SKILLS REQUIRED BY YOUTHS FOR EMPLOYMENT IN GREEN JOBS IN THE AGRICULTURAL SECTOR FOR SELF-RELIANCE IN KOGI STATE

Alleh, Anthony Ogbomeda and Bello Muftau
Department of Home Economics
Niger State College of Education, Minna

E-mail: muftaubello2012@gmail.com

Abstract

Youth unemployment in Kogi state has led to negative effects such as underdevelopment and increased crime rate. It became imperative to find solutions to the issue of youth unemployment in the state. Green jobs have helped in reducing youth unemployment in other locations although the skills need to be ascertained before it is adopted as a tool for employment in the state. Hence, the study sought to identify the skills required by youths for employment in green jobs for self-reliance in Kogi State. Two research questions were posed to guide the study while two null hypotheses were formulated and tested at 0.05 level of significance. The study adopted survey research design. It was carried out in Kogi State. The population for the study was 204 made up of 163 lecturers and 41 extension agents. Due to the manageable size of the population, the entire population were involved in the study. Structured questionnaire was employed as instrument for data collection. The instrument was face validated by five experts. Cronbach Alpha reliability coefficient of 0.79 was obtained for the instrument. Data was collected by the researcher with the help of four research assistants. Data were analyzed using mean and standard deviation for answering the research questions and t-test for testing the hypotheses. Based on the data analyzed, the study identified nine skills in agritourism and ten skills in agrometeorology. The study recommended among others that; the Ministry of labour should provide funding to encourage researchers to ascertain the best ways of inculcating skills needed for employment in agritourism to enable youths get employed and enhance self-reliance; and policy makers have to enact policies/laws that would lead to the increase in the number of green jobs in the agricultural sector that youths can get employed in.

Key words: Green jobs, employment, agricultural sector

1. Introduction

Green jobs and associated skills have gained considerable attention through the Green Jobs Initiative, established in 2007 between United Nations Environment Programme (UNEP), International labour Organization (ILO), International Organization of Employers (IOE) and International Trade Union Confederation (ITUC) (Raedmaekers, Svatikova & Yearwood, 2015). OECD and CEDEFOP (2014) defined green jobs as "work in agricultural, manufacturing, research and development, administrative and service activities that contributes substantially to preserving or restoring environmental quality". Also, ILO and CEDEFOP (2011) defined green jobs as "jobs that reduce the environmental impact of enterprises and economic sectors, ultimately to levels that are sustainable". Furthermore, ILO (2013) defined green jobs as "decent jobs that contribute to preserve or restore the environment, be they in

traditional sectors such as manufacturing and construction or in new emerging green sectors such as renewable energy and energy efficiency". The author further opined that green jobs exist in most sectors of the economy. However, due to the fact that the agricultural sector provides employment for a majority of Nigeria's citizens, green jobs in the agricultural sector is going to affect this sector the most (Fin Intel, 2016)

The agricultural sector is that sector of the economy that deals with crop production, animal production, agricultural marketing as well as agricultural extension service. Green jobs in the agricultural sector are occupations in plant and animal production that reduce the environmental impact of agricultural enterprises to levels that are sustainable (Projectives, Klapuch & Caudron, 2013). The authors further opined that green jobs in the agricultural sector are important for the following reasons; it helps to mitigate the environmentally damaging aspects of agricultural land use; it helps to reduce the energy used by farm holdings to run their operations, machines and installations; it helps to generate energy in rural areas from renewable raw materials or renewable energy sources and helps to enhance the health and safety of animals and people who are stakeholders in agriculture. For youths to get employed in green jobs, they require the requisite skills termed green skills.

Skill refers to the ability or competency an individual has to perform a task. In the opinion of OECD and CEDEFOP (2014), "green skills are competencies needed by the workforce, in all sectors and at all levels, in order to help the adaptation of products, services and processes to the changes due to climate change and to environmental requirements and regulations". Nwakile, Ojiako and Akwam (2020) opined that green skills refer to the competencies needed to function in a job that aims at reducing pollution or providing coping strategies against the negative effects of climate change. The authors further opined that this implies that any skill that takes into consideration changes due to climate and keeps environmental requirements and regulations in carrying out daily occupational activities are considered green skills. Skills required for green jobs such as agritourism and agrometeorology are prerequisites for youth employment in such jobs.

