Influence of Agricultural Education Programme in Revamping Young Farmers Club for Food Security in Rivers State

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Abstract—This study focused on the Influence of Agricultural Education Programme in Revamping Young Farmers Club for Food Security in Rivers State. A descriptive survey design was adopted for the study. The population of this study comprised eleven (11) and thirteen (13) Agricultural Educators in Rivers State University and Ignatius Ajuru University of Education respectively. Due to the fact that the population was manageable, the entire population was adopted for this study, hence, there was no sampling technique adopted for this study. The instrument used in collecting data was a survey questionnaire titled "Influence of Agricultural Education Programme in Revamping Young Farmers Club" which was structured in four-point rating scale of agreement. This instrument was subjected to face validity by two experts in the Department of Agricultural Education in Rivers State University. Thereafter, Cronbach Alpha was used to establish the reliability of the instrument. The reliability coefficient achieved was 0.82. Mean and Standard Deviation were used to answer the research questions while t-test statistical tool was used to test the hypotheses. This study found that Agricultural Education Programme could revamp young farmers club through conducting orientation programs for new students on young farmers club, organizing symposium on importance of young farmers club, organizing conferences on young farmers club, organizing seminars on young farmers club and advertorial on young farmers club. Provision of educational support by: conducting practical for members, equipping future farmers susceptible to new ideas and modern practice, extension training on entrepreneurship, providing vital information to boost the interest of potential farmers, extension training on leadership, introducing potential farmers to farmers cooperative, creating and coordinating communication of agricultural potentials, by motivating members through allotment of time for young farmers club meetings, regular visit of agricultural educators to young farmers club meetings, supervision among others. It was recommended that there should be orientation programme for every year one student in the Department of Agricultural Education so that they could be abreast with the benefits of becoming member of young farmers club. If this is done, it will help to increase the number of students in the club.

Keywords—Agricultural Education Programme, Food Security, Revamping & Young Farmers Club.

I. INTRODUCTION

Food is a substance that is necessary for human survival. Basically, its conservation is one issue that has generated so much concern and as such it is regarded as food security. The term food security was originally used to describe whether a country has access to enough food to meet dietary energy requirements (Pinstrup-Anderson, 2009). The most acceptable definition of food security derives from the 1996 World food summit plan of action which described food security as a state in which people, at all times have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences of an active and healthy life (Coates, 2013).

Food security is contingent on three basic parameters—availability, accessibility and affordability. Availability comes from production and related aspect of productivity that sustains a desire level of production, accessibility is about distribution (Krishnaraj, 2005). Food security depends not only on the availability of food but also its nutritional quality. If global food security is to be attainable and sustained, a multidimensional approach must be used in formulating and implementing an appropriate strategy. This
is to say that achieving sustainable food security will require more than improving farm productivity and profitability while maximizing environmental impact. The concept is broader than sustainable agriculture. Achieving food security needs policies and investment reforms on multiple fronts including human resources, agricultural research, rural infrastructure, water resources, farm and community-based agriculture and natural resource management. From the foregoing, one of the ways of achieving food security could be through agricultural education.

Agricultural Education is an educational programme that has contributed and is still contributing in terms of providing manpower who will pilot the agricultural sector in Nigeria. Egbule (2004) described agricultural education as the process of training learners in the process of agricultural productivity as well as the techniques for the teaching of agriculture. Agricultural education is a systematic programme of instruction for public school leavers, out-of-school and post-secondary youth, and established farmers, organized for the purpose of improving agricultural methods and rural living (Umoh, 2006). Agricultural education according to Onuekwusi and Okorie (2000) encompasses farming and agro-allied business organizations which includes services and sales in agriculture. Agricultural education was inculcated into the school curriculum for learners to acquire knowledge and skills as to meet the basic food production needs of the society as well as production of raw materials for industrial use (Federal Republic of Nigeria, 2013). Agricultural education programme enhances improvement of traditional agriculture and concentrates on the training of essential skills that are crucial to the success of people entering a career in agriculture.

To achieve the aims and objectives of Agricultural Education Programme, it has been structured in a way that students upon graduation would be able to function optimally, which will, in turn, have great impact on food production in the country. Therefore, Agricultural Education Programme is composed of three distinct components which include the classroom instruction which takes place in the classroom setting, supervised agricultural experience which takes place in the field and Future Farmers Association which involves the development of leadership skills in agriculture.

