awolowo University, Ile Ife.

Abstract

The study examined the use of social media for agricultural information dissemination among farm youth in the three agricultural zones of FCT, Abuja. Seventy eight farm youth were randomly selected from each zone, giving 234 in total. Validated questionnaire was used for data collection and appropriate statistical tools were used to analyse the data. The results showed that WhatsApp was mostly (52.4%) used by farm youth among the social media. Also, majority (62.3%) of the youth spent less than 7 hours/week on social media. The results further showed that there were significant associations between the use of social media for agricultural information dissemination and farm youth's age ($\chi^2= 66.498$), education ($\chi^2= 18.050$), years in farming ($\chi^2= 64.591$) and external orientation ($\chi^2=39.718$). The study recommended that efforts to encourage the use of social media by farm youth for agricultural purposes should consider their age, education, years in farming and external orientation.

Keywords: Social Media, Farm Youth, Rural Communities

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Introduction

Successive governments have continued to invest in the agricultural sector in order to boost agricultural production. Some of the programmes embarked upon included Green Revolution, Agricultural Development Programme (ADP), National Agricultural and Land Development Authority (NALDA), Seed Multiplication Programme, National Poverty Eradication Programme (NAPEP), Farm Settlement Scheme, Operation Feed the Nation among others (Ndem, 2008). In 2008, for instance, the Federal government of Nigeria spent twenty-four billion naira on agricultural research and development (ASTI, 2010). Many governmental agencies such as research institutes and universities are also involved in agricultural research (Flaherty, Ayoola, Ogbodo and Beintema, 2010) backed with several extension approaches and strategies with the aim of boosting farmers' production yet agricultural performance remains unimpressive resulting

in continued food importation and increase in consumer price index (CPI). For instance, the food index as at December 2016, stood at 17.39 percent up by 0.26 percent points from rate recorded in November 17.19 percent (NBS, 2016). Some of the factors responsible for the increase is poor communication of agricultural research results coupled with the fact that agricultural production in Nigeria has remained in the hands of ageing and aged who are averse to modern information and communication technologies (FAO, 2016).

Aspects of social media that makes them an important and accessible tool in development communication are easy access through mobile phones, mass-personal communication and mass-self communication, a larger set of weak ties to ensure receipt of novel ideas, high degree of connectedness, and linkability and content sharing across multiple platforms (Hemsley & Mason, 2013). Thus, encouraging social vices such as internet

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

fraud, theft and cyber theft in which much time which would have been tailored to agriculture purposes is expended in carrying out these antisocial acts (Charles, Helen and Nneka, 2014). Social media sites (SMs) constitute part of the revolution that the internet has brought about in modern day transfer and dissemination of information. These include Facebook, LinkedIn, WhatsApp, Social Net, Google Docs, Skype, Twitter and YouTube, have attracted millions of users, many of who have integrated these tools into their daily practices (Dwyer, Hiltz, & Passerini, 2007). They are interactive networks which information and communication technologies (ICTs) bequeath to the modern society through the instrumentality of the internet and the telecommunication gadgets.

The internet makes it possible to expand the networks and to increase the possibilities of communicating with wider audiences on the globe. The interactive aura of the new media confers an unprecedented

popularity on them. Also the ubiquity of the social networking sites within their short period of arrival is unparalleled in the annals of media industry. Awake (2011) buttressed this point by noting that "social networking has become very popular". Similarly, it took 38 years for radio to reach 50 million users, 13 years for television to attract the same number and 4 years for the Internet to do so, but it took Facebook 12-month only to gain 200 million users (Awake, 2011). The introduction of various relevant ICTs such as social media in agricultural information dissemination could help farmers access market information, land resources and services, management of pests and diseases, rural development programmes (Meera *et al.*, 2004) and help in broadening the orientation of farmers in production activities thereby causing a major turnaround in the agricultural sector as it is doing in many other sectors. If farm youth are vital to agricultural and rural development and use of various social media sites promises a positive change for

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

**ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.**

agricultural and rural development, then a study on extent of use of social media for agricultural information dissemination by farm youth is relevant and timely. Therefore, the study assessed the use of social media for agricultural information dissemination and specifically described the socio economic characteristics of the respondents and various uses including hour of usage and frequency of usage of social media while it tested the hypothesis that there was no relationship between use of social media and socioeconomic characteristics of respondents.

Methodology

The study was carried out in the Federal Capital Territory, Abuja. Multi-stage sampling was used to select a sample size of 234 respondents out of which 212 retrieved questionnaires were used for this study. At the first stage, purposive sampling was used to select 1 Area Council from each of the 3 agro ecological zones because of the presence of more farming communities. At the second

stage, simple random sampling procedure was used to select 6 rural communities from each of the area council, making a total of 18 rural communities. At the third stage, 13 respondents were chosen from each of the selected rural communities through snowball sampling to make a total of 234 respondents. However, 212 retrieved questionnaires were used for the study. Data about extent of use were measured at ordinal level as always, sometimes, rarely and Not at all

Socio-economic characteristics of farm youth

Result in Table 1 shows that majority (59.9%) of farm youth were male. This study implies that males were more involved in social media usage than females. This result is similar to Banmeke Tajudeen and Oose (2012) who reported that 61.4% of researchers who use social network site were males. The average age of the farm youth was 23.8 years and the standard deviation was 2.76. The analysis shows that more than half (51.0%) of the respondents were

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

**ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.**

between the active age of 15 and 24 years. This result affirmed that age group 15 – 24 years is youth category as reported by International Labour Organisation (2010a) definition of youth. The result is similar to the findings of Torimiro, Iludire, Zubair & Akinjobi (2013) that 60% of ICT users in Oye Ekiti was between the ages of 15 & 28 years. It further revealed that few (8.5%) had requisite years (17-24 years) of experience which could be useful in relating well with fellow youth. The average year of experience was 7.9 with a standard deviation of 4.99. This implied that farm youth had low number of years of farming experience and hence, may not be motivated to use new method of information gathering such as social media. This result is similar to Banmeke & Oose (2012) that 78.6% of social network users in South West Nigeria had less than 10 years of research experience. Majority (68.0%) had secondary education. This is similar to Tiyabo (2015) who reported that 81% had tertiary education among male phone users in rural

areas of Niger State. This implied that the level of individual's education may assist in the enhancement of mental ability to gain knowledge about a particular concept, understanding and usage of technology. The analysis shows that 28.9 percent had primary education while only 8.1 percent had tertiary level of education. Also, 76.9% of farm youth have travelled out of their community and many (33.9%) frequently travel to other local government areas other than their own. This study indicated that larger proportion of the respondents had travelled outside their communities. However, the extent of external orientation could be used to determine respondents' cosmopolitanness which predisposes farmers to new technologies such as social media. The study is similar to Sulaiman (2016) and Torimiro *et al.* (2013) that the degree of external orientation of respondents was high in Osun State and that larger proportion of the farmers had travelled out of their primary domain.

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

**Social media usage for
agricultural information
dissemination by farm youth**

Results in Table 2 shows that majority (52.4%) of the respondents indicate that they always use social media to promote new technology in agriculture while 46.2 percent, 41.9 percent and 41 percent each to always discuss on agricultural development, get suggestions from peers on sales of agricultural produce and allied matters while 35.8 percent and 34.9 percent of the respondents indicate they always and sometimes use SM to make consultation with experts.

The study further revealed that 39.6 percent and 36.8 percent of the respondents sometimes seek agricultural assistance and find agriculture-related information through the use of social media. Also, many (34.4%, 33.9% and 31.1%) of the respondents, respectively, indicated that they sometime use social media to get ideas on agricultural production, coordinate access to agricultural inputs and partake in meeting and

conferences on youth involvement in agriculture.

Further analysis shows that majority (46.8%) of the respondent had moderately used SM for agricultural information dissemination. Consequently, it can be inferred that on the average, and in order of importance of usage, social media was used to promote new agricultural technology (mean= 2.23), seek agricultural assistance (mean= 2.20), participate in agricultural development discourse (mean= 2.16), get ideas on agricultural production (mean= 2.08), get suggestion from peers on sales of agricultural produce (mean= 2.07) and to coordinate access to agricultural inputs (mean= 2.06). This finding is in accordance with Sidi, Kamba and Barau (2017) who found that greater percentages (62.8, 57.6 and 55.6) of farmers, respectively, accessed fertilizer, improved seeds and agrochemicals through the use of mobile phone under the Growth Enhancement Support Scheme (GESS) in Sokoto state, Nigeria.

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

**ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.**

However, social media was rarely used to find agriculture related information (mean= 2.00), conduct seminar and workshop (mean= 1.97), consult agricultural expert for advice (mean= 1.93), and in receiving message about meeting and conferences on youth involvement in agriculture (mean= 1.77). Thus, this is an indication of low knowledge of the importance of social media usage in agriculture hence, the need for advocacy on the need to make use social media for such things as meeting and conferences; while this approach will deepen farm youth's horizon on the use of social media, it will also sharpen their agricultural expertise to be in tune with other farmers outside Nigeria such as the Mkulima Young of Kenya, Agriculture Proud, Farming and I grow it, " Keeping it real: Through the Lens of a Farm Girl " United States of America and Agchat of New Zealand where website has been developed to engage young and experienced farmers in online farming (Valsamidis, 2013). Hence, farm youth will be afforded the

opportunity of keeping abreast with the World best practices in agriculture and other issues of life.

Moreover, results in Table 3 indicated that most (46.2%, 41.1%, 38.9% and 37.3%) of the respondents use WhatsApp, Yahoo, Google and Facebook respectively daily, while few (5.7%) and very few (0.5%) also used Twitter and LinkedIn respectively daily. This indicates that WhatsApp is the most used social media among the farm youth in the area, and it is contrary to Sokoya, Onifade and Alabi (2012), Boyd and Ellison (2007) who found that Facebook is the most popular SM platform used in the world.

Further analysis revealed that many (62.3%) of the respondents did not use social media more than 7 hours in a week or 1hour per day (Table 4). However, 65.6% of the respondents moderately (12.49 – 25.05) used social media for agriculture. Although the finding affirmed the position of Suchiradipta and Saravanan (2016) who found that many farmers, researchers and

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

scientists in developing countries use social media for 1-2 hours per day. This spate of usage is low compared to the global best practice which put the benchmark of social media usage at an average of 2-4 hours per day (Kemp, 2015). Few (35.4%) of the farm youth use between 8 and 14 hours per week on social media, very few (1.9% and 0.5%) spent 15.00 to 21.00 hours and less than 22 hours per week, respectively, on social media (Table 4). These results imply a moderate to low patronage of social media among the respondents (Table 5). This may be due to lack of knowledge of benefits inherent in the use of social media for agricultural purposes, on the one hand, and accessibility on the other hand, and the result is similar to Abdul-Aziz, Haruna and Jamilu (2015) who reported that lack of accessibility and knowledge were the bane of ICTs usage in Kaduna. The implication is that the general negative attitude of youth towards agriculture will be sustained since social media which would have made agricultural practice easy for

them was not sufficiently utilized.

Chi-Square analysis of the relationship between socioeconomic characteristics of respondents and use of social media.

The Chi square analysis carried out presented the following results. There is significant association between respondents' age ($\chi^2 = 66.498$), education ($\chi^2 = 18.050$), years of farming ($\chi^2 = 18.050$), and external orientation ($\chi^2 = 39.718$). This implies that, the higher the farm youths' age, education, years in farming and external orientation the more their use of social media.

Conclusion and Recommendations

Based on the major findings of the study, it was revealed that farm youth mean age was 23.8 ± 2.76 . Majority (67.3%) were male with secondary level of education (68%) being the highest. Also, majority (76.7%) had travelled outside their communities. However, social media was moderately used (81.1%) by majority of the

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

respondents, while 62.3% of respondents used it to promote agriculture and less than seven hours per week was spent on social media. It was further found that significant relationship exist between age, education, years of farming experience and external orientation. The study therefore recommended that any effort to encourage the use of social media for agricultural information should consider age, education, years of experience and external orientation of respondents.

References

- Abdul-Aziz, H., Haruna, S.K. & Jamihi, A.A. (2015): Contributions of Information Communication Technology Use to Female Poultry Farmers in Kaduna State/ *Proceedings of the 20th Annual National Conference of the Agricultural Extension Society of Nigeria (AESON)* held at the National Agricultural Extension and Research Liaison Services (NAERLS) ABU, Zaria.
- Awake, (2011). *What Should I know social networking?* Part 1, pp. 24.25.
- Dwyer, C., Hiltz, S. R., Passerini, K. (2007). Trust and Privacy Within Social Networking sites: A Comparison of Facebook and MySpace. *Proceeding of 13th Americas Conference on Information Systems*. Retrieved from <http://csis.pace.edu/~dwyer/research/DwyerAMCIS2007.pdf>
- Ellison, N. and Boyd, D. (2013). "Sociality through SocialNetwork Sites." In Dutton, W.H. *The Oxford Handbook of Internet Studies*, Oxford University Press.
- FAO. (2016). Food and Agriculture Organisation of the United Nations. *FAO in Nigeria: Nigeria at a glance*.
- Flaherty, K., Ayoola, G, Ogbodo, J.and Beintema, N. (2010) "Nigeria: Recent Developments in Folorunso, O., Vincent, R.O., Adekoya, A.F. and Adewale, O.O. (Eds). *Diffusion of Innovation in Social Networking sites Among University Students. International Journal of Computer Science and Security (IJCSS)*, (3)4: 361-372.

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Hemsley, J. and Mason, R.M.
(2013). Knowledge and
Knowledge Management in the
Social Media Age, *Journal of
Organizational Computing and
Electronic Commerce*, 23(1)

Kemp, S. (2015). Digital, Social
and Mobile Worldwide in
2015. on August 12, 2015.

Méera SN, Jhamtani A, Rao
DUM (2004). Information and
Communication Technologies in
Agricultural Development: A
Comparative Analysis of three
Projects from India. Network, p.
135. Agricultural Research and
Extension Network/

NBS (National Bureau of
Statistics) (2016). Nigeria Gross
Domestic Product. Issue 09,
Quarter one.

Ndem, A.N. (2008). *Poverty to
Sustainable Development: A
Community-based Approach*.
University of Calabar Printing
Press, Calabar, Nigeria.

Suchiradipta, B., and Saravanan,
R. (2016): Social media: Shaping
the future of agricultural

extension and advisory services.
GFRAS interest group on
ICT4RAS discussion paper,
GFRAS: Lindau, Switzerland.

Valsamidis, S., Theodosiou, T.,
Kazanidis, I. and Nikolaidis, M.
(2013). A Framework for
Opinion Mining in Blogs for
Agriculture. *Procedia
Technology*, 8: 264-274.

Sidi, S.H., Kamba, A.A and
Barau, A.A. (2017). Access to
Growth Enhancement Support
Scheme's Inputs Among the Dry
Season Rice farmers in Sokoto
State, Nigeria. *Asian Journal of
Agricultural Extension,
Economics and Sociology*. 15(3):
1-8.

Sokoya, A.A, Onifade, F.N and
Alai, A.O. (2012): Establishing
Connections and Networking.
The Role of Social Media in
Agricultural Research in Nigeria.
World Library and Information
Congress, 28th INFLA General
Conference and assembly,
Helsinki.

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Table 1: Distribution of respondents by demographic characteristics n = 212

Variables	Freq.	%	Mean	Std
Age				
15-24	127	59.9		
25 – 34	79	37.3	23.8	2.76
≥35	6	2.8		
Education				
Tertiary Education	17	8.1		
Secondary	134	68.0		
Primary	61	28.9		
Years in Farming				
≤ 8	149	70.3		
9 – 14	45	21.2	7.9	4.99
≥ 15	18	8.5		
Travel out of Community				
No	49	23.1		
Yes	163	76.9		
Other LGA within state				
Not at all	127	59.9		
Occasionally	13	6.1		
Frequently	72	33.9		

Source: Field Survey, 2017.

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Table 2: Distribution of Social Media Usage by Farm Youth

S/N	Not at all	Always	Sometimes			
Rarely	Freq. %	Freq. %	Freq. %			
Freq. %	Mean					
1	Coordinating access to agric inputs	41	33.	14.6	10.4	2.06
2	Seeking agricultural Assistance	41	39.6	13.7	5.7	2.20
3	Promote new tech.	52.4	25.9	13.7	8.0	2.23
4	Consultation with Expert for advice	35.8	34.9	16.0	13.2	1.93
5	Seminar & workshop of Agric	31.6	29.2	15.6	23.6	1.97
6	Meeting & conferences on youth involvement in agric	31.1	31.1	21.7	19.3	1.77
7	To find agric related Information	34.9	36.8	22.2	6.1	2.00
8	To get ideas on agric Production	41.0	34.4	15.6	8.9	2.08
9	To discuss on agric Devt	46.2	28.8	19.3	5.7	2.16
10	To get suggestions from Peers on sales of agric produce allied Matters	41.9	33.5	13.7	10.8	2.07

Source: Field Survey, 2017

Grand mean = 2.05

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Table 3: Frequency of Use of Social Media

Social Media Platform	Daily	Weekly	Fortnightly	Monthly	Never
Facebook	79(37.3)	83(39.2)	35(16.5)	15(7.1)	-
Twitter	12(5.7)	47(22.3)	85(40.3)	44(20.9)	23(10.9)
Linkdln	1(.5)	-	4(2.0)	31(15.8)	160(81.6)
Google	82(38.9)	77(36.5)	19(9.0)	12(5.7)	-
Whatsapp	98(46.2)	77(36.5)	18(8.5)	18(8.5)	1(.5)
Bebo	-	1(.5)	5(2.4)	11(5.3)	191(91.8)
Yahoo	87(41.4)	82(39.0)	31(14.8)	8(8.8)	2(1.0)
2go	-	5(2.4)	3(1.5)	39(19.0)	158(77.1)
Twoo	-	1(.5)	1(.5)	26(12.4)	179(85.6)

Source: Field Survey, 2017

Table 4: Distribution of respondents by Hours of Usage per Week

Hours	Frequency	Percentage
≤ 7.00 (Very low)	132	62.3
8.00 – 14.00 (Low)	75	35.4
15.00 – 21.00 (Moderate)	4	1.9
≥ 22.00 (High)	1	0.5

Source: Field Survey, 2017

Bankole, O., D. O., Torimori,
J. O., Filusi and S. M. Tongshuwal

ASSESSMENT OF SOCIAL MEDIA
USAGE FOR AGRICULTURAL
INFORMATION DISSEMINATION
AMONG FARM YOUTH IN RURAL
COMMUNITIES OF FEDERAL
CAPITAL TERRITORY, ABUJA.

Table 5: Distribution of respondents by frequency of use of social media

Patronage	Freq	%	Mean	SD
		15.06	3.09	
Low (< 11.97)		20	9.4	
Moderate (11.97 – 18.15)	181		85.4	
High (> 18.15)	11		5.2	

Source: Field Survey, 2017

Table 6: Results of Chi-square Analysis Showing Association Between Socio-economic Characteristics of Farm Youth and Use of Social Media.

Variables	χ^2 value	DF	p-value	Cc
Age	66.498	42	0.009	0.572
Sex	4.049	2	0.132	0.141
Education	18.050	6	0.006	0.299
Years in Farming	64.591	34	0.001	0.564
Association				
Membership	5.139	4	0.273	0.161
Places visited	39.718	20	0.005	0.443
Source of information	2.631	6	0.854	0.141

Significant at $P \leq 0.05$ level

Source: Field Survey, 2017.



SOCIO-ECONOMIC FACTORS INFLUENCING YOUTH PARTICIPATION IN FADAMA III PROJECT IN OSUN STATE.

Olaniyi, O. A., T., Ogunkunle and I. F. Oladipo

Department of Agricultural Extension and Rural Development,
Ladoke Akintola University of Technology, P.M.B. 4000, Ogbomoso,
Nigeria
+2348060202639; E mail: oaolaniyi@lautech.edu.ng

Abstract

The study determined the socio-economic factors influencing rural youth participation in Fadama III project in Osun State Nigeria. Simple random sampling was used to select sixty-nine youth out of 88 participants from four selected participating Local Government areas in Osun State, Nigeria. Interview schedule was used to collect relevant information from the respondents based on the objectives of the study. Data were analyzed using frequency counts, percentages, Mean, and Tobit regression. The result showed that the mean age of the participants in Fadama III project was 26.5years. Majority (71.2%) of the respondents were not married and more than half of the respondents were executive officers in FUGs. Majority (65.2%) of the participants were male and were literate. Most of the respondents had moderate level of participation in Fadama III programme especially in the areas of financial contribution towards group counterpart fund, attendance at meetings and development of local plans for the projects to be executed. Delayed disbursement of fund for the projects, and inadequate access to information were major constraints to participation in Fadama III programme in the study area. Tobit regression revealed that age; years of education; household size and position in Fadama Users Group (FUG) were significant factors that influenced level of participation in Fadama III programme. The study concluded that youths in the study area had participated in Fadama III programme and it was recommended that extension institutions in Nigeria should put in place strategies to improve youth participation in development programmes/project.

Keywords: Youth, participation, Fadama, Nigeria, Rural Development.

Introduction

Youths are one of the greatest assets that any nation can have. Not only are they legitimately regarded as the future leaders, they are potentially and actually the greatest investment for a country's development (National Youth Policy (NYP), 2009). According to United Nations estimate, Nigeria has a population of about One hundred and ninety- six million people; one- fifth of her population are young people between the ages of 10 and 24 years (World Population Prospects, 2017). Laogun (2002) observed that investment in youth is the only way to ensure the future growth and development of any country. The author further asserted that increasing number of young people must be trained and as quickly as possible, to provide leadership in agriculture, industry, government and rural development projects. These youth must be developed intellectually, morally, socially, and with relevant skills to face a rapidly advancing technological world.

In Nigeria, it has been a major problem to retain this potent youth force in the rural

areas as they continue to migrate to urban centres hoping for a better life, which is not usually attainable. Some of the reasons attributed to rural-urban migration of youth in the rural areas, include: inadequate rural infrastructures and social amenities, poor living standard of the rural dweller, non lucrative of farming enterprise (Ugwokwe *et al.*, 2005). However, Russell (2001) reported poor or low participation of youth in agricultural development programme and this was attributed to negative perceptions towards the agricultural sector. It is in the light of these that Fadama III project, an initiative of the World Bank proffered ways of retaining youth in the rural areas for them to contribute their potentials to sustainable rural development. Generally, Fadama is a veritable instrument for income generation, entrepreneurship promotion and poverty reduction in our local communities (Fadama, 2009). The Fadama III project (simply means Irrigable Land) is a Community Driven Development (CDD) project of

the Federal Ministry of Agriculture and Rural Development jointly funded by the Federal Government of Nigeria and the World Bank with component funding by States and Local Governments (Badru, 2013). The project is basically agricultural based that aimed at increasing the income of the beneficiaries through Fadama Community Associations (FCA) and Fadama Users Group (FUG) in a sustainable and environmentally friendly manner.

Osun Fadama III programme has no doubt brought succor to diverse classes of people in the State especially youth thereby reducing the high rate of unemployment and poverty in the society. Youths are known to contribute immensely to agriculture and rural development in Nigeria and previous studies had established low participation of youth in various agricultural activities (Nnadi and Akwiwu, 2008; Ugwokwe, 2005) It is against this background that this study was set out to determine the factors that influenced youth participation in Fadama III project in Osun State, Nigeria.

Specifically, the study described the socioeconomic characteristics of the youth that participated in Fadama III programme in the study area; identified the sub-projects enterprise participated in by youth in Fadama III programme; ascertained the level of participation of youth in Fadama III programme identified the benefits derived from participation in Fadama III; identified the constraints to youth participation in Fadama III programme in the study area.

