International Journal of Mechanical Engineering and Technology (IJMET)

Volume 10, Issue 03, March 2019, pp. 172-182. Article ID: IJMET_10_03_017 Available online at http://www.iaeme.com/ijmet/issues.asp?JType=IJMET&VType=10&IType=3 ISSN Print: 0976-6340 and ISSN Online: 0976-6359

© IAEME Publication



YOUNG PEOPLE AND CHALLENGES OF AGRICULTURE: AN OVERVIEW OF UNDERGRADUATE STUDENTS' FARM PRACTICE PROGRAMME IN NIGERIA

RASAK Bamidele Ph.D, ARISUKWU Ogadimma Ph.D, ADEBANJO Joseph Falaye Ph.D, ADEWARA Sunday Olabisi Ph.D

Department of Sociology, College of Business and Social Sciences, Landmark University, Omu-Aran, Kwara State

ABSTRACT

Young people who have the strength required to take up agriculture shy-away from the work, leaving it to an ageing and dying population of old farmers, the continuation of this will force us to wonder what the fate of agriculture would be in Nigeria. Agricultural development specialists and policymakers around the world are concerned with the fact that young people are not interested in agriculture, as agriculture is very crucial to the current economic status of Nigeria. A sample of 384 respondents from the population was drawn using multistage sampling method and 40 in-depth interviews. Five research questions were raised in the study and two hypotheses were generated and tested (at 0.05 level of significance) using the chisquare inferential statistical method. Data were collected using a well-structured questionnaire; the research design was a descriptive survey. While the theories used for this research are the social exchange and rational choice theory. The major finding of the research showed there is no significant relationship between the sociodemographic characteristics of young people and their level of involvement in farm practice, while there was a significant relationship between the benefits attached to farm practice and the level of students' involvement.

Keywords: Agriculture, Young People, Farm Practice, Farming, Agricultural development.

Cite this Article: RASAK Bamidele Ph.D, ARISUKWU Ogadimma Ph.D, ADEBANJO Joseph Falaye Ph.D, ADEWARA Sunday Olabisi Ph.D, Young People and Challenges of Agriculture: An Overview of Undergraduate Students' Farm Practice Programme in Nigeria, *International Journal of Mechanical Engineering and Technology*, 10(3), 2019, pp. 172-182.

http://www.iaeme.com/IJMET/issues.asp?JType=IJMET&VType=10&IType=3

1. INTRODUCTION

Nigerian farmers are ageing and younger ones are not interested in filling their gaps, leaving uncertain future as many farms are concentrated in the hands of the aged farmers. According to World Bank (2016), agricultural development is one of the most powerful tools to end extreme poverty, boost shared prosperity and feed 9 billion people by 2050. Growth in the agriculture sector is about two to four times more effective in raising incomes among the poorest compared to other sectors. This is important because 78 percent of the world's poor lives in rural areas and depend largely on farming to make a living. The report further posit that Agriculture is also crucial to economic growth: it accounts for one-third of gross-domestic product (GDP) and three-quarters of employment in Nigeria. Report has it that about 70 million people died in famines during the 20th century.

Agricultural development specialists and policymakers around the world are concerned that young people are not interested in taking up farming. Agriculture holds no prestige and young people taking it up as a livelihood are not considered success stories in their various communities (Paisley, 2014). The International Fund for Agricultural Development (2013) recognizes that in many developing countries young people comprise a large proportion of the population, with only few among this large proportion of the population participating in agriculture (Essiet, 2014).

The Farm practice structure in Nigeria agricultural sector have not changed in generations. Lack of support to improve productivity and bring innovation into the sector has in many ways pushed our young people away from business opportunities in agriculture and into more attractive sectors like information and communication technology (ICT) or finance. Given agriculture's major role in our economy, it has significant potential to provide solutions to the current problems of unemployment in the country and slow the pace of rural-urban migration; as such there is an urgent task at hand. Therefore, there is need on how leaders in agricultural development, policymakers and professionals can articulate new visions of agriculture that will be attractive to young people and align with their aspirations and interests (Alex, 2012).

