Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS) 3(6): 893-898

jeteraps.scholarlinkresearch.org

Entrepreneurial Competencies Required by Secondary School Graduates for Processing Cashew Nuts to Kernel for Poverty Reduction in Enugu State, Nigeria

[1]Mama, R.O., [2]Asogwa, V.C. and [1]Ukonze, J.A.

[1]Department of Vocational Teacher Education,
University of Nigeria Nsuakka.
[2]Department of Agricultural Education,
University of Agriculture, Makurdi.

Corresponding Author: Asogwa,V.C.

Abstract

This paper identified entrepreneurial competencies required by Secondary School graduates for processing cashew nuts to kernel for poverty reduction in Enugu State. This study is significant to the secondary school graduates, their parents, skill acquisition centres, Enugu State Government and future researchers. Three research questions and three hypotheses guided the study. The study adopted a survey research deign. It was carried out in Enugu State. The population for the study was 134 made up of 102 female teachers of agriculture and 32 traditional women cashew nut processors. The entire population was involved for the study. Questionnaire was use for data collection. The internal consistency of the instrument was 0.81. The data was analyzed using the mean, standard deviation and t-test. The findings include, among others, the total of 27competencies. Recommendations were made.

Keywords: entrepreneurial competencies, secondary school graduates, processing, poverty reduction.

INTRODUCTION

Cashew, *Anacardium accidentale*, is a tree crop favoured in Enugu State for its juice petiole and nut. Bridaine (1989) said that cashew originated from Latin America. It is 10-15 meter high, the branches are dense and spreading, and may almost reach the ground. The author noted that the fruit of cashew consist of two parts –the cashew apple which is really the swollen peduncle of the fruit and the cashew nut containing a kernel rich in oil. Ugwu (1996) recorded that cashew apples are preferred yellow or red in color at maturity by consumers. The apple is very high in vitamin C and riboflavin. The author continued that the overall compositions of the cashew nut (kernel) in percentages include the following: protein (21%), fat (47%), carbohydrate (22%), reducing sugar (1-3%), starch 4.6 – 17.2% and oil 35.8%. Renaweera (2000) observed that the kernel of the cashew nut is eaten as a delicacy, or added to sauces. The kernel also yields oil that is sometime made into a kind of butter. The leaves and shoots are occasionally used for flavouring stews. Panafrica News Agency (2001) said that cashew has various domestic and industrial uses. Products of the tree have various medicinal values – Cashew Nut Shell Liquid (CNSL) for wounds, leaves for burns etc. Errington and Coulter (1989) revealed that the skin obtained from processed cashew kernel can be burned or mixed with grains for livestock feed.

Processing, in the opinion of Hornby (2006) is the act of putting a raw material through a manufacturing process in order to change it. In reference to this study, processing is the act of putting raw-cashew nuts through a manufacturing process in order to obtain cashew kernels. Jafee and Morton (1997) noted that India was the first country to build a cashew processing industry. The authors added that the country's hundreds of small and medium – scale processing outlets has long been insufficient to meet the demand in the market. Nayar (1995) clarified that processing of cashew-nut has the potential to increase earnings, create jobs and increase exports. Secondary school graduates in Enugu State can be engaged in cashew nut processing jobs to reduce poverty among them.

Secondary school graduates, in the view of Okafor and Onuoha (2010) are those individuals that have completed six years of secondary school education but could nut secure admission into any higher institution or employed in any job. Olaitan, Asogwa and Onipede (2009) stressed that unemployed secondary school graduates have no means of survival except by depending on their parents. This implies that they need to be employed for jobs in order to reduce poverty.

Poverty, in the view of Olaitan, Ali, Nwachukwu and Onyemachi (2002) is a state of not having money or means of meeting basic needs by an individual,

thereby deserving sympathy or pity. The World Bank report of (2003) stated that poverty is an unacceptable human deprivation in terms of economic opportunity, education, health and nutrition as well as lack of empowerment and security. Unemployed secondary school graduates, in this study, can be viewed as those experiencing poverty at a level that requires to be reduced. Reduction is described by Hornby (2001) as the act of making something smaller in size, number or degree. Poverty reduction, in the context of this study, is the act of making the degree of poverty among secondary school graduate smaller that what it is at present by empowering them through entrepreneurial competencies in cashew nut processing.