Methodology

The study was carried out in Osun state, Nigeria, Simple random sampling was used to select sixty-nine youths out of 88 participants in Fadama III projects from 4 purposively selected participating Local Government areas (LGAs) (Ede North, Egbedore, Olorunda and Irepodun) due to the fact that they have youth based FUGs. Each selected LGA has a number of FCA from which youth FUGs were purposively selected as shown in Table 1. From the constituent population of participating youths in each FUGs 75 percent of the total

Olaniyi, O.A, T., Ogunkunle and I. F. Oladipo **SOCIO-ECONOMIC FACTORS INFLUENCING YOUTH PARTICIPATION IN FADAMA III PROJECT IN OSUN STATE.**

target population were randomly selected. Interview schedule was used to collect relevant information from the respondents based on the objectives of the study. Data were analyzed using frequency counts, percentages, Mean, standard deviation and Tobit regression. The dependent variable was level of Participation which was measured on a 4 point scale of Never=0, Rarely =1, Sometimes=2 and Often=3. There are ten items on areas of participation in the programme. Hence, the minimum and maximum scores for an individual were 0 and 30 points respectively. The frequency of individuals for each item of area of participation on the rating scale multiplied by the assigned numbers and divided by the total respondents was used to calculate the Weighted Mean Score (WMS). The cut-off point for individual's participation was calculated as 1.50 based on the rating scale. Any WMS greater or equals to cut - off point 1.50 was rated as high and otherwise was rated as low. The overall respondents' level of participation were thus

determined based on Mean participation score and standard deviation and later categorized into low, moderate and high levels of participation in Fadama III programme

Tobit Regression Model

The considered Tobit regression, a hybrid of the discrete and continuous dependent variable was used to determine the factors influenced the likelihood of youth participation in Fadama III project. The model is expressed below following Salimonu and Falusi (2009) and Ayoade (2009)

$$\Psi_i^* = B_i X_i + \epsilon_i \dots \dots \dots 1)$$

$$\Psi_i^* = 0 \text{ if } 0 < \Psi_i < 1 \dots \dots \dots 2)$$

$$\Psi_i^* = \Psi_i \text{ if } 0 < \Psi_i < i \dots \dots \dots 3)$$

$$\Psi_i^* = 1 \text{ if } \Psi_i \geq 1 \dots \dots \dots 4)$$

Where Ψ_i^* is the limited dependent variable, which represents the level of participation indices. Ψ_i is the observed dependent (censored) variable, X_i is the vector of independent variables, B is the vector of unknown parameters, ϵ_i is a disturbance term

assumed to be independently and normally distributed in zero mean and constant variance ($N(0, \sigma^2)$) and $i = 1, 2, \dots, n$ (n is the number of observations = 66).

The independent variable specified as determinants of level of participation in Fadama III were defined as follows:
 Age (X_1) – age of youth (Actual age in years)
 Sex (X_2) = Gender of farmers (Dummy $D = 1$, if Male, otherwise $D = 0$)
 Years of formal Education (X_3) = Actual Number of Years Spent in Schooling
 Marital Status (X_4) – Dummy $D = 1$ for married, otherwise $D = 0$
 Household size (X_5) - Number of people eating in the same pot (Actual)
 Position in FUG (X_6) = Dummy ($D = 1$ for executive members, otherwise $D = 0$)

If Ψ_i^* is assumed to be normally distributed, then consistent estimates can be obtained by performing a Tobit estimation using an interactive maximum likelihood algorithm. The use of maximum likelihood estimation guarantees that the parameters estimates will be

asymptotically efficient and the appropriate statistical test can be performed.

Results and Discussion
Personal characteristics of Respondents

The personal characteristics of the sampled respondents are shown in Table 2. Majority (71.2%) of the respondents were within the ages of 24 and 35. The mean age of the respondents was 26.5 ± 3.1 years. Majority (65.2%) of the sampled participants were male and others (34.8%) were female. The finding that men were majority of the participants in the project affirmed the report of Olaniyi (2010) that high percentage of arable crop growers (rural youth) in Southwest Nigeria were males. It has been posited that gender influences decision making as reported by Bembridge; and Tshikolomo (1998). The mean years of education of the respondents was 8.06 ± 1.1 years. The level of education of the respondents is relatively low and this has implication for information access and utilization (Olaniyi and Adewale, 2013). Majority (71.2%) of the participants in the

project was singled in terms of their marital status. The average household size was 4 members. More than half (51.5%) of the respondents were executive members in FUGs and majority (65.2%) of the respondents practiced Islamic religion.

Sub - Projects Enterprise of the Respondents under Fadama III project

Figure 1. Shows the sub projects enterprise of the respondents. The result revealed that more than half (51.5%) of the respondents were involved in fishery production, 27.3 % were involved in crop production, 16.7% were into livestock production, and other (4.5%) were involved in beekeeping and non-farming activities respectively. This shows that youth participants were involved in various aspects of agriculture as well as non agricultural related activities. This finding revealed that participation of the respondents was high the area of fish production and low participation was recorded in livestock production, non-farm activities and bee keeping enterprise. This may probably be due to area of interest of

individual participants in Fadama Programme.

Extent of Participation of Respondents in Fadama III Programme

The result in Table 3 shows the extent of participation of the respondents in Third National Fadama Development Programme. It was revealed the areas of participation to include: contribution towards groups counter-part fund (WMS = 2.74) which ranked 1st, closely followed by attendance at meetings (WMS = 2.59) and development of local plans (WMS = 2.39) ranked 2nd and 3rd respectively. Other areas of participation are: development of plan of work (WMS = 2.15), identification of the problem (WMS = 2.06), situational analysis of the problem (WMS = 2.03), programme implementation and monitoring (WMS = 2.02). Among the least areas of participation by the respondents are: maintenance of group properties (WMS = 1.98), purchasing of the needs of the groups (procurement) (WMS = 1.03) and opening of group/bank account (WMS=0.88). It is worthy to note that the project

adopted participatory approach. The study therefore found out that the respondents had participated in the areas of financial commitment, attendance at meetings and in planning activities of the projects to be executed. This finding implies that the respondents were committed to the programme.

Level of participation in the Project

The result in Table 4 reveals the analysis that the minimum and maximum participation score of the respondents are 12 and 30 points respectively. The Mean participation score was 21.8 points. Result in Table 4 shows that majority (85.9%) of the participants fell between low and moderate categories of level of participation in Fadama III projects in the study area. The fact that majority of the respondents were found in these categories of participation may be attributed to the constraints encountered in the programme.

Benefits derived by the respondents

From Table 5 it could be seen that most of the respondents had

benefitted from the project in the areas of change in standard of living (82.6%), acquisition of new innovation and skills (73.9%), access to advisory services (71.0%) and dispute / conflict management and resolution (40.6%). This implies that the programme indeed had great influence on improving the standard of living of the beneficiaries as well as acquisition of knowledge and skills

Constraints to respondents' participation

Table 6 reveals the various constraints encountered by the respondents during participation in the programme. Most (86.9%) of the respondents claimed that delayed disbursement of Fund for project execution by the government, poor attendance at meeting (52.2%), inadequate access to information (50.7%), inadequate input support to participants (47.8%), unfaithfulness of some group members / leaders (47.8%), Natural Hazards (46.4%), poor group leadership (40.6%), poor maintenance of existing equipments and infrastructure (30.4%) and socio cultural belief

Olaniyi, O.A, T., Ogunkunle . SOCIO-ECONOMIC FACTORS INFLUENCING
and I. F. Oladipo YOUTH PARTICIPATION IN FADAMA
III PROJECT IN OSUN STATE.

(26.0%) were constraints to participation in Fadama III project in the study area. Maele *et al*, (2015) in their study reported similar constraints to youth participation in agricultural projects in South Africa. The finding of this study therefore implies that if it had not been for these constraints, the respondents would have participated more and enjoyed greater benefits than they did.

The Determining factors of Youth participation in Fadama III Programme

The result of the Tobit model of estimating socio-economic factors influencing Youth participation in Fadama III programme are presented in Table 7. Four explanatory variables out of six were significant in explaining youth participation in development programme. Variables found to be significant and positively related to probability of participation in Fadama III project are: age, years of schooling, household size and position in FUG. Age, household size (significant at 10%), years of education and position in FUG (significant at 5%) were

positively related to probability of participating in Fadama III programme. This implies that the more the participants in the project advances in age, increases in household size and years of education as well as occupies leadership position in FUG as executive members, the more the probability of their participation in Fadama programme.

Conclusion and Recommendations

The study examined the socio-economic factors influencing youth participation in FADAMA III programme in Osun State, Nigeria. There was moderate participation of youths in Fadama III programme and delayed matching grants fund was a major constraint to youth participation in Fadama III programme. Age, education, household size and position in FUG contributed to participation in Fadama III programme in the study area. Based on the findings of the study, it was recommended that extension institutions should design programme that will encourage and promote optimum participation of youth in

Olaniyi, O.A. T., Ogunkunle and I. F. Oladipo **SOCIO-ECONOMIC FACTORS INFLUENCING YOUTH PARTICIPATION IN FADAMA III PROJECT IN OSUN STATE.**

developmental programme. Also, prompt release of matching grants for the projects execution is highly necessary as this will enhance high participation of the respondents.

References

- Ayoade, A. R. (2009). Impact of National Special Programme for Food Security of Poverty Alleviation Among Women in Oyo State, Nigeria. An Unpublished Ph.D Thesis in the Department of Agricultural Economics and Extension, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria. 156 pp.
- Badru, I. O. (2013). Fadama III Beneficiaries' Adherence to Project Guidelines in Ogun State, Nigeria. *Journal of Agricultural Extension* 17(1): 61-68
- Bembridge, T. J. and Tshikolomo, K. A. (1998). Communication and decision making among fruit growers in the Phaswana Area of Northern Province. *South African Journal of Agricultural Extension*, 27, 19-29.
- Fadama (2009). Project Implementation Manual (PIM), Third National Fadama Development Project (NFDP III). Abuja, Nigeria. 1, pp 1 - 85.
- Laogun, E. A. (2002). Rural Youth Training Needs for Community Development. *Nigerian Journal of Rural Sociology* 3(1&2): 57-63
- Maele, L. M., Nesamvuni, A. E., Tshikolomo, K. A., Afful, D. B. and Norris, D (2015). Characterization of Youth Agricultural Projects in Limpopo Province of South Africa. *Journal of Agricultural Science* 7(7): 1-11 URL: <http://dx.doi.org/10.5539/jas.v7n7p42>
- National Youth Policy (NYP) (2009). Federal Government of Nigeria, Second National Youth Policy for Nigeria, Abuja. Retrieved from URL http://www.tc_nigeria_nyp_2009.pdf
- Nnadi, F. N. and Akwiwu, C. D. (2008). Determinants of Youth Participation in Rural Agriculture in Imo State, Nigeria. *Journal of Applied Sciences*, 8: 328 - 333

Olaniyi, O.A, T., Ogunkunle and I. F. Oladipo SOCIO-ECONOMIC FACTORS INFLUENCING YOUTH PARTICIPATION IN FADAMA III PROJECT IN OSUN STATE.

- Olaniyi, O. A. (2010): Assessment of Utilization of Agricultural Information on Selected Arable crops among Rural youth in Oyo and Osun states, Nigeria. Unpublished Ph.D Thesis. Department of Agricultural Extension and Rural Development, Ladoke Akintola University of Technology, Ogbomoso, Nigeria. 266pp
- Olaniyi, O. A. and Adewale, J. G. (2013). Categorization of Rural youth on Utilization of Agricultural Information on Arable Crops in Southwest Nigeria. *American Journal of Experimental Agriculture* 3: 571-578
- Salimonu, K. K. and Falusi, A. O. (2009). "An Empirical Analysis of Attitude towards. Risks and the Influence of Socio Economic and Demographic factors among food crops farmers in Osun State, Nigeria". *International Journal of Applied Agricultural and Agricultural Research (IJAAR)* , 5(1): 32 – 43.
- Ugwoke, F. .O., Adesope O. M. and Ibe F. C. (2005): Youth Participation in Farming Activities in Rural Areas of Imo State Nigeria: implications for Extension. *Journal of Agricultural Extension*, 8: 136 – 42.
- Russell, E. B. (2001). Attracting Youth to Agriculture. University of Illinois, Urbana Champaign.
- World Population Prospects (WPP) (2017). Nigeria Population Live 2018. Retrieved from www.worldometers.info/world-population/Nigeria-population on 15th February, 2019

Table 1: Sampling Techniques and Selection of Respondents for the Study

Local Government Area	FCA	Youth FUGs	Total No of Youth Participants	Sampled Youth(75 %)
Egbedore	Irepodun	Alatori Youth	9	7
	Aduramigba	Obalagbe	10	8
	Ifesowapo	Irewole	10	8
	Orelope	Alatori Youth	11	8
	Arapeju	Aseyori Beekeepers	6	5
Ede North	Olohunwa	TOTAL	46	36
		Agbelere	10	8
	Orire	Agbelere	6	5
Olorunda	Isokan	TOTAL	16	13
		Ifesowapo	9	7
	Agbedire	Omolere Youth	11	8
Irepodun	Agbedire	TOTAL	20	15
		Asejere	6	5
Total			88	69

Source: Field survey, 2013

Table 2: Descriptive analysis of Personal Characteristics of Sample Respondents

Variable	Mean	Mode(n=69)
Age	26.5 ± 3.1 years	71.2% (24- 35years)
Sex	-	65.2% (Male)
Years of Education	8.06 ± 1.1 years	33.3% (Primary education)
Marital status	-	71.2% (Single)
Household size	4 ± 1 members	
Position in FUG	-	51.5% (Executive)
Religion	-	65.2% (Islam)

Source: Field survey, 2013

Table 3: Mean Scores of Respondents showing the Extents of Participation in Fadama III Project

Areas of participation	Mean Score	Rank	Remark on Participation
Situational Analysis of the Problem	2.03	6	High
Identification of the Problem	2.06	5	High
Development of Plan Work	2.15	4	High
Opening of Group Bank Account	0.88	10	Low
Programme Implementation And Monitoring	2.02	7	High
Development of Local Plans	2.39	3	High
Attendance At FCA / FUG Meetings	2.59	2	High
Purchasing the needs of the group (procurement)	1.03	9	Low
Participation in Decision Making	2.02	7	High
Maintenance of Group Properties	1.92	8	High
Contribution Towards Group Counterpart Fund	2.74	1	High

Source: Field Survey, 2013 MS- Weighted Mean scores

Table 4: Distribution of Respondents according to Level of Participation in Fadama III Projects. n=69

Participation Score (points)	Frequency	Percentage
Low (< 21.8)	30	43.5
Moderate(21.8-26.6)	29	42.4
High (> 26.6)	10	14.1

Source: Field Survey, 2013 Mean Score = 21.8
Standard deviation = 4.8

Table 5: Distribution of Respondents by Benefits Derived in Participating in Fadama III Project. N=69

Benefit derived	Frequency	Percentage
Dispute /conflict management and resolution	28*	40.6
Acquisition of New Innovations and skills	51	73.9
Change in Standard of Living such as increased income	57	82.6
Access to Advisory Services	49	71.0

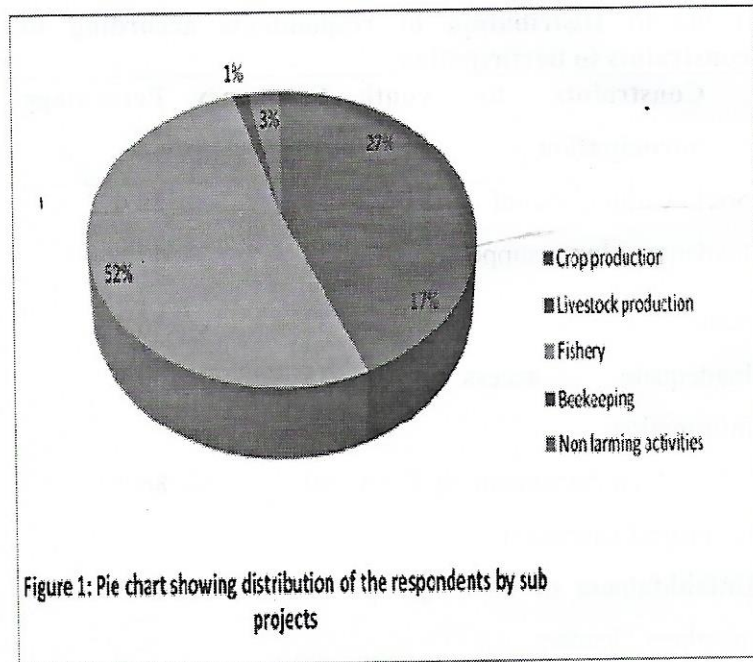
Source: Field Survey, 2013 * Multiple Response

Table 6: Distribution of respondents according to constraints to participation

Constraints to youth participation	Frequency	Percentage
Socio-Cultural Belief	18	26.0
Inadequate Input support	33	47.8
Natural hazards	32	46.4
Inadequate access to information	35	50.7
Delayed Disbursement of Fund for project execution	60	86.9
Unfaithfulness of some group members / leaders	33	47.8
Poor Group Leadership	28	40.6
Poor Maintenance of Existing Equipment/infrastructure	21	30.4
Poor Attendance at Meeting	36	52.2

Source: Field Survey, 2013

Olaniyi, O.A, T., Ogunkunle and I. F. Oladipo **SOCIO-ECONOMIC FACTORS INFLUENCING YOUTH PARTICIPATION IN FADAMA III PROJECT IN OSUN STATE.**



Source: Field Survey, 2013



ASSESSMENT OF INCOME PATTERN OF YOUTHS IN ERIWE FARM VILLAGE, OGUN STATE, NIGERIA

Sodique, F. R., A. A. Mako and V. O. Akinwande

Department of Agricultural Sciences, Tai Solarin University of
Education, Ijagun. Ogun State.

Corresponding author: moyibfola@gmail.com or
sodiquefr@tasued.edu.ng

Abstract

This study examined the income and employment pattern of Eriwe youths in agricultural and non-agricultural jobs, their livelihood diversification and challenges. A total of 96 youth between 17 and 34 years were purposively selected for the study. Information was elicited on their socio-economic characteristics and job experiences with the use of a structured questionnaire. Descriptive and inferential statistics were used. The results of the study indicated that Eriwe youths engaged mostly in fish farming, as fish attendants (52.08%); while others were engaged as poultry (19.8%) and piggery attendants (7.29%), fish-marketing supervisors (4.16%) mostly on salary basis despite their various skills. Some engaged in non-agricultural jobs as pond-digging (3.13%), feed-processing (8.33%), food and drinks hawking (3.13%) and - water-pump repairs (2.08%). Constraints faced by the youths include poor salaries and conditions of service and hazards of water borne diseases. Findings from the study indicated that youths in Eriwe farm village engaged more in agricultural and related jobs, with poor salaries. It is suggested that continuous policies that will address youths' problem of unemployment and underemployment be addressed with more formal agricultural jobs to boost their productivity.

Keywords: Youths, Employment, Skills, Farming

Introduction

The agricultural sector is a major employer of labour in Nigeria despite her oil resources. It has been recently observed that the economy is transforming from an agrarian society to a tertiary service economy, without going through the intermediate stage of industrialization (Ajakaiye, Jerome, Nabena and Alaba, 2016). This 'tertiarization' according to Ajakaiye *et al.* (2016) has failed to deliver quality job to the citizenry. Adesugba and Mavrotas, (2016), observed that 'as most people cannot afford to be unemployed, they take up jobs in the informal sector to survive'.

According to the International Labour Organisation (ILO) (2013), about 37 per cent of the 201.3 million unemployed people in 2014 globally were youths. Youth unemployment is a major concern for many countries because it has negative effects on their welfare, economic performance and social stability. In Nigeria youth unemployment has been one major problem, it was recorded as 11.4 per cent in 2014 while it increased to 33.1 per cent in

2017 (Bureau of Statistics, 2018).

In Africa and Asia according to Bezu and Holden (2014) and White (2012), agriculture is the primary source of livelihood. Rural households in these continents generally engage in different agricultural and/or non-agricultural activities for livelihood sustainability. Taking a look at the rural areas, Davis *et al.* (2010) asserted that about 90 percent of these households are involved in farming activities. In Africa, 70 percent of the rural household income is from farming activities, while in Asia and Latin America, 50 percent of their income comes from farming activities (Davis *et al.* 2010a; Davis *et al.* 2010 in Mphande, 2016). In these populations according to these authors small-scale farming, fishing, raising livestock and non-farm activities are some of the common livelihood activities. Literature also has it that very few of these rural households derive their income solely from farming crops or livestock (Mphande, 2016; Kimaro and Towo, 2015; Reardon *et al.*, 2001). While some of these activities could be

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

inherited or traditional, poverty widespread in the rural sector and under-employment among youths make many of our youths to look out for non-agricultural employment in urban or sub-urban areas.

Coupled with the increasing rate of youth unemployment as indicated by Adesugba and Mavrotas, (2016), a significant proportion of the Africa youths with jobs are mostly under-employed. They are therefore faced with an option of getting engaged in the informal sector due to limited opportunities in the public sector with sixty percent of employed youth not having stable employment contracts while they receive wages that are below expected income. The question that arises according to the duo is 'can the agricultural sector provide jobs that are sufficiently attractive in terms of wage levels while at the same time satisfying the job aspirations of today's youth in order to significantly reduce the youth unemployment that Nigeria and most African countries are currently experiencing? In Nigeria, various programmes have been directed towards

youth's employment in recent years. The Agricultural Transformation Agenda (ATA) initiative, a move towards value chain development and agribusiness with youth involvement is one of such programmes. Under the ATA initiative, Youth and Women in Agribusiness Investment Programme (YWAIP) were initiated in 2013 to train 5,000 youths and 3,000 women in a pilot programme. Since its inauguration, YWAIP has provided training to about 2,500 men and 3,000 women (Adesugba and Mavrotas, 2016). Youth Employment in Agriculture Programme (YEAP) was also launched in December 2014. It was designed in collaboration with the technical arm of the Food and Agricultural Organization of the United Nations (FAO). The goals of YEAP were to attain national food security; lay a solid foundation for a more competitive, commercialized, and efficient agriculture that will help Nigeria to rapidly diversify the economy and become a global powerhouse in food and agriculture; and, consequently, actualize the Agricultural

Transformation Agenda (ATA) (Adesugba and Mavrotas, 2016). The state governments are expected to get involved in these programmes by training youths in commercial farming for them to become entrepreneurs in the sector. The question is despite such trainings, how many of these youths get engaged in agriculture? A lot of such youths still roam around the streets seeking for employment into white collar jobs. They prefer earning monthly salary to entrepreneurship. According to various literature, though youths have desirable qualities and capabilities that can promote agriculture production activities, yet most youths do not want to participate in agriculture (Nwaogwugwu and Obele, 2017; Kimaro and Towo, 2015, Butler *et al.*, 2007): while the few that find themselves in it possibly are facing strict options. Studies by Bezu and Holden (2014) and White (2012) suggest that youth are increasingly less interested in agriculture while Bezu and Holden (2014) pointed out that lack of access to land is a major force that pushes youth away from agriculture. Kimaro and Towo (2015) opined that

agriculture to the youths seems unprofitable and should be carried out by the old, retired and those who lack other alternatives. Rahut, Mottaleb and Ali (2017), emphasised that globally, youth are abandoning agriculture and they look more forward to occupations in the non-agricultural sector. Breitenbach (2006) opined that the rejection of youth to participate in agricultural job has resulted in mass unemployment and lack of sustainable livelihood activities especially among them.