The rate at which young people participate in farm practice is a pre-condition for success in any developmental programme to boost the economy of this nation. The rate at which young people participate in farm practice (FMP) means their voluntary involvement in Agrorevolution. It depicts a process by which young people are provided with opportunity to make inputs in the agriculture sector of this country and work actively with others to solve the present economic problems. Shittu (2008), opined that government programmes tend to fail partly because the benefiting parties are not sufficiently involved, thereby causing wastage of resources.

Young people by their very education, talent, innovation, energy, openness to new agricultural techniques and technology, are better poised to be more effective and efficient agricultural producers. Thus, they are able to combat the devastating food insecurity ravaging Nigeria. The drive to attain self-sufficiency and exportation of key agro-produce in a bid to boost our national economy can only be possible through youth engagement in agriculture.

2. PROBLEM

Nigerian government had initiated a plethora of programmes and policies over the past years, which all aimed at restoring agricultural sector to its pride of place in the economy. However different endeavours at advancing venture and fare broadening in the farming sector have not yielded considerable profit. The tremendous diversification in investment and export potentials for generating more eminent growth in the economy sector of Nigeria have

remained unlocked and unexploited in agriculture due to some constraining factors that must be removed.

Government is facing a great challenge in the involvement of young member of the society in agricultural practice. Therefore, decision on how to make young people participate more in agriculture must be made in other to increase agricultural inputs, outputs and productivity, to raise income as well as increase the contribution of agriculture to national economic growth. A number of farm practice development programmes has been initiated by government and non-governmental organizations in the past to arrest the decline in farm practice most especially among young members in the society, none has been carried out with regards to university undergraduate, and this is a gap in knowledge, which this study intends to fill.

It is against these background, that this study was carried out to ascertain whether or not there is any benefit attached to students' involvement in farm practice section; the perception of students towards the landmark university farm practice programme; challenges landmark university students faced during farm practice section and the coping strategies adopted and finally what determines landmark university students' confidence and attitude towards farm practice programme.

Different individuals have characterized Agriculture in various ways. However, the basic among these definitions is the one that defines it as the creation of sustenance, nourish, fiber and different products by the precise developing and collecting of plants and creatures. Agriculture is derived from two Latin words 'Ager' and 'Cultura'. 'Ager' implies land or field and 'Cultura' implies cultivation. It is also refers to as the science of producing crops and domesticated animals from the natural assets of the earth. The primary aim of agriculture is to cause the land to produce more abundantly, and at the same time, to protect it from deterioration and misuse. It is synonymous with farming—the production of food, fodder and other industrial materials (Chandrasekaran, 2010).

3. BRIEF REVIEW OF LITERATURE

3.1. Agriculture in Nigeria

Agriculture has its place in the history of the nation; this is the reason for the 'green' in the flag, and the progressive roles it has played. When talking about the history of agricultural sector in Nigeria it is intertwined with its political history. According to Ayoola (2001), Food and Agricultural Organisation (2004), it can be best explained in the context of the varying constitutional frame works, that is; pre-colonial, colonial, and post-colonial era.

According to Nigeria's national youth development policy (2016), the youth comprises all young persons of age 18-35, who are citizens of the federal republic of Nigeria. This category represents the most active, the most volatile and yet vulnerable segment of the Nigeria population.

3.2. Conceptualizing Young People

According to the United Nations Education, Scientific and Cultural Organization (UNESCO, 2016), 'Young people' is best understood as a period of transition from the dependence of childhood to adulthood's independence and awareness of our interdependence as members of a community. Young people are a more fluid category than a fixed age-group. However, age is the easiest way to define this group, particularly in relation to education and employment. Therefore 'young people' is often indicated as persons between the age where he/she may leave compulsory education, and the age at which he/she finds his/her first employment. This

latter age limit has been increasing, as higher levels of unemployment and the cost of setting up an independent household puts many young people into a prolonged period of dependency. The United Nations (UN), for statistical consistency across regions, defines 'youth', as young people between the ages of 15 and 24 years. All UN statistics on youth are based on this definition, as illustrated by the annual yearbooks of statistics published by the United Nations system on demography, education, employment and health.