For instance, in some countries, Agricultural Education students aside from curricula activities are exposed to other extra-curricular activities that provide students with leadership skills and other necessary skills that will add to classroom instruction in order to function as expected. Unlike in the past, Agricultural education no longer provides vocational training exclusively for students who want to become farmers or intend to pursue a career in the agricultural industry after graduation from school (Talbert, Vaughn & Croom, 2007). In a country as Nigeria, the importance of Agriculture cannot be latent especially as there is a dire need to revitalize the nation’s agricultural sector to be able to be at par with the non-agricultural sector currently front lining the economy of the nation. Agriculture has in recent times lost its role as a national provider of raw material to industries as well as foreign exchange to the country as stated by Shaib Aliyu, and Bakshi, (1997) and Idachaba (2006). Mainly this is as a result of the aging population of farmers as stated by Ogunbameru (1998). The involvement of youths in agricultural production through youths-in agriculture programs, such as young farmers’ club (YFC) program, can contribute significantly to expected increase in agricultural production and improved rural life (Amadi & Ekezie, ).

A young farmers’ club (YFC) is an organization in which young people, aged between nine and twenty-five years, are engaged in learning about farming and homemaking techniques (Ogunbameru, 1998). Young farmers’ club as described by Amadi and Sunday (2016) is an organization where boys and girls are encouraged to learn about contemporary techniques in farming under the tutelage of agricultural teachers and extension workers. A successful YFC programme is beneficial to the participating youths, the family, local government and country as a whole. The YFC is a government strategy for involving youths in agriculture (Mbanaso Ajayi, Ironkwe & Onunka, 2013). Members also have the potentiality of generating income and disseminating improved agricultural technologies to their parents and other farmers because they have more trust in them than in the formal extension agents (Adekonle, 2001). It may be in-school or out-of-school. The in-school club lays emphasis on both theoretical and practical agriculture, while greater emphasis is placed on practical agriculture in the out-school club. This is premised on the principle of learning by doing (Eastern State of Nigeria Ministry of Agriculture, 1964).

Basically, a Young Farmers Club is established to: help boys and girls develop ideals for better farming, home-making and rural community development; give informal training in agriculture; provide social and recreational activities; make boys and girls better citizens, and to encourage and practice thrift. It is also established to encourage team work, encourage boys and girls to use their leisure prudently, promote patriotism, reduce juvenile delinquency, help give
dignity to agriculture as an occupation, develop good and competent agricultural leadership, provide an opportunity for self expression, and help raise the standard of living of rural people (Ogunfoditimi, 1984; Ajayi, 2006).

Despite the relevance of YFC in food security, this programme seemed not to be functioning effectively in schools. From the foregoing, there is a relationship between Agricultural Education Programme and YFC, which means that YFC can be revamped through effective Agricultural Education Programme for food security. According to a research by Mbanaso, Ajayi, Ironkwe and Onunka (2013), it was observed that the involvement of youths in agricultural production through youths-in-agricultural education programs, such as young farmers’ club (YFC) programme contributes significantly to expected increase in agricultural production and improved rural life. On the basis of these findings, it is recommended that government makes it mandatory for each secondary school to organize YFCs program, and create a fund similar to the Industrial Training Fund (ITF) for provision of logistic support (Mbanaso, Ajayi, Ironkwe & Onunka, 2013). Therefore, education could have a significant influence on the sustenance of YFC, especially the Agricultural Education Programme. Basically, this study has been designed to examine the influence of the agricultural education programme in revamping young farmers club for food security in Rivers State.

**Purpose of the Study**

This study examined the influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State. Specifically, this study sought to:

1. examine the public relation influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State.
2. ascertain the educational influence of the Agricultural Education Programme in revamping young farmers club for food security in Rivers State.
3. find out the motivational influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State.

**Research Questions**

1. What is the public relation influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State?
2. What is the educational influence of the Agricultural Education Programme in revamping young farmers club for food security in Rivers State?
3. What is the motivational influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State?