Adisa (2008) also asserted that the poor image of agriculture makes the sector unattractive to the youth because they see it as 'tedious with poor income' when compared to other sectors of the economy. He further iterated that youth's non-inclination towards agriculture could also have been borne out of negative beliefs such as 'only drop-outs and fools engage in agriculture. In general, many people in Nigeria have negative impression about farming. It is like if you want to get poorer or quickly 'worn-out', engage in farming.

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

Rahut, Mottaleb and Ali (2017) examined rural youth occupational choices in agricultural and non-agricultural sectors of Bhutan. The study applied a multinomial choice estimation procedure; the results show that the relatively educated youth in the study area were more likely to work for salaries or wages, rather than self-employment in either agricultural or non-agricultural sector while older youths including married females within among the selected youths for the study were also more prone to taking to agriculture for self-employment. This study confirms that the relatively older portion of the labour force and the married female labour force were also more likely to take over the agricultural sector as self-employed operators. Nwaogwugwu and Obele (2017) in their study on the factors that limit youth participation in agriculture-based livelihoods in Eleme Local Government Area of the Niger Delta, Nigeria: identified crop farming, livestock farming, fish farming, farm labour service and agricultural product processing as predominant livelihood

activities in the study area. The identified factors that limit youth participation in agricultural based livelihood activities in the selected study area were industrialisation, pollution, poor income and poor access to communication and internet services.

According to literature (Fabusoro *et al.*, 2010; Khatun and Roy, 2012) livelihoods are determined by several factors of which we have birth into a predisposed livelihood, gender, inherited and spontaneous livelihoods, education and migration. Some of the activities under rural livelihood according to Fabusoro *et al.*, (2010); Khatun and Roy, (2012) include the following Food and Tree Crop Farming, Animal herding including livestock farming, Food-processing, for example, Raw Foofoo, Soya milk, Cheese, Sorrel drinks, Cowpeas pudding (*Moinmoin*), Fish smoking and drying among others, Hunting and gathering, Wage labour (agricultural and non-agricultural labour), Trading and hawking, Artisan works e.g. weaving and carving, block making, pottery, sand mining, Providing services in transport

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

and other relevant areas, Bakery, Confectionaries, Hair - dressing and - barbing. Taking a cursory review, it has been observed in and around Ijebu Ode metropolis in the early morning hours; youths are seen waiting at some bus-stops for farm buses to pick them. The Eriwe farm village located in Eriwe/Iwata-Ogbo near Ijebu - Ode, Ogun State is one of the farms that youth also troupe in and out daily for salaried and casual works. They come from different areas/wards/local government areas to take up jobs on the farm for livelihood. The questions one begins to ask are: are the youths being engaged on this farm as agricultural labour? Is the Agricultural Transformation Agenda of the Federal/State government attracting these youths to Eriwe farm village to engage in farming? This study therefore seeks to assess the income pattern of Eriwe youths in agricultural and non-agricultural jobs, their livelihood diversification and challenges.

Objectives of the Study

The specific objectives of this study therefore were to

- i. describe the socioeconomic characteristics of the selected youths in Eriwe farms;
- ii. examine the youths' agricultural and non-agricultural employment pattern in the study area; and
- iii. to determine the level of income of these youths in their different farming and non-farming investments.

Hypothesis

H₀: There is no significant relationship between the selected income pattern and their socioeconomic characteristics.

Methodology

Area of the Study

The study was conducted on Eriwe Farm Village coordinated by Ijebu Development Initiative on Poverty Reduction (IDIPR). The farm is located in Odogbolu local government area of Ogun State. The State covers an area of 16,762 km²; it is situated in the South Western part of Nigeria, It lies within latitude 6°55'-7°N and longitude 3°46'-4°15'E. It is bordered by Lagos State in the South, the Republic of Benin in the West, Oyo and Osun States in the North with Ondo State in the East. The

Sodique, F. R., A. A. Mako
and V. O. Akinwande

**ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA**

average annual rainfall in the state ranges between 1250 and 1800 mm, with a bimodal rainfall distribution, which peaks in June and October, while the dry season stretches from mid-November to mid-March. Temperature ranges from 27 to 32°C and average relative humidity from 80 to 90%. The climatic conditions favour the production of poultry birds, pigs, West-African dwarf sheep and goats, fish, arable and tree crops. The Ijebu Development Initiative on Poverty Reduction (IDIPR) is a non-governmental organisation with the objective of poverty alleviation among immediate communities and Ogun State at large. The initiative uses cluster innovation farming system popularly called the 'Eriwe Model' to settle farmers in her various nine farm villages of which Eriwe farm village is one. The Eriwe farm covers 156 hectares; others farms under the Initiative are Imodi Ijasi (100 hectares), Odo-Jobore (51 hectares), Ijebu-Ijesha (131 hectares), Oke-Nla (50 hectares), Ilodo (50 hectares) and Ilushin (60 hectares). The organisation till date has 2,629 farmers in 153 cooperative

groups on a total of 755 hectares of land. The initiative was borne out of a city's consultation on poverty reduction held on 22nd – 24th March, 1999 in Ijebu-Ode under the auspices of the Development Policy Centre, (DPC) Ibadan and the African Centre for Development and Strategic Studies (ACDESS). The United Nations Development Projects (UNDP), United Nations Centre for Human Settlement Scheme (UNCHS) and the World Bank sponsored Urban Management Programme Regional Office for Africa (UMP-ROA) in Abidjan, Cote d'Ivoire which provided financial support for the initiative to take off (Mabogunje, 2004). It was set up with the objective of reducing poverty in Ijebu and Ogun State at large. Under the programme, the young, old, retired and in-service civil servants are trained to take up farming in various enterprises with land allocated for fee.

Sampling Procedure

Both primary and secondary sources of data were used for the study. Primary data were obtained from a cross-sectional survey of youths between 17 and

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

34 years on Eriwe farm Village. The secondary sources of information included journal articles of past studies, IDIPR magazines and Annual reports, and oral interviews. Purposive sampling technique was employed to select a sample of 120 youths who are between ages 17 and 34 years for the study. This is based on the fact that village farm stakeholders include individuals who have passion for farming among whom we have retirees. Data were collected using well-structured questionnaire to elicit information on the socio-economic characteristics of the selected youths such as their age, sex, educational qualifications (in years), marital status, skill acquisition, livelihood activities, monthly income from various livelihood activities, and household size. Out of the 120 questionnaires, only 101 were returned, while five were incomplete; hence 96 questionnaires were used for the analysis using descriptive and inferential statistics.

Analytical Technique
Multiple Linear Regression
Model Specification on the
Relationship between Socio-
Economic Characteristics of
the Youths and their Incomes

The analytical technique used for this study is the simple linear regression analysis, which was used to investigate the relationship between the socio-economic characteristics of the selected youths and the total income from their livelihood activities. Four functional forms were applied: linear, semi-log, Cobb-Douglas and exponential. The linear regression model is as follows:

$$Y = f(x_1, \dots, x_n) + \varepsilon_n$$

$$Y = \beta_0 + \beta_i X_i + \varepsilon_i$$

Where

Y = Total income from all livelihood activities (₦)

X_1 = Age of the youth (years)

X_2 = Sex of the Youth (male = 1; female = 0)

X_3 = Education of the selected youth (years)

X_4 = Marital Status (married = 1; otherwise = 0)

X_5 = Livelihood (farming = 1;
otherwise = 0)

X_6 = Skill (skilled = 1;
otherwise = 0)

X_7 = Salaried job participation
(if participated=1; otherwise 0)

ℓ = error term

β_0 = Intercept

β_i = Independent variables
(i.....n)

Results and Discussion Socio-demographic characteristics of the Youths

Results in Table 1 show that respondents were between the age range of 17 to 34 years with a mean age of 25 ± 3.68 years. Some (22.92%) of them were less than 20 years of age while the majority (62.5%) were between 21 to 30 years. This study agrees with Arowolo *et al.*, (2013), in their study of grass root youth involvement in cattle rearing activities in Oyo State, Nigeria which detected that most of the youths involved in Cattle rearing in their study (73%) fell within 21 to 30 years age range with a mean age of 25 years. Contrary to these, Yunusa and Giroh (2017), recorded that

youths within 31 to 34 years as forming the highest age group (34%) among the selected respondents in their study of youth participation in food-crop farming in Song local government area of Adamawa State. While Okwoche, Age and Alekwu (2012), in their assessment of youth participation in agriculture and rural development in Benue, Nigeria; their findings indicated that many of the youths in the selected area of the study were below 30 years with 55 percent of them within the age range of 26 to 30 years. As the mean age of youths on Eriwe Farm is 25 years with many of them within age range of 21 to 30 years indicates that most of them are in the active age stage, and so they often get involved in menial jobs outside their employers' farm to earn extra income to augment the 'peanuts' they receive as wages from their employers. This reveals that the youths could be used for productive business activities such as agriculture if given the required support.

On education, 44.8% of these youths have secondary education with just 5.2% having no formal

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

education. This was followed by tertiary education which constituted 6.2%. The mean education of the youths in years was 9 ± 4 years which indicated junior secondary education as the mean education of the selected youths. This is an indication that an average youth on the farm possesses the junior secondary school certificate, which implies that averagely any youth on the farm could read and write. Therefore, they could access information on agricultural and non-agricultural occupations available to them. This result differs from that of Nwaogwugwu and Obele (2017), on factors that limit youth participation in agriculture-based livelihoods in Eleme Local Government Area of the Niger- Delta region in Nigeria who reported that few percentage of youth participated in agriculture based livelihood in Eleme area of Niger Delta. Also, it shows that a higher percentage of youths in Eriwe Farm Village possess secondary education than those in their study; where only 29 percent had secondary education. The results of the study conducted also by Okwoche, Age and Alekwu

(2012) on youths in Benue State indicated that 15% of their selected youths were without formal education while a higher percentage (29%) was detected among youths from Eleme LGA study area as conducted by Nwaogwugwu and Obele (2017); in the case of Eriwe farm, the youths recorded 5.2% illiteracy level. The selected farm youths for this study therefore have the least level of illiteracy, which shows that their level of education is relatively high.

Most of the youth studied were females (61.5%) while the remaining 38.5% were males. This result is contrary to the findings from most studies on youth participation in agriculture, for example, Okwoche, *et al.*, (2012), in their assessment of youth participation in agriculture and rural development in Benue, Nigeria their findings indicated that 60.7 percent were males while 39.3 percent were females. They then felt this might be due to the probability that males are stronger 'vessels' than the females while they participate more in tedious activities than the females. Arowolo, Lawal,

and Ogundijo (2013) in their study of grass root youth involvement in Cattle rearing activities, in Oyo State, their result indicated low participation of female youths (32%) in cattle rearing, the same goes for Kimaro, Towo and Moshi (2015) in their study of the determinants of rural youth participation in agricultural activities: the case for Kahe East ward in Moshi rural district of Kenya. Those results disagree with the outcome of this study which indicated more females than males on Eriwe farm village. The result of this study revealed that female youths on Eriwe farm village are able to carry out energy demanding jobs such as fish net dragging during cropping, fish loading, fish pond netting, water-pump operating activities, pond draining (Table 5). While, male youth participants on the farm were found more in odd jobs such as pond digging and dressing, feed-milling attending, and water-pump machine repairs. Furthermore, more than half (53.1%) of the youths were not married. This implies that singles constituted the highest population of Eriwe youths with

just 41.7 percent of them having vocational training for sustainability. This result is similar to that of Arowolo *et al.*, (2013), whose study indicated 51.3% of the youths cattle farmers under their study area in Oyo State as being unmarried; but different from that of Yunusa and Giroh (2017) in their study of the determinants of youth participation in food-crop production in Adamawa State, Nigeria and Kimaro *et al.*, (2017) in their study of youth engagement in agriculture in Kenya. Their studies indicated that more male youths participate in agricultural production than their female counterparts. This was adduced to family responsibilities on the part of the male youths. Their bids to care for their families possibly do not grant them the choice of having to look for alternative jobs which may not be readily available.

Employment Pattern of Eriwe Farm Village Youths

Results in Table 2 show that majority (72.9%) of the respondents were on salaries on the farm while only 20.83 percent were entrepreneurs in

non-agricultural jobs such as fish-pond excavation / digging/dressing, water-pump machines repairs, food and drinks hawking among others. Also, 58.3 percent of the youths possessed different vocational skills, to carry out other non-agricultural related activities such as electrical repairs and installation, tailoring, hair barbing and dressing for additional income. The farming investment activities of these youths were considerably low as only 6.25 percent of them engaged in real farm business such as fish and poultry production. Their low investment in agribusiness may not be unconnected with high capital intensiveness of these enterprises especially fish farming that requires much investment. This result is different from the findings of Kimaro and Towo (2015) in their study of the determinants of rural youths' participation in agricultural activities in Kahe East Ward of Moshi rural district of Tanzania. Their finding indicated that 73 percent of the youths in the study area invested in agriculture on own farms while just 23 percent of these

were females. Contrary to this, most of the youths in Eriwe farm village sell their labour to agriculture for wages and salaries. Table 3, indicated the different livelihood activities of the youths of which we have poultry, fishery, piggery, food hawking, feed-milling, pond digging, and water pump mechanics. Farming activities for 'fee' of the selected youths were land clearing, weeding, feeding livestock (fish, poultry and pigs), and livestock waste collection, pond netting and liming, pond draining, fish dragging/cropping, water pump operation and fish up-loading from pond (Table 4). The table indicates the farm activity pattern based on sex and one could see that once employed on the farm there is no dichotomy between the males and females; findings from the study indicated that the youths carryout on-the-job-training once employed.

Income categories of the youths' livelihood activities

The total monthly income for all the selected youths ranged between ₦10,000:00 and ₦80,000: 00 with a mean income of ₦21,720:00 ±

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

₦12,950. Analysis of the youths' total monthly income based on their livelihood activities indicated that youths in non-farm investment activities (i.e. youths without personal investment in agriculture) on the farm had a mean monthly income of ₦19,720: 00 while they participated as farm attendants helping to tend domestic fowls or pigs or fish. On the contrary, the participating agricultural investors among the youths (6.25%) had a mean monthly income of ₦55, 330:00 (Table 5). This indicates youths participating in farm investments make more money than youths who engage in selling their labour for agricultural activities on the farm. The result of this study seems not too different from what Yunusa and Giroh (2017), detected among youths in food-crop production in Adamawa State whose mean monthly income was ₦15,492.5; which indicated that Eriwe youths are able to make better income. Findings from this study also revealed that many of the youths in non-farm investment activities, once employed on the farm get engaged in other

livelihood activities aside the main job based on their different skills and capabilities for additional incomes. Of the activities that provide them with additional incomes are fish dragging, pond weeding and netting, fish carriage/loading and sorting which was found rampant among fish-pond attendants across the farm (See Table 4). At other times, we have such youths taking up second jobs with other employers on the farm as their work permits for more income. Youths in the poultry and piggery sections were also found seeking additional wages by carrying out poultry/piggery-waste packing or poultry/piggery-house weeding for more income and better livelihood. The implication of the additional income for the farm attendants is that it helps in stabilising them, so they are able to stay on low salaries with their employers while carrying out part-time jobs elsewhere on the farm. The implication of this attitude on their employers cannot be far-fetched as there would be times where such attendants would be found wanting in their primary jobs;

for example inefficiencies may arise in the bid to get going with their secondary jobs.

Results of the Linear Regression Model Analysis

Of the four functional forms tested on the data, the linear model shows the best of fit, indicating it as the lead equation. Seven socio-economic variables such as age, sex, education, marital status, participation in farming, skill acquisition, and participation in salaried jobs on the farm were tested in relationship to their total monthly income. All the variables except three were insignificant with ($R^2 = 0.66$; $SE = 7.82$) which indicated that the selected variables explained 66 percent of the variation in the total monthly incomes of the youth on Eriwe Farm Village. The result of the regression analysis in Table 4 indicated that at $p \leq 0.01$ level of significance, age, participation in farming and participation in salaried jobs as means of livelihood were the significant variables contributing to the income of the youths.

The relationship between the age of the youths and their incomes was positive and significant

indicating a direct relationship between the two variables. This implies that as their age increases, the probability is that they tend to earn more income from their various livelihood activities possibly due to increasing knowledge and experiences on livelihood diversification as they grow older.

The result of the relationship between farming and total income from various livelihood activities of the youths was positive and significant, indicating that as their income increases, the tendency is that the youths get more interested in farming for livelihood. Possibly, inadequate fund is a likely limiting factor for these youths' engagement in farming.

The result of the relationship between getting engaged in salaried jobs as farm attendants and the total monthly income was negative but significant; implying that having strict salaried jobs on the farm reduces these youths' chances of having more income for sustenance. Based on the results of the linear regression analysis the hypothesis that there is no significant relationship between

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

the income of the respondents and their socio-economic characteristics was rejected while the alternative was accepted. Therefore, the study makes us to understand that in Eriwe Farms, the level of income generated by the youths is strongly affected by their age and work status either as a farmer or agricultural labour hand. This indicates that as the youths grow older on the farm, they tend to diversify their interest into other income generating activities for their family economic stability. The study thus supports Dauda (2009), who opined that 'though youths are noted for being open to new ideas, but as they grow old they hold more responsibility in generating additional income for the family'.

Conclusion and Recommendations

The study looks at the income pattern of youths in Eriwe Farm Village of Ogun State, Nigeria. The mean age of youths on was 25 years with many of them within age range of 21 to 30 years indicating that most of the youths are in their active age stage. Findings from the study

indicated that an average youth on the farm possesses the junior secondary school certificate. The youths were detected to engage more in agricultural salaried jobs and other vocations aside agriculture with a mean income of ₦19, 720:00 (93.25%) while very few of them actually get engaged in farming as a business (6.25%). This set of youths had ₦55, 330 as their mean income. This suggests that the engagement of Eriwe Farm Village youths in farming as a business is very low. Also, income generation on the farm among the youths is affected by their age and work status (farming as a business or agricultural labour hand). It is therefore, suggested that continuous policies that will draw youths into farming as a business be embarked on, while more formal agricultural jobs be created to address youth unemployment and productivity. While their employability be improved through additional in-house training programmes on agri-preneurship. The study therefore recommends that youths on Eriwe farm village should be encouraged into farming rather than salary

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

earning jobs, and that own-farm business (entrepreneurship) pays off than engaging in farm labour sales.

References

- Adesugba, M. and Mavrotas, G. (2016). Delving Deeper into the Agricultural Transformation and Youth Employment Nexus: The Nigerian Case, Nigerian Strategy Support Programme. IFPRI, pp 1 - 27.
- Adisa, B. O. (2008). Participation of Rural In-School Youth in Agricultural Activities for Occupational Potentials Development: Empirical Evidence from Ogun State, Nigeria. *Annals of Child and Youth Studies*, Vol. 3(1) pp 148 - 170.
- Ajakaiye, O., Jerome, A. T., Nabena, D. and Alaba, O. A. (2016). 'Understanding the Relationship between Growth and Employment in Nigeria' in *Understanding the African Lions - Growth Traps and Opportunities in Six Dominant African Economies*, Development Policy and Research Unit, United Nations University - UNU-Wider, pp3.
- Arowolo, O. O., Lawal, A. A. and Ogundijo, J. L. (2013). Grass-root Youth Involvement in Cattle Rearing Activities, Oyo State, South-western Nigeria. *Journal of Agricultural Extension and Rural Development*, Vol. 5(5), pp. 100 - 106.
- Bezu, S. and Holden, S. (2014). Are Rural Youth in Ethiopia Abandoning Agriculture? *World Development*. 64:259 - 272.
- Breitenbach, M.C. (2006). "A Model for Rural Youth Participation in Local Government: A South African case study", *Annals of Child and Youth Studies* 1(1):72 - 84.
- Butler, L. M. and Mazur, R. E. (2007). Principles and Processes for Enhancing Sustainable Rural Livelihoods: Collaborative Learning in Uganda. *International Journal of Sustainable Development and World Ecology* 14: 604-617.
- Bureau of Statistics, (2018). Report of Annual Statistics.
- Davis, B., Winters, P., Carleton, G., Covarrubias, K., Quiñones, E. J., Zezza, A., and

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

DiGiuseppe, S. (2010a). A Cross-Country Comparison of Rural Income Generating Activities. *World Development*, 38(1):48 – 63.

Davis, J. R., Wilson, S., Brock-Martin, A., Glover, S., and Svendsen, E. R. (2010). The Impact of Disasters on Populations with Health and Health-Care Disparities. *Disaster Medical Public Health Preparedness*, 4 (1):30–38.
<http://doi.org/10.1017/S1935789300002391>

Dauda, S. (2009). Role of Youths in Agricultural Development in Makurdi Local Government Area of Benue State, Nigeria. *Journal of Agricultural Extension*, Vol. 13 (2), pp. 107 – 109.

Fabusoro, E., Omotayo, A. M., Apantaku, S. O. and Okuneye, P. A. (2010). Forms and Determinants of Rural Livelihoods Diversification in Ogun State, Nigeria. *Journal of Sustainable Agriculture*, 34(4):417-438. <http://doi.org/10.1080/10440041003680296>

International Labour Organisation (ILO) (2013), *Global Employment Trends for Youth: A Generation at Risk*. International Labour Office (ILO), Geneva.

Khatun, D. and Roy, B. C. (2012). Rural Livelihood Diversification in West Bengal: Determinants and Constraints. *Agricultural Economics Research Review*. 25(1): 12-20

Kimaro, P. J. and Towo, N. N. (2015). Determinants of Rural Youth's Participation In Agricultural Activities: The Case of Kahe East Ward in Moshi Rural District, Tanzania. *International Journal of Economics, Commerce and Management United Kingdom* 3(2): 1 – 47 <http://ijecm.co.uk/>

Mabogunje, A. L. and Kates, R. W. (2004). Sustainable Development in Ijebu Ode: The Role of Social Capital, Participation, and Science and Technology, Sustainable Development Programme – Center for International Development (CID), Harvard University, Working Paper No. 102: 1 - 22.

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

- Mphande, F. A. (2016). Infectious Diseases and Rural Livelihood in Developing Countries, *Springer Science and Business Media*, Singapore. www.springer.com/978-981.
- Nwaogwugwu, O.N. and Obele, K.N. (2017). Factors Limiting Youth Participation In Agriculture-Based Livelihoods in Eleme Local Government Area of the Niger Delta, Nigeria. *Scientia Agriculturae*, 17 (3): 105 - 111.
- Okwoche, V. A., Age, A. I. and Alegwu, F. O. (2012). An Assessment of Youth Participation in Agriculture and Rural Development in Benue, Nigeria. *Agricultural Journal*, 7(5): 365 - 369.
- Rahut, D. B, Mottaleb, K. A. and Ali, A. (2017). Occupation Choice in the Agricultural and Non-Agricultural Sector by Rural Youths and Females in Bhutan. *The Journal of Animal and Plant Sciences*, 27(3): 978 - 985.
- Reardon, T. J., Berdeque, J. and Esubal, O. (2001). Rural Non-farm employment and income in Latin America. Overview and Policy Implication, *World Development*. 29 (3): 592-547.
- White, B. (2012). *Agriculture and the Generation Problem: Rural Youth Unemployment and the Future of Farming*. A Conference Paper for the FAC- ISSER on Young people, Farming and Food, held in Accra, Ghana between 19 - 21th March, 2012 in Yunusa, P.M. and
- Yunusa, P. M. and Giroh, D. Y. (2017). Determinants of Youth Participation in Food Crops Production in Song Local Government Area of Adamawa State, Nigeria, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*. 17 (Issue 3).

