Entrepreneurial Skills Required by Unemployed Youths in Golden Melon Production as Perceived by Teachers and Extension Agents in Nigeria

Saidu B. JIMOH

Department of Science Education Faculty of Education, University of Ilorin, Ilorin, Nigeria jimoh.bs@unilorin.edu.ng

Kayode O. AFOLABI

Department of Science Education Faculty of Education, University of Ilorin, Ilorin, Nigeria afolabi.ko@unilorin.edu.ng

Suleiman B. SHUAIB

Department of Science Education Faculty of Education, University of Ilorin, Ilorin, Nigeria shuaib.sb@unilorin.edu.ng

Emmanuel O. ADESANYA

Department of Science Education Faculty of Education, University of Ilorin, Ilorin, Nigeria adesanya.eo@unilorin.edu.ng

Abstract

This study investigated into the entrepreneurial skills required by unemployed youths in golden melon production as perceived by teachers and extension agents in Nigeria. The research type adopted for this study was the survey research type. Three research questions and three research hypotheses guided the study. The population of the study was 73; made up of 37 teachers of agricultural science in secondary schools and 36 agricultural extension agents in the state. The entire population constituted the sample because of the small size. The Entrepreneurial Skills Structured Questionnaire (ESSQ) was used to elicit relevant responses and data for this study. The study investigates the skills required by unemployed youths in planning, field management, harvesting and marketing of golden melon. The questionnaire had a 4-point response scale of Highly Required, Averagely Required, Slightly Required and Not Required. Seventy threes (73) copies of the questionnaire were administered on the respondents. The research questions formulated were analyzed using mean and Standard Deviation while the hypotheses were tested using the t-test statistic. Findings revealed that the required skills by unemployed youths in planning, field management, harvesting and marketing golden melon for sustainability were highly significant. It was therefore recommended that government and relevant agencies increase the skill capacities of unemployed youths through training and technical support. Finally, skill acquisition centers should be established and the identified occupational skills should be incorporated into the curriculum incorporation into the curriculum of the Skill Acquisition Centers, Schools and Colleges by federal, state government, and training institutes to train youths in order to empower them and reduce challenges of unemployment.

Key words: Golden melon, Skills, Planning, Production, Entrepreneur

Introduction

Golden melon (*Cucumis melo* L.) belongs to the *Cucurbitaceae* family, and is an important worldwide commodity. (FAO, 2005 & Robinson and Decker-Walters, 1999 in Nunez-Palenius, 2005). The golden melon originated in Africa and south west Asia and over time have travelled from Africa to Asia to Europe and North America. It is an important commercial crop in many countries and mostly cultivated in the temperate regions of the world due to its good adaptation to temperate soil and climate. The fruit has the taste of apple, water melon and gauva combined. It's simply the complete fruit package with a taste you might be unable to describe. The skin is edible; just like cucumber but unlike watermelon whose skin edibility is quite controversial. (Adeyeye *et al*, 2017),

Adeyeye, Akanbi, Olalekan, Lamidi, Othman, and Ishaku (2017) also informed that in Nigeria, the golden melon (also called sweet melon or honeydew melon) is mostly grown in the Southern part of the country where it is popular because of its sweet pulp and the pleasant aroma. The crop is known for its striking golden yellow colour and dense white flesh. The fruit, according to Lester and Hodges (2008) in Shivaprasad (2013), is a rich source of vitamin C, β-carotene (vitamin A), carbohydrates, sugars, protein and also traces of vitamin B6, vitamin K, niacin, vitamin B2 and vitamin B1. In addition, fruits contain more than 90%, folic acid and potassium as well as a number of other human health-bioactive compounds (Shivaprasad, 2013). It is also rich in bioactive compounds such as Phenolics, flavonoids and vitamins as well as carbohydrate and minerals especially potassium, also low in fat and calories with large amount of dietary fibre. The health benefits include: Reduce blood pressure: Potassium is able to support in controlling nerves, blood vessels and muscles contraction which further affect the blood pressure; Control cholesterol, improve cardiovascular health; Ease digestion; Manage weight; Hydrate the body; Good for skin; Support better sleep quality. (Adeyeye, et. al, 2017).