**Hypotheses**

The following null hypotheses were tested at a .05 level of significance:

1. There is no significant difference in the mean responses of Agricultural Educators in Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) in Rivers State on the public relation influence of Agricultural Education Programme in revamping young farmers club for food security.
2. There is no significant difference in the mean responses of Agricultural Educators in Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) in Rivers State on the educational influence of Agricultural Education Programme in revamping young farmers club for food security.
3. There is no significant difference in the mean responses of Agricultural Educators in Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) in Rivers State on the motivational influence of Agricultural Education Programme in revamping young farmers club for food security.

**II. METHODOLOGY**

This study adopted a descriptive survey design. The population of this study comprised all the Agricultural Educators in RSU and IAUE. As at the time of this study, there was a total population of 11 and 13 Agricultural Educators in RSU and IAUE respectively. Due to the fact that the population was manageable, the entire population was adopted for this study, hence, there was no sampling technique adopted for this study. The instrument used in collecting data was a survey questionnaire titled “Influence of Agricultural Education Programme in Revamping Young Farmers Club” (IAEPYFC), which was structured in four-point rating scale of agreement. This instrument was subjected to face validity by two experts in Agricultural Education in Rivers State University. Thereafter, Cronbach Alpha was used to establish the reliability of the instrument. This was achieved through purposive sampling of 8 Agricultural Educators in Federal College of Education (Technical) Omoku whose responses were correlated to give a reliability coefficient of 0.82. The instrument was further distributed by the researchers and retrieved at the spot of distribution. The data elicited from the respondents were analyzed using mean and standard deviation, while t-test was...
used to test the hypotheses. Mean scores less than 2.50 were rejected, while mean scores equal or above 2.50 were accepted.

III. RESULTS AND DISCUSSION OF FINDINGS

Research Question 1: What is the public relation influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State?

Table 1: Mean responses and hypothesis on public relation influence of Agricultural Education Programme in revamping young farmers club for food security

| S/ N | Public Relation Influence                                      | RSU Agric Educators (n=11) | IAUE Agric Educators (n=13) |
|------|-----------------------------------------------------------------|----------------------------|----------------------------|
|      |                                                                 | M  | SD | % of A | M  | SD | % of A | t-cal | t-crit | Decision |
| 1    | Conducting orientation programmes for new students on young farmers club | 3.64 | .51 | 100    | 3.54 | .52 | 100    | .47   | 2.07   | NS        |
| 2    | Organizing symposium on importance of young farmers club          | 3.45 | .82 | 81.8   | 3.38 | .77 | 84.6   | .21   | 2.07   | NS        |
| 3    | Organizing conferences on young farmers club across different schools | 3.09 | .94 | 81.9   | 3.23 | .93 | 84.7   | .37   | 2.07   | NS        |
| 4    | Organizing Seminars on Young Farmers Club                        | 3.00 | .77 | 72.8   | 3.10 | .71 | 76.9   | .33   | 2.07   | NS        |
| 5    | Advertorial on young farmers club                                 | 3.18 | .75 | 81.9   | 3.23 | .73 | 84.7   | .16   | 2.07   | NS        |

Source: field survey, 2019

Table 1 shows responses on public relation influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State. The percentage and Mean responses of RSU Agricultural Educators shows that Agricultural Education Programme could revamp YFC through the following: conducting orientation programmes for new students on young farmers club (100% and 3.64), organizing symposium on importance of young farmers club (81.8% and 3.45), organizing conferences on young farmers club (81.9% and 3.09), organizing seminars on young farmers club (72.8% and 3.00) and advertorial on young farmers club (81.9% and 3.18). Also, responses of IAUE Agricultural Educators shows that Agricultural Education Programme could revamp YFC through the following: conducting orientation programmes for fresher on young farmers club (100% and 3.54), organizing symposium on importance of young farmers club (84.6% and 3.38), organizing conferences on young farmers club (84.7% and 3.23), organizing seminars on young farmers club (76.9% and 3.10) and advertorial on young farmers club (84.7% and 3.23). Furthermore, the t-crawl for each of the variables was < the t-crit of 2.07. Therefore, all the items were accepted, which means that there was no significant difference in the mean responses of RSU and IAUE Agricultural Educators on public relation influence of Agricultural Education in revamping young farmers club for food security in Rivers State. Future farmers association was established to encourage teamwork, encourage boys and girls to use their leisure prudently, promote patriotism, reduce juvenile delinquency, help give dignity to agriculture as an occupation, develop good and competent agricultural leadership, provide an opportunity for self expression, and help raise the standard of living of rural people (Ogunfiditimi, 1984; Ajayi, 2006)