According to Hornby, (2010) being entrepreneurial is the ability to establish a business enterprise that involves financial risks. International Labour Organization (2003) posited competency as the knowledge, capabilities and behavior which someone exhibits in doing his job and which are factors in achieving the stated objectives. In the context of this study, entrepreneurial competencies are the knowledge, skills and behavior required by secondary school graduates for processing cashew nuts into kernels for earning income for survival.

In Enugu State, a lot of cashew fruit are produced annually. People eat the petiole and throw the nuts because of lack of knowledge for their value. In some cases, these nuts are picked up and sold at very low prices at the local market to some traders who probably export them. Most farmers, in the study area of this work, allow the cashew fruit to drop and waste at the foot of the tree because the use for them are not known beyond the eating of the petiole, except some of their women who process cashew nut traditionally for family consumption. This situation has led to lack of expansion in cashew tree planting, whereas the benefits from cashew nuts are numerous. If unemployed secondary school graduates are encouraged and trained on how to process cashew nut to kernel, it will help to create employment for them, serve as a source of income for them, improve the foreign exchange earning of the state and help to encourage expansion of cashew tree planting in the state.

PURPOSE OF THE STUDY

The major purpose of this study was to identify entrepreneurial competencies required by secondary school graduates for processing cashew nuts into kernels for poverty reduction in Enugu State. Specifically, the study identified competencies required for the:

1. planning for cashew nut processing enterprise.
2. processing cashew nut processing enterprise.
3. marketing of cashew kernels.

HYPOTHESIS FOR THE STUDY

There was no significant difference in the mean ratings of the responses of female teachers of agriculture in senior secondary schools and traditional women cashew nut processors on the competencies required in:

1. Planning for cashew nut processing enterprise
2. Processing of cashew nuts into kernels, and
3. Marketing of cashew kernels.

SCOPE OF THE STUDY

The study was restricted to identification of entrepreneurial competencies required by Secondary School graduates for processing cashew nuts to kernel for poverty reduction in Enugu State. It was also restricted to teachers of agriculture in senior secondary schools and traditional women cashew nut processors in the three agricultural zones; Awgu, Enugu and Nsukka of Enugu State. The study was restricted to the use of questionnaire and competencies required for the planning for cashew nut processing enterprise, processing cashew nut and marketing of cashew kernels.

METHODOLOGY

This study is significant to the secondary school graduates, their parents, skill acquisition centres, Enugu State Government and future researchers. Survey research design was adopted for this study. The area of study is Enugu State. Cashew nuts are predominant in Awgu west (Oji river), Udi East (Ngwo, Nsude) and Nsukka West (Enugu Ezike, Obollo, Eha-Ndiagu). Enugu State is naturally endowed with good ecological and environmental conditions favourable for cashew production. The population for the study was 134 consisting of 102 female teacher of agriculture teaching crop production to students in senior secondary schools and 32 traditional women cashew nut processors. The entire population was used for the study because their number was small.

The instrument for data collection was a 28-competency structured item question with 10 competency items in planning, 11 competency items in processing and 7 competency items in marketing of cashew kernel. The questionnaire had a four-point response scale options of highly required (HR), average required (AR), slightly required (SR) and not required (NR) with a corresponding value of 4, 3, 2 and 1 respectively. Three experts validated the instrument, two from Agricultural unit and one from Home Economic unit of the Department of Vocational Teacher Education, University of Nigeria, Nsukka. Their corrections and suggestions were used to produce the final copy of the questionnaire. Split-half technique and Pearson product moment correlation coefficient method were utilized to

determine the internal consistency of the instrument with a reliability coefficient of 0.81.