Agritourism is a combination of agriculture and tourism. "Agritourism is any commercial enterprise that combines agriculture and tourism on a working farm, ranch, or other agribusiness operation" (UK Cooperative Extension Service & University of Kentucky, 2011). The Commonwealth of Kentucky defines agritourism as "The act of visiting a working farm or any agricultural, horticultural, or agribusiness operations for the purpose of enjoyment, education or active involvement in the activities of the farm or operation" (UK Cooperative Extension Service & University of Kentucky, 2011). Also, according to Blacka, et al. (2009), "agritourism is the practice of attracting travelers or visitors to an area or areas used primarily for agricultural purposes". Agritourism is also referred to as "entertainment farming" or "agritainment," and it is a means of diversifying the farm and adding value (i.e. the farm experience) to products already produced on the farm (UK Cooperative Extension Service & University of Kentucky, 2011). Agritourism provides a lot of opportunities for youths. The opportunities in agritourism according to UK Cooperative Extension Service and University of Kentucky (2011) include; accommodations (bed and breakfast, farm vacations, retreat centers),

educational/entertainment tours (agricultural tours, cook-offs/baking, concerts/musical events, cultural/heritage tours) and outdoor recreation (bird-watching, bonfires, camping). Despite the vast opportunities for employment of youths in agritourism, youths have to acquire the requisite skills needed. Asides agritourism, skills can also be employed in agrometeorology.

Agrometeorology is the study of weather and use of weather and climate information to enhance crop production. According to Gubbard (2014), agricultural meteorology is concerned with every aspect of local and regional climates and the causes of their variations, thus making standard observation of climatic variables a fundamental necessity. It is also concerned with any climatic modifications which may be introduced by human management of agriculture, animal husbandry or forestry operations (Stigter, 2012). The main objective of agricultural meteorology is to elucidate the effects of meteorological and hydrological factors on agricultural production and then to assist farmers to apply this supportive knowledge and information in agrometeorological practices and services (Odugu, 2019). Acquiring skills in green jobs such as agrometeorology and agritourism would help youths to be self-reliant.

Self-reliance refers to an individual or group's ability to do or decide things on their own rather than depending on other people or groups for help. Self-reliance involves living a life in which an individual makes decisions and has opinions with primary respect to the individual's experience of the world (Eschenroeder, 2017). One way of ensuring that youths are self-reliant is by providing the skills required by youths for employment in green jobs so that they can be trained in such skills. Acquiring skills in green jobs has helped to increase youth employment and consequently self-reliance as evidenced in literature.

Green jobs have led to increase in employment in most countries. Since the 2008 global financial crisis, the green growth concept emerged as a potential strategy to create the basis of a new green employment market which has led to a reduction in unemployment rate (OECD & CEDEFOP, 2014). ILO (2013) defined unemployed workers as those who are currently not working but are willing and able to work for pay, currently available to work and are actively searching for work. An OECD and CEDEFOP (2014) review of 24 studies available for nine countries found out that observable net employment gains have been accomplished through green jobs. For example, in Brazil, sustainable land use has led to an annual increase in employment of 1.13% between 2010 and 2013; while in Indonesia, a 2% GDP annual green investment in energy, transportation and forestry has generated between 0.9 and 1.2 million jobs with decent working conditions (ILO & International Institute for Labour Studies (IILS), 2012; ILO, 2013). Despite the potential of green jobs to create employment, it has not been efficiently utilized as a means of creating employment in Kogi state despite a large number of unemployed youths.

In Kogi State, there are over 411,430 unemployed youths out of a youth population of 975,200 (Adozuka, 2021). The author further noted that due to a large number of unemployed youths, there has been an increase in crimes such as kidnapping, arm robbery and prostitution due to the strive to survive. This is sad because Kogi State has the resources such as grasslands and confluence rivers that are natural resources needed for agritourism as well as the human capital

that is necessary to create employment opportunities in green jobs such as agrometeorology. These available resources are not effectively utilized in green jobs creation as a means of reducing the high youth unemployment rate in the state. This is mainly due to unavailability of skill set required to get employed in agritourism and agrometeorology in Kogi State. Hence, it became necessary to ascertain the skills required by youths for employment in green jobs in the agricultural sector. After the skills have been ascertained, they will be imparted to youths in two ways.