The United Nations Education, Scientific and Cultural Organization (UNESCO) will then adopt the definition of "young people" as used by a particular Member State. It can be based for instance on the definition given in the African Youth Charter where "youth" means "every young person between the ages of 15 and 35 years".

3.3. Involvement of Young People in Agriculture

It was reported by Farming-First a coalition of multi-stakeholder organizations (2013), that engaging youth in agriculture has been a prominent topic recently and has risen up the development agenda, as there is growing concern worldwide that young people have become disenchanted with agriculture. With most young people – around 85% – living in developing countries, where agriculture is likely to provide the main source of income it is vital that young people are connected with farming. Another study on the 'Role of Youths in Agricultural Development' in Makurdi Local Government Area of Benue State, conducted by Daudu, et al. (2009), shows that young people play important roles in the supply of labour, donation of materials, initiating of projects, attend meetings punctually and use initiatives to gain outside help.

Agriculture as used in this study is the science, the art and the business of producing crops and the livestock for economic purposes in the society.

Also, participation of young people in community based non-formal rural youth agricultural programmes is mainly in youth organizations which includes, age grades, local social clubs and young farmers organization. The study highlighted some problems that inhibit young people's participation in agricultural activities were lack of commitment, lack of logistic support and lack of land ownership. It was recommended that a robust relationship between agencies interested in encouraging youth involvement in agriculture should be evolved through legislation and implementation of policies to guarantee training programmes, credit facilities and land accessibility to young people at the identified rural youth organizations. This will enhance young people's involvement and catalyze agricultural development (Daudu, Okwoche, & Adegboye, 2009).

3.4. Challenges of Agriculture in Nigeria

Nigeria is endowed with a large expanse of land that can work perfectly to supply all agriculture needs of the country and feed her citizens quite alright. According to Furlong (2013) the population of Nigeria is yet another factor that can help in promoting agriculture, with Nigeria youth accounting for over 33,652,000, which is equally on record that over 50% of Nigeria's 180 million populations is unemployed. If only this huge workforce can be diverted towards agriculture then Nigeria would be leading the world in food production. Regardless of the factors that seem to be working in favour of Nigeria in terms of agriculture, it is unfortunate that Nigeria is still lagging behind in the production of rice and other varieties of agricultural products to feed her population. Here are some of the problems militating against agriculture in Nigeria as written by Vasanth, (2010). (a) Soil Infertility (b) Irrigation Problems (c) Food Processing Issues (d) Impact of Imported Food (e) Lack of Investment (f) Land Tenure Problem

3.5. Theoretical framework- Social Exchange theory and Rational Choice theory

In this study the reason for Landmark University students' involvement in farm practice programme is anchored on rationally, prudency, logic, and cost-benefit analysis, this is the reasons for adopting the Social Exchange and Rational Choice theory.

3.6. Social Exchange Theory

Social exchange theory is a social psychological and sociological perspective that explains social change and stability as a process of negotiated exchanges between parties. Social exchange theory posits that human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. The theory has roots in economics, psychology and sociology. Sociologist George Homans (1961) defined social exchange as the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons. Thibaut and Kelley (1959) opined that human nature include the following:

- i. Humans seek rewards and avoid punishments.
- ii. Humans are rational beings.
- iii. The standards that humans use to evaluate costs and rewards vary over time and from person to person.