Research Question 2: What is the educational influence of the Agricultural Education Programme in revamping young farmers club for food security in Rivers State?
Table 2: Mean responses and hypothesis on educational influence of Agricultural Education Programme in revamping young farmers club for food security

| S/N | Educational Influence                                                                 | RSU Agric Educators (n=11) | IAUE Agric Educators (n=13) |
|-----|----------------------------------------------------------------------------------------|-----------------------------|-----------------------------|
|     |                                                                                       | M   | SD  | % of A | M   | SD  | % of A | t-cal | t-crit | Decision |
| 6   | Conducting practical for members                                                       | 3.45 | .52 | 100    | 3.54 | .52 | 100    | .42   | 2.07   | NS       |
| 7   | Equipping future farmers susceptible to new ideas and modern practice                  | 3.36 | .67 | 91.0   | 3.46 | .66 | 92.3   | .37   | 2.07   | NS       |
| 8   | Extension training on entrepreneurship                                                  | 3.18 | .98 | 81.9   | 3.31 | .95 | 84.6   | .33   | 2.07   | NS       |
| 9   | Providing vital information to boost the interest of potential farmers                  | 3.00 | .63 | 81.8   | 3.15 | .69 | 84.6   | .56   | 2.07   | NS       |
| 10  | Extension training on leadership                                                        | 2.91 | .94 | 72.8   | 3.31 | .75 | 84.7   | 1.14  | 2.07   | NS       |
| 11  | Introducing potential farmers to farmers cooperative                                    | 3.27 | .79 | 81.9   | 3.08 | .95 | 77.0   | .53   | 2.07   | NS       |
| 12  | Creating and coordinating communication of agricultural potentials                       | 2.91 | .94 | 72.8   | 3.38 | .77 | 84.6   | 1.32  | 2.07   | NS       |
| 13  | Disseminating agric information to future farmers                                       | 2.81 | .98 | 63.7   | 3.08 | .95 | 77.0   | .68   | 2.07   | NS       |
| 14  | Equipping Future farmers with modern agricultural information for productivity         | 3.09 | .83 | 72.8   | 3.23 | .83 | 77.0   | .41   | 2.07   | NS       |

Source: Field survey, 2019

Table 2 shows responses on educational influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State. The percentage and Mean responses of RSU Agricultural Educators shows that the following are Educational ways Agricultural Education Programme can revamp young farmers club: conducting practical for members (100% and 3.45), equipping future farmers susceptible to new ideas and modern practice (91.0% and 3.36), extension training on entrepreneurship (81.9% and 3.18), providing vital information to boost the interest of potential farmers (81.8% and 3.00), extension training on leadership (72.8% and 2.91), introducing potential farmers to farmers cooperative (81.9% and 3.27), creating and coordinating communication of agricultural potentials (72.8% and 2.91), disseminating agricultural information to future farmers (63.7% and 2.81) and equipping future farmers with modern agricultural information for productivity (72.8% and 3.09). Also, the responses of IAUE Agricultural Educators shows that the following are educational ways Agricultural Education Programme can revamp young farmers club: conducting practical for members (100% and 3.54), equipping future farmers susceptible to new ideas and modern practice (92.3% and 3.46), extension training on entrepreneurship (84.6% and 3.31), providing vital information to boost the interest of potential farmers (84.6% and 3.15), extension training on leadership (84.7% and 3.31), introducing potential farmers to farmers cooperative (77.0% and 3.08), creating and coordinating communication of agricultural potentials (84.6% and 3.38), disseminating agricultural information to future farmers (77.0% and 3.08) and equipping future farmers with modern agricultural information for productivity (77.0% and 3.23). Furthermore, the t-cal for each of the variables was < the t-crit of 2.07. Therefore, all the variables were accepted, which means that there was no significant difference in the mean responses of RSU and IAEU Agricultural Educators on educational influence of Agricultural Education in revamping young farmers club for food security in Rivers State. These findings corroborate with Mbanaso, Ajayi, Ironkwe, and Onunka (2013), who observed that the involvement of youths in agricultural production through youths-in-agricultural education programs, such as young farmers’ club (YFC) programme contributes.
significantly to expected increase in agricultural production and improved rural life. Research Question 3: What is the motivational influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State?