The skills required for employment in green jobs (agritourism and agrometeorology) would be taught to youths in formal situation in tertiary institutions through lecturers of agriculture or in the informal sectors through extension agents. A lecturer is anyone who teaches in a tertiary institution such as universities and colleges of Education (Ogbonna, 2018). The author further opined that extension agents refer to individuals who teach youth farmers' modern techniques of farming and also help young farmers especially those in rural areas solve their agricultural related problems. In whatever way the skills will eventually be inculcated in youths, the skills have to first and foremost be ascertained. Therefore, the research is geared towards identifying skills required by youths for employment in green jobs in the agricultural sector for self-reliance in Kogi State.

2. Purpose of the Study

The general purpose of the study was identifying the skills required by youths for employment in green jobs in the agricultural sector for self-reliance in Kogi State. Specifically, the study sought to identify the;

1. Skills required by youths for employment in agritourism for self-reliance in Kogi State.
2. Skills required by youths for employment in agrometeorology for self-reliance in Kogi State.

3. Research Questions

1. What are the skills required by youths for employment in agritourism for self-reliance in Kogi State?
2. What are the skills required by youths for employment in agrometeorology for self-reliance in Kogi State?

3.1 Hypotheses

The following null hypotheses would be tested at 0.05 level of significance

$H0_1$: There is no significant difference between the mean responses of lecturers and extension agents on skills required by youths for employment in agritourism for self-reliance in Kogi State

$H0_2$: There is no significant difference between the mean responses of lecturers and extension agents on skills required by youths for employment in in agrometeorology for self-reliance in Kogi State.

4. Methodology

Two research questions guided the study while two null hypotheses were formulated and tested at 0.05 level of significance. Descriptive survey research design was adopted for the study. Nworgu (2015) described a descriptive survey research as "those studies which aim at collecting data and describing in a systematic manner the characteristics, features or facts about a given population using a questionnaire". The design was adopted because the study involved the use of structured questionnaires to elicit responses from the respondents on the skills required by youths for employment in green jobs in the agricultural sector for self-reliance. The study was carried out in Kogi State, Nigeria. Kogi State was chosen because of the high level of unemployment in the area despite the youths. The population for the study was 204 comprised of 41 Extension agents and 163 lecturers in Agricultural related courses in tertiary institutions in the study area. The entire population was studied due to the fact the population was manageable. Hence there was no need for any sampling technique.

A questionnaire consisting of 19 items was developed from literature and used as the instrument for data collection. The scale for the questionnaire was: Highly required (HR)-4, moderately required (MR)-3, slightly required (SR)-2 and not required (NR)-1. The questionnaire was face validated by five experts of agriculture. Cronbach alpha was used to determine internal consistency of the questionnaire which yielded 0.79 coefficients. The questionnaire was administered on 204 respondents and collected with the help of four research assistants. There was 86% return rate which equated to 176 respondents. Mean statistics was used to answer the research questions while t-test statistics was used to test the hypothesis at 0.05 level of probability. Real limit of numbers was applied in decision making for the research questions thus; 1.00 - 1.49 – Not required, 1.50 - 2.49 – Slightly required, 2.50 - 3.49 – moderately required and 3.50 - 4.00 - Highly required. The standard deviations (SD) of the items were also analyzed. Any item with SD value of 1.96 or below indicated that the respondents were near to the mean and to each other in their responses. On the other hand, any item with SD value above 1.96 indicated that the respondents were far from the mean and to each other in their responses. For the two null hypotheses, they were upheld if the calculated level of significance was greater than 0.05 or otherwise rejected.

5. Results

Research Question 1: What are the skills required by youths for employment in agritourism for self-reliance in Kogi State?

$H0_1$: There is no significant difference between the mean responses of lecturers and extension agents on skills required by youths for employment in agritourism for self-reliance in Kogi State

The data for answering research question 1 and hypothesis 1 are presented in Table 1

Table 1: Mean ratings and t-test analysis of Lecturers and Extension Agents on Skills Required by Youths for Employment in Agritourism

N= 176 (140 Lecturers & 36 Ext Agents)