Mature fruits of golden melon cultivars are usually consumed fresh for the sweet and juicy pulp. The pulp is also mixed with water and sugar or sometimes with milk, and served as a refreshing drink or made into ice cream. Immature fruits of non-sweet types, including snake melon are used as a fresh cooked or pickled vegetable. They can also be stuffed with meat, rice and spice, and fried in oil. Sweet melon is often confused with cucumber and often used as such. The seeds are eaten after roasting they contain edible oil. The Hausa people in Nigeria grind the kernels to a paste and make it into fermented cakes. The young leaves are occasionally consumed

as a pot herb and in soups. The leafy stem and also the fruit provide good forage for all livestock. In reunion and Mauritius, a decoction of seeds and roots is used as a diuretic and vermifuge (Vossen, El Tahir & Oluoch, 2004).

Onu (2010) opined that youths are mainly secondary school leavers who have finished their six years of study in secondary schools. United Nations General Assembly report (1995) also view youths as young people of 15-24 years bracket. This age may go up to 30 years and above in developing country like Nigeria. In the context of this study, the youths are the unemployed or jobless Senior Secondary School leavers, Colleges of Education and University graduates and even drop outs inclusive.

Olukosi and Ogungbile (2015) in Muhammad (2014) defined production as the process of combining various material inputs and immaterial inputs in order to make something for consumption. Production in this context involves the successful management of agronomic practices for growing golden melon. These agronomic practices are planning, pre-planting, planting, weeding, fertilizer application, harvesting, processing and marketing which are all carried out by the farmers. A farmer is a person engaged in agriculture, raising livestock for food and raw materials for industries. This usually applies to people who do some combination of raising field crops, orchards, vineyards, poultry, or other livestock (Muhammad, 2014).

To be efficient in the production of golden melon production, these farmers need skills in all the production processes. Skill is a standardized requirement for an individual to properly perform specific job. It encompasses a combination of knowledge, expertise and attitude to improve performance (Udeh, 2013). According to Osinem (2008) skill is a well-established habit of doing something expertly. It is the ability to do something well or to perform an act expertly. Thus, it is necessary for youths to possess viable occupational skills so that they will be able to produce watermelon in large quantity profitably. Skills also entails the process of making farmers acquire those competencies in which they are deficient in golden melon production through retraining for sustainable agriculture.

The IMF (2003) in Abubakar and Bayero (2016) asserted that an entrepreneur is someone who organizes, manages, and assumes the risks of a business or enterprise. Entrepreneurship describes the process of creating, developing and managing a new business or project with the aim of turning innovative ideas into reality. However, it goes beyond simply starting a business to include the ability to drive innovative change within existing organizations that leads to growth

and progress. In addition to this, entrepreneurship often involves a willingness to take risks and manage uncertainty in order to seize potential opportunities.

Statement of the Problem

The importance of golden melon cannot be underestimated. It has curative effect in urinary disorder, mainly used as delicious dessert fruit, seed kernel is vitalizer and it is used as a nutritive additive in sweets and other confectionery items and majority of consumers it is preferred over watermelon because it is easier to eat, has desirable musk-flavour flesh, and comparatively higher sugar content, also immature fruits of some varieties are used for cooking vegetable Ripe fruits and immature ones are very much useful in curing human diseases like kidney problem, in chronic and acute eczema as well as tan freckles and internally in case of dyspepsia etc. (Singh, 2013).

Despite the importance of golden sweet melon, it is an underused member of the melon family. About 70% did not know that golden sweet melon existed; only few had consumed it. The lack of knowledge of the crop is likely due to it not being common among marketers. It is imperative to improve consumer consumption, increased knowledge that the crop exists is also needed. Golden melon is predominantly grown in south western part of the country. As a result of this endowment, farmers are engaged in its production. There is high demand for golden melon by the growing population, which leads to purchase of golden melon from other parts of Nigeria, reason is because most farmers are unaware of the crop and lack the perquisite skills for large scale production enterprises and method of production is still traditional in nature.

In view of the above, this study tends to investigate and identify the entrepreneurial skills required by unemployed youths in golden melon production as perceived by teachers and extension agents in Nigeria with the aim of making the farmers become competent.

Purpose of the Study

The major purpose of this study is to investigate the entrepreneurial skills required by unemployed youths in golden melon production as perceived by teachers and extension agents in Nigeria. Specifically, the study seeks to identify the skills required in:

- i. Planning for golden melon production.
- ii. Field management of golden melon production.
- iii. Harvesting of golden melon and Marketing of golden melon.