Three research assistants were hired and given orientation on how to administer the questionnaire to the respondents. One hundred and thirty-four copies of the questionnaire were administered on the respondents and one hundred and thirty-one copies were retrieved and analyzed. Weighed mean and standard deviation were used to answer the research questions, while t-test statistics was used to test the hypotheses of no significant difference. An arithmetic mean with a mean less than 2.50 was regarded as not required. Also any item with a standard deviation of 1.50 or below revealed that the respondents were close to the mean and not too far from the opinion of one another in their responses. The null hypotheses of no significant difference was accepted for any item whose t-calculated value was less than t-table value, while it was rejected for any item whose t-calculated value was greater than the t-table value.

RESULT

These results of the study were obtained from the research questions answered and the hypotheses tested.

Table 1: Mean ratings and t-test analysis of the responses of the female teachers of agriculture and the traditional woman cashew nut processor on competencies required in planning for cashew nut processing enterprise

(N = 134: 102 teachers and 32 processors)

S/N	Item statement	$\underline{X}_1$	$\underline{X}_2$	$\underline{X}w$	SD	t-cal	Rmks
1	Formulate specific objectives for cashew nut processing enterprise	3.98	3.78	3.36	0.81	0.85	*N.S
2	Review the objectives periodically to meet economic or business situation	3.72	3.68	3.94	0.90	1.25	*N.S
3	Decide on the location of the cashew nut processing enterprise	3.63	3.53	3.74	0.76	0.32	*N.S
4	Drawing programme to cover different stages of cashew nuts processing into kernels.	3.49	3.22	3.62	0.74	0.54	*N.S
5	Identify other relevant inputs required for the enterprise.	3.72	3.68	3.94	0.90	2.25	*N.S
6	Identify market outlet for cashew kernels	3.63	3.53	3.74	0.76	0.32	*N.S
7	Identify sources of fund to establish the enterprise	3.63	3.36	3.25	0.71	0.19	*N.S
8	Identify relevant records to keep for the enterprise	3.42	3.18	3.58	1.02	0.23	*N.S
9	Make budget for cashew nut processing enterprise.	3.99	3.79	3.88	0.95	1.01	*N.S

X_1 = mean of teachers, X_2 = mean of processors, Xw = weighted mean, SD = weighted standard deviation, t-table = 1.96, t-cal = t-calculated values, S = significant, NS = not significant, * = required, ** not required.

Table 1 revealed that all the items had their mean values ranged from 3.25 – 3.94 which are competencies required by secondary school graduates in planning for cashew nut processing enterprise. The table also shows that the standard deviation (SD) of the items ranged from 0.71 – 1.02, indicating that the respondent were not too far from the mean and from the opinion of one another in their responses. The table reveals that all the 9 items had their t-calculated values less than their t-table values, indicating that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the competencies required by secondary school graduates in planning for cashew nut processing enterprise.

Table 2 reveals that all the competency items had their mean values ranged from 3.44 to 3.94 which are above 2.50. This shows that all the 11 items are the competencies required by secondary school graduate in processing cashew nut into kernels. The table also shows that the standard deviation of the items ranged from 0.76 – 1.02, indicating that the respondents were not too far from the mean and from the opinion of one another in their responses. The table revealed that all the 11 items had their t-calculated values less than their t-table values, indicating that there was no significant difference in the mean ratings of the responses of the two groups of respondents on the competencies required by secondary school graduates in processing of cashew nuts into kernels.

Table 2: Mean ratings and t-test analysis of the responses of the female teachers of agriculture and the traditional women cashew nut processors on competencies required in processing cashew nuts into kernels.

(N = 134: 102 teachers and 32 processors)