S/N	Skills	G $\overline{X}$	SD	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Sig	Dec
1	Marketing skills needed to sell organic farm produce	3.43	0.77	3.58	0.65	3.18	0.90	0.01	S *
2	Cooperation skills needed to work with co-employees in the farm	3.63	0.57	3.56	0.62	3.76	0.43	0.93	NS*
3	Public relation skills such as public speaking needed to address visitors to the farm	3.52	0.69	3.57	0.59	3.41	0.82	0.27	NS*
4	Entrepreneurial skills needed to organize other factors of production like farm input.	3.51	0.80	3.58	0.77	3.38	0.85	0.26	NS*
5	Core skills such as ability to be innovative	3.54	0.65	3.52	0.65	3.58	0.66	0.66	NS*
6	Leadership skills	3.53	0.67	3.59	0.62	3.44	0.75	0.29	NS*
7	Ability to keep farm and visitors' facilities always tidy	3.51	0.69	3.60	0.65	3.38	0.74	0.15	NS*
8	Managing and organizing farm facilities	3.43	0.76	3.41	0.79	3.47	0.71	0.70	NS*
9	Communication skills	3.51	0.72	3.71	0.56	3.14	0.82	0.00	S *

Key: N= Population, G $\overline{X}$ = Grand mean, $\overline{X}_1$ = Mean of lecturers, $\overline{X}_2$ = Mean of extension agents, SD_1 = Standard Deviation of lecturers, SD_2 = Standard Deviation of extension agents, S = Significant, NS= Not significant, *= Highly Required/Moderately Required

Data in Table 1 revealed that 7 out of the 9 items had mean values ranged from 3.51- 3.63. The values were within the real limit of 3.50-4.00 indicating that the 7 items were highly required. The remaining 2 items had their mean values as 3.43. The values of the 2 items were within the real limit of 2.50-3.49 indicating that the 2 items were moderately required. Generally, all the 9 items were required by youths for employment in agritourism for self-reliance. The standard deviation of all 9 items ranged from 0.57-0.77. Each of the values was below 1.96 indicating that the respondents were near to the mean and to each other in their responses.

Furthermore, data presented in Table 1 showed that the calculated level of significance of 7 out of the 9 items ranged from 0.15-0.93. Each of the significant levels was greater than 0.05 indicating that there was no significant difference between the mean responses of lecturers and extension agents on the skills required by youths for employment in agritourism in for self-reliance in Kogi State on the identified 7 items. Therefore, the null hypothesis of no significance was upheld for the 7 items. However, the significant level of the 2 items (1 and 9) was 0.01 and 0.00 respectively which was less than 0.05. The values indicated that there was significant difference between the mean responses of lecturers and extension agents on the skills required by youths for employment in agritourism for self-reliance in Kogi State on items 1 and 9. Hence, the null hypothesis of no significant difference was not upheld for items 1 and 9.

Research Question 2: What are the skills required by youths for employment in agrometeorology for self-reliance in Kogi State?

H0$_2$: There is no significant difference between the mean responses of lecturers and extension agents on skills required by youths for employment in in agrometeorology for self-reliance in Kogi State.

Table 2: Mean ratings and t-test analysis of Lecturers and Extension Agents on the Weather Forecasting Skills Required by Youths for Employment

N= 220 (176 Lecturers & 44 Extension Agents)

S/N	SKILLS	G $\overline{X}$	SD	$\overline{X}_1$	SD_1	$\overline{X}_2$	SD_2	Sig	Dec
1	Ability to use disdeometer	3.42	0.88	3.54	0.79	3.20	0.98	0.74	NS*
2	Skill in using barometer	3.48	0.70	3.56	0.60	3.35	0.85	0.17	NS*
3	Skill in ensuring accuracy between prediction and actual weather	3.64	0.64	3.68	0.60	3.59	0.70	0.52	NS*
4	Ability to be reliable thereby reducing bias in prediction	3.40	0.71	3.42	0.72	3.35	0.69	0.65	NS*
5	Skill in acknowledging temporal and spatial differences in weather	3.57	0.65	3.51	0.65	3.68	0.64	0.23	NS*
6	Ability to acknowledge variance of weather predictions	3.15	0.83	3.19	0.71	3.09	1.02	0.59	NS*
7	Ability to provide value for farmers who use their predictions	3.00	0.90	2.97	0.87	2.88	0.95	0.63	NS*
8	Ability to interpret weather forecasts to farmers	3.33	0.74	3.36	0.74	3.30	0.76	0.70	NS*
9	High level of computer literacy	3.03	0.84	3.00	0.85	3.09	0.83	0.63	NS*
10	Proficiency in mathematics	3.38	0.86	3.27	0.91	3.56	0.75	0.12	NS*

In Table 2, it is revealed that 2 out of the 10 items had mean values of 3.64 and 3.57. The values were within the real limit of 3.50 - 4.00 indicating that the 2 items were highly required. The remaining 8 items had their mean values ranging from 3.00 - 3.48. Each of the values of the 8 items was within the real limit of 2.50 - 3.49; indicating that the 8 items were moderately required. Generally, all 10 items were required by youths for employment in agrometeorology. The standard deviation of all 10 items ranged from 0.64 - 0.90. Each of the values was below 1.96 indicating that the respondents were near to the mean and to each other in their responses.