Research Questions

The following research questions were provided answers to:

- 1. What are the skills required by farmers in planning for golden melon production?
- 2. What are the skills required by farmers in the field management of golden melon?
- 3. What are the skills required by farmers in harvesting and marketing of golden melon?

Research Hypotheses

The following null hypotheses were tested for the study:

- Ho_{1:} There is no significant difference in the mean ratings of extension workers and golden melon farmers on the skills required in planning for golden melon production.
- Ho₂: There is no significant difference in the mean ratings of agricultural extension workers and golden melon farmers on the skills required in the field management of golden melon.
- Ho₃: There is no significant difference in the mean ratings of agricultural extension workers and golden melon farmers in skills required in harvesting and marketing of golden melon.

Methodology

The study adopted a descriptive survey research type. The population for the study comprised all the agricultural science teachers in all the 16 Local Government Areas as well as the agricultural extension workers in ADPs in the state. The sample for the study is 73. Proportionate random sampling technique was used to select 36 agricultural extension workers and 37 agricultural science teachers. The instrument used for data collection is the Required Skills Structured Questionnaire (RSSQ) administered to the respondents, which consisted of items developed from the literature reviewed for the study. The questionnaire was used to collect data in the study. Twenty-seven (27) question items were used to answer the research questions and test the hypotheses generated in the study. Each of the questionnaire item was assigned a four response options of: Highly Required (HR) = 4, Averagely Required (AR) = 3, Required (R) = 2 and Not Required (NR) = 1. Three lecturers validated the instrument from the Department of Agricultural and Technology Education and the Department of Crop Science, Joseph Sarwuan Tarka University, Makurdi, and Cronbach Alpha reliability method was used to determine the internal consistency of the questionnaire items. A reliability coefficient of 0.82 was obtained. Research assistants, who were familiar with the area of study were hired and were instructed on how to administer the questionnaire to the respondents. 70 copies of the questionnaire were administered

on the respondents. The entire 70 copies of their questionnaire were retrieved and used the for the data analysis.

Data Analysis

The data collected from the respondents were analyzed using mean and standard deviation.

- 1. Where the mean value of any item is 2.50 or above, the item was regarded as being Required; where the item had a mean value less than 2.50, the item was Regarded as Not Required.
- 2. Where the standard deviation of the item was less than 1.96, it indicates that the respondents were close to the mean and not too far from one another in their opinion.

Results

Answering Research Questions

Research Question 1: What are the skills required by farmers in planning for golden melon production?

Table 1: Analysis on Skills Required by Farmers in Planning for Golden Melon Production

S/N	Statement	N	Mean	Std. D
1	Formulate specific objective for golden melon production	73	3.46	0.54
2	Review the objectives periodically to meet the business	73	3.08	0.73
	and economic situation such as changes in demand and supply			
3	Draw up an activity schedule to cover the different stages of golden melon production	73	2.88	0.55
4	Decide where to locate golden melon farm	73	4.03	0.41
5	Identify market outlets for golden melon	73	3.32	0.87
6	Decide on the cropping system to be adopted in the farm (mono/mixed cropping)	73	3.86	0.49
7	Identify sources of fund to buy the inputs Total Mean	73	3.72 3.48	0.59

The data in Table 1 showed that the formulation of specific objective for golden melon production has a mean value of 3.46; reviewing the objectives periodically to meet the business and economic situation such as changes in demand and supply has a mean value of 3.08; drawing up an activity schedule to cover the different stages of golden melon production has a mean value of 2.88; deciding where to locate golden melon farm has a mean value of 4.03; identifying market outlets for golden melon has a mean value of 3.32; deciding on the cropping system to be adopted in the farm(mono/mixed cropping) has a mean value of 3.86 while identifying sources of fund to buy the inputs has a mean value of 3.72. Therefore, since all the items of statement on the above table have

a total mean value of 3.48 which is greater than the 2.50 decision threshold, we can thus conclude that farmers required all these skills in planning for golden melon production.

Research Question 2: What are the skills required by farmers in field management of golden melon?