S/N	Item statement	X_1	X_2	Xw	SD	t-cal	Rmks
1	Source cashew nut from the market or cashew for processing	3.90	3.82	3.68	0.99	0.71	*N.S
2	Sieve the nuts using hand or mesh sieve to remove dust or dirt	3.72	3.63	3.94	0.90	1.25	*N.S
3	Boil raw cashew nuts in large cauldron for about 25 minutes.	3.67	2.47	3.58	0.83	0.81	*N.S
4	Remove the cashew nut from the pot and dry for about 48 hours	3.08	2.86	3.53	0.01	0.91	*N.S
5	Shake some nuts together to test for dryness through their sound or vibration	3.33	2.12	3.88	0.98	0.96	*N.S
6	Remove the cashew shell manually or mechanical to obtain the kernel	3.50	2.28	3.60	1.08	0.29	*N.S
7	Dry the kernel over a special cooling screen or through slight heating to ease peeling.	3.11	1.97	3.59	0.79	0.36	*N.S
8	Peel of the testa covering the kernel for cleaning.	3.11	2.31	3.62	0.97	0.26	*N.S
9	Grade the cleaned kernel using size and wholeness	3.26	2.46	3.49	0.80	1.19	*N.S
10	Dry/humidify cleaned kernel to a final moisture contents of 5% using drier or oven	3.26	2.46	3.49	0.80	1.19	*N.S
11	Package dried kernel into airtight bags or cans depending on the scale of production	3.26	3.42	3.18	3.58	1.02	*N.S

X_1 = mean of teachers, X_2 = mean of processors, Xw = weighted mean, SD = weighted standard deviation, t-table = 1.96, t-cal = t-calculated values, S = significant, NS = not significant, * = required, ** not required.

Table 3: Mean ratings and t-test analysis of the responses of the female teachers of agriculture and the traditional women cashew nut processors on competencies required in marketing of cashew kernels

(N = 134: 102 teachers and 32 processors.)

S/N	Item statement	X_1	X_2	Xw	SD	t-cal	Rmks
1	Make market survey for cashew kernel	3.91	3.76	3.03	0.79	0.57	*N.S
2	Sort kernel into groups using size of bags or cans.	3.72	3.68	3.94	0.90	1.25	*N.S
3	Fix price for each group of kernel	3.73	3.65	3.19	1.41	1.21	*N.S
4	Advertise the product locally or through the media	3.72	3.68	3.94	0.90	1.25	*N.S
5	Sell to buyers at the site or in the market	3.98	3.98	3.36	0.81	0.85	*N.S
6	Keep appropriate record of sale	3.91	3.76	3.03	0.79	0.67	*N.S
7	Calculate the expenditure and income to determine profit	3.96	3.40	3.06	0.70	0.34	*N.S

X_1 = mean of teachers, X_2 = mean of processors, Xw = weighted mean, SD = weighted standard deviation, t-table = 1.96, t-cal = t-calculated values, S = significant, NS = not significant, * = required, ** not required.

Table 3 shows that all the competency items had their mean values ranged form 3.06 – 3.94 which are above 2.50. This shows that all the items are the competencies required by secondary school graduates in marketing of cashew kernel. The table also shows that the standard deviation of the items ranged from 0.70 – 1.14, this indicated that the respondents were not too far from the mean and from the opinion of one another in their responses. The table also revealed that all the 7 competency items had their t-calculated values less than their t-table values, indicating that there was not significant difference in the mean ratings of the responses of the two groups of respondents on the competencies required by secondary school graduates in marketing of cashew kernels.

DISCUSSION OF RESULT

The result of the study revealed that 9 competencies in planning, 11 competencies in processing cashew nut and 7 competencies in marketing of cashew nut are required by secondary school graduates for success in cashew nut processing enterprise. The findings of this study are in lined with the findings of Olaitan, Asogwa and Umeh (2010) in a study carried out on competencies bee-keeping required by teachers of agricultural sciences for enhancing their income for sustainable living in Enugu State, where it was found out that teachers of agricultural science required 10 competencies in planning activities, 17 competencies in construction and location of bee hive, 25 competencies in stocking and management of bees and 8 competencies in marketing of bee products.

The findings of this study are in consonance with the findings of Asogwa, Olaitan and Asouzu (2010) in a study 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 16 skills were required by woman retirees in processing of pineapple fruit into juice. The skills include sources for pineapple fruit, sort out spoiled pineapple fruit and discard them, wash the pineapple fruit thoroughly and so on.

The finding are also in agreement with the findings of Akwaji (2006) in a study on work skills required by secondary school graduates for success in cassava processing enterprise in Cross River State, where it was found out that 11 skills are required in planning for processing cassava into chips. The skills include set goals for processing cassava into gari, flour, chips and starch; review the goals periodically; decided on the location of the enterprise on so on. The findings of this study are in conformity with the findings of Ibrahim (2007) in a study carried out on entrepreneurial skills required by secondary school graduated for success in rice production enterprise in Kwara State, where it was found out that 9 skills were required in marketing of rice. The skills include: processing and bagging of rice in 50kg per bag, sell to buyers, keep sales record and others.