Furthermore, data presented in Table 1 showed that the calculated level of significance of the 10 items ranged from 0.16 - 0.99. Each of the significant levels was greater than 0.05 indicating that there was no significant difference between the mean responses of lecturers and extension agents on the skills required by youths for employment in agrometeorology for self-reliance in Kogi State on the identified 10 items. Therefore, the null hypothesis of no significance was upheld for the 10 items.

6. Discussion of the Findings

The findings of this study on skills required by youths for employment in agritourism for self-reliance in Kogi State showed that all the skills identified by the study were required by youths for them to get employed in agritourism. These skills include public relations skills such as public speaking needed to address visitors to the farm, cooperation skills needed to work with co-employees on the farm, marketing skills needed to sell organic farm produce, entrepreneurial skills needed to organize other factors of production like labour and farm input, core skills such as ability to be innovative, leadership skills, ability to keep farm and visitors facilities always tidy, managing and organizing farm facilities as well as communication skills. The hypothesis tested on mean responses of lecturers and extension agents on skills required by youths for employment in agritourism showed that there were no significant differences between the mean responses of lecturers and extension agents on the skills required by youths for employment in agritourism in Kogi State on a majority of the items. The upheld null hypothesis of no significance on a majority of the items can be attributed to lecturers in agricultural related courses and extension agents having relatively the same academic background. The findings of the study on skills required by youths for employment in agritourism agree with the result of CEDEFOP (2012) in a study on green skills and environmental awareness in vocational education and training. The author found out that the skills required for employment in agritourism include technical know-how, entrepreneurial skills, management skills, core skills such as ability to learn and to innovate and leadership skills. The findings are also in agreement with Hans, Andre, Zhuohua and Binns (2011) in a study on green jobs for a revitalized food and agriculture sector. The skills identified by the authors for employment in agritourism are ability to be innovative, leadership skills and communicative skills. The findings also with agreed with Finora (2011) in study on people skills required when practicing agritourism. The author found out that people skills such as communication and cooperation is very necessary for optimal performance in agritourism. Therefore, it can be induced from the findings of the study that all the skills identified in the study are required by youths for employment in agritourism for self-reliance in Kogi State.

The findings of this study on the agrometeorology skills required by youths for employment in Kogi State revealed that the agrometeorology skills include the following; Ability to use disdeometer, ability to use a barometer, skill in ensuring accuracy between prediction and actual weather, ability to be reliable thereby reducing bias in prediction, skill in acknowledging temporal and spatial differences in weather, ability to acknowledge variance of weather predictions, ability to provide value for farmers who use their predictions, ability to interpret weather forecasts to farmers, high level of computer literacy and proficiency in mathematics. The findings also revealed that there was no significant difference between the mean responses of lecturers and extension agents on the skills required by youths for employment in agrometeorology for self-reliance in Kogi State. The findings are in line with ILO and IILS (2012) who found that agrometeorologists are expected to be consistent in their weather judgment and accurate while comparing forecasts and actual weather. The findings also agree with Wade (2019) who found that agrometeorologists are supposed to be proficient in the use of computers.

7. Conclusion

The study was carried out to identify the skills required by youths for employment in green jobs in the agricultural sector for self-reliance in Kogi state. The skills required by youths for employment in two green jobs were identified. These green jobs are agritourism and agrometeorology. The required skills needed by youths for employment in agritourism among others include; technical know-how, entrepreneurial skills, management skills, core skills such as the ability to learn and innovate as well as leadership skills. The required skills needed by youths for employment in agrometeorology among others include the ability to use disdeometer, the ability to use a barometer, skill in ensuring accuracy between prediction and actual weather, ability to be reliable thereby reducing bias in prediction. The ascertained skills needed for employment in green jobs will help reduce youth unemployment and consequently enhance self-reliance among youths in Kogi State if properly inculcated. The duty of inculcating these skills in the youths will be carried out in two ways. The two ways are through lecturers in tertiary institutions in the formal system and through extension agents in the informal system.