3.7. Rational choice theory

The Rational choice theory, also known as choice theory or rational action theory is a framework for understanding, explaining and often formally modeling social and economic behaviour. The basic premise of rational choice theory is that aggregate social behaviour results from the behaviour of individual actors, each of whom is making their individual decisions. The theory also focuses on the determinants of the individual choices. Rational choice theory then assumes that an individual has preferences among the available choice alternatives that allow them to state which option they prefer. The rational agent is assumed to take account of available information, probabilities of events, and potential costs and benefits in determining preferences, and to act consistently in choosing the self-determined best choice of action.

4. METHODS

The research designs for the study were both survey and exploratory in nature. The study was conducted in Landmark University (LMU) which is located at Km 4, Ipetu Road, Omu-Aran, Kwara State, Nigeria and was established on March 21, 2011. Landmark University was purposive selected base on it proprietor's based philosophy and vision of high quality teaching and research activities in all human endeavours with a special focus of breaking new ground through spearheading an agrarian revolution on the African Continent. To address the specific objectives of the study, using Cochran's (1977) formula for selecting sample size, a sample of 384 respondents from the population was drawn using a Multistage Sampling method (purposive, accidental sampling stratified sampling method) and 40 in-depth interviews. Data were collected using a well-structured questionnaire. Five research questions were raised in the study and two hypotheses were generated and tested (at 0.05 level of significance) using the chi-square inferential statistical method.

Table 1 below shows that respondents within age 15 to 20 years were 176 (45.8%), respondents within 21-25 years were 177 (46.1%), and respondents within 26-30 years were 31 (8.1%), while no respondent was within 31 years and above. This shows the age-range of the respondents in Landmark University. This indicates that most of the respondents (students) were young people. The percentage of the male respondents (46.9%) is closer to

that of female (53.1%) with the total number of 180 for male and 204 for female. Based on this table, the dominant sex among the respondents was the females. The study shows that 166 (43.2%) respondents were from the Yoruba ethnic group, 93 (24.2%) were Igbo, 44 (11.5%) were Hausa, while the remaining 81 (21.1%) were from the other minority ethnic groups (Edo, Ijaw, Urhobo Igala, Itsekiri, etc.) in Nigeria. Therefore, it could be elicited that the Yoruba ethnic group forms the majority ethnic group among Landmark University students. This could be attributed to the fact that it is within their territory the institution is located.

The table below further shows that from the College of Agricultural Sciences 128 (33.3%), of the respondents were selected, 124 (32.3%) of the respondents selected for the sample are from the College of Business and Social Sciences, while 132 (34.4%) are from the College of Science and Engineering. It is observed that 78 (20.3%) of the respondents for the study are from 100 level, 86 (22.4%) are from 200 level, 78 (20.3%) are from 300 level, 84 (21.9%) are from 400 level while 58 (15.1%) are from 500 level. This implies that most of the respondents used for this study are from the College of Science and Engineering and 200 Level respectively, this may be attributed to the sampling types adopted for the study.

5. RESULT OF FINDINGS

Table 1 Distribution of Respondents' socio-demographic characteristics

Variables	Frequency	Percentage
Sex	1,000	
Male	180	46.9
Female	204	53.1
Total	384	100
Age		
15-20	176	45.8
21-25	177	46.1
26-30	31	8.1
31-above	0	0
Total	384	100
Marital status		
Single	384	100
Married	0	0
Divorced/Separated	0	0
Total	384	100
Ethnic Group		
Yoruba	166	43.2
Igbo	93	24.2
Hausa	44	11.5
Others	81	21.1
Total	384	100
Religion		
Christianity	383	99.7
Islam	1	0.3
Total	384	100

Variables	Frequency	Percentage
Levels		
100	78	20.3
200	86	22.4
300	78	20.3
400	84	21.9
500	58	15.1
Total	384	100
College		
CAS	128	33.3
CBS	124	32.3
CSE	132	34.4
Total	384	100

Source: Field survey (2017)

Table 2 Distribution showing benefits students' attached to farm practice section