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

**Table 1: Socio-economic characteristics of the
selected youths in Eriwe Farm Village (n = 96)**

Variable	Frequenc y	Percentag e	Mean	SD
Age			21.8 (yrs)	4.68 (yrs)
≤ 20	22	22.92		
21 – 25	30	31.25		
26 – 30	30	31.25		
31 – 34	14	14.58		
Total	96	100.00		
Sex				
Females	59	61.50		
Males	37	38.50		
Total	96	100.00		
Marital Status				
Not Married	51	53.10		
Married	45	46.90		
Total	96	100.00		
Education			9(years)	4(years)
Zero	05	05.20		
Primary Education	33	34.40		

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

Junior	09	09.40		
Secondary				
Senior	43	44.80		
Secondary				
Tertiary	06	06.20		
Total	96	100.00		
Total			₦21,71	₦12,95
Income			0	0
(₦'000)				
10 – 19	57	59.40		
20 – 29	23	24.00		
30 – 39	03	03.10		
40 – 49	08	08.30		
50 – 59	01	01.00		
60 – 69	02	02.10		
Above 69	02	02.10		
Total	96	100.00		

Source: Field Survey, 2018

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

**Table 2: Employment Pattern among Youths in
Eriwe Farm Village**

Variable	Frequency	Percentage
Salaried Jobs		
Yes	70	72.9
No	26	27.1
Total	96	100.0
Farming as Business		
Yes	06	06.25
No	90	93.75
Total	96	100.0
Vocational Skill Possession		
Yes	56	58.33
No	40	41.67
Total	96	100.0

Source: Field Survey, 2018.

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

**Table 3: Distribution of Youth by Livelihood
Activities on Eriwe Farm Village**

Livelihood Activity	Frequency	Percentage (%)
*Poultry		
Males	08	08.34
Females	11	11.46
Total	19	19.80
*Fishery		
Males	16	16.66
Females	34	35.42
Total	50	52.08
*Piggery		
Males	5	5.21
Females	2	2.08
Total	7	7.29
Food Vendors		
Males	01	1.05
Females	02	2.08
Total	3	3.13
Feed milling		
Males	6	6.25
Females	2	2.08
Total	8	8.33
Pond Digging		
Males	3	3.13
Females	0	0.00
Total	3	3.13
Water-Pump Mechanic		
Males	2	2.08
Females	0	0.00
Total	2	2.08
Fish Sales Supervisors		
Males	2	2.08
Females	2	2.08
Total	4	4.16
Grand Total	96	100.00

Source: Field Survey, 2018 Attendants plus farm investors

Sodique, F. R., A. A. Mako
and V. O. Akinwande

ASSESSMENT OF INCOME PATTERN
OF YOUTHS IN ERIWE FARM
VILLAGE, OGUN STATE, NIGERIA

Table 4: Farming Activities of the Youths by Sex

Farming Activity	Male	%	Female	%	Total	%
Weeding	2	100	0	0.00	2	100 (n=2)
Land clearing	2	100	0	0.00	2	100 (n=2)
Planting	0	0.00	0	0.00	0	0.00 (n=0)
**Feeding Livestock	29	38.2	47	61.8	76	100 (n=76)
Waste Collection	13	50.0	13	50.0	26	100 (n=26)
*Pond Netting	16	32.0	34	68.0	50	100 (n=50)
*Pond liming	16	32.0	34	68.0	50	100 (n=50)
*Fish dragging/cropping	16	32.0	34	68.0	50	100 (n=50)
*Fish Loading	16	32.0	34	68.0	50	100 (n=50)
*Water pump operations	16	32.0	34	68.0	50	100 (n=50)
*Pond draining	16	32.0	34	68.0	50	100 (n=50)

Source: Field Survey, 2018.

* Fishery attendants, n = 50; * Poultry attendants, n = 19; * Piggery attendants, n = 7

Waste collection (poultry and Piggery) = 26; ** All attendants (fishery, poultry and piggery), n = 75.

Table 5: Total Monthly-income Range among Youths by Farming and Non-farming Investment Activities

Income Range (₦)	Farming (%)	Youths	Non-Farming Youths	Total
10 – 29	0.00		83.40	83.40
30 – 49	2.10		9.40	11.60
50 – 69	3.10		0.00	3.10
70 and Above	1.00		1.00	2.00
Total	6.20		93.80	100.00

Source: Field Survey, 2018.

All youths' mean monthly income = ₦21,710; SD = ₦12,950; Mean monthly income for non-farming youths = ₦19,480; Mean monthly income for farming youths = ₦55,333.

Table 6: Results of the Linear Regression Analysis of the Relationship between Socio-economic Variables of the Youths and their Monthly Total Income

$R^2 = 0.66$; F-stat = 24.60; ***Significance @ 1%; tabular t = 2.36

Variables	B	Std. Err.	T	Sig.
Constant	6.09	6.81	0.89	0.37
Age	0.88	0.24	3.71	0.000***
Sex	-0.85	1.74	-0.49	0.63
Education	0.12	0.23	0.51	0.61
Marital Status	-3.69	2.19	-1.69	0.09
Farming	24.61	3.46	7.10	0.000***
Skill acquisition	0.52	1.71	0.30	0.76
Salary participation	-10.53	2.26	-4.65	0.000***

Source: Field survey, 2018.



RURAL YOUTH PARTICIPATION IN FAMILY FARMING IN ILA LOCAL GOVERNMENT AREA OF OSUN STATE, NIGERIA

¹Ajayi, F. O, ²O. Agbana, and ³J. O. Ayinde

¹Dept/ of Agricultural Education School of Vocational and Technical Education, Osun State College of Education, Ila-Orangun, Osun State, Nigeria

²Dept. of Agricultural Extension and Rural Development, University of Ilorin, Kwara State, Nigeria

³Dept. of Agricultural Extension and Rural Development, Obafemi Awolowo University, Ile-Ife.

Email: francisolu1@gmail.com

Abstract

This study appraised the rural youth participation and contributions to family farming in Ila Orangun Local Government Area (LGA) of Osun State. Survey research method was adopted and questionnaire was used for data collection. Five out of eleven wards in the LGA were randomly selected; two rural communities from each of the selected ward and eight respondents from each of the selected communities were randomly selected to give a sample size of 80 respondents. The results were analysed using descriptive statistics. The results showed that majority (58.75%) of the respondents were within the age bracket of 21 - 40 years with the mean \pm standard deviation being 22 ± 4.47 . 65% were single and contributed in no small measure in various farming activities. Out of the thirty-three (33) identified roles performed by rural youths in family farming, only eleven (11) roles were identified by less than half of the respondents among which were haulage of farm produce, driving farm tractors, milking of dairy animals and stumping of trees on farm land while the remaining twenty-two (22) were identified by majority among which were sowing of seeds/planting materials, clearing of farm lands, harvesting of crops and manual weeding. The youth did not have extension contact in the last one year, thus deprived them opportunity of embracing improved technology that should have boost their family farming. Based on these findings, the

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

study then recommends that training be organized for the youths to replace manual labour with mechanization in agriculture to sustain their interest in farming and enhance food security in Osun State while Government should employ more extension agents and also motivate those on ground by providing all necessary materials needed to perform their duties.

Keywords: Youth, Participation, Family Farming

Introduction

Family farming is the predominant form of agriculture in the food production sectors in both developing and developed countries. It mainly includes all family-based agricultural activities, and it is linked to several areas of rural and social development. It is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and increasingly reliant on family labour of men and women, the elderly and the youths (Technical Centre for Agricultural and Rural Cooperation, 2014). About 70% of the world's food products are produced by over 500 million family farmers across the world, whose activities are crucial to combating hunger and malnutrition (Food and Agricultural Organisation, 2014) and Lowder (2014) also reiterated that atleast 500 million of the world's 570 million farms are managed by families, making family farms predominant in global agriculture. Therefore, family farming is frequently more productive than the so called large industrial operations

in terms of production per unit area of land and energy consumption (Conchi, 2014). Family farmers are making, upholding and sustaining the various forms of food crops and livestock, transferring the knowledge from the current generation to the next. At the same time, many family farmers are also developing quality products not only for their self-consumption, but also available in niche markets (CTA, 2014). Family farming is currently the biggest employer of labour and has the potential to remain as such (White, 2012). Young farmers constitute a formidable force for development of family farming in any nation particularly the agrarian ones. According to Prosper *et al* (2015) rural youths are directly involved in farming activities like planting, weeding, livestock keeping and harvesting. Rural youths have been noted for significant role in family farming especially in developing countries like Nigeria, where their contributions cannot be under estimated. Studies have also shown that rural youths contribute significantly to agricultural activities (Ajani *et al*, 2015). For sustainability of

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

foods in many African countries especially Nigeria, there is always the need to promote rural youth participation in family farming and formulation of appropriate policies for their integration. This can be done through motivating the rural youths involved in agriculture by providing fair market and training opportunities in new technologies and presenting agriculture as a profitable venture (Ommani, 2011).

Akpan (2012) observed that perceptions of better job opportunities outside farming, poor physical infrastructures, lack of social amenities, and use of local farming tools in rural areas and general dislike of village life are some of the factors hindering youths' participation in family farming. According to Ayanda *et al.* (2012), in spite of the roles performed by rural youths, agriculture remains unattractive to the youths leading to their movement to other sectors of the economy for better employment opportunities. In recent times, migration of young and vibrant people to cities in search of greener pastures has reduced the availability of labour force for

agricultural production in Nigeria. This has led to the following pertinent questions on the participation of rural youths in family farming in Ila Local Government Area of Osun State.

What are the socio-economic characteristics of the respondents?

What are the roles performed by rural youths in family farming?

What is the level of participation of rural youth in family farming?

The specific objectives of the study were to:

1. describe the socio-economic characteristics of the respondents;
2. identify the roles performed by rural youths in family farming; and
3. determine the level of participation of rural youths in family farming

Hypothesis of the study

There is no significant relationship between the socio-economic characteristics of rural youths and their level of participation in family farming.

Methodology

Study Area

The survey was carried out in Ila Orangun, an ancient city in Osun

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

State, Nigeria. Osun State was created in 1991 from the former Oyo State. It is bounded in the north by Kwara State, in the east partly by Ekiti State and partly by Ondo State, in the south by Ogun State and in the west by Oyo State. Ila Orangun lies to the north east of Osun State quite near the border with Kwara State on 8° 1'North and longitude 04°54'East. It is the more populous sister-city (and sister-kingdom) of Oke Ila Orangun located about 7.5 miles (12 km) to the northeast. It is the headquarters of Ila Local Government. It has an area of 303 km² and a population of 62,049 at the 2006 census (National Population Commission 2006). The region falls within the tropical humid climate that is characterized by wet and dry seasons. The State's economy is basically agrarian, with large scale production of cocoa, palm produce and rubber. Other crops like maize, cassava, cocoyam, fruits and vegetables are also produced in large quantities. The dry season is short, lasting generally from December to February. Ila enjoys rainfall ranging from 45 to 55 inches annually and the monthly

minimum temperature is about 22.49^o while the monthly maximum temperature is about 26.6 °C. Furthermore, the yearly relative humidity is about 76.05 percent.

Sampling Technique and Sample Size

The study was carried out in Osun State Nigeria. Multi-stage sampling technique was used to select the respondents for the study. At the first stage, five political wards were purposively selected from the available eleven wards in the Local Government Area based on the population of rural youths participating in family farming. At the second stage, two villages were randomly selected from each of the wards from the list of the villages collected from the Agricultural Development Project officers in the Local Government Area headquarters, which are: Amowoyagi and ItaAtewogbade I (Iperin ward), EyindiIyalode I and IsaleAfa I (Eyindi ward), Aworokun and Idi Ogbagbara (Ajaba/Edemosi/Aba Orangun ward), OjudeAlaa and Odoode (Eyindi/Iperin ward), Gaa Fulani and ItaSapon (Ejigbo I ward) making a total of 10

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

villages. At the last stage, snowball sampling technique was used to select 8 rural youths in each of the villages chosen. In all, primary data were collected from 80 rural youths through the use of well-structured questionnaire consisting of validated and reliable open and close ended questions. The questionnaire was divided into three (3) sections (1-3) based on the specific objectives of the study. Section 1 focused on socio-economic characteristics of the respondents. Section 2 centered on roles performed by rural youths in family farming, while Section 3 examined the level of participation of the rural youths in family farming. Data for this study were analyzed using frequency counts, percentages, means, standard deviation and Inferential statistics tool. The inferential statistics tool use to analyze the hypothesis was multiple regressions. The dependent variable which is the role performed by the rural youth is measured with 33 items in a 3-point likert scale based on, always (3), occasionally (2), non participation (1). The maximum point is 99 while the minimum

point is 33. To know the level of participation, a total score of each level of participation will be group into 3 categories: which is high, low and medium/moderate, high was place within mean + standard deviation, low was within mean - standard deviation, while medium / moderate was within mean \pm standard deviation range respectively. The midpoint was calculated thus; $1+2+3 = 6$ divided by 3 to obtain 2 and which was use respectively to rate the level of youth participation in family farming. High for the mean that fell above 2, low for the mean that fell below 2 and medium for the mean that fall on 2 exactly.

Results and Discussion.

Socio-economic characteristics of the respondents

Age (Years)

Results in Table 1 show that majority (58.75%) of the respondents were within the age bracket of 21 - 40 years, while 41.25% falls within the age bracket of less than 20 years with the mean \pm standard deviation being 22 ± 4.47 . This implies that the respondents were energetic and in their productive years,

hence greater participation in farming activities for economic empowerment. This finding agrees with Okwoche *et al* (2012) who stated that youths in their active years are energetic and innovative to participate more in agriculture.

Sex

Majority (72.5%) of the respondents were male while female accounted for 27.5%. There were more male youths in the study areas who participated in family farming. This may be as a result of strenuous nature of farming activities. This finding agrees with Okogun (2004) who stated that males are more interested in farming activities than females.

Marital Status

Majority (65.0%) of the respondents were single, 32.5% were married while 2.5% were divorced. This implies that many of the youths participating in family farming in the study area were not married. This finding is in contrast with the study of Proctor *et al* (2015) which stated that married youths have the potentials to participate more in agriculture due to the fact that

they have more family responsibilities than the unmarried youths.

Years of residency

Results in Table 1 revealed that majority (83.75%) of the respondents had lived for more than 10 years while 16.25% had less than 10 years of stay with mean \pm standard deviation being 6.79 ± 3.1 which implied that most of the respondents had longer years of stay in the community.

Level of Education (Years)

Results in Table 1 reveal that majority (61.25%) of the respondents had tertiary education, 26.25% had secondary education while the remaining (12.50%) had primary education. This may be because there are three tertiary institutions located around the study area that avail the youth opportunity to be literate. The need for education in agriculture cannot be over emphasized since the level of education of a farmer do not only increase his productivity but also enhances his ability to adopt innovations. The findings conformed to Soyebbo *et al* (2008) report that farmers in

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

Southwest, Nigeria are literates and as well disagree with Abdullahi, (2010) who noted that farmers do not need any formal education. The implication of this finding is that the high literacy level of these rural youth farmers would positively influence their adoption behaviour.

Farming Experience (Years)

Results in Table 1 show that majority (63.75%) of them had more than 5 years of farming experience; some (36.25%) recorded less than 5 years while the mean farming experience was 4.73 ± 1.7 years. This implies that many of the rural youth just got engaged in farming not long despite the years they have stayed in the area. This was against the proposal of Abdullahi *et al.* (2010) who reported that a good number of youths in family farming had farming experience of 10 years and above and acquired experience and skills through informal sources such as parents, relatives, neighbours, among others.

Religion Affiliation

Result in Table1 show that a little above average (51.25%) of the

respondents were Christians, 42.50% of them were Muslims while only 6.25% of them were Traditionalists. The findings revealed that Christianity and Islam were the major religion affiliations that are commonly found in the study area. The slightly higher proportions of Christians could be explained by the early missionary activities in Nigeria in around early 1950s. Religion affiliation has been reported as determinant of adoption behaviour of farmers by many scholars such as Ekong (2003) and Rogers (1965).

Household Size (Numbers)

Results in Table1 reveal that majority (72.0%) of the respondents had household size of between 4 and 6 persons, some (23.75%) had less than 4 persons while few (3.75%) had 7 persons and above. The mean household size was 6 persons which implied that most of the respondents had a moderate household size. This could be due to the fact that polygamous families are no longer popular in many rural households in Nigeria.

Farm Size (Hectares)

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

Results in Table 1 show that 68.0% of the respondents had less than 2.0 ha of farmland, while 2.50% and 12.5% had between 2.0 – 3.99ha and more than 4.0ha respectively. The mean farm size was 1.8 ± 1.2 . This implies that the respondents had access to small portion of farmland which they use in farming activities. This agrees with World Farmers' Organization (2013) who noted that a large proportion of rural youth's farm on a smaller scale which could be due to shortage of resources for production such as land, finance, labour among others.

Mode of land acquisition

Results in Table 1 show that respondents had multiple mode of acquiring land with majority (82.5%) of them owning their land where they farm, 50.0% acquired their farmland through inheritance, and 30.0% acquired their land by purchase while about 10.0% of them got their farmland by lease. Also, 13.75% of the respondents acquired their farmland through tenancy and only 8.75% acquired their land as gift with just 3.75% acquiring their farmland by pledge. The

findings revealed that most of the farmers owned the land in which they farm. The implication of these findings is that they may not have much hindrance in cultivating tree crops. With about 50% inherited farmland, cultivation of any kind of crop is possible.

Type of Farming

Results in Table 1 show that respondents had diversified farming activities with the majority (78.75%) of them engaging in crop production, 58.75% engaged in animal production, while 47.50% of the respondents were into both production of crop and animal. This indicates that majority of the respondents engaged in crop production. This could enable them sustain their families economically.

Main Occupation

Results in Table 1 reveal that majority (67.50%) of the respondents had farming as their main occupation, while 22.50%, 15.0% and 10.0% were primarily into Okada riding, Trading and Civil Service respectively. This indicates that farming was the main occupation of the

respondents in the study area. This finding agrees with Abdullahi *et al.* (2010) who stated that majority of the youths in their study area had farming as their main occupation.

Membership of Formal Organization

Results in Table 1 show that majority (60.0%) of the respondents' belonged to formal organization, while the remaining 40.0% did not. This indicates that the respondents did have interactions from formal organizations which can help them to improve productivity in family farming. Membership of formal organization could enhance putting resources together for easy access to credit facilities, production inputs and training opportunities for improved productivity. This study support Mangal (2009) who stated that most youths in rice production were members of formal organization.

Availability of Modern tool

Results in Table 1 show that majority (65.0%) of the youths in the study area lack modern tools to carry out their farming

exercise while (35.0%) had advantage of modern day tools.

Contact with Extension Agents

Majority (77.50%) of the respondents did not have extension contact in the last one year, while only (22.50%) had extension contact. This may be attributed to high extension-farmers' ratio in Nigeria. Lack of access to extension services deprives the youth's opportunities of embracing the use of improved technologies that will boost their productivity in family farming.

Roles Performed by Rural Youths in Family Farming

Results in Table 2 show that respondents identified multiple roles performed by them in family farming which include sowing of seeds/planting materials (100.0%), clearing of farm land (97.5%), harvesting of crops (96.2%), manual weeding of farm land (95.0%), feeding of animals (93.75%), gathering of fruits (90.0%), cleaning of pens (85.0%), cutting of fodder for feeding goat, sheep and cattle (83.75%), Soil tillage such as making ridges, mounds (81.25%), seedbed preparation

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

(77.5%), operating of farm equipment knapsack sprayer (73.75%), care of seedling (72.5%) and Herbicides/Pesticides application (72.5%) among others. Out of the thirty-three (33) identified roles performed by rural youths in family farming, only thirteen (11) roles were identified by less than half of the respondents while the remaining twenty (22) were identified by majority of them. This indicates that rural youths perform key roles in farm activities. This agrees with Umeh and Odom (2011) who reported that the youths play major roles in family farming with which they provide greater percentage of the total workforce in agricultural production.

Level of Participation of Rural Youths in Family Farming

Results in Figure 1 reveal that majority (81.5%) of the rural youths were highly participating in family farming while few (18.5%) were not fully participating.

Test of hypothesis

Results in Table 3 show that at $p \leq 0.01$, age ($r=0.336$) and

farming experience ($r=0.326$) correlated positively with level of participation. The implication of the finding is that the older rural youth farmers participated fluty in the family farming more than the younger ones. Also, youths with longer years of experience in the family farming must have participated more than those with fewer years. This may be attributed to the benefits they enjoy in the project.

Household size ($r= 0.284$) correlated positively and significant with participation at 0.05 level of significance. This implies that respondents with larger household size participated in the family farming because of cheap family labour availability. Farm size ($r= 0.313$) correlated positively with the level of participation and significant at 0.01 level. This suggests that those who cultivated large farm size were able to produce more which in turn lead to growth and expansion of their enterprise.

Conclusion

Recommendations

Results from the study have shown that rural youths in Ila Local Government Area of Osun State were major resource base

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

for family farming. Majority of the respondents were males, single and in their productive age. The combined effect of the socio-economic variables (Age, Farming experience, Household size and Mode of land acquisition) has made positive and significant contributions to the level of youth participation in family farming. Out of the thirty-three (33) identified roles performed by rural youths in family farming, only eleven (11) roles were identified by less than half of the respondents among which were haulage of farm produce, driving farm tractors, milking of dairy animals and stumping of trees on farm land while the remaining twenty-two (22) were identified by majority among which were sowing of seeds/planting materials, clearing of farm lands, harvesting of crops and manual weeding. The youth did not have extension contact in the last one year, thus deprived them opportunity of embracing improved technology that should have boost their family farming. Majority of the youth owned their farmland through inheritance. Hypothesis testing revealed that age, farming experience and household size

correlated positively with the level of youth participation. Based on these findings, the study then recommends that training be organized for the youths to replace manual labour with mechanization in agriculture to sustain their interest in farming and enhance food security in Osun State. Government should employ more extension agents and also motivate those on ground by providing all necessary materials needed to perform their duties. Policies aimed at providing loans to youths in agriculture should be put in place by the government and donor agencies to boost their interest in agriculture.

References

- Abdullahi, Y. M., Gidado, A. S., & Jibril, S. A. (2010). Attitude of rural youths towards family farming in Dass, Bauchi State Nigeria and the implication for policy. *Journal of Agricultural Extension*, 14: 22.
- Ajani, E. N., Mgbenka, R. N., & Onah, O. (2015). Empowerment of youths in rural areas through agricultural development programmes: Implications for poverty reduction in Nigeria.