7.1 Recommendations

Based on the findings of the study, it is recommended that:

1. Ministry of labour should provide funding to encourage researchers to ascertain the best ways of inculcating skills needed for employment in agritourism to enable youths to get employed and enhance self-reliance
2. Policymakers have to enact policies/laws that would lead to an increase in the number of green jobs in the agricultural sector that youths can get employed in.
3. National Universities Commission should ensure that the practical aspect of agrometeorology which involves skills is prioritized in universities as against the theoretical aspect currently being prioritized.

References

Adozuka, A. E. (2021). Youth unemployment in North Central Nigeria and its implications in Nigerian Development. *Journal of Social science and Public Policy, 20,* 112-119.

Blacka, A., Couture, P., Coale, C., Dooley, J., Hankins A., Lastovica, A. & Uysal, M. (2009). *Agri-Tourism*. Petersburg: Virginia State University. Retrieved from http://m.pubs.ext.vt.edu/310/310-003/310-003.html.

CEDEFOP (2012). *Skills for green jobs. European synthesis report*. Luxembourg: Publication Office of the European Union.

Eschenroeder, K. (2017). *A man's guide to self-reliance*. Retrieved on October 21, 2022 from www.artofmanliness.com/2017/01/16/finding-true-north-guide-self-reliance/

Fin Intel (2016). *Nigerian economy and full employment*. Retrieved September 26, 2022 from www.myfinancialintelligence.com/banking-and-finance/nigerian-economy-and-full-employment

Finora J. (2011). *People skills required when practicing agritourism.* Retrieved on October 21, 2022 from bvegetablegrowernews.com/article/people-skill-required-whenpracticing-agritourism/.

Gubbard, O. N. (2014). Online agrometeorological applications with decision support on the farm level (*Unpublished Ph.D Thesis*), Department of Agricultural Extension, University of Nigeria, Nsukka.

Hans R.H., Andrea M.B., Zhuohua T &Binns W. P. (2011). *Green jobs for a revitalized food and agriculture Sector*. Washington: Millennium institute.

ILO & CEDEFOP (2011). *Skills for green jobs: A global view*. Switzerland: International Labour Organization.

ILO &IILS (2012). *Working towards sustainable development*. Geneva: ILO
International Labour Organization (2013). *Sustainable development, decent work and green jobs*. Geneva: Author.

International Labour Organization (2013). *Sustainable development, decent work and green jobs*. Geneva: Author.

Nwakile, T.C., Ojiako, C. C. & Akwam, N. C. (2020). Constraints and enhancement measures to development of skills by youths for employment in green jobs in agriculture in Anambra State. *Journal of Agricultural Education Teachers Association of Nigeria, 4*(1), 153 – 161. https://www.researchgate.net/publication/363539117

Nworgu, B.G (2015). *Educational research. Basic issues & methodology* (3rd ed.). Nsukka: University Trust Publishers

Odugu, B. I. (2019). The relationship between students perception of agricultural meteorology. *Journal of Agriculture and Research, 23*(1), 10 – 16.

OECD & CEDEFOP (2014). *Greener Skills and Jobs: OECD Green Growth Studies*. Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264208704-en

Ogbonna, O. V. (2018). *Factors that account for the poor image of Agricultural Education Programme in Secondary Schools in Isialangwa L.G.A of Abia State, Nigeria* (Unpublished M.sc project), University of Nigeria, Nsukka

Projectives, R., Klapuch, J & Caudron, P. (2013). *Green jobs in Agriculture and rural area.* France: European Federation of Food, Agriculture, Tourism and Trade Unions (EFFAT).

Raedmaekers, K., Svatikova, K & Yearwood, J. (2015). *Facilitating green skills and jobs in developing countries*. France: Afd Rue Barthes.

Stigter, A. O. (2012). Integrating Meteorological and Indigenous knowledge-based seasonal climate forecasts for the agricultural sector: Lessons from participatory action research in sub-Saharan Africa. *International Development Research Centre, Ottawa, Canada. Climate Change Adaptation in Africa learning paper series*.

UK Cooperative Extension Service & University of Kentucky (2011). *Agritourism*. Retrieved August 3, 2016 from https://www.uky.edu/Ag/NewCrops/introsheets/agritourism.pdf.

Wade, A. I. (2019). Derived meteorological data: Agroclimatological Methods. *Technical Education Today, 2*, 18-22.