Table 2: Analysis on Skills Required by Farmers in Field Management for Golden Melon Production

S/N	Statement	N	Mean	Std. D	
1	Select suitable site for field establishment of golden melon	73	4.04	0.84	
2	Clear the farm site with tractor or cutlass for easy ploughing	73	3.12	0.44	
3	Pack rubbish out from the farm site using rake to allow the plough to work freely	73	3.09	0.61	
4	Plough the site to loosen the soil	73	2.96	0.57	
5	Ridges of the soil for golden melon farming	73	3.61	0.85	
6	Selection of golden melon seeds/seedlings planting		4.12	0.92	
7	Determine the correct time for planting (such as April to August)	73	3.65	0.57	
8	Observe leaves, buds, flowers, vines, fruits or seeds carefully to detect pest and disease infestation especially at the beginning of the dry season	73	3.98	0.87	
9	Remove weeds with hoe regularly to avoid competition for nutrients, water, space and light	73	2.56	0.48	
	Total Mean		3.46		

Table 2 above revealed that the selection of suitable site for field establishment of golden melon has a mean value of 4.04; clearing the farm site with tractor or cutlass for easy ploughing has a mean value of 3.12; packing rubbish out from the farm site using rake to allow the plough to work freely has a mean value of 3.09; ploughing the site to loosen the soil has a mean value of 2.96; making ridges of the soil for golden melon farming has a mean value of 3.61; selecting golden melon seeds/seedlings for planting has a mean value of 4.12; determining the correct time for planting (such as April to August) has a mean value of 3.65; observing leaves, buds, flowers, vines, fruits or seeds carefully to detect pest and disease infestation especially at the beginning of the dry season has a mean value of 3.98 while removing weeds with hoe regularly to avoid competition for nutrients, water, space and light has a mean value of 2.56. Since the total mean value of all the items above is 3.46 which is more than 2.50 decision-making level, we conclude that all the skills relating to the field management of golden melon production are required by the farmers.

Research Question 3: What are the skills required by farmers in harvesting and marketing of golden melon?

Table 3: Analysis on Skills Required by Farmers in Harvesting and Marketing for Golden Melon

S/N	Statement	N	Mean	Std. D	
1	Determine the appropriate time of harvest (harvest at the		3.44	0.61	
	coolest time of the day: early morning or late in the evening)				
2	Identify full or half-slip in matured fruit	73	3.76	0.53	
3	Cut the matured fruit from vine	73	3.18	0.88	
4	Pack the harvested fruit for processing or market	73	3.45	0.72	
5	Survey the market for golden melon to determine the market value and demand	73	4.11	0.58	
6	Weigh the golden melon using weighing machine	73	4.31	0.69	
7	Record the weight of each fruit	73	1.86	0.63	
8	Fix prices for different sizes of golden melon	73	3.56	0.51	
9	Identify the distribution channels for marketing of golden melon	73	3.73	0.77	
10	Advertise the produce to buyers (either locally or through the media)	73	3.52	0.61	
11	Keep appropriate record of sales for accountability	73	2.18	0.43	
	Total Mean		3.40		

The data presented in Table 3 indicated that the determination of the appropriate time of harvest (harvest at the coolest time of the day: early morning or late in the evening) has a mean value of 3.44; identifying full or half-slip in matured fruit has mean value of 3.76; cutting the matured fruit from vine has a mean value of 3.18 while packing the harvested fruit for processing or market has a mean value of 3.45. It also revealed that the surveying the market for golden melon to determine the market value and demand has a mean value of 4.11; weighing the golden melon using weighing machine has a mean value of 4.31; recording the weight of each fruit has a mean value of 1.86; fixing prices for different sizes of golden melon has a mean value of 3.56; identifying the distribution channels for marketing of golden melon has a mean value of 3.73; advertising the produce to buyers (either locally or through the media) has a mean value of 3.52 while Keep appropriate record of sales for accountability has a mean value of 2.18. Therefore, since all these items have a total mean value of 3.40 which is more than 2.50, we then conclude that all the skills mentioned in Table 3 are required by farmers in the harvesting and marketing of golden melons.

Research Hypotheses

The following null hypotheses were tested in the study at 0.05 level of significance.

Hypothesis One: There is no significant difference in the mean ratings of extension workers and farmers on the skills required in planning for golden melon production.