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

- International Journal of Research in Agriculture and Forestry*, 2: 34-41. Educational publishers. 259-285.
- Akpan, B. S. (2010). Encourage youth's involvement in agricultural production and processing." Retrieved from www.ifpri.org [Accessed 23/05/2017].
- Food and Agriculture Organization (FAO) (2014). About family farming. Retrieved from <http://bit.ly/1qJp5x4> [Accessed on 05/05/2017].
- Ayanda, I. F., Olooto, F., Motunrayo, A., Abolaji, G. T., Yusif, O. J., & Subair, S. K. (2012). Perception of Kwara State university agricultural students on farming as means of future livelihood. *International Journal of Agricultural Science*, 2: 1053-1061.
- Lowder, S. K., Skoet, J., & Singh, S. (2014). What do we really know about the number and distribution of farms and family farms worldwide? <http://www.fao.org/docrep/019/i3729e/i3729e.pdf>
- Conchi, Q. (2014). Family farming: Feeding the world, caring for the earth.
- Mangal, H. (2009). Best practices for youth in agriculture: The Barbados. Grenada and Saint Lucia Experience. Final Report.
- Daudu, S., Okwoche, V.A. and Adegboye, O.G. (2009). Role of youths in agriculture development in Makurdi Local Government Area, Benue State, Nigeria. *Journal of Agricultural Extension*, 13: 40-45.
- Okogun, S. (2004). Youths participation in farming activities in Edo State. An Unpublished B.Sc Project in the Department of Agricultural Extension and Rural Development University of Ibadan, Ibadan Nigeria.
- Ekong, E. E. (2003). An Introduction to Rural Sociology. Second Edition. Dove
- Ommani, M. A. (2011). Assessment of the socio-economic factors affecting rural youth attitude to occupation in agricultural (Case of Kohgiluyeh and Boyer - Ahmad Province,

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

Iran). *International Journal of
Agriculture Management and
Development*, 1: 15-19.

Proctor, J., Nathaniel, N., &
Benson, H. (2015). Determinant
of rural youth's participation in
agricultural activities.
*International Journal of
Economics, Commerce and
Management*, 3: 1-46.

Prosper, J. K., Nathaniel, N. T.,
& Benson, H. M. (2015).
Determinants of rural youth's
participation in agricultural
activities. *International Journal
of Economics, Commerce and
Management*, 3: 2348 -2386

Rogers, E. M. (1965). *Diffusion
of Innovations* (2th Edition).
New York. Free Press.

Soyebo, K.O., Farinde, A.I., &
Dionco- Adetayo, E. (2005).
Constraints of oil palm
production in Ife Central Local
Government Areas of Osun
State. *Journal of Social Sciences*,
10(1): 55- 59.

Technical Centre for Agricultural
and Rural Cooperation (CTA)
(2014). How can we rejuvenate
family farming? Discover 4
routes to success proposed by the
experts at CTA." Retrieved from
<http://bit.ly/1tJkRH4> [Accessed
on 9/05/2017].

Umeh, G. N., & Odom, C. N.
(2011). Roles and constraints of
youths' associations in
agricultural and rural
development. *World Journal of
Agricultural Sciences*, 7: 515-
519.

White, B. (2012). Agriculture
and the generation problem:
Rural youth, employment and the
future of farming," presented at
the FAC – ISSER Conference —
Young People, Farming and
Food, Accra.
World Farmers' Organization
(WFO) (2013). Youth and
agriculture: Uganda experience,"
E – Magazine, pp. 39-87.

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

Table 1: Distribution of respondents by their socio-economic characteristics

Variable	Frequency	Percentage	Mean±Std dev
Age (Years)			22 ± 4.5
≤20	33	41.25	
≥20	47	58.75	
Sex			
Male	58	72.5	
Female	22	27.5	
Marital status			
Single	52	65.0	
Married	26	32.5	
Widowed	2	2.5	
Years of residence (Years)			6.79 ± 3.1
≤10	67	83.75	
≥10	13	16.25	
Level of education			
Primary	10	12.5	
Secondary	21	26.25	
Tertiary	49	61.25	
Years of experience (Years)			4.73 ± 1.7
≤5	29	36.25	
≥5	51	63.72	

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

Religion	41	51.25	
affiliation	34	42.50	
Christianity	5	6.25	
Islam			
Traditional			
Household size			
<4	19	23.75	5.7 ± 1.8
persons/house	58	72.0	
4-6	3	3.75	
>6			
Farm Size			
<2.0	68	85.0	
2.0 – 3.99	2	2.5	
>4	10	12.5	1.8 ± 1.2
*Mode of land			
acquisition	66	82.5	
Owner	11	13.75	
Tenant	7	8.75	
Gift	24	30.0	
Purchase	40	50.0	
Inheritance	3	3.75	
Pledge	8	10.0	
Lease			
Types of			
farming	63	78.75	
Crop	47	58.75	
production	38	47.50	
Animal			
production			
Both			

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

**RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA**

*Major occupation		
Farming	54	67.5
Trading	12	15.0
Okada riding	18	22.5
Civil servant	8	10.0
Membership of formal organisation		
Formal	48	60.0
Non-Formal	32	40.0
Modern tool availability		
Lack modern tools	41	65.0
Have modern tools	39	35.0
Contact with Extension		
No Contact	6218	77.5
Contact		22.5

Source: Field survey, 2017.

*Multiple responses

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

Table 2: Roles performed by the rural youth in family farming

Roles	Frequency	Percentage
Sowing of seeds/planting materials	80	100
Clearing of farm lands	78	97.5
Harvesting of crops	77	96.2
Manual weeding of farm lands	76	95.0
Feeding of animals	75	93.75
Gathering of fruits	72	90.0
Cleaning of pens	68	85.0
Cutting of fodder for feeding goat, sheep and cattle	67	83.75
Fertilizer application	66	82.5
Soil tillage such as making ridges, mounds, etc	65	81.25
Seedbed preparation	62	77.5
Operating of farm equipment knapsack sprayer	59	73.75
Care of seedlings	58	72.5
Herbicides/Pesticides application	58	72.5
Herbicides/Pesticides application	58	72.5
Slashing of bushes	55	68.75
Transplanting	54	67.5
Staking of crops	54	67.5
Making of storage barns for yams	51	63.75
Collection of eggs in poultry	49	61.25

¹Ajayi, F. O, ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

farm		
Sorting/grading of farm	48	60.0
produce		
Mulching of crops	43	53.75
Irrigation of farm lands	38	47.5
Detuberization of yams	35	43.75
Vaccination	34	42.5
Dressing of crops for storage	32	40.0
Digging of drainages farm lands	32	40.0
Milling of farm produce	28	35.0
Herding/shepherding of animals	26	32.5
Brooding of chicks in poultry	25	31.25
farm		
Stumping of trees on farm lands	18	22.5
Milking of dairy animals	18	22.5
Driving farm tractors	4	5.0
Haulage of farm produce	4	5.0

Source: Field survey, 2017.

¹Ajayi, F. O., ²O. Agbana
and ³J. O. Ayinde

RURAL YOUTH PARTICIPATION IN
FAMILY FARMING IN ILA LOCAL
GOVERNMENT AREA OF OSUN STATE,
NIGERIA

Table 3: Correlation analysis of relationship between socioeconomic characteristics and level of participation in family farming

Variables	r-value	P-value	Remark
Age	0.336***	0.001	S
Farming experience	0.326***	0.00	S
Household size	0.284**	0.006	S
Farm size	0.313***	0.042	S

Source: Field survey, 2017

***Significant at 1% level

** Significant at 5% level

S = Significant

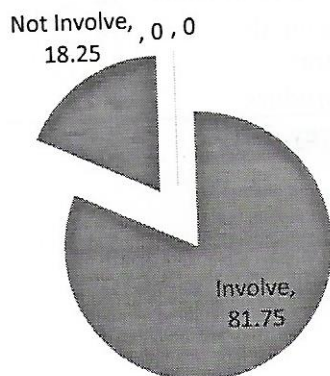


Figure 1: Level of participation of rural youth
Source: Field survey, 2017

INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

Bamiwuye, O. A. and B. O. Adisa
Department of Agricultural Extension and Rural Development,
Obafemi Awolowo University, Ile-Ife
Corresponding author: banjiolalere@yahoo.com

Abstract

This study identified Non-Timber Forest Products (NTFPs) available for exploitation; examined the level of involvement of female youths in NTFPs' exploitation and examined the influence of socioeconomic variables on level of involvement in NTFPs exploitation. The study adopted a cross-sectional design in collecting quantitative data using structured interview schedule administered on 197 female youths in 32 communities. A multistage sampling procedure was adopted to select three out of six States in Southwestern Nigeria using purposive sampling technique. Oluwa and Akure-Ofosu were selected in Ondo State, Omo forest reserve was selected in Ogun and Shasha in Osun State. Data was analysed using descriptive statistics and regression analysis. The results identified forty-one NTFPs available for exploitation to the female youths. Results indicated that 40.1 percent of respondents had low level of involvement, 24.9 percent were moderately involved and 35.0 percent were highly involved. Results of regression analysis show that five socioeconomic variables significantly contributed to involvement in exploitation of NTFPs. Specifically, age of respondents ($t=-2.29$; $p<0.05$), numbers of hours of collecting NTFPs per week ($t=4.81$; $p<0.01$), indigenous status ($t=-2.23$; $p<0.05$), formal education ($t=2.14$; $p<0.05$) and external orientation ($t=-1.99$; $p<0.05$) were significant predictors of involvement in exploitation of NTFPs. Female youths' involvement in the exploitation of NTFPs was not as high as expected despite

**Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE
YOUTHS IN THE EXPLOITATION
OF NON TIMBER FOREST
PRODUCTS AS LIVELIHOOD
CHOICE IN SELECTED FORESTS
IN SOUTHWESTERN NIGERIA**

several opportunities NTFP business offers and its good economic potentials which if well utilised could enhance their livelihood.

Keywords: Involvement, Female Youth, Exploitation, Non-Timber Forest Products,

Introduction

One of the ways to improve rural livelihoods in developing countries which has begun to receive more attention in the past decades is utilization of Non-Timber Forest Products (NTFPs) (Bisong and Ajake, 2001; Dovie, 2003; Shackleton and Shackleton, 2004). Non-timber forest products (NTFPs) refers to natural resources collected from forests apart from sawn timber and this includes other wooded land, and trees outside forests (Food and Agricultural Organisation, 2001). NTFPs are also referred to as Non-wood, minor, secondary, special or specialty forest products (Shiva, 1993). Exploitation of such natural resources increases the range of income generating options for rural women especially in developing countries, including Nigeria (Amusa *et al.*, 2012). This is because of the growing recognition of the contributions made by many NTFPs to rural economies, both in terms of supporting subsistence and as

a means of generating financial income (Belcher, 2003). Exploitation of NTFPs is also widely believed to be relatively compatible with forest conservation as collecting NTFPs is generally considered to be less damaging to forest resources and avoids some of the ecological costs of timber cutting (Ellis, 2000, Belcher, 2003). NTFPs are generally easily accessible to the rural poor and little capital investment is needed for collection, processing and marketing.

There are several types of NTFPs for exploitation in Nigeria and these include a wide range of edibles and non-edibles such as fruits, seeds, leaves, nuts, bush meat, roots, tubers, fibres, resins, latex, sticks, ropes, and construction materials like bamboos and rattans and a host of others (Akanni, 2013). Exploitation of such natural resources increases the range of income generating options for rural women for subsistence and cash especially in developing countries, including Nigeria

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

(Jimoh, Amusa and Azeez, 2012) and other parts of the world (Shaanker *et al*, 2004; IFAD, 2008; Mulenga *et al*, 2011).

However the potentials of NTFPs in enhancing livelihood outcomes among female youths in most sub-Saharan Africa have not been fully harnessed unlike other parts of the world including Asia where tremendous success has been recorded (Ogunbanjo and Aina, 2013). In addition the level of involvement of female youths in the exploitation of NTFPs is scarcely known in the literature of NTFPs in Nigeria except the work of Adisa and Alao (2011) which studied involvement of youth in general. Literature on NTFPs in the past decade has focused on involvement among the households and all categories of women. It is against this background that the following questions become important: What are the NTFPs that were available for exploitation for female youths? What is the level of involvement of female youths in the

exploitation of NTFPs and what socioeconomic variables influence involvement of female youths in NTFPs as a livelihood choice?

Objectives of the study

The main objective of the study was to assess involvement of female youth in the exploitation of Non Timber Forest Products as livelihood choice in selected Forests in Southwestern Nigeria. The specific objectives were to:

- i). describe the socio-economic characteristics of the female youths in the forest areas;
- ii) identify the NTFPs that were available for exploitation for female youths in the forest areas; and
- iii) assess the level of involvement of female youth in the exploitation of NTFPs

Hypothesis of the study

Ho: There is no significant relationship between the socioeconomic characteristics of female

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

youth and their involvement in the exploitation of NTFPs

Methodology

The study adopted a cross-sectional design in collecting quantitative data using structured interview schedule administered on 197 female youths age 15 to 40 years in 32 communities who collected or traded in at least one NTFP. A multistage sampling procedure was adopted to select the participants for the study. At first stage, Ogun, Ondo and Osun States were purposively selected out of the six States in Southwestern Nigeria based on the size of the forest reserves. In all, there are a total of 37 forest reserves in the three selected States (9 in Ogun, 11 in Osun and 17 in Ondo States). At the second stage, ten percent of all the 37 forest reserves were selected and this translates to four forest reserves. In selecting the four forest reserves, the largest in each of the selected States was chosen. To make the selection to be proportional to the number in each State, and on the basis

of forest reserve size, Oluwa and Akure-Ofosu were selected in Ondo State, Omo in Ogun State and Shasha in Osun State. At the third stage 20 percent of the total number of communities in the forest reserves was randomly selected. Thus a total of 32 communities were randomly selected across the three States. At the last stage, data for a total of 197 female youths out 320 respondents was extracted for analysis.

Measurement of variables

The dependent variable is involvement in exploitation of NTFPs. Respondents were asked to rate their extent of involvement in each of the forest produce/products on a 3-point Likert type scale – Always (3), Sometimes (2), Rarely (1), 1 for each NTFPs. Thus the minimum involvement score was 41 and the maximum was 123. The mean involvement score was 62.2 with a standard deviation of 12.1. The Mean plus or minus one standard deviation was used to classify involvement into three levels: low, moderate and high.

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON-TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

Level of involvement in NTFPs was classified as low when the total involvement score fell below the difference between the mean score and one unit of standard deviation. Involvement in exploitation was at the high level when score was above the sum of the mean score and one unit of standard deviation while at the medium level, level of involvement score fell in between the two extremes (Plus or minus one unit of standard deviation). The technique had been used in several literatures in other studies including Adisa (2001), Deji (2002) and Bamiwuye (2014). The independent variables employed in the study were mainly socioeconomic and were as measured below:

1. Age: Respondents were asked to indicate their age and this was recorded as given.
2. Marital status: This was measured at nominal level and coded as single (1), married (2)
3. Religious affiliations: This was classified as

Christianity (1), Islam (2), Traditional (3) and others (4)

4. Education: This was coded as follows: non-formal education (1), primary education (2), secondary education (3), tertiary education (4).
5. Indigenous status: Respondents were asked to indicate whether they are native of the community where they were interviewed or not and this was coded as (1) for "yes" and (2) for "no".
6. Number of children: This was recorded as given by the respondents
7. Number of dependants for feeding, clothing and shelter: This was also recorded as given by the respondents.
8. External orientation (Ever travelled out of community of residence): The response options were 1 for "yes" 2 for "no"
9. Number of collection hours of NTFPs per week: This variable was recorded in hours per

week as given by the respondents.

Results and Discussion **Socioeconomic characteristics of the respondents**

This section presents general information about the respondents' socioeconomic characteristics. Result in Figure 1 showed that 28.4 percent of the respondents were 30 years old or below; 34.0 percent were between age 31 and 35 years while 37.6 percent were between 36 and 40 years old at the time of the survey. The mean age of respondents was 33.8 ± 5.4 . This pattern of the age distribution showed that the respondents are in their advanced youthful age and they are expected to be responsible to the family. Results in Table 1 show that nearly all the respondents (95.9%) were married, 4.1 percent were single. This may imply that the NTFP business could generate enough income to sustain the family. The finding is in line with other studies (Deji and Makinde, 2006) which found

higher percentage of married population engaging in economic activities. It is similar to the finding of Folayan and Bifarin (2009) which reported that majority of married respondents engaged in forestry as employment generation activities in Akure-ofosu forest reserve of Ondo State, Nigeria. Among the respondents who were married, 67.7% were in monogamous relationships, while 32.3 percent were in polygynous relationship. The type of marriage – monogamous or polygynous may have implications on the extent on engagement in productive activities and choice of livelihood. For instance, it is expected that female youths in polygynous marriage are more likely to engage in activities that help their economic sustenance. About 75.6 percent of the respondents were non-indigene. This suggests that majority of people living around the forest areas were migrants. Young people often leave their place of origin in search of economic activities

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

such as NTFPs. This is however in contrast with the study conducted by Olaniyi, Akintonde and Adetumbi (2013) which revealed that majority of the respondents in 13 villages in Oyo State were indigene but those villages were not within the forests.

One fifth of the respondents (19.8%) had no formal education, 37.6 percent have had primary education; 39.6 percent have had secondary education. This shows that majority of the respondents had formal education and this could expose them to knowledge of marketing strategies of NTFPs. Results on religious affiliation showed that 76.6 percent were Christians compared with 23.4 percent of adherents of Islamic religion. The sample is predominantly Yoruba (79.2%) with 21.8 percent representing other ethnic affiliations such as Igbo and Hausas. This is expected because the setting of the study is in South West Nigeria. This is in agreement with several studies conducted in many parts of South West Nigeria

(Bamiwuye, 2014, Akanni, 2013 and Adisa, 2001) The bulk of the respondents (67.5%) indicated that in the past year they had travelled to other communities for one reason or the other which indicates high external orientation. The implication of the high external orientation of the respondents is that they would be exposed to more information on management of NTFP business which may in turn have positive effects on their trade and expose them to various means of livelihood. Similar findings have been reported in rural communities in South West Nigeria by Deji and Makinde (2006). In terms of number of dependents 64.5 percent of the women have had 4 or less dependants compared to 35.5 percent who have had at least 5. This implies that respondents may have to rely on forest resources around them because of the available family labour that can be utilized for NTFPs collection.

Types of NTFPs available for exploitation for female youths

Results indicated that there were forty one (41) different NTFPs available for exploitation for female youth. The top 10 NTFPs spontaneously mentioned were Palm fruit collected from the wild groove (66.9%), Kolanut (35.9%), Bitter Cola (60.9%), Vegetable (59.7%), Snail (58.1%), Firewood (49.4%), Bush meat (44.7%), Mango (44.7%), Dika nut (43.4%) and Kolanut (*cola acuminata*) (40.0). The five least mentioned were spring onion (*Allium fistulosum*) (6.3%), Swizzle's stick (*rauvolla vomitoria*) (5.0%); shea butter (5.9%); Ackee (9.7%) and coffee (7.8%). This result suggests that there were varieties of NTFPs in the forest communities available for exploitation by the female youths in the study area to make as livelihood choice. This finding upholds IFAD (2008) that NTFPs offer great promise for rural women and enhance the effectiveness of

poverty reduction programmes.

Level of involvement in the exploitation of NTFPs

The overall level of involvement in the exploitation of NTFPs classified into low, moderate and high using mean±sd shows that 40.1 percent of the women have low level of involvement in the exploitation of NTFPs, 24.9 percent were moderately involved in the NTFP business while 35.0 percent of the respondents were in high level of involvement. This shows that majority of the respondents were either at low or moderate level of involvement in NTFPs as livelihood choice. This finding suggested that rural female youths are involved at the different levels in NTFPs exploitation in the study area. Adisa and Alao (2011) in similar study among youth in Southwestern Nigeria revealed that as many as 85% and 75.8% of the respondents always exploit specific NTFPs like *Ocimum basilicum* (*Efirin*) and

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

Xylopia aethiopica (Eeru) respectively.

Regression analysis of the relationship between personal and socioeconomic variables and involvement in exploitation of NTFPs.

Five socioeconomic variables significantly contributed to involvement in exploitation of NTFPs as shown in Table 3. Specifically, age of respondents ($t=-2.29$; $p<0.05$), numbers of hours of collecting NTFPs per week ($t=4.81$; $p<0.01$), indigenous status ($t=-2.23$; $p<0.05$), formal education ($t=2.14$; $p<0.05$) and external orientation ($t=-1.99$; $p<0.05$). In terms of relative importance of each of the socioeconomic variables on involvement in exploitation of NTFPs as measured by the Beta Coefficient, numbers of hours of collection of NTFPs per week is the most important predictor of involvement in exploitation of NTFPs ($\beta=0.331$, $p<0.01$). Next to number of hours of collection is the indigenous status, external orientation, age of respondents and formal

education. In all, the socioeconomic variables in the regression equation jointly explained 19.1 percent of the total variations in involvement in exploitation of NTFPs as depicted by the multiple coefficient of determination (R-Square=19.1; $p<0.001$).

Conclusions

The following conclusions were drawn from the findings of the study. There were varieties of NTFPs in the forest communities available for exploitation by the female youths in the study area to make as livelihood choice. Socioeconomic variables influencing involvement in exploitation of NTFPs were age of respondents, numbers of hours spent in collecting NTFPs per week, external orientation, indigenous status and formal education. Despite the general availability of NTFPs, majority of female youths were still at low and medium levels of involvement in NTFP business. Opportunities for greater involvement of female youths

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON-TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

in NTFPs are essential and will enhance the effectiveness of poverty alleviation programmes in Nigeria.

References

Adisa, B. O., and Alao, O. T. (2011): Assessment of Rural Youths Involvement in the Exploitation of Non-timber Forest Products in Selected Communities of Shasha Forest Reserves in South-West Nigeria. 15(20), 21-26. <https://scholar.google.com/scolar?hl=en&quth>. Accessed on 15th February, 2016

Adisa, B. O. (2001): "Participation of Community Based Organisation in Rural Development Projects in Osun State of Nigeria". An Unpublished Ph.D Thesis, Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife, Osun State, 65-66

Akanni, K. A. (2013): Economic benefits of non-timber forest products among rural communities in Nigeria. *Environment and Natural Resources Research*,

<http://dx.doi.org/10.5539/enr.v3n4p19>. Accessed on the 19th February, 2016

Amusa, T. O., Jimoh, S. O., and Azeez, I. O. (2012): "Determining the Local Importance of Non-Timber Forest Products Using Two Different Prioritization Techniques", *International Journal of Agriculture and Forestry* 2 (1), 84-92. doi: 10.5923/j.ijaf.20120201.14.

Bamiwuye, O. A. (2014): "Factors Influencing Role Performance of Community Based Organizations in Rural Development of Osun State, Nigeria" An Unpublished M.Sc Thesis, Department of Agricultural Extension and Rural Development, Obafemi Awolowo University, Ile-Ife, Osun State, 33-34

Belcher B. M. (2003): What isn't a NTFP? *International Forestry Review*, 2: 161-168.

Bisong, F. E., and Ajake, A. O. (2001): An economic analysis of women's dependence on forest resources in the rainforest

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON-TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

communities of South-Eastern Nigeria. *Global Journal of Pure and Applied Sciences*, 7(2), 345-350.

Counsell, S., and Rice, T. (1992): The rainforest harvest: sustainable strategies for saving the tropical forests. London: *Friends of the Earth Trust Ltd.*

Deji, O. F. (2002): "Participation of Women Organisation in Rural Development Projects in Osun State of Nigeria". An Unpublished Ph.D Thesis, Department of Agricultural Extension and Rural Sociology, Obafemi Awolowo University, Ile-Ife, Osun State, 81.

Deji, O. F. and Makinde, T. (2007) Comparative Study of the Influence of Demographic and Socio-economic Characteristics of Men and Women Leaders on their Leadership Styles and Patterns in the Rural Areas of Nigeria, *Journal of Comparative Social Welfare*, 22(1), 49-62

Dishan E. E., Agishi R., Akosim C. (2010): Women's involvement in non-timber forest products utilization in support zones of Gashaka Gumti National park. *Journal of Resources for Wildlife and Environment* 2:73-84

Dovie, D. B. (2003): Rural economy and livelihoods from the non-timber forest products trade. Compromising sustainability in southern Africa?. *The International Journal of Sustainable Development and World Ecology*, 10(3), 247-262.