Table 3: Mean responses and hypothesis on Motivational influence of Agricultural Education Programme in revamping young farmers club for food security

| S/N  | Motivational Influence                        | RSU Agric Educators (n=11) | IAU Agric Educators (n=13) | Source: field survey, 2019 |
|------|-----------------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| 15   | Allotment of time for young farmers club meetings | 3.36                        | .67                         | 91.0                         | 3.46                         | .66                         | 92.3                         | .37                         | 2.07                         | NS                           |
| 16   | Regular visit of Agricultural Educators to young farmers club meetings | 3.27                        | .79                         | 81.9                         | 3.38                         | .77                         | 84.6                         | .34                         | 2.07                         | NS                           |
| 17   | Supervision                                  | 3.27                        | 1.01                        | 81.8                         | 3.38                         | .96                         | 84.6                         | .27                         | 2.07                         | NS                           |
| 18   | Funding                                      | 3.09                        | .70                         | 81.8                         | 3.32                         | .73                         | 84.7                         | .48                         | 2.07                         | NS                           |
| 19   | Provision of equipment for practical activities | 3.18                        | .75                         | 81.9                         | 3.31                         | .75                         | 84.7                         | .42                         | 2.07                         | NS                           |
| 20   | Provision of agricultural inputs             | 2.91                        | 1.04                        | 63.7                         | 3.08                         | 1.04                        | 69.3                         | .40                         | 2.07                         | NS                           |
| 21   | Organizing excursions exercise               | 3.27                        | .79                         | 81.9                         | 3.38                         | .77                         | 84.6                         | .34                         | 2.07                         | NS                           |

Table 3 shows responses on motivational influence of Agricultural Education Programme in revamping young farmers club for food security in Rivers State. The percentage and Mean responses of RSU Agricultural Educators shows that the following are motivational ways Agricultural Education Programme can revamp young farmers club: allotment of time for young farmers club meetings (91.0% and 3.36), regular visit of agricultural educators to young farmers club meetings (81.9% and 3.27), supervision (81.8% and 3.27), funding (81.8% and 3.09), provision of equipment for practical activities (81.9% and 3.18), provision of agricultural inputs (63.7% and 2.91) and organizing excursion exercise (81.9% and 3.27). Also, the responses of IAU Agricultural Educators showed that the following are motivational ways Agricultural Education Programme can revamp young farmers club: allotment of time for young farmers club meetings (92.3% and 3.46), regular visit of agricultural educators to young farmers club meetings (84.6% and 3.38), supervision (84.6% and 3.38), funding (84.7% and 3.23), provision of equipment for practical activities (84.7% and 3.31), provision of agricultural inputs (69.3% and 3.08) and organizing excursion exercise (84.6% and 3.38). Furthermore, the t-cal for each of the variables was < the t-crit of 2.07. Therefore, all the items were accepted, which means that there was no significant difference in the mean responses of RSU and IAEU Agricultural Educators on motivational influence of Agricultural Education in revamping young farmers club for food security in Rivers State. The findings in line with Egbule (2004) who observed that it is in the capacity of agricultural education programme to provide motivational environment that could gear boys and girls to farming.

IV. CONCLUSION

This study deduced that Agricultural Education Programme could revamp YFC through public relation by conducting orientation programs for new students on young farmers club, organizing symposium on importance of young farmers club, organizing conferences on young farmers club, organizing seminars on young farmers club and advertorial on young farmers club. Also, Agricultural Education Programme could revamp YFC through public relation by providing motivative support by conducting practical for members, equipping future farmers susceptible to new ideas and modern practice, extension training on entrepreneurship, providing vital information to boost the interest of potential farmers, extension training on leadership, introducing potential farmers to farmers cooperative, creating and coordinating communication of agricultural potentials, disseminating agricultural information to future farmers and equipping future farmers with modern agricultural information for productivity. Furthermore, Agricultural Education Programme could revamp YFC by motivating members through allotment of time for young farmers club.
meetings, regular visit of agricultural educators to young farmers club meetings, supervision, funding, provision of equipment for practical activities, provision of agricultural inputs and organizing excursion exercise.