Table 4: t-test on the Mean Ratings of the Responses of Farmers and Agricultural Extension Workers on the Skills Required in Planning Golden Melon Production

Nature of Work	N	Mean	Std. D	df	t-value	p-value
Agricultural Science	37	3.42	0.791	71.00	-1.380	0.219
Teachers						
Agricultural Extension	36	0.57	0.132			
Workers						

Mean diff. = 0.089

The first hypothesis sought to establish that there is no significant difference in the mean ratings of extension workers and farmers on the skills required in planning for golden melon production. Table 4 above shows that the t-value is 1.380, but we will make use of the p-value which is 0.219. Since p-value (0.219) is greater than the alpha value (0.05), we reject the null hypothesis one. Therefore, we conclude that there is a significant difference in the mean ratings of extension workers and farmers on the skills required in planning for golden melon production.

Hypothesis Two: There is no significant difference in the mean ratings of the responses of agricultural extension workers and farmers on the skills required by farmers in the field management of golden melon.

Table 5: t-test on the Mean Ratings of the Responses of Farmers and Agricultural Extension Workers on the Skills Required in Field Management of Golden Melon Production

Nature of Work	N	Mean	Std. D	df	t-value	p-value
Agricultural Science Teachers	37	3.27	0.609	71.00	-0.665	0.336
Agricultural Extension Workers	36	1.29	0.102			

Mean diff. = 0.074

Hypothesis two sought to investigate that there is no significant difference in the mean ratings of the responses of agricultural extension workers and farmers on the skills required by farmers in the field management of golden melon. Table 5 shows that the t-value is 0.665 while the p-value is 0.336. Since the p-value (0.336) is greater than the alpha value (0.05), we reject hypothesis two. Therefore, we conclude that there is a significant difference in the mean ratings of the responses

of agricultural extension workers and farmers on the skills required by farmers in the field management of golden melon.

Hypothesis Three: There is no significant difference in the mean ratings of agricultural extension workers and farmers in skills required in harvesting of golden melon.

Table 6: t-test on the Mean Ratings of the Responses of Farmers and Agricultural Extension Workers on the Skills Required in Harvesting and Marketing of Golden Melon

Nature of Work	N	Mean	Std. D	df	t-value	p-value
Agricultural Science	37	3.52	0.841	71.00	2.331	0.466
Teachers						
Agricultural Extension	36	2.46	0.298			
Workers						

Mean diff. = 0.596

Hypothesis three sought to investigate that there is no significant difference in the mean ratings of the responses of agricultural extension workers and farmers on the skills required by farmers in harvesting and marketing of golden melon. Table 6 shows that the t-value is 2.331 while the p-value is 0.466. Since the p-value (0.466) is greater than the alpha value (0.05), we reject hypothesis three. Therefore, we conclude that there is a significant difference in the mean ratings of the responses of agricultural extension workers and farmers on the skills required by farmers in harvesting and marketing of golden melon.

Discussion of Findings

This study revealed that; all the skills required by youths in planning of golden melon production are all required by youths to ameliorate unemployment issues in Nigeria. The result of this study is in line with Udeh (2013) who identified planning skills involved in agricultural production. Some of these skills included formulation of specific objectives for the farm; review the objective periodically; drawing up programme; plan for the farm; deciding on the farming and cropping system to adopt on the farm; budgeting for the farm and other required skills useful in planning. The study is also in conformity with that of Ukonze (2010), who conduct a study on vegetable production skills needed by instructors in universities for effective teaching of vegetable crop in Enugu State where it was found out that in planning a farm enterprise, the instructors should formulate objectives for vegetable production, review the objectives periodically and budget for various required for vegetable production.

The findings in this study revealed that the youths require all the 9 occupational skills in the field management of golden melon production as selection of suitable site for field establishment of golden melon, clearing the farm site with tractor or cutlass for easy ploughing, ploughing the site to loosen the soil, making ridges of the soil for golden melon farming, selecting golden melon seeds/seedlings for planting, determining the correct time for planting, observing leaves, buds, flowers, vines, fruits or seeds carefully to detect pest and disease infestation especially at the beginning of the dry season, and weed control are all significant. The result agrees with the assertion made by Oketoobo, Lawal and Onipede (2011), in a study on entrepreneurial skills required by graduates of schools of Agriculture for commercial cucumber production in South West Nigeria where they found out that graduates of schools of agriculture required entrepreneurial skills which includes effective weed control; careful thinning; irrigation; selection of suitable site; clearing the farm site; packing rubbish out from the farm site; ploughing the site to loosen the soil and other required skills.