Ellis, F. (2000): *Rural livelihoods and diversity in developing countries*. Oxford University Press.

Folayan, J. A. and Bifarin, J. O. (2009): Forestry Potentials in Employment Generation in Akure-Ofosu Forest Reserve of Ondo State, Nigeria. *International Journal of Creativity and Technical Development* 1 (1) - 3,

Food and Agricultural Organization (FAO) (2001):

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON-TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

Resource assessment of non-wood forest products: Experience and biometric principles (eds., Jennifer, L.G., Kirsti, T and Nell, B.). FAO, Rome 2001. 109Pp

International Fund for Agricultural Development (IFAD) (2008): Soaring food prices and the rural poor: feedback from the field, available at: www.ifad.org/operations/food/food.htm accessed. March 20, 2016

Jimoh S. O., Amusa, T. O., and Azeez, I. O. (2012): Prevalence, Utilization and Conservation Strategies for Non-Timber Forest Products in South western Zone of Nigeria, *Resources and Environment*, 2 (1), 46-54. doi: 10.5923/j.re.20120201.07.

Mulenga, B. P., Richardson, R. B., Mapemba, L. D., and Tembo, G. (2011): *The contribution of non-timber forest products to rural household income in Zambia* (No. 109887). Michigan State University,

Department of Agricultural, Food, and Resource Economics.

Ogunbanjo, O. O. and Aina, A. S. (2013): Non-Timbers Forest Products for Poverty Reduction in Ogun Waterside Local Government, Ogun State, Nigeria. *Journal of Agricultural Science* 4(1): 49-53

Olaniyi, O. A., Akintonde, J. O. and Adetumbi, S. I (2013): Contribution of Non-Timber Forest Products to Household Food Security among Rural Women in Iseyin Local Government Area of Oyo State, Nigeria. *Research on Humanities and Social Sciences*, 3(7), 41-49.

Shiva, M. P. (1993): Solutions to Overcome Impediments in Forest Development through MFP-Based Management. Paper presented at the International Seminar on MFP-Based Management in Forestry, 17-18th April, Dehradun, India

Shaanker, R. U., Ganeshiah, K. N., Rao, M. N. and

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE
YOUTHS IN THE EXPLOITATION
OF NON TIMBER FOREST
PRODUCTS AS LIVELIHOOD
CHOICE IN SELECTED FORESTS
IN SOUTHWESTERN NIGERIA

Aravind, N. A. (2004):
Ecological consequences of
forest use: from genes to
ecosystem-a case study in the
Biligiri Rangaswamy Temple
Wildlife Sanctuary, South
India. *Conservation and
Society*, 2(2), 347.

Shackleton, C. and
Shackleton, S. (2004): The
importance of non-timber
forest products in rural
livelihood security and as
safety nets: a review of
evidence from South Africa.
*South African Journal of
Science*, 100(11-12), 658-
664.

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

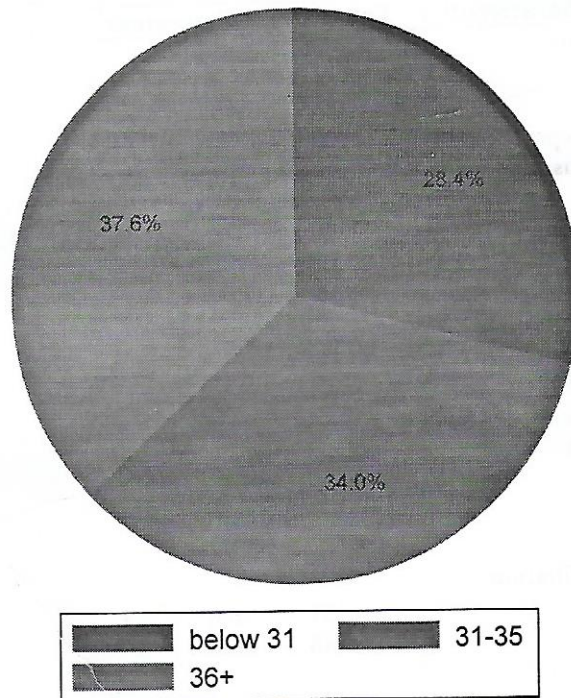


Figure 1: Pie chart showing distribution of respondents by age
Mean age: 33.8; Standard deviation 5.4
Source: Field survey, 2017

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

Table 1: Distribution of respondents by personal and socioeconomic characteristics (n=320)

Personal characteristics	Frequency	Percentage
Marital status		
Single	8	4.1
Married	189	95.9
Marriage type		
Monogamous	128	67.7
Polygynous	61	32.3
Indigenous status		
Indigene	48	24.4
Non-Indigene	149	75.6
External orientation		
Ever travelled out	133	67.5
Never travelled out	64	32.5
Highest educational level		
No education	39	19.8
Primary	74	37.6
Secondary	78	39.6
Higher	6	3.1
Religious affiliation		
Christianity	151	76.6
Islam	46	23.4
Ethnicity		
Yoruba	156	79.2
Others	41	21.8
Number of dependants		
0-4	127	64.5
5 or more	70	35.5
Mean/standard deviation	3.9	3.0

Source: Field survey, 2017

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

Table 2: Distribution of respondents by types of NTFPs in their community (n=197)

Botanical Names	English names	Local names	Percentage
<i>Elais guinensis</i>	Palm fruit	Eyin	66.9
<i>Garcinia kola</i>	Bitter cola		60.3
(Different species)	Orogbo	Efo	59.7
	Vegetable	Igbin	58.1
<i>Achatina</i>	Snail	Igi	49.4
(Different species)	Firewood		
	idana	Eran	44.7
	Bush meat		
	Igbe	Oro	44.7
<i>Irvingig gabonensis</i>	Bush Mango fruit	Apon	43.4
<i>Irvingig gabonensis</i>	Dika nut	Obi	40.0
<i>Cola acuminata</i>	Kolanut		
	abata		38.8
<i>Tetracarpidium sonphora</i>	Walnut		
	Awusa	Agbon	35.9
<i>Cocos nucifera</i>	Coconut		35.9
<i>Cola nitida</i>	Kolanut		
	Gooro/Gbanja	Emu	33.1
	Palm wine		27.2
<i>Aframomum melegueta</i>	Alligator pepper		
(Different species)	Ataare		25.6
	Herbs		24.7
<i>Mangifera indica</i>	Mango		
	Mangoro	Pako	24.4
<i>Massularia acuminata</i>	Chewing stick		
<i>Bambusa vulgaris</i>	Bamboo		22.8
	Oparun	Atale	21.3
<i>Zingiber officinale</i>	Ginger	Gbere	20.3
<i>Artocarpus commnis</i>	Bread fruit	Iru	19.1
<i>Prosopis Africana</i>	Locust bean		

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON-TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

<i>Agaricus bosporium</i>	Mushroom	Olu	18.1
<i>Dacrydes edulis</i>	African Pear	Pia	17.5
<i>Ocimum basilicum</i>	Scent plant	Efirin	16.6
<i>Raffia hookerri</i>	Raphia Palm	Pako	16.3
	oguro		
<i>Artocarpus altilis</i>	Breadfruit	Gbere	15.3
	elepa		
<i>Xylopi aethiopica</i>	African guinea pepper		15.3
	eru		
<i>Alstonia boonie</i>	Cheese	Ewe	13.8
	ahun		
	Ropes		13.4
	Okun		
<i>Piper guineensis</i>	Black pepper		12.2
	Iyere		
<i>Parkia biglobosa</i>	African locust bean	Igba	12.2
<i>Acacia spp</i>	Gum		11.9
	Goomu		
<i>Luffa spp</i>	Sponge		11.9
	Kankan ayaba		
<i>Tetrapleura tetraptera</i>	Prekese	Aidan	10.6
	Honey	Oyin	10.0
<i>Blighia sapinda</i>	Ackee	Isin	9.7
<i>Coffea Arabica</i>	Coffee	Kofi	7.8
<i>Allium fistulosum</i>	Spring onion		6.3
	Alubosa elewe		
<i>Vitellaria paradoxa</i>	Shear butter	Emi	5.9
<i>Rauvolla vomitoria</i>	Swizzle's stick		5.0
	Asofeye		

Source: Field survey, 2017

Bamiwuye, O. A. and B. O. Adisa INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA

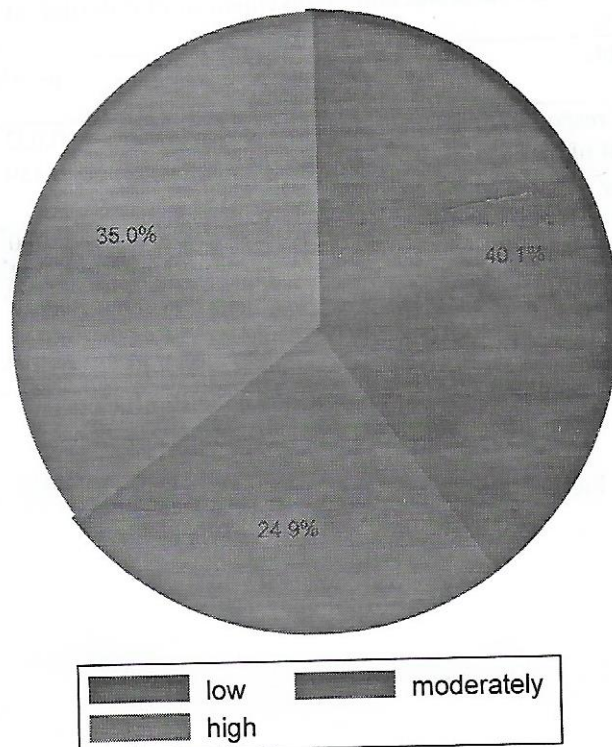


Fig 2: Pie chart showing distribution of respondents by level of involvement in NTFPs
Source: Field survey, 2017

Bamiwuye, O. A. and B. O. Adisa **INVOLVEMENT OF FEMALE YOUTHS IN THE EXPLOITATION OF NON TIMBER FOREST PRODUCTS AS LIVELIHOOD CHOICE IN SELECTED FORESTS IN SOUTHWESTERN NIGERIA**

Table 3: Regression analysis of the relationship between socioeconomic variables and involvement in exploitation of NTFPs.

Variable	Beta coefficient	T	p-value
Age of respondents	-0.172	-2.29	0.023*
Number of dependants	-0.053	0.74	0.459
Number of hours of collecting NTFP per week	0.331	4.81	0.000**
Indigenous status	-0.257	-2.23	0.048*
External orientation	-0.231	-1.99	0.027*
Formal education	0.145	2.14	0.034*
_cons		3.49	0.001**

Number of obs = 197; R-squared=19.06 * significant at p<0.05; ** significant at p<0.01

Source: Field survey, 2017



EFFECT OF STREET HAWKING ON THE EDUCATIONAL PERFORMANCE OF IN-SCHOOL CHILDREN IN AKINYELE LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

¹Abdulsalam-Saghir, ²O. O., Adeuyi and ³W. G. Ojebiyi
Department of Agricultural Extension and Rural Development, Federal
University of Agriculture, Abeokuta, Nigeria
petrajib@yahoo.com

Abstract

Street hawking affects the educational development of a child and is a disinvestment in human capital formation. This study examined the effect of street hawking on the educational performance of in-school children in Akinyele Local Government Area of Oyo State, Nigeria. Data were collected from 120 in-school children hawkers with the use of interview guide and analyzed using descriptive and inferential statistics. Results revealed that most (69.2%) of the in-school street hawkers were female with mean age of 14.26 ± 2.34 years and were in junior secondary classes and many (67.5%) have mean hawking experience of 6.28 ± 1.75 years. More than half (52.5%) of the children hawked during morning and evening periods while 37.5% only hawked in the evening. The larger proportions (45.5% and 48.3%) of the children hawked between 4-6 hours on weekdays and weekends respectively. It was further revealed that majority (91.7%) of the street hawkers do study at home. Also, regular attendance in school was observed among 63.3% of the respondents while 60.0% do get to school lately during the first period of the day's lessons. There were significant associations between period of involvement in street hawking ($\chi^2 = 69.32$), study time ($\chi^2 = 37.66$) and educational performance. The study concluded that street hawking has negative effect on the educational performance of in-school children. It is recommended that the hawking time of the in-school children should be regulated by the parents.

Keywords: Child abuse, educational performance, In-school children, Street hawking

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Introduction

The essence of any educational system is in having well-educated people who are not only able to read and write but also have a good manipulative and other skills needed for the economic survival and development of individuals and nations at large. Due to the prevalence of poverty, among others, the objectives of the Nigerian educational system remain unrealistic as poverty prevented most school age children, who are hopefully the nation's future leaders, from accessing quality education. Such children are involved in many income-generating activities so as to contribute to the basic needs of their immediate family or households (Ashimolowo *et al.*, 2010). Most of the income-generating activities engaged in by the children could constitute child labour and as such a form of child abuse which totally or partially deprived the children from having access to their fundamental human rights as entrenched in the constitution of the Federal Republic of Nigeria and the Child's Rights Act (Ashimolowo *et al.*, (2010).

Street hawking is considered to be one form of child labour that is exploitative because of the excessively long hour of trading by the children, hindrance of school attendance, and negative impact on child's health (Ibanga, 2007). In the views of some scholars (Okafor, 2010; Fetuga, Njokanma & Olowu, 2004), it is the most common form of child labour in Nigeria.

Street hawking is referred to as an occupation engaged by children and young adults which involves selling of items or goods in the street and it is one of the prevalent income generating activities that prevents children from schooling optimally especially in major cities of Nigeria like Port-harcourt, Kaduna, Sokoto, Lagos, Ibadan, Osogbo, Akure, Aba and Anambra. (Voluntary Counseling and confidential Testing - VCCT, 2005). According to Oyinye, Soronnadi & Udemezue (2002), street hawking is the act of moving round the streets and other areas not designated as markets to sell essential products. Street hawking extends to be an act of canvassing for sale items carried by a hawker along the street

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

from house to house or in the public space (Ikechebelu, Udigwe, Ezechuku & Ndinech, 2008). Street hawkers are grouped into three categories namely in-school, school drop-out, and never-attended school categories. The in-school hawkers are those who are schooling and hawking but do not intend to take street hawking as permanent vocation (Kwankye *et al.*, 2007). The school drop-outs are those that stopped schooling but went into hawking. According to The Guardian (2013), street hawking has left many children, estimated as 10.5 million out of school in Nigeria. This explains why Oyinye *et al.* (2002) stated that while some children hawk throughout the day (an indication that such children don't attend school at all or that they play truancy), some hawk only in the early mornings, evenings and weekends. Others did not only hawk during early morning hours but at night (Onuzulike, 2007). Specifically, Ebigbo (2003) found that in Ibadan that 20 percent of children hawked after school. Many Nigerian children

are compelled to work because of their parents' joblessness, poverty and ill-health. Ibanga (2007) study showed that polygamy also contributes to poor living standard and push children into the street due to large family size. Some of the street hawking children spent the entire day and sometimes until late in the night selling goods under harsh weather conditions of rain and sunshine. Street hawking by children interferes with the emotional, educational and social development of children.

As indicated by Admassie (2002), street hawking affects the educational development of a child and is a disinvestment in human capital formation and has negative effects on the private and social returns of a child (Admassie, 2002). The number of school children engaged in street hawking in Ibadan has been increasing. According to Ashimolowo *et al.*, (2010), increased number of child traders affects the acquisition of education which could be traced to a lot of factors which Dustman (2003) identified as cost of schooling; characteristics of child, parents, households and

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

community, location and distance of formal education center. Therefore this study assessed the educational performance of in-school children hawkers in Akinyele Local Government Area Of Oyo with a view to identify the effect of hawking on their educational performance.

Research Methodology

The study was conducted in Akinyele which is one of the 11 local government areas that make up Ibadan metropolis, Oyo State. It shares boundaries with Afijio Local Government to the north, Lagelu Local Government Area to the east, Ido Local Government Area to the west and Ibadan North Local Government Area to the south. Although agriculture is the main stay of the people of the LGA, other prominent sources of income include petty trading, fishing, civil service and artisanal jobs. The study population was street hawkers who were still schooling. A two-stage sampling procedure was adopted in selecting 120 respondents. The first stage involved the purposive selection of six popular markets due to the

prevalence of child traders especially on market days. The selected markets were Akinyele central market, Bodija, Ojoo, Moniya, Alabata and Ijaye markets. This was followed by the convenience sampling of street hawkers who were of school age, between 6 and 18 years from the markets on market days. Although a total of 148 child street hawkers were interviewed, the responses of only 120 street hawkers were suitable for data analysis because the remaining (18.9%) were out-of-school. Data were collected with the aid of semi-structured interview guide and analyzed with frequency counts, percentages, mean, standard deviations, and Chi-square analytical techniques. Period of hawking, reasons for hawking and intensity of study time was measured at nominal level. Educational performance of in-school children was measured at ordinal level as Excellent ($\geq 70.0\%$); Very Good (60.0 – 69.9%); Good (50 – 59.9%); Fair (40.0 – 49.9%); Poor ($< 40.0\%$) using the student overall performance as obtained in their schools. The results were presented in frequency

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

distribution tables, cross-tabulations, pie-chart and bar-chart.

Results and Discussion

Personal and family characteristics of respondents

The result of the study as shown in Table 1 reveals that the in-school children hawkers' age ranged from 10 to 18 years with more than half (50.8%) being in the 13 – 15 years age bracket. The findings of this study is in tandem with Ashimolowo *et al.*, (2010); Ndem, Michiel and Awa, (2012); Ugochukwu *et al.*, (2012) who indicated that hawking children are within the age of 10 and 19 years. The mean age of the street hawkers was 14.26 ± 2.34 years. This means that the students were not too young to hawk as a form of socialization, provided their involvement did not affect their educational activities. Result in Table 1 further reveals that 69.2% of the street hawkers were female. This supports the opinion of Salisu (2012) who submitted that street hawking is mostly done by female children in Nigeria. This implies that more female than male students were into street hawking which

could limit the academic achievement or success of the female students. This could be as a result of not giving priority to girl education in the study area. Most (67.5%) and 21.7% of the in-school children hawkers were in junior and senior secondary school classes respectively. As a result of the students' age and class, their involvement in street hawking may not qualify as a form of child labour or child abuse depending on the intensity of their involvement and the consequent effect on children's educational activities. The higher proportion (53.3%) of the street hawkers practiced Christianity while the remaining practiced Islam. Majority (89.2%) of the street hawkers were from the Yoruba ethnic group. This could be a result of the dominance of the Yoruba people in Akinyele LGA. The mean hawking experience of the students was 6.28 ± 1.75 years implying that most of the students started hawking on the street since when they were in primary school classes. As a result, they are likely to have adapted to combining schooling with hawking and as such may

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

not really feel the negative effect of their engagement in street hawking.

Result in Table 1 also reveals that 75.0% and 56.7% of the street hawkers' fathers and mothers respectively had secondary education. This is in conformity to the reports of Babalola, Folorunso, Kassim, Bello and Oladokun (2011) who revealed that secondary education was the highest educational attainment of girl hawkers' parents in Ibadan. Two-thirds (66.7%) of the street hawkers' fathers were artisans while 54.2% and 37.5% of their mothers were into trading and artisan respectively. This findings is supported by Babalola *et al.* (2011) who reported that majority of the girl hawkers' parents and guardians were marketers. With the results on parental education and occupation, this study supports the findings of Nuhu and Nuhu (2010) which stated that parents who were unemployed, had low level of education and low income were significantly associated with sending children to sell goods. This shows that there is a link between education and occupation of the parents.

This is because it is very difficult for someone with the highest educational qualification being secondary school education to be employed into civil and/or public services. Trading as the occupation of most of the parents might be responsible for the students' involvement in street hawking as the children are usually requested to assist their parents in order to augment their household income and meet their financial needs. Ijadunola *et al.* (2015) also affirmed that having a mother who is a trader is a strong determinant of children's involvement in street hawking.

Periods of involvement in street hawking

Result presented in Figure 1 shows that more than half (52.5%) of the children were hawking during both morning and evening periods while 37.5% only hawking in the evening. This is similar to the findings of Ashimolowo *et al.* (2010) who reported that the highest proportion of the children do hawk in the morning and afternoon. This means that most of the children do hawk in the morning before going to

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

schools and in the evening after school hours. Ijadunola *et al.* (2015) also found that most of the children hawk before going to school in the morning and continue after school until late in the night. The implication is that such students may always get to school late at times after the first lesson of the day would have been over and are also not likely to have time to study at home since they had to hawk in the evening. Such students are likely to lose interest in schooling and also be exposed to social vices such as bad gangs, prostitution, and rapes. The academic performance might be negatively affected since they hardly have time to do assignments and study at home. This, according to Ijadunola *et al.* (2015), is because the children may have little or no time for recreation, personal studies and other meaningful educational activities.

Frequency of involvement in street hawking

Result in Table 2 shows that 19.2% and 41.7% of the children do hawk their wares on highways and within the streets

respectively while one-third (33.3%) do sell their wares on both highways and within the streets. This implies that both routes were used by the street hawkers in displaying and selling their goods. While taking the highways for hawking may be dangerous as a result of exposure to motor accidents, hawking within the streets might also be dangerous as the street hawkers might be exposed to kidnapping, robbery and even rape because most of their streets rarely have regular movement of people especially in the evening periods. This agrees with the positions of authors on street hawking (Okoye and Tanyi, 2009; Ayodele and Olubayo-Fatiregun, 2014; Agbanyi, 2012; Femi, 2011) who narrated that hawking along the road side make the hawkers vulnerable to road accident.

Result in Table 2 also indicated that more than half (52.5%) of the children do hawk their goods in groups of at least two persons. The hawkers' movement in groups could be a source of security among the children especially when hawking in the streets. Hawkers who move

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

in groups may also return home late as they may need to wait for their colleagues to finish the sale of their goods before going home. Depending on the quality of the people in a group, hawking in group may lead to the emulation of good or bad characters. The highest proportions (45.5% and 48.3%) of the children hawked between 4-6 hours on weekdays and weekends respectively. This was followed by those who hawked 1-3 hours per day on weekdays (27.3%) and weekends (32.5%). The mean hawking hours were 3.88 ± 1.26 hours and 4.25 ± 1.52 hours on weekdays and weekends respectively. This implies that the in-school children hawkers spent more time hawking on weekends than weekdays. This could mean that instead of spending weekends for studying, most of the students were hawking everyday and this is in line with the study of Babalola *et al.* (2011) which revealed that majority of the girl hawkers were hawking every day. It is therefore still likely that child street hawkers' academic performance be better when hawking time is minimized through parents'

regulation of hawking time and monitoring of school work (Bulus, 2016).

Reasons for respondent's involvement in street hawking

Result in Table 3 shows the probable reasons why students could be involved in street hawking. The results reveal that 71.7% of the students were involved in street hawking as a source of personal income while 66.7% saw street hawking as a means of contributing to the household income. Additionally, 58.3% of the students were involved in street hawking because their parents were poor. These pointed to the fact that students' personal interest of earning extra income and contributing to the households' income were top reasons for their involvement in street hawking. Both reasons could however be associated with poverty which has plagued most communities in Nigeria. Poverty was also ranked as the most significant reasons for the violation of child's rights among rural and urban residents in Ogun State, Nigeria (Ojebiyi, 2014). These reasons conform to the findings of Ashimolowo *et*

¹Abdulsalam-Saghir, ²O. O. Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON THE EDUCATIONAL PERFORMANCE OF IN-SCHOOL CHILDREN IN AKINYELE LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

al. (2010) and Owoaje *et al.* (2011) who observed that street hawking by children was influenced by parents' socio-economic background.