The result of the hypotheses tested showed that there was no significant difference in the mean ratings of the responses of the female teachers of agriculture in senior secondary schools and the traditional women cashew nut processors in planning processing of cashew nuts into kernels and marketing of cashew kernel. The implication of this findings was that the professional differences of the two groups of respondents did not significantly influence their responses on the competencies requires by secondary school graduates in planning, processing and marketing of cashew kernels.

CONCLUSION

In Enugu State, it was observed that secondary school graduate depend solely on their parents for living. It was also observed that processing cashews nuts into kernel requires minimal capital involvement and has low market competition. Based on the observations, the study was carried out to identify entrepreneurial competencies required by secondary school graduates in processing cashew nuts into kernels for poverty reduction in Enugu State. The study found out that 27 competencies are required by secondary school graduates in planning, processing and marketing of cashew into kernels.

RECOMMENDATIONS

1. The identified entrepreneurial competencies should be utilized by skill acquisition centers of retraining of secondary school graduates.
2. The competencies should be used to train youths and retirees who may be interested in cashew nut processing enterprise.
3. The competencies should be used by teachers of agriculture in secondary schools to teach students step-by-step of processing cashew nuts into kernels.

REFERENCES

Akwaji (2006) Work – Skills Required by Secondary school graduates for success in cassava processing Enterprise in Cross River State. Unpublished thesis Department of Vocational Teacher Education, University of Nigeria Nsukka.

Bridaine O: (1989) African Gardens and Orchards. Growing Vegetables and Fruits. London Macmillan Publishers Ltd

Erington, M. & Coutor, J.P (1989) The International Market for Cashew Products. Overseas Development National resources institute chattam, Kent, U.K

Hornby A.S. (2001) Oxford Advanced learners Dictionary of current English. London: Oxford University press

Hornby A.S. (2006) Oxford Advanced Learner's Dictionary of Current English. London Oxford University press

Ibrahim (2007) Entrepreneurial Skill in Secondary School of Graduates for Success in Rice Production Enterprise in Kwara State. Unpublished M.Ed thesis, Department of Vocational Teacher Education, University of Nigeria Nsukka

Jafee S and Morton, (1995) Marketing African's high value Foods: Comparative Experience of an Emergent Private Sector

Okafor O.E. Onuoha E.R. (2010) Work Skills required by Secondary School Graduate for Success in Cassava root processing and Marketing Enterprise in Imo State. A paper presented at school of agriculture and vocational studies, Avan Ikoku federal collage of Education Owerri – Imo State 2010
Olaitan S.O. Asouzu I, A and Asogwa V.C (2010) Quality Assurance of women in Agriculture in processing Bambara Groundnut into "Okpa" in Anambra State. Journal of the faculty of Education, University of Nigeria Nsukka (2010)

Olaitan, Asowa and Umeh (2010) Competencies in bee – Keeping Required by Teachers of Agricultural Science for Enhancing their income for Sustainable Living in Enugu State. Journal of Home Economic Research Association of Nigeria volume 12 (HERAN, 2010). Nsukka: Thompson Reaters

Olaitan, S.O, Asogwa, V.C. and Onipede O. (2009) Enterpreneurial competencies Required by secondary school graduates for Entering into Bambara groundnut production in Enugu State. A paper presented at the Annual National conference of the faculty of Education University of Nigeria Nsukka (2009)

Panafrican News Agency, (2001). 26th January http://allafrica"com/sories/200101260364.htm

Rana were, B (2000). Management of tea Mosquito by (Helopetis antonii) in cashew. Cashew Bulletin 3(1): 1-6

The World Bank, Washing for , U.S.A potential. (1995) The Cashew, Han-March 1995

Uguru M. I (1996) Crop production, Tools Techniques and practice. Enugu: Fulladu publishing company.