The findings of this study further revealed that all the 11 identified occupational skills in harvesting and marketing of golden melon were required by youths as a panacea to unemployment problem in Nigeria. These findings were supported by of Oketoobo, Lawal and Onipede (2010), in a study on entrepreneurial skills required by graduates of schools of agriculture for commercial cucumber production in South West Nigeria where they found out that graduates of schools of agriculture required. Also, in consonance with the findings of the study conducted by Asouzu (2009), on entrepreneurial skills required by women retirees for processing of pineapple fruit into juice as a sustainable business in Enugu state where it was found out that women retirees in Enugu State required entrepreneurial skills in making market survey for pineapple, sort juice into groups using sizes of bottles, fixed prices for each group and keep appropriate record of sales. These basic skills include: find buyers or search for market; grade and standardize products; store the products; distribute and transport the products; process the products; risk management; record financial transaction; and power to price.

Conclusion

This study identified the major saleable occupational skills required for large scale production of golden melon by youths in Nigeria. The occupational skills identified in this study could be adopted for use by all farmers who are into arable crop production, teachers and

instructors of agricultural science in secondary schools, training establishments, colleges and tertiary institutions in most states of the federation where golden melon could be cultivated. The identified skills will be useful in the training of the unemployed youths who otherwise could be tempted to go into various forms of social ills such as house-breaking, armed robbery, rape, political thuggery, car-snatching, kidnapping among others. The study identified the occupational skills required by youths for cultivating, managing, harvesting and marketing operations as a panacea to solving unemployment challenges among youths and unemployed individuals.

Recommendations

From the findings and conclusions of this study, the following recommendations were made:

- 1. The identified skills required by youths in planning for golden melon production are significant for wealth creation; therefore, there is the need for government, non-governmental organizations and relevant agencies to increase the capacities of youths through training, enlightenment and technical support. This will help them acquire the relevant skills and thus improve productivity for wealth creation.
- 2. Also, the skills required by youths in the field management of golden melon production are of great significance; therefore, the youths need to be supported with credit and other facilities that will ensure the acquisition and application of the requisite skills in field management.
- 3. Skill acquisition centers should be provided by government where youths will be trained to acquire the relevant skills and put these skills to use in golden melon production.

References

- Adeyeye, A.S; Akanbi, W.B; Olalekan, K.K; Lamidi, W.A; Othman, H.J & Ishaku, M.A. (2017). The Growth and Yield Performance of Sweet Melon as Affected by Planting Spacing in North East Nigeria. *International Journal of Research in Agriculture and Forestry*, 4(8): 17 21. Retrieved August 12, 2018 from www.ijraf.org/papers/v4-i8/3.pdf
- Agbulu, O. N., Asogwa, V. C. & Ekele, G. E. (2015). Entrepreneurship Opportunities in Crop Production for Capacity Building of Youths for Employment in Agriculture in Benue State, Nigeria. Retrieved August 12, 2018 from https://www.researchgate.net/.../Entrepreneurship-Opportunities-In-Crop-Production-Capacity-Building-Youths-Employment-Agriculture-Benue-State-Nigeria.doc

- Amao, S.A.; Ajiboye, B. O.; Adeagbo, T.A. & Akinyemi, O.A. (2014). Profitability of Sweet melon to Farmers in Ibarapa Central LGA of Oyo State. International Journal of Research 1(9).Retrieved August 12, 2018 from https://www.researchgate.net/publication/278026658_Profitability_of_sweet melon_to_Farmers_in_Ibarapa_Central_Local_Government_Area_of_Oyo_State.pdf
- Ansley Hill, R.D. (2018). 10 Surprising Benefits of Honeydew Melon. Available on https://www.healthline.com/nutrition/honeydew
- Asouzu I. A (2009). Entrepreneurial Skill Required by Women Retirees for Processing of Pineapple fruit into juice as a Sustainable Business in Enugu State. A paper presented at the Annual Conference of Nigerian Vocational Association University of Nigeria.
- FAO (2005). Food and Agricultural Commodities Production. Retrieved on August 11, 2018 from http://faostat.fao.org
- Mayiza, M. (2013). An Assessment of Agricultural Skills and their Effect on Agricultural Productivity and Household Food Security: A Case of Tugela Ferry Irrigation Scheme in KwaZulu Natal Province of South Africa. Unpublished M.Sc Degree, University of KwaZulu Natal, South Africa. Retrieved August 12, 2018 from http://researchspace.ukzn.ac.za/xmlui/bitstream/handle/10413/12140/Maziya_Mbongeni_2013.pdf?sequence=1&isAllowed=y
- Muhammad, B.A (2014). Economic Analysis of Watermelon Production in Selected Local Government Areas of Kano State, Nigeria. Unpublished M.Sc Thesis, Dept. of Agricultural Economics and Rural Sociology, Ahmadu Bello University Zaria. Retrieved August 12, 2018