Educational activities of the respondents

The result presented in Figure 2, revealed that majority (91.7%) of the street hawkers do study at home. Also, regular attendance in school was observed among 63.3% of the street hawkers while 60.0% do get to school lately mostly during the first period of the day's lessons. Some (35.8% and 26.7%) of the students were regularly doing their school assignments at home and actively participating in school activities. The implication is that although the students could still regularly attend schools and study at home, they are less likely to avoid lateness to schools, do school assignments and actively participate in school learning activities. This is because they have little or no time for these activities. Those that do study at home, are not likely to spend tangible time for studying due to fatigue and stress associated with combining schooling with

street hawking. In line with the above findings, Ashimolowo *et al.* (2010) revealed that majority of the street child traders in Epe, Lagos State were in school most of the time and mostly participate in reading.

Intensity of study time

Result of the study in Table 4 reveals that 28.3% and 38.3% were studying everyday and 3-5 days respectively while 8.3% do not study at all. This implies that the students' involvement had effect in their level of involvement in studying and could be attributed to their lack or insufficient time for studying at home after studying both in the evening and morning periods on weekdays and weekends. Half (50.0%) of the students spent less than 1 hour to study per day while 25.5% and 20.0% spent 1-3 hours and 4-6 hours per day respectively. The mean study time was 2.33 ± 0.89 hours and this indicated that most of the students did not practice a good and effective study habit as a result of inadequate study time at home after their hawking activities. This is in line with Bulus (2016) which attested that

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

the students do not have a good study habit.

Educational performance of street hawkers

Result in Table 5 reveal that the highest proportions (30.0%) of the street hawkers had fair and poor performances respectively while only 14.2% had excellent performance scoring at least 70 percent. The mean performance was $43.46 \pm 11.25\%$ implying that the academic achievement of the street hawkers was generally.

Chi-square analysis of the association between period of involvement in street hawking and academic performance

Result in Table 6 shows that the calculated value of the test statistic, χ^2 , exceeds the critical value of χ^2 at 0.05 significant level for 12 degree of freedom. This implies that the null hypothesis that there is no significant association between period of involvement in hawking and academic performance was rejected. This means that the period of involvement and academic performance was significantly associated. The implication of

this finding is that students who hawk during both weekdays and weekends performed more poorly than those who hawk during either the weekdays or weekends. This finding is in agreement with the established trends that hawking and other forms of child labour over negative effects on schooling achievement (Ashimolowo et al., 2010; Ijadunola et al., 2015; Fetuga et al., 2007; Ubah and Bulus, 2014).

Chi-square analysis of the association between study time and academic performance

Result in Table 7 reveal that computed value of χ^2 (37.66) was greater than the critical tabulated value (21.03) at 95% confidence interval and with degree of freedom = 12. This implies that the association between intensity of study and academic performance of the street hawker was significant. In the light of the findings of this study, it means that more of the students who performed brilliantly do study either every day or 3-5 times per week while those who performed poorly were mostly those who do not read at all or only reads on

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

weekends. In essence, the higher the study time of the students, the better their academic performance and vice versa. Similar findings have been reported by other empirical studies (Akpan & Emeya, 2015; Osa-Edoh & Alutu, 2012; Anwar, 2013; Onuekwe, 2015; Bulus, 2016) that significant association existed between good study habit and academic achievement.

**Conclusion and
Recommendations**

The in-school children hawkers' age ranged from 10 to 18 years with more than half (50.8%) being in the 13 – 15 years age bracket and 69.2% of the street hawkers were female. Majority (71.7%) of the students were involved in street hawking as a source of personal income while 66.7% saw street hawking as a means of contributing to the household income. The street hawkers spent considerable time to hawk in the morning and afternoon on weekdays and weekends. The period of children's involvement in street hawking was found to be associated significantly with the educational performance of the

street hawkers. To improve the academic performance of the street hawkers, it is recommended that the hawking time of the in-school children be regulated by the parents. A means to do this is to ensure that in-school children are not allowed to hawk in the morning before going to school in order to ensure that the children do not become perpetual latecomers in school. The children should also be allowed to have a dedicated study time of at least one hour per day which will make the students able to do their school assignments at home. Poverty alleviation programmes should be promoted by relevant stakeholders such as government and non-governmental agencies to assist both the parents and these children hawkers as these are likely to reduce the level of involvement of children in street hawking.

References

Admassie, A. (2002). Explaining the high incidence of child labour in sub-Saharan Africa. *Africa Development Review*, 14(2): 251-275.

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Agbanyi, S. (2012). *Street hawking*. Retrieved from <http://westafricaninsight.org/articles/pdf/166> on 30th August, 2014.

Akpan N. S. and Emeya, S. (2015). Effect of study habit on academic achievement of Agricultural Science students in Senior Secondary Schools in Emohua Local Government Area of Rivers State, Nigeria. *International Journal of Education and Evaluation*, 1(3): 1-8.

Anwar, E. (2013). A correlational study of academic achievement and study habits: Issues and concerns. *Excellence International Journal of Education and Research*, 1 (2): 46-51

Ashimolowo, O. R.,
Aramolaran, A. K. and
Inegbedion, S. O. (2010). Child street trading activities and its effects on the educational attainment of its victims in Epe Local Government Area of Lagos State. *Journal of Agricultural Science*, 2(4), 211-220.

Ayodele, R. B. and Olubayo-Fatiregun, M. A. (2014). Accidental injuries among juvenile hawkers: Clog in the wheel of sustainable socio-economic development of a nation. *Asian Journal of Social Sciences*, 2(2), 19-30.

Babalola, F. D., Folorunso, L. A., Kassim, O. R., Bello, O. S. and Oladokun, Y. O. M. (2011). *Survey on the influence of hawking on girl education in Ibadan, Oyo State, Nigeria*. Educational Research Network for West and Central Africa - ERNWACA Research Grants Programme 2009/2010 edition. 62p.

Bulus, A. (2016). *Influence of hawking time and study habits on junior secondary school students' academic performance in Social Studies, in Nasarawa State, Nigeria*. An M.Ed Dissertation submitted to the Department of Arts and Social science Education, Ahmadu Bello University, Zaria, Nigeria. 137p.

Dustman, C. (2003). Children and return migration. *Journal of*

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Population Economics, 16 (4),
815 – 830.

Femi, T. (2011). The challenges
of girl-child education and
alternative jobs in Nigeria.
*Corvinus Journal of Social and
Policy*, 2(1), 101-121.

Fetuga, M. B., Njokanma, F. O.
and Olowu, A. O. (2004). Child
labour and school absence in
Sagamu local government area
of Ogun state. *Nigerian Medical
Practitioner*, 46(1):15 – 19.

Fetuga, M. B., Njokanma, O. F.
and Ogunlesi, T. A. (2007). Do
working children have worse
academic performance? *Indian
Journal of Pediatrics*, 74(10),
933-936.

Ibanga, F. I. (2007). Child labor
in Nigeria: A religious
educational response. ETD
Collection for Fordham
University. ProQuest
Dissertations Publishing

Ikechebelu, J. I., Udgwe, G. O.,
Ezechukwu, C. C., Ndinechi, A.
G. and Joe-Ikechebelu, N. N.
(2008). Sexual abuse among
juvenile female street hawkers in

Anambra State, Nigeria. *African
Journal of Reproductive Health*,
12(2), 111-119.

Kwankye, S. O., Nyarko, P. E.
and Tagoe, C. A. (2007).
*Reproductive health implications
of street hawking in Accra*.
Paper presented at the fifth
African Population Studies,
Arusha Tanzania, 10-14 Dec.

Ndem, B. E., Micheal, B. and
Awa O. C. (2012). Child labour
in Nigeria and its economic
implication - A case study of
Calabar Municipality. *Research
on Humanities and Social
Sciences*, 2(9), 149-159.

Ojebiyi, W. G. (2014).
*Awareness and knowledge of
Child's Rights Act among rural
and urban residents in Ogun
State, Nigeria*. A Masters'
Dissertation submitted to the
Department of Agricultural
Extension and Rural
Development, Federal
University of Agriculture,
Abeokuta. 191p.

Okafor, E.E. (2010). Child labor
dynamics and implications for
sustainable development in
Nigeria. *Journal of Sustainable*

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Development in Africa, 12(5), 8-21.

Okoye, U. O and Tanyi, P. L. (2009). Perception of child labour in Southeastern Nigeria: A study of Onitsha metropolis. *International Journal of Research in Arts and Social Sciences (IJASS) UNN*: 1(1), 425-440.

Okoye, U. O. (2011). Knowledge and awareness of the Child's Rights Act among residents of a university town in Enugu State, Nigeria. *International Research Journals*, 2(10), 1595-1601.

Onuekwe, E. M. (2015). Influence of study habits on the academic achievement of students in Home Economics in Junior Secondary Schools in Enugu State. *International Journal of Innovative Education Research*. 3 (4):15-22

Onuzulike, N. M. (2007). *Gender differences in knowledge and attitudes towards child street hawking among rural resident parents*. In: Yakubu, J. A., Morohunkola, O. A. &

Sokoya, G. O. (Eds.), *The abused and the society* (136 – 147). Ibadan, Nigeria: Royal People Nigeria Ltd.

Osa-Edoh, G. I. and Alutu, A.N.G. (2012). A survey of students study habits in selected secondary schools: Implication for counselling. *Current Research Journal of Social Sciences* 4(3): 228-234

Owoaje, E. T., Ige, O. K. and Bamgboye, E. (2011). Working school children in a Nigerian Community: Revisiting the issues. *International Journal of Health Research*, 4:11 – 9.

Oyekunle, O., Sodiya, C. I., Ayansina, S. O., Bolarinwa, K. K. and Oyeyinka, R. A. (2014). Involvement of farmers' children in family income generating activities for a secured future in Odeda Local Government Area of Ogun State, Nigeria. *Annals of Child and Youth Studies*, 5(1), 153-166.

Oyinye, O., Soronnadi, V., Udemezie, G. and Ugochukwu, O. (2002). Child abuse and neglect. Paper for the 2005

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

World Development Report.
16th August, 2003. pp. 3 – 8

Salisu, I. S. (2012). *Exploitation of children in the informal sector: Case study of street hawking children in Ifo Local Government, Ogun State*. A Research paper presented in partial fulfilment of the requirements for obtaining the degree of Masters of Arts in Development Studies at the Institute of Social Studies, The Hague, The Netherlands. 39p.

Ubah, M. C. and Bulus, A. (2014). Effect of street hawking on the academic performance of students in Social Studies in Junior Secondary Schools in

Nassarawa State, Nigeria. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 4(4), 18-22

Ugochukwu, E. F., Okeke, K. N., Onubogu, C. U. and Edokwe, E. S. (2012). Socio-demographic characteristics of child street vendor in Nnewi, Nigeria. *Nigerian Journal of Paediatrics*, 39 (4), 174-183.

Voluntary Counseling and Confidential Testing – VCCT. (2005). A survey by peer educators in Federal Capital Territory, Abuja, January-December, 2005.

Table 1: Distribution of respondent by personal and family characteristics (n=120)

Personal and family characteristics	Frequency	Percentage
Ages		
10-12	24	20.0
13-15	61	50.8
16-18	35	29.2
Mean	14.26±2.34	
	years	
Sex		
Male	37	30.8
Female	83	69.2
Educational level		
Primary classes	13	10.8
Junior secondary classes	81	67.5
Senior secondary classes	26	21.7
Religion		
Christianity	64	53.3
Islam	56	46.7
Hawking experience (years)		
1-5	79	65.8
6-10	41	34.2
Mean	6.28±1.75	
	years	
Ethnic group		
Yoruba	107	89.2
Igbo	7	5.8

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

Hausa	6	5.0
Fathers' occupation		
Farming	22	18.3
Civil service	7	5.8
Trading	11	9.2
Artisans	80	66.7
Mothers' occupation		
Farming	6	5.0
Civil service	4	3.3
Trading	65	54.2
Artisans	45	37.5
Fathers' educational attainment		
No formal education	3	2.5
Primary education	12	10.0
Secondary education	90	75.0
Tertiary education	15	12.5
Mothers' educational attainment		
No formal education	12	10.0
Primary education	28	23.3
Secondary education	68	56.7
Tertiary education	12	10.0

Source: Field survey 2016

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Table 2: Frequency of involvement in street hawking
(n=120)

Street hawking variables	Frequency	Percentage
Days of hawking		
Weekdays only	15	12.5
Weekends only	65	54.2
Both weekends and weekdays	40	33.3
Route of hawking		
On High way	23	19.2
Within the streets	50	41.7
On highways and within the streets	47	39.2
Hawking mode		
Groups	63	52.5
Alone	57	47.5
Hawking Hours on weekdays per day (n=55)		
<1	6	10.9
1-3	15	27.3
4-6	25	45.5
>6	9	16.4
Mean	3.88±1.26	hours
Hours spent on weekends (n = 105)		
<1	3	2.5
1-3	34	32.5
4-6	53	48.3
>6	15	16.7
Mean	4.25±1.52	hours

Source: Field survey 2016

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA

Table 3: Distribution of respondents according to reasons for their involvement in street hawking

Reasons for street hawking	Frequency	Percentage
Contribution to household income	80	66.7
Source of personal income	86	71.7
Parents are poor	70	58.3
Peer influence	26	21.7
Parental loss of job	21	17.5
Single parenthood	27	22.5

Source: Field survey 2016 *Multiple response

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

Table 4: Intensity of study time

Study time variables	Frequency	Percentage
Frequency of studying (n = 120)		
Everyday	34	28.3
3-5 days	46	38.3
Weekends only	30	25.0
Not at all	10	8.3
Study time per day (hours) (n = 110)		
<1	55	50.0
1-3	28	25.5
4-6	22	20.0
>6	5	4.5
Mean	2.33±0.89	hours

Source: Field survey 2016

Table 5: Educational performance of street hawkers (n=120)

Average score	Frequency	Percentage	Mean
Excellent	17	14.2	43.46±11.25%
(≥70.0%)	21	17.5	
Very Good (60.0 –	15	12.5	
69.9%)	36	30.0	
Good (50.0 –	31	25.8	
59.9%)			
Fair (40.0 –			
49.9%)			
Poor (<40.0%)			

Source: Field survey 2016

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

Table 6: Chi-square analysis of the association between period of involvement in street hawking and academic performance

Variable	χ^2	df	P value	Decision
Period of involvement in street hawking	69.32	12	0.01	Significant

Source: Field survey 2016

Table 7: Chi-square analysis of the association between study time and academic performance

Variable	χ^2	df	P value	Decision
Study time	37.66	12	0.01	Significant

Source: Field survey 2016

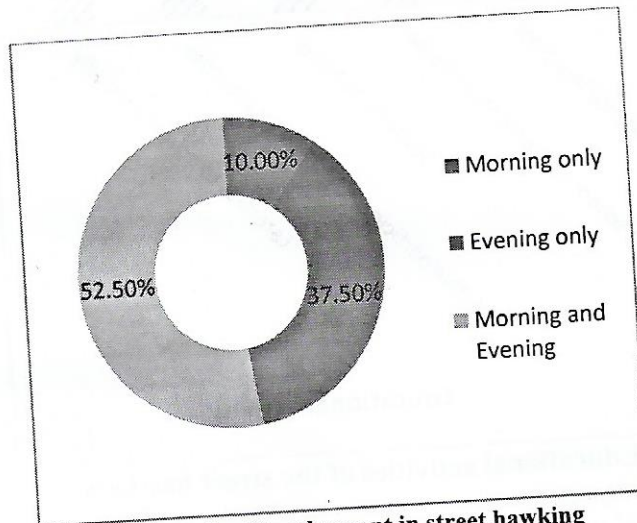


Figure 1: Periods of involvement in street hawking
Source: Field survey 2016

¹Abdulsalam-Saghir, ²O. O.,
Adeuyi and ³W. G. Ojebiyi

**EFFECT OF STREET HAWKING ON
THE EDUCATIONAL PERFORMANCE
OF IN-SCHOOL CHILDREN IN
AKINYELE LOCAL GOVERNMENT AREA
OF OYO STATE, NIGERIA**

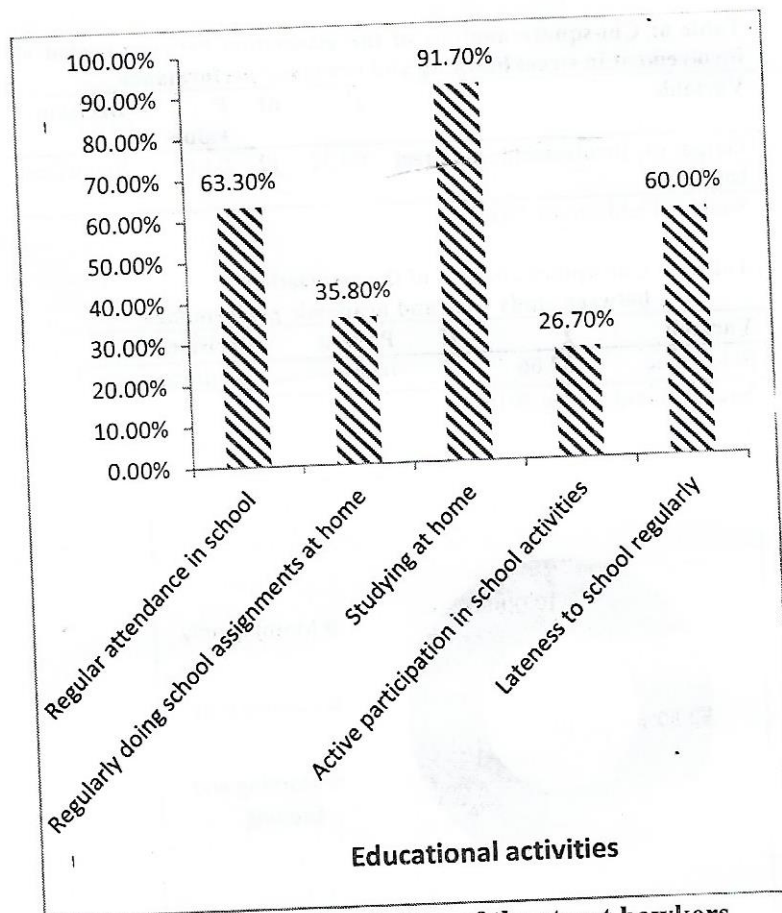


Figure 2: Educational activities of the street hawkers
**Multiple responses*
Source: Field survey 2016

PROFITABILITY ANALYSIS OF FRUIT MARKETING AMONG YOUTHS IN OSUN STATE, NIGERIA

Adisa, O. D. and A. B. Ayanwale
Dept. of Agricultural Economics, Obafemi Awolowo University,
Ile-Ife, Osun State, Nigeria.
ymc4reallove@yahoo.com; 08034828473

Abstract

The study analyzed the returns to the youth in marketing of selected fruits in Osun State towards improving their welfare. Multi-stage sampling technique was used to select 211 fruits marketers that are youths. Data were gathered through well-structured interview schedule and analyzed using descriptive statistics and marketing margin analysis. The results showed that majority (85.31%) were females, 85.78 percent were married and 76.78 percent of the respondents were within the age bracket of 31 - 40 years with the mean of 39 years. Results further revealed that majority (58.08%) had a household size range of 5 to 10 members; more than half (54.50%) had secondary school education. Most of the respondents adopt the method of buying small quantities of fruits so as to sell off in time and in turn reduce the losses. Marketing margin (MM) results showed that marketers experience high percentage MM except for sweet orange wholesalers (30%) and plantain retailers (34.5%) implying that fruit marketing was a profitable business, requiring small capital to kick-off. The study concluded that marketing of selected fruits were more profitable among young retailers than wholesalers in the study area.

Keywords: Profitability, Fruit, Marketing, Youths, Losses

Introduction

Fruits are natural staple food of man that contains all the necessary nutrients in sufficient proportion such as vitamins, sugars, essential minerals, fibers, antioxidants, little hormone precursors in addition to protein and energy in human daily diet that can help to keep a good and normal health (Raiyemo, 2014). They are easily assimilated by the body, produce a clearing effect on the blood and aids digestion hence, the ailments usually caused by the consumption of unnatural foods can be treated easily with fruits (Raiyemo, 2014). Apart from being a very good source of food, fruits are also good medicine used to cure some diseases naturally. They are widely consumed either as raw form or as desserts or appetizers.

Fruits are perishable commodities that contain high moisture content making their texture and skin to be softer and more susceptible to physical damage through the activity of pathogens, insect and pests (Mukaminega, 2008). One of the factors that have adverse effect on the economic value of fruits is their short shelf-life

characteristic which makes their handling during distribution, transportation and marketing a special problem particularly in the tropics.

As perishable commodities substantial amount of these fruits harvested can be lost before reaching the final consumers. These major problems of losses along the supply chain are caused by a wide array of factors ranging from growing conditions to handling at the market levels. United Nations defined the term "youth" as the category of people in the age bracket of 15 and 24 years. In the Third World countries (Nigeria inclusive), about 20 percent of the population belongs to this age group (World Bank, 2007). Youths, as cited in Ayinde, Torimiro, Koledoye, and Adepoju (2015) were defined as the people within the ages of 13-30 years. These people constitute about 32 percent of the Nigerian rural communities. The Oxford dictionary describes the youth as the period between childhood and adult age.

Post-harvest losses (PHLs) of perishable produce are however not easy to quantify. In some instances the marketer are forced

FAO-World Bank, (2010) revealed that PHLs are high - 30 percent in cereals, 50 percent in roots and tubers and up to 70 percent in fruits and vegetables. From the statistics it can be seen that, post -harvest losses are higher for fruits and vegetables than for cereals and other root and tuber crops. This can be attributed to the highly perishable nature of fruits coupled with its short shelf life. This loss tends to make farmers poorer (Ahmed, 2013). Fruit marketers are faced with a major problem of losses which reduces their revenue. In Nigeria, losses in fruits such as banana, plantain, citrus (sweet orange) and pineapple are very huge due to the marketing system of fruits, the burden of about 75 percent of these losses is placed on the fruit marketers as reported by Ahmed (2013). These losses are caused by a lot of factors like poor storage facilities of fruit, poor infrastructural facilities like good roads which affect transportation cost of the fruits and certain environmental factors such as temperature, humidity, and solar radiation (Buyukbay *et al.* 2011; Busari *et al.* 2015). This loss is currently posing a great challenge to the marketers

who are constrained to offer it for sale at ridiculous price to avoid further spoilage.

Yusuf, Ukoje and Orire (2012) asserted that at the market, the seller is faced with problems of loss as the fruits have to be sold within the shortest time possible before they get spoilt.

The pattern of marketing channels for fruits in Nigeria evolved in response to the food production pattern characterized by a large number of peasant farmers with small, often less than one hectare, non-contiguous holdings. The marketers buy in small quantities from these farmers with scattered farm holdings and assemble the fruits in bulk for transportation to the markets and urban centers. Since the price of buying and transporting these fruits from farm to the market determines the market margin and hence the income that will accrue to the farmers and marketers, it is therefore pertinent to investigate the effect of PHLs on fruits marketing.

Objectives of the study

The general objective of the study was to analyze the profitability of fruit marketing

among youths in Osun State, Nigeria. Specifically,

- i. describe the socio-economic characteristics of youth in the marketing of selected fruits;
- ii. estimate the marketing margin obtained by the fruit marketers and
- iii. identify the post-harvest handling practices used in improving the profitability of selected fruits.

