ENTERPRENEURIAL SKILLS NEEDED BY RETIREES FOR SUCCESS IN WALNUT (JUGLARIS NIGRA. L) PRODUCTION IN ONDO STATE

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Abstract.
The study focused on the determination of entrepreneurial skills needed by retirees for success in walnut (Juglaris Nigra. L) Production in Ondo State. Three research questions and two hypotheses guided the study. The study was carried out in Ondo state. Population of the study was 56 made of 40 (forty) registered walnut farmers and 16 (sixteen) agricultural extension agents from eight agricultural zones in the state. The entire population made up the sample due to the manageable size. A-48 entrepreneurial skill questionnaire items was developed and used to collect data. The questionnaire had a 4-point response scale of Highly needed, Averagely needed, Slightly needed and Not needed. The questionnaire was validated by three experts from the Department of Vocational Teacher Education, (Agricultural Education Unit) university of Nigeria, Nsukka. The reliability of the questionnaire was established using Crobanch Alpha reliability method to determine the internal consistency of the questionnaire items. This yielded a reliability coefficient of 0.82. The 56 copies of the questionnaire were administered on walnut farmers and agricultural extension agents and all were retrieved. Mean was used to answer the research questions while t-est statistics was used to test the hypotheses. Results from the study revealed that the retirees needed all the 48 skills items identified by the study. It was therefore recommended that the 48 entrepreneurial skills identified by this study be used in training the retirees for success in walnut production enterprise in Ondo state.

Introduction

Walnut ***Juglaris nigra. L*** is a perennial dicotyledonous plant that belongs to the group of non-timber forest product trees. Walnut according to Moyinjesu (2009) belongs to the family of Jugbandaceae. It is an epiphyte climbing plant occurring in the rain or humid forest zone of West Africa. When planted; it germinates and grows in form of vine, climbs a tree and produces tendrils that spread at the top of the tree with simple leaves. It performs well on a wide range of soils that are fertile but it does better in a humus or loamy soil. It prefers an environment which is shady with average exposure to sunlight. This is the reason why its production is carried out in the South west and Middle belt zones of Nigeria by Cocoa farmers.

The fruit is in form of a pod containing between one to four seeds with a hard seed coat. The seeds are extracted by splitting the pod carefully with a sharp knife. These seeds are used for the propagation of the plants. In Nigeria, Walnut according to Moyinjesu (2009) is multipurpose fruits trees which are consumed by people as food/delicacy with or without freshly boiled maize. Dyes, resins and waxes are extracted from the seeds and utilized by textile industries. The stems and roots have some medicinal usefulness as an anti-inflammatory agent. The boiled seeds are highly nutritious and rich in vitamins. Unboiled or fresh seed is taken traditionally as a panacea or anti-venom for snake bite. Farmers derive high revenue from the sales of the seeds which are of high demand for consumption during the period of production, for example a 2kg of walnut seeds could be sold for as much as Six Hundred Naira (₦600.00).

In Nigeria today the situation of the retirees is cloudy and fearful as they are not sure of what they can do to earn their daily living. Jerry (2009) explained that the fear of most retirees is how to continue with the challenges of life on retirement due to lack of productive skills. Having known this, there is the need to commercialize the production of this important and high revenue yielding crop as a sure way for retirees to re-engage themselves after leaving government or private service. This will help in dousing the already over-flooded market of unemployment.

Commercial production of walnut requires some entrepreneurial skills.Entrepreneuial skills in the view of Meredith, Nelson and Neck (1996) are those dexterities possessed by an entrepreneur to undertake an enterprise. Entrepreneurial skills in this study are those skills needed by the retirees for success in walnut production in Ondo state. A retiree in the opinion of Olaitan, Ifeanyieze and Omeje

(2008) is an individual that has disengaged from his or her initial employment after a long service but is still willing and able to continue his existence in any desirable but less strenuous occupation.

A retiree in this study is a person who has served the Ondo state government or a private company in the state for a certain number of years and is now being disengaged from active service but is still willing and able to continue his existence in any desirable but less strenuous occupation like walnut production. Production as defined by Iwena (2008) is all the activities which results in the creation of goods and services. Business dictionary (2010) defined production as the process and methods employed to transform tangible inputs (ideas, information and knowledge) into goods and services. Production in this study is the process, method and skills employed in the nursery, planting, management, harvesting and sales of walnut by retirees in Ondo state.