 from http://www.kubanni.abu.edu.ng/jspui/bitstream/123456789/6660/1/ECONOMIC%20ANALYSIS%20OF%20WATERMELON%20%28Citrillus%20lanatus%29.pdf
- Nunez-Palenius, H.G. (2005). Transformation of Galia Melon to Improve Fruit Quality. Unpublished PhD Thesis, University of Florida. Retrieved August 12, 2018 from http://www.ufdcimages.uflib.ufl.edu/UF/E0/01/14/67/00001/nunezpalenius.pdf
- Oketoobo, E. A, Lawal, O. I. & Onipede O. (2011) Entrepreneurial Skills Required by Graduates of Schools of Agriculture for Commercial Cucumber (Cucumis Sativus) Production in South West Nigeria. *Journal of Nigerian Vocational Association*, 16 (1) 44-52.
- Okuku, N. & Osagie, B. (2017). Work Skills Improvement Needs of Farmers in Pawpaw Production and Marketing for Sustainable Livelihood in Delta State. *International Journal of Innovative Food, Nutrition and Sustainable Agriculture*, 5(2): 1-8. Retrieved August 12, 2018 from http://seahipaj.org/journals-ci/june-2017/IJIFNSA/full/IJIFNSA-J-1-2017.pdf
- Onu, F.M (2010) Skills Required by Secondary School Leavers for Entering into Bee keeping Occupation in Enugu State. *Journal of Nigeria Vocational Association*. 15(1), 316-325.

- Osinem, E. C. (2008). *Managing Agricultural Education and Training. Resources, Principles and Principles Enugu.* Belong International Publishers Limited.
- Shivaprasad, M.K. (2013). Studies of Performance of Muskmelon (Cucumis melo L.) Hybrids under Northern Dry Zone of Karnataka. Unpublished M.Sc. Thesis, University of Horticultural Sciences, Bagalkot. Retrieved August 12, 2018 from http://krishikosh.egranth.ac.in/bitstream/1/93526/1/Shivaprasad_Thesis.pdf
- Singh, S.P (2013). Cucurbits: Biodiversity, Breeding and Production in Utter Pradesh. Lucknow, India: Uttar Pradesh State Biodiversity Board. Retrieved August 12, 2018fromhttp://www.upsbdb.org/pdf/2014/09/Books/3CurcurbitsBiodiversity_Breeding_and_Production_in_Uttar_Pradesh.pdf
- Udeh, F.O (2013). Skill Needs of Secondary School Graduates of Enugu State for Employment in Rice Production Enterprises. Unpublished M.Ed. Thesis, Dept. of Vocational Teacher Education University of Nigeria, Nsukka. Retrieved August 12, 2018 from http://www.unn.edu.ng/publications/files/17696 skill-needs-of-secondary-school-graduates-of-enugu-state-for-employment-in-rice-production-enterprises_.pdf
- Ukonze, J. U. (2010) Vegetable Production Skills Needed by Instructors in Universities for Effective Teaching of Vegetable Crop in Enugu State. *Journal of Nigerian Vocational Association*. 15 (1) 63-71.
- United Nation General Assembly Report (1995) Youth Policy and Resources Related to Rural Youth Programme. Rome. F. A. O.
- Van der-Vossen, H.A.M., El Tahir, I.M. & Oluoch, M.O., (2004). *Cucumis melo L.* In PROTA4U. Grubben, G.J.H. & Denton, O.A. (Editors). PROTA (Plant Resources of Tropical Africa, Wageningen, Netherlands. Retrieved August 30, 2018 from http://www.prota4u.org/search.asp.