Category	Frequency	Percent %	
Yes	246	64.1	
No	138	35.9	
Total	384	100.0	

Source: Field survey (2017)

Table 2, above reveals the distribution of respondents based on the benefits attached to farm practice, 246 (64.1%) of the respondents indicated that there are benefits attached to farm practice, while 138 (35.9%) of the respondents were of the opinion that there are 'no' benefits attached to farm practice. This implies that there are some kinds of benefits attached to farm practice. In the course of IDI, with regards to benefits attached to farm practice, a respondent, who was a two hundred student in the College of Business and Social Sciences, corroborate the above findings when he said:

I strongly believe that there are benefits attached for involving in farm practice, foremost to these benefits is the academic benefits; I can tell you that majority of the students would not attend farm practice without these benefits attached, that is most students attend farm practice because of the benefits they will get for attending (IDI/Male/200L/CBS/2017)

From the response above, it is obvious that this benefit is very important to Landmark University students' academic performance. To further buttress how students perceived farm practice, a student in her 4th year in the College of Agricultural Sciences, averred that:

These benefits are very important to Landmark University students' academic performance, if not, most students will not attend farm practice, also, I strongly agreed with other students who states that farm practice is stressful and time consuming. (IDI/Female/400L/CAS/2017)

These responses, suggest that most students attend farm practice because of the benefits they will get for attending, also, students of Landmark University see it as a stressful activity which is also time consuming, despite the fact that instructors do come early for the programme and students are subjected to long hours of standing during the programme. A respondent from College of Science and Engineering asserted that:

Farm practice programme is important, since it enhances our knowledge on agriculture and is relevance to our course (IDI/Female/500L/CSE/2017)

This response suggested that the students were aware of the relevance of farm practice to their various discipline.

Category	Frequency	Percent %
High	107	27.9
Moderate	199	51.8
Low	78	20.3
Total	384	100.0

Table 3 Respondents' on view challenges of farm practice programme

Source: Field survey (2017)

Table 3, reveals perception level of the challenges faced by students in the course of their involvement in farm practice programme, 107 (27.9%) of the respondents evaluated the challenges faced by students as high, 199 (51.8%) says is moderate, while, 78 (20.3%) of the respondents evaluated the challenges faced by students as low. From the responses above, it is clear that the nature of farm practice could lead to stress due to long hours of standing by the students, as observed by a 400 level student from the College of Agricultural Sciences. Hence, leading to care free attitude by the students and harassment from the instructors, which may in turn placed the farm practice programme at risk. This is contrary to the response from a 200 Level male respondent in the College of Business and Social Sciences during an IDI session. He asserted that:

I strongly disagreed that students are subjected to long hours of standing, harassed, expresses carefree attitude towards farm practice and see farm practice to be a stressful activity and time wasting (IDI/Male/200L/CBS/2017)

Furthermore, a 100 Level Student from the College of Science and Engineering said:

I agreed that students are vulnerable to diseases during farm practice, but disagree that going for farm practice is a waste of time, and that students are harassed by the instructors. Whenever there are issues concerning a students and any instructor, the first point of call is the Programme coordinator, and if the student is not satisfied, he/she will have to bring the chairman of the programme in (IDI/Male/100L/CSE/2017).

These responses suggest that the students are aware of the academic relevance of the programme and, since no special treatment is accord any student; students are constantly expected to be at their best and can sometimes be subjected to long hours of standing as well as harassed by the instructors of the programme. Thus, most of these students could be described as expressing carefree attitude, or attending the programme out of necessity or bidding their time in order to avoid sanction.

Table 4, presents the perceived level of respondents coping strategies. The result showed that 64.8% of the respondents that cut across the three colleges were of the opinion that they come very early for farm practice in order to sign the attendants register and be aware of where the groups will be carrying out their day assignment, while 35.2% of them were of the opinion that they did not come early for farm practice.