Methodology

The study was conducted in Osun State, Nigeria. The state was created on 27th August, 1991, situated in the Southwestern region of the country and lies within the co-ordinates of latitude 7°30'N of the equator and longitude 4°30'E of the Greenwich meridian. It is bounded by Ogun State in the South, Kwara State in the North, Ondo and Ekiti States in the East and Oyo State in the West. The State has 30 Local Government Areas (LGAs) which spread across the six administrative zones (National Population Commission NPC, 2007). Crops produced in the state include cash crops such as cocoa, oil palm, kola; food crops such as

cassava, yam, maize. Prominent fruits produced in the state include sweet oranges, grape, lemon, tangerine, plantain, banana, mango, pineapple, pawpaw, walnut, *albidium* (agbalumo), *chrysophyllum*, *Invingia gabonensis*. The choice of Osun State was premised on the high number of fruit marketers in the state (Durodola, Wahab and Ibikunle, 2017). The selection of the fruits was based on the importance of the fruits in the study area – sweet orange (*Cirus sinensis*), pineapple (*Ananas comosus*), plantain (*Musa paradisiaca*) and banana (*Musa balbisiana*) were the four major fruits.

Data were gathered through well-structured interview schedule administered on 211 young fruit marketers' age 20 to 40 years. A multi-stage sampling technique was employed to select the young marketers sampled for this study. The first stage was the purposive selection of one LGA from each of the six administrative zones of Osun State Agricultural Development Programme (OSADEP) based on high concentration of community markets where fruits are prominently sold, making a total

of six LGAs. The second stage involved a random selection of three community markets from each of the LGAs where there was availability of many fruit marketers, making a total of eighteen (18) community markets. At the last stage, 8 wholesalers and 12 retailers were randomly selected from the community markets, giving an overall sample size of 360 fruit marketers. Out of these fruits marketers 211 youths were extracted from the overall sample.

Descriptive statistics such as frequency counts, percentages, mean, standard deviation and marketing margin analysis were used to analyze the data collected. To estimate the marketing margin obtained by the fruit marketers in Objective 2, this study adopted Adegeye and Dittoh (1982) as cited by Thompson and Agbugba (2013), marketing margin (MM) equation is as follows:

For wholesalers

$$\frac{WSP - WBP}{WBP} \times 100\% \quad (1)$$

For retailers:

$$\frac{RSP - RBP}{RBP} \times 100\% \quad (2)$$

Where

WSP= Wholesaler's selling price

WBP=Wholesaler's buying price

PSP = Retailer's selling price

RBP = Retailer's buying price

Results and Discussion

Socioeconomic characteristics of the respondents

Results of analysis in Table 1a showed that majority (85.31%) of the young marketers interviewed were females. This indicated that fruit marketing and post-harvesting handling is in the domain of female gender. The dominance of the females in fruit marketing activities might be because it requires small capital to start. This affirms Adekanye (1988) and Wahab *et al.* (2017) findings that women dominate food stuff marketing in Osun State. The mean age of the youth marketers was 39.07 ± 7.35 years. Majority (76.78%) were within the age of 31 and 40 years. The implication of this is that marketers whose age range between 31 and 40 years are

more involved in fruit marketing among the fruits marketers interviewed. The import of this finding is that the marketers are in their active age and they can do their business with youthful strength. This is when they are likely to be more energetic and willing to take risks that are related with marketing with the hope of improving their socio-economic status conditions. This is in agreement with Wahab *et al.* (2017) findings that majority of fruits marketers are middle aged. The results in Table 1a also indicated that majority (85.78%) were married. The import of this finding is that most of the marketers have responsibilities and fruit marketing serve as source of earnings for the running of the family. This is in line with Wahab *et al.* (2017) which states that majority of fruits marketers in Osun State were married. Results on religious affiliation showed that 52.61 percent practice Islamic religion compared with 47.39 percent of adherents of Christian religion. The household size distribution revealed that majority (88.63%) had between 1 and 10 persons living with them with a mean household size of

6.09 ± 2.90 . The finding showed that the marketers have larger household size. This supports the findings of Mbuk *et al.* (2011) who state that fruit marketers had a large household size in Nigeria (Osun state inclusive). The results in Table 1a further showed that majority (54.50%) spent between 7 to 12 years schooling. This result asserted that most of the fruit traders had secondary school education. This finding is in agreements with Muluaem *et al.* (2015) that reported that fruit marketers have secondary level of education meaning that literate traders find it relatively easier in their dealing with people, more especially, in the exchange process. Results in Table 1b revealed that the mean years of fruit marketing experience was 11.86 ± 6.82 years. Majority (59.73) has been in fruit business for more than 12 years implying that they have practical marketing experience on the different fruit crops handled. The more experienced the fruit marketers are, the lesser the losses and the more profit returned would be when compared to the less experienced ones since they can utilize the gained experience to make

important handling decisions as well as make quick contacts with customers to ensure that fruits are sold quickly. This finding agrees with Adewumi *et al.* (2009) and Busari *et al.* (2015) that revealed marketing experience of fruit marketers range from 10 to 19 years.

The Table also revealed that the mean annual income was ₦142,388 ± 94,210.06. Majority (41.23%) earned above ₦250,000 per annum. This implies that fruit marketing among the youths gives good returns. In Table 2, the mean distance travelled by marketers was 2.23 ± 4.35 Km. Majority (91.47%) travelled less 10 Km. It implies that the marketers travelled longer distance to purchase fruits and bring to the market. This supports the findings of Ayandiji, Adeniyi and Omodiji (2011) that reported that the longer the distance of the farm/source to the market, the longer the time it will take the produce to get to the market and this would increase postharvest losses and reduces the returns to marketers. This is due to the congestion of the produce when overloaded in vehicle will build-up heat which causes physical

injury such as vibration, compression and this conversely affect the quality of the fruit.

Estimation of Marketing Margin of Selected Fruit Marketers

The results in Table 2 indicated that the percentage marketing margin (PMM) for sweet orange wholesalers was 30 percent while for retailers was 49 percent implying that the sweet orange retailer had a higher percentage marketing margin than wholesalers. The high margins made by the sweet orange retailers explain the reason they are still in business. Also retailers rendered some marketing services such as bulk breaking, washing, sorting into various sizes, grading and bringing fruits nearby homes which in turn contribute to the margins received. From the data gathered, it was noted that some retailers buys fruits directly from the producers, farmgate buyers and also from wholesalers within the market. This allows them to have more returns than the wholesalers, hence higher marketing margin because they would have boycotted the middlemen.

Table 2 showed that pineapple wholesalers have lower marketing margin (31%) when compared with the retailers (35%) who had a higher marketing margin. Here, again the retailers have a higher MM than the wholesalers. These results suggested that pineapple marketing is a profitable business in the study area. It was also discovered that the services rendered by the retailers to reduce post-harvest loss/spoilage in pineapple like peeling, cutting and packing the pineapple into smaller pieces for sale explain the high margin they had. This could be due to the services rendered by the retailers by cutting the pineapple into small sizes for consumer's affordability, transporting from community markets to nearby shops for easy access to consumers and sometimes gives to their children to hawk. Furthermore, percentage marketing margin for plantain in Table 2 revealed that wholesalers had a higher marketing margin (40%) than the retailers (35%). This indicated that marketing of plantain was more profitable among the plantain wholesalers. This means that a unit increment

in the purchase price of plantain at the wholesale and retail levels will lead to an increase in the selling price of plantain by 39.5 percent and 34.5 percent respectively. Lastly, Table 2 showed the percentage margin for banana wholesalers 40.6 percent while that of the banana retailers was 39.6 percent. This implies the wholesalers had a higher marketing margin than the retailers.

In summary, Table 2 revealed that retailers of sweet orange (49%) and pineapple (35%) had a higher marketing margin while the wholesalers of plantain (40%) and banana (41%) had higher marketing margin implying that that the sales of banana and sweet orange was efficient. Similarly, the least marketing was recorded among wholesalers of sweet orange (29.73%) and plantain (34.54%), respectively. This agrees with Adekanye (1988) which stated that high margin is an indication that distribution or marketing is efficient.

Post-harvest handling practices used by youth in the marketing of selected fruits

Results in Table 3 revealed that all (100%) the youths adopted the method of buying fruits in small quantities so as to sell off in time by this means, they incur less spoilage and high profit. This agrees with Bourne (1983) who reported that buying small quantities of fruits by marketers enable them to sell off in time and in turn reduces losses and increase profit. Majority (85.31%) of the respondents handle fruits with great care by cleaning with clothes, washing, removal of bad ones from good one and in some cases cut into smaller portions and hawk. This practice was done to present the fruits in good quality in order to command good price which might increase the returns to young marketers. 32.23 percent of youth buy mature and good quality fruits because they can sell it at a good price. Few (9.48%) of the respondents protect fruits from direct sunlight with shades, umbrella or sell in shops to make it cool. This practice by youth prevents fruits for getting spoilt because sun-beaten fruits deteriorate at a

faster rate because fruits contain water content which makes their soft texture susceptible to decay easily and increases the rate of water loss. This result supported Kader (2005) findings that states overheating of fruits and mishandling leads to deterioration. Only 14.22 percent of the respondents sell to credit worthy customers and process into other forms in order to reduce loss.

Conclusion and Recommendations

Based on the findings, it was concluded that fruit marketing among youth was a profitable business that requires small capital to start. Marketers need to be enlightened on handling of fruits especially during loading, offloading and conveying the fruits to the markets. The study therefore recommended that marketers should adopt the method of buying small quantities that can be sold in time in order to reduce losses in fruits which in turn bring good returns/profits to them.

References

Adegeye, A. J. and Dittoh, J. S. (1982). Essentials of Agricultural

Economics. Ibadan, Centre for Agricultural and Rural Development

Adekanye, T. O. (1988). The Markets for Foodstuffs in Western Nigeria, *Reading in Agricultural Marketing*. In: Adekanye, T. O. (ed.), 12-22.

Adeoye, I. B., Odeleye, O. M. O., Babalola, S. O. and Afolayan, S. O. (2009). Economic Analysis of Tomato Losses in Ibadan Metropolis, Oyo State, Nigeria, *African Journal of Basic and Applied Sciences*, 1(5-6), 87-92.

Adewumi, M. O., Ayinde, O. E., Falana, O. I. and Olatunji, G. B. (2009). Analysis of Postharvest Losses among Plantain/banana Marketers in Lagos State, Nigeria, *Nigerian Journal of Agriculture, Food and Environment* (NJAFE), 5(2-4), 35-38.

Ahmed, D. A. (2013). Post-harvest Losses; Making Nigerians Farmers Poorer. 21st November 2013, Hits 530 post harvest losses.

Ayandiji, A., Adeniyi, O. R. and Omidiji, D. (2011). Determinant

Post-harvest Losses among Tomato Farmers in Imeko-Afon Local Government Area of Ogun State, Nigeria, *Global Journal of Science Frontier Research*, 11(5), 23-27

Ayinde, J. O., D. O. Torimiro, G. F. Koledoye, O. A. Adepoju (2015). Assessment of Rural Youth Involvement in the Usage of Information and Communication Technologies (ICTs) among Farmers' in Osun State, Nigeria. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, 5(2): 17 – 23. ISSN 2284-7995, E-ISSN 2285-3952.

Busari, A. O., Idris-Adeniyi, K. M. and Lawal, A. O. (2015). Food Security and Post-harvest Losses in Fruit Marketing in Lagos Metropolis, Nigeria, *Discourse Journal of Agriculture and Food Sciences*, 3(3), 52-58. Retrieved from www.resjournals.org/JAFS

Buyukbay, E. O., Uzuno, M. and Sibel Gulse Bal, H. (2011). Post-harvest Losses in Tomato and Fresh Bean Production in Tokat Province of Turkey,

Adisa, O. D. and A. B. Ayanwale

**PROFITABILITY ANALYSIS OF FRUIT
MARKETING AMONG YOUTHS IN
OSUN STATE, NIGERIA**

Scientific Research and Essays,
6(7), 1656-1666.

Durodola, O. S., Wahab, M. J.
and Ibikunle, D. R. (2017).
Assessment of Post-harvest
Losses of Fruits during
Marketing in Osogbo Metropolis,
Osun State, Nigeria,
*International Intervention of
Scientific Journal*, 1(1), 1-5.

Food and Agriculture
Organization (F.A.O.)–World
Bank (2010). Reducing Post-
harvest Losses in Grain Supply
Chains in Africa, Report of
FAO–World Bank Workshop
held from 18–19th March, 2010
in Rome, Italy. 120p.

Kader, A. A. (2005). Increasing
Food Availability by Reducing
Post-harvest Losses of Fresh
Produce, *Acta Horticulture*, 682,
2169-2175.

Mbuk, E. M., Basse, N. E.,
Udoh, E. S. and Udoh, E. J.
(2011). Factors Influencing Post-
harvest Loss of Tomatoes in
Urban Market in Uyo, Nigeria,
*Nigerian Journal of Agriculture,
Food and Environment*, 7(2), 40-
46.

Mukaminega, D. (2008). Hybrid
Dryer (Solar And Biomass
Furnace) to Address the Problem
of Post-harvest Losses of
Tomatoes in Rwanda. *Research
Project submitted to Larenstein
University of Applied Sciences,
Wageningen, The Netherlands.*
Portela

Mulualem, A. M., Jema H.,
Kebede W. and Amare A.
(2015). Determinants of
Postharvest Banana Loss in the
Marketing Chain of Central
Ethiopia. *Food Science and
Quality Management*, 37, 52-64.

National Population Census
Result (2007): *Nigerian Gazette*.
Wednesday, January 10, 2007,
17 (19), 1.

Raiyemo, D. (2014). Production
of Citrus fruits in Nigeria:
Problems and Prospects.
Accessed on Eduresoure World
(<http://www.Eduresoureworld.com/2013/08/fruits-are-natural-staple-...>) on 12/4/2014

Thompson, D. and Agbugba, I.
K. (2013). Marketing of Tropical
Vegetable in Aba Area of Abia
State, Nigeria, *Journal of
Agricultural Economics and
Development*, Academic

Adisa, O. D. and A. B. Ayanwale

**PROFITABILITY ANALYSIS OF FRUIT
MARKETING AMONG YOUTHS IN
OSUN STATE, NIGERIA**

Research Journals, 2(7), 272-
279.

Wahab, M. J., Durodola, O. S.,
Ibikunle, D. R. (2017).
Comparative Study of Fruits'
Post Harvest Losses and the
Socio-Economic Level of Fruits'
Marketers in Osogbo Metropolis
of Osun State, Nigeria,
*International Invention of
Scientific Journal*, 1(1), 1 – 5.

World Bank, (2007). "Executive
Summary" In World Bank. Rural
Development: From Vision to

Action, the Next Generation,
World Bank, Washington, D. C.

Yusuf, O. R., Ukoje, J. A. and
Orire, I. O. (2012). The
Dynamics of Rural-urban
Interaction in Sustainable Access
to Fruits and Vegetables in Zaria,
Nigeria being a paper presented
during the 54th Annual
Conference on the Association of
Nigerian Geographers held at the
Kano State University of Science
and Technology, Wudil, Kano
State between 19th – 24th
November 2012.

Table 1a: Distribution of socio-economic characteristics of young fruit marketers (n = 211)

Variables	Youths	
	Frequency	Percentage
Gender		
Male	31	14.69
Female	180	85.31
Age (years)		
20 – 25	5	2.38
26 – 30	44	20.85
31 – 35	82	38.86
36 – 40	80	37.91
Mean	39.07	
Standard deviation	7.35	
Marital Status		
Single	24	11.38
Married	181	85.78
Widowed	3	1.42
Divorced	3	1.42
Religion affiliation		
Christianity	100	47.39
Islam	111	52.61
Household size		
None	3	1.42
< 5	75	35.55
5 – 10	112	58.08
11 – 15	19	9.00
> =16	2	0.95
Mean	6.09	
Standard deviation	2.90	
Years of formal education		
None	28	13.27
1 – 6	48	22.75
7 – 12	115	54.50
13 – 18	20	9.48
Mean	7.39	
Standard deviation	4.70	

Source: Field survey, 2018

Table 1b: Distribution of socio-economic characteristics of fruit
marketers (contd.) (n = 211)

Variables	Frequency	Percentage
Years of marketing experience		
≤ 6	43	20.38
7 – 11	66	31.28
12 – 16	60	28.44
≥ 16	42	19.90
Mean	11.86	
SD	6.82	
Annual Income from fruit marketing (₦)		
≤ 50,000	68	32.23
50,000 – 200,000	46	21.80
201,000 – 250,000	10	4.74
≥ 251,000	87	41.23
Mean	142,388.43	
SD	124,210.06	
Distance of farms or sources of fruits to the market (Km)		
≤ 6	174	82.46
6 – 10	19	9.00
11 – 15	5	2.38
16 – 20	6	2.84
> 20	7	3.32
Mean	2.23	
Standard deviation	4.35	

Source: Field survey, 2018

Table 2: Analysis of marketing margin to selected fruit marketers
(n = 211)

Type of marketers/fruit	Mean Purchase price (₦)	Mean Selling price (₦)	Marketing margin (₦)	Percentage (%)
Sweet orange wholesalers	5,348	6,938	1590.00	29.73
Sweet orange retailers	7,764.79	11,585.92	3821.13	49.21
Pineapple wholesalers	15,242.65	19,891.18	4648.53	30.50
Pineapple retailers	11,700.00	15,756.64	4056.64	34.67
Plantain wholesalers	13,985.07	19,509.70	5524.63	39.50
Plantain retailers	16,642.61	22,391.04	5748.43	34.54
Banana wholesalers	7,485.22	10,522.78	3037.56	40.58
Banana retailers	8,942.25	12,515.89	3573.64	39.96

Source: Field survey, 2018

NOTE FOR CONTRIBUTORS

Annals of Child and Youth Studies (ACYS) is a multidisciplinary publication of the International Research and Development Network of Child and Youth in Agricultural programme (CYIAP) in Nigeria that serves sociologists, anthropologists, psychologists, educators, psychiatrists, pediatricians, social and community development workers, extension agents, change facilitators and other professionals who deal with research, planning, development and empowerment of child and youth. The periodical provides English translations of work on all aspect of child and youth development such as descriptive and evaluative articles on economics and socio-politico-cultural issues, educational and preventive medical programmes for youth, experimental and observational studies, critical reviews and summary articles. In addition to scientific paper, the periodical will contain reviews reports on conferences and other items of interest. Articles submitted to *Annals of Child and Youth Studies* should not be under consideration by any other journal, or have been published elsewhere.

Manuscripts should be typed with double spacing and sent electronically to editor, acys@yahoo.co.uk, where this is not possible, 3 hard copies of the article should be submitted to: Dr. Banji O. Adisa, Editor-in-Chief, *Annals of Child and Youth Studies*, Department of Agricultural Extension & Rural Development, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. Submission of an original paper to this journal will be taken to imply that it represents original work not previously published, that it is not being considered elsewhere for publication, and that if accepted for publication, it will not be published elsewhere in the same form, in any language without the consent of the editor and publisher.

Length: The maximum preferred length is 10 pages

Language: Papers are published only in English

Abstract: Each paper requires an abstract of 100-150 words summarizing the significant coverage and findings.

Key words: Each abstract should be accompanied by up to four key words, which between them should characterize the paper. These will be



used for indexing and data retrieval purpose.

Processing your articles electronically:

We strongly encourage you to send the final, revised version of your articles electronically, by e-mail. This will ensure that it can be dealt with quickly and will reduce errors at the typesetting stage. This guide sets out the procedures which will allow us to process your articles efficiently.

Please note: This guide does not apply to authors who are submitting an articles for consideration and peer review; they apply only to authors whose articles have been reviewed, revised, and accepted for publication.

Tables and figures should be saved as separate files, and a separate list of figure captions should also be provided. Give the files clear names such as Name _ text, doc, Name _ tables, doc, Name _ figures, doc, or Name _ figure captions. doc.

The approximate position of tables and figures should be indicated in the text file, and they must be mentioned in the text. Ensure that the files are not saved as **read only**. Please see the journal instructions for Authors page for a Word template to help you style your article correctly. Please pay particular attention

to the references. Also supply the running heads for your article in the style of the journal (this will usually be the authors' initials and surname plus a short title) Please make sure that the full postal and e-mail address of the author who will check proofs and receive correspondence and off-prints is clearly marked.

Figures: All figures should be numbered with consecutive Arabic numbers, have descriptive captions, and be mentioned in the text. An approximate position for each figure should be indicated in the margin.

Preparation: Figures submitted must be of a high enough standard for direct reproduction. Line drawings should be prepared in black (India) ink on white art paper or tracing paper, with all lettering and symbols included. Alternatively good sharp photo-prints ("glossies") are acceptable. Photographs intended for halftone reproduction must be good glossy original prints of maximum contrast. Each figure should be clearly labeled with the author's name and figure number. Re-drawing or retouching of unusable figures will be charged to authors.

Captions: A list of figure captions should be typed on a separate sheet and included with the manuscript.



References: should be indicated in the typescript by giving the author's name, with the year of publication in parentheses. If several papers by the same author and from the same year are cited, a, b, c, etc., should be put after the year of publication. The references should be listed in full, including pages, at the end of the paper in the following standard form:

- *For books:* Stone, A and Water B. (1988) *Youth for the Future* (Nigeria: CY AP – Network Publishing). 10-12
- *For articles:* Shortlady, Y. and Shortman, Z. (1995) Bridging the gaps between men and women in Africa, *African Gender Review*, 10 (1) 5-17
- *For chapters within books:* Torimiro, D.O. (1995) Managing the impossible, in S.H. Noone, E. H. Twoone and P.P.E. Threeone (E d s.) *Management Practices in Rare Organization* Nigeria, People's society of Nigeria, 40-50.
- *For online documents:* Tinko, R (2001) *Hooliganism in colleges in Nigeria*. Available online at www.acys.org/plag.htm (accessed 6 August 2006).

Title of journals and names of publishers, etc. should **not** be abbreviated. Acronyms for the names of

organizations, examinations, etc. Should be preached by the title in full. If you have any further questions about the style for this journal. Please send your mail to banjiolalere@yahoo.com or editor, acys@cyiapnetwork.org. Corresponding authors will receive a copy of the journal by post after publication. Additional copies of the journal can be purchased at the author's preferential rate of ₦1000 or \$US 5.00 per copy.

Price charges

Processing fee: ₦10,000.00 or \$US 10.00 Page charges: 1st 10 pages (₦15,000.00 or \$US100), additional pages (₦500:00 or \$US5.00/page).

Payment

The money should be sent in Bank Draft and made payable to: The Editor-in-Chief, Annals of child and Youth Studies, Department of Agricultural Extension & Rural Development, Obafemi Awolowo University, Ile-Ife. Or pay directly to: CYIAP Publications Account ACCESS Bank Plc., Ile-Ife Account No.: 0725017381

Copyright.

It is a condition of publication that authors assign copyright or license the publication rights in their articles,



including abstracts, to (Put publisher's name). This enables us to ensure full copyright protection and to disseminate the article, and of course the Journal, to the widest possible readership in print and electronic formats as appropriate. Authors may, of course, use the article elsewhere after publication without prior permission from the Editor-in-Chief, *Annals of child and Youth Studies* provided that acknowledgement is given to the Journal as the original source of publication, and that the Editor-in-Chief, *Annals of child and Youth Studies* is notified so that our records show that its use is properly authorized. Authors are themselves responsible for obtaining permission to reproduce copyright material from other sources.