V. RECOMMENDATIONS
The following recommendations were made in this study:
1. Agricultural Education Department should introduce YFC so that students through the programme can help in acquiring leadership and other skills that would help them grow in their profession.
2. There should be an orientation programme for every year one students in the Department of Agricultural Education so that they could be abreast with the benefits of becoming member of YFC. If this is done, it will help to increase the number of students in YFC.
3. Agricultural Education Educators should always provide both educational and motivational support to YFC so that it will help in motivating the students to put in their best towards sustaining the club.

REFERENCES
[1] Ajayi, A.R. (2006): A Guide for Young Farmers Club program. Akure: SAC Publishers
[2] Amadi, N. S. & Ekezie, A. I. A. (2018). Influence of Vocational Agricultural Education (VAE) on Poverty Reduction among Youth in Rivers State. International Journal of Agriculture and Earth Science 4(1) 34-41.
[3] Amadi, N.S & Sunday, B. (2016). Role of Agricultural Education in Nation Building. Journal of Agriculture, Socioeconomics and Sustainable Environment 4(1):11-16
[4] Coates, J. (2013). Build it back better: Deconstructing food security for improved measurement and action. Global Food Security, 2 (3), 188-194. (available at http://dx.doi.org/10.1016/j.gfs.2013.05.002).
[5] Eastern State of Nigeria Ministry of Agriculture and Natural Resources (1964): Young Farmers Club Organization Handbook. Enugu, pp. 1-12.
[6] Egbule, P.E (2014). Fundamental and Practice of Agriculture practice, Owerri: Totan Publishers Limited.
[7] Federal Republic of Nigeria (2013). National policy on Education. Yaba-Lagos, Nigeria NERDC Press: 2013.
[8] Idachaba, F.S. (2006): Repositioning Nigerian agriculture to realize millennium development goals: whither Nigerian agriculture in the Obasanjo reform agenda? Invited keynote paper delivered at the 40th Annual Conference of the Agricultural Society of Nigeria held at the National Root Crops Research Institute, Umudike.
[9] Krishnaraj, M (2005). Food Security: How and for Whom? Economic and Political Weekly, 40(25) 2508-2512. doi:10.2307/4416779
[10] Krishnaraj, Maithreyi. (2005). Food Security: How and for Whom? Economic and Political Weekly, 40(25).
[11] Mbanso, E.O , Ajayi, A.R., Ironkwe, A.G & Onunka, N.A (2013). Appraisal of Young Farmers’ Club Programme in Abia State, Nigeria. Journal of Agricultural and Social Research 13 (1): 31-38
[12] Ogunbameru, B.O (1998): Strengthening extension programme among the youth in Agric: the young farmers club perspective. In: Terry A. Olowu (ed) Towards the Survival of Agric Extension System in Nigeria. Proceedings of the 3rd Annual National Conference of the Agricultural Extension Society of Nigeria.
[13] Ogunfidi, T. O. (1984): Rural Youth Programmes. Mimeograph, Department of Agricultural Extension, University of Ibadan, Ibadan, Oyo State, Nigeria.
[14] Onuekwusi, G. C. & Okorie, L (2008) Attitude of secondary school students in Abia State towards a career in Agriculture. Agricultural Journal, 2008: 3 (2), 102-106.
[15] Pinstrup-Andersen, Per (2009). Food Security: Definition and Measurement. Journal of Food Security 1(5): 5-7. Available at doi - 10.1007/s12571-008-0002-y.
[16] Shaib, B., Aliyu, A. and Bakshi, J. S. (1997). (eds) Nigeria: National Agricultural Research Strategy Play: 1996-2010.
[17] Talbert, B. A., Vaughn, R., Croom, D. B., & Lee, J. (2007). Foundations of agricultural education (2nd Ed.). Danville, IL: Professional Educators Publications, Inc.
[18] Umeoh-Mac (2006) Handbook on youth Organizations in agricultural education. Abuja: Hil-venture publishers.