Table 4 Strategies adopted by respondents in coping with the challenges of farm practice programme

G4 4 4	Firms				
Statements	CAS	CBS	CSE	Frequency (%)	
I come very early for farm practice					
Response	Frequency (F=128)	Frequency (F=124)	Frequency (132)	Total (384)	
Yes	72(56.3%)	79(63.7%)	98(74.2%)	249(64.8%)	
No	56(43.7%)	45(36.3%)	34(25.8%)	135(35.2%)	
I listen attentively at farm practice lectures					
Yes	77(60.2%)	75(60.5%)	89(67.4%)	241(62.8%)	
No	51(39.8%)	49(39.5%)	43(32.6%)	143(37.2%)	
I depend on my mate for farm practice note					
Yes	66 (51. 6%)	56(43.8%)	79 (59.8%)	201(52.3%)	
No	62 (48.4%)	72 (56.2%)	53(40.2%)	183 (47.7%)	
I do other things during farm practice (gossip)					
Yes	41 (32.0%)	61 (49.2%)	68(51.5%)	170 (44.3%)	
No	87 (68.0%)	63 (38.8%)	64(48.5%)	214 (55.7%)	
In all, how would you evaluate your coping strategies					
Good	69(53.9%)	64(51.6%)	77(58.3%)	210(54.7%)	
Poor	59(46.1%)	60(48.4%)	55(41.7%)	174(45.3%)	

Source: Field survey (2017)

On whether the respondents listen attentively at farm practice lectures, 62.8% of them said "Yes", while 37.2% indicated "No. This implies that despite the fact that the students come early for farm practice, they also pay attention to the lectures. This was corroborated by one of the instructors in the College of Business and Social Sciences during an IDI session. According to him:

There is no problem with regards to the students attendants register since majority of them come early for the programme and majority of them also participate well during the lecture (IDI/Male/Instructor/CBS/2017)

The result showed that 52.3% of the respondents that cut across the three colleges were of the opinion that they depend on their mates for farm practice notes, while 47.7% of them were of the opinion that they did not depend on their mate for farm practice notes. This is contrary to the response from a 200 Level male respondent in the College of Business and Social Sciences during an IDI session, who said that students' do not expresses carefree attitude towards farm practice.

The finding further shows that 32.0% of respondents from CAS, 49.2% in CBS, and 51.5% in CSE agreed that they gossip during farm practice hour as part of their coping strategies. A careful observation shows that majority of students in CSE claimed to gossip during farm practice as compared to respondents in CAS and CBS. This may be as a result of flexibility in supervision by the instructors for students in these colleges. In other words, though majority of the students tends to agree on the benefits attached to the programme, they differ in terms of style of supervision by the instructors. Furthermore, the study revealed that 54.7% of the respondents noted that their coping strategies generally were "good", while 45.3% noted that their coping strategies were "poor". This suggests that these coping strategies adopted by the students have brought about better deployment and development of their labour power and interest.

6. DISCUSSION

Findings from this study confirmed the theoretical framework for the study. The theoretical positions of Social Exchange and Rational Choice theories were understood in the context of the findings. The study showed that, Landmark University students' involvement in the farm practice programme is based on a subjective cost-benefit analysis and the comparison of alternatives. That is, students analyzed the efforts they put in the farm practice and the kind of reward they get for working on the farm with other alternatives, such as gossiping or even engaging themselves in other relevant or irrelevant activities. Analysing social exchange theory, the study revealed a dynamic relation in students' emotions that is, when students get emotional satisfaction due to different reward situations; those who receive more than they anticipate or do not receive any anticipated punishment will be happy and will behave approvingly.

Students may also rationally choose what part of the farm practice activities to participate in, whether the fishery aspect, planting, tractor or the poultry aspect; this choice may be based on a cost-benefit decision. Based on the rational theory these shows that students' involved in farm practice programme is not just by chance or a random decision but it is seen as a well-planned and analysed act based on rational thinking by weighing the cost and benefits of the possible outcome. This finding shows that what determines landmark university students' confidence and attitude towards farm practice programme is base on their rational decision with regards to cost-benefit analysis rather than being influence by their friends.

7. RESULT ON TEST OF HYPOTHESIS

Using SPSS, the findings reveals that the p-value is greater than α , that is 0.912 is greater than 0.05 null hypotheses is accepted. Hence, there is no significant relationship between young people's socio-demographic characteristics and their level of participation in farm practice. Also, for the second hypothesis, p-value is less than α that is 0.001 is less than 0.05 null hypotheses were rejected. Hence, there is a significant relationship between student's involvement in farm practice and the benefits attached.

8. CONCLUSION

From the findings of this study, the following conclusions were made. The socio-demographic characteristics of landmark University students do not determine their level of involvement in farm practice. It was also discovered that not all the students are aware of the benefits involved in farm practice, but those who are aware of these benefits attends farm practice base on the benefits they get for participating. It could also be stated that from the study most students strongly agreed that the farm practice programme should be certificated and that it expunged from the school curriculum.

There is a significant relationship between student's involvement in farm practice and the benefits attached and that these benefits are very important reason why students attend farm practice programme. They perceived the programme to be a stressful activities and time consuming, thereby showing some elements of carefree attitude towards the programme, despite the fact that most instructors do come early for the programme and there were no evident of an instructor harassing any student. Students were of the opinion that they were subjected to long hours of standing during the farm practice exercise.

Finally, there were strong assumptions that students may be vulnerable to diseases during farm practice exercise. Majority of the respondents disagree that going for farm practice is a waste of time that the credit unit attached to farm practice should not be increased to 2 units

and that the exercise should be more of practical rather than theoretical. Also, there are indications that the time allotted for the exercise should be reduced from 3hours to 2 hours.

REFERENCES

- [1] Agricultural Development (2013)
- [2] Alex, S. (2012). Attracting Africa youths to agriculture: the way forward.
- [3] Ayoola G.B. (2001). Essays on the Agricultural Economy: A Book of Readings on Agricultural
- [4] Policy and Administration in Nigeria. Ibadan, Nigeria: TMA Publishers
- [5] Chandrasekaran, B. (2010). A Textbook of Agronomy.
- [6] Cochran, W. G. (1977). Sampling Techniques (Third ed.). Wiley. ISBN 0-471-16240-X.
- [7] Daudu, S., Okwoche, V. A., & Adegboye, O. G. (2009). Role of Youths in Agricultural Development in Makurdi Local. *Journal of Agricultural Extension*, 1-6.
- [8] Essiet, D. (2014). How to engage youths in agric. Retrieved from The Nation Nigeria
- [9] Food Agricultural Organization (2010)
- [10] Furlong, A. (2013) Youth Studies: An Introduction. London: Routledge, 300 pp.
- [11] Homans, G. (1961). *Social Behaviour: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.
- [12] Multi-stakeholder Organization (2013)
- [13] National Baseline Youth Survey (2012)
- [14] National Bureau of Statistics (NBS) (2016)
- [15] National Bureau of Statistics (NBS) (2017)
- [16] National Population Commission (NPC) (2016)
- [17] Oxfam International (2017)
- [18] Paisley, C. (2014). Involving Young People in Agricultural. palawija newsletter.
- [19] Shittu.S. B. (2008). A Textbook of Agronomy. New York City: New Age International.
- [20] Thibaut, J.W. Kelley, H.H. (1959). *The social psychology of group*. Wiley, New York.
- [21] United Nations Educational, Scientific and Cultural Organization (UNESCO) (2016)
- [22] Vasanth (2010), Agricultural Issues and Problems in Nigeria, ed. R. Scudder: Bright Hub.
- [23] World Bank (2016). Findings. Good Practice Info brief. Africa Region No. 83. December.
- [24] Washington D.C.: World Bank.