In Ondo state, most of the retirees are at crossroads due to lack of entrepreneurial skills they need to re-engage themselves after their retirement. Some of the retirees are afraid of what enterprise to engage in and their lack of entrepreneurial skills make them feel they could succeed in any agricultural occupation like walnut production. Apart from this, they want to avoid the risk of business failure or sudden death. Therefore they want to engage in a sustainable production which is less strenuous with little investment, short period of maturity, high rate of turnover with constant flow of streams of income.

Since walnut production meets the requirement for the enterprise they want to engage in, it is therefore necessary to identify the entrepreneurial skills that could be used to train the retirees for re-engaging themselves in walnut production. If the entrepreneurial skills in walnut production are identified, this could be package into a training programme and integrated into skill acquisition centers for training the retirees, it will equip the retirees with needed skills for walnut production, in order to re-engage them with a sustainable means of livelihood to elongate their life span.

Purpose of the study

The study sought to identify the entrepreneurial skills needed by retirees for success in walnut production in Ondo state. Specifically the study determined the entrepreneurial skills needed by retirees for success in the following areas:

i. Planning and pre-planning operation of walnut production.
ii. Planting and post-planting operation of walnut production.
iii. Harvesting, packaging and marketing of walnut for profitability.

Research questions

The following research questions guided the study;

i. What are the entrepreneurial skills needed by retirees in planning and pre- planting operation of walnut production?
ii. What are the entrepreneurial skills needed by retirees in planning and post – planting operation of walnut production?
iii. What are the entrepreneurial skills needed by retirees in harvesting, processing and marketing of walnut for profitability?

Hypothesis

The following hypotheses were formulated and tested at $p<0.05$ level of significance.

HO: there is no significant difference in the mean rating of the responses of walnut farmers and agricultural extension agent on:]

HO_1: Entrepreneurial skills needed by retirees in planning and pre- planting operation of walnut production.

HO_2: Entrepreneurial skills needed by retirees in planting and post planting operation of walnut production.

Methodology

The study adopted a survey research design. A survey research design according to Olaitan, Ali, Eyoh and Sowande (2000), is the plan, structure and strategy that the investigator want to adopt in order to obtain

solution to research problem using questionnaire in collecting, analyzing and interpreting the data. It is a very valuable tool for assessing opinion and trends from representative group of population being investigated.

Area of study

The study was carried out in Ondo State comprising of eighteen (18) local governments which were divided into nine agricultural zones, each containing two (2) local governments. The riverine local governments were left out as a zone leaving eight agricultural zones for study.

Population for the study

The population for the study was 56 made up of 40 registered walnut farmers and 16 agricultural extension agents. Also 2 extension agents were selected from each agriculture zone. There was no sampling; therefore the entire population was involved in the study because of the manageable size.

Instrument for data collection

The instrument used for data collection was a entrepreneurial skill questionnaire items. The instrument had a 4-point response option of Highly Needed (HN); Averagely Needed (AN), Slightly Needed (SN) and Not Needed (NN) with corresponding values of 4, 3, 2and 1.

Validation and Reliability of Instrument

The instrument was face validated by three experts , two from Department of Vocational Teacher Education (Agricultural Education Unit) and one from the Department of Crop Science all from the University of Nigeria, Nsukka. The reliability of the instrument was established using Crobanch Alpha reliability method to determine the internal consistence of the questionnaire items. The questionnaire were administered to a sample of twenty(20) respondents comprising ten (10) walnut farmer and ten (10) extension agents who have experience in the production of walnut in the nearby Ekiti State. Their responses were subjected to Crobanch Alpha reliability formula through the use of SPSS (Statistical Package for Social Science). A reliability coefficient of 0.82 was obtained.

Method of data collection and Analysis

Fifty-six copies (56) of the instrument were administered on the respondents by the researchers. The entire 56 copies administered were retrieved and analyzed. Mean was used to answer the research questions while t-test statistics was used to test the hypotheses at $p<0.05$ level of significance and at 54 degrees of freedom. The values attached to the response options of the questionnaire were Highly Needed (HN) = 4, Averagely Needed (AN) = 3, Slightly Needed (SN) = 2 and Not Needed (NN) = 1.

The arithmetic mean of the value was computed as follows = 4+3+2+1/4 = 10/2 = 2.50.

Any item with a mean of 2.50 was regarded as not needed while any item with a mean score below 2.50 was regarded as not needed. The t-test statistics was used to test the null hypotheses at 0.05 level of significance. Any item with a standard deviation of between 0.00 and 1.96 indicated that the respondents were not far from the mean and opinion of one another. The null hypothesis of no significance difference was upheld for any item whose t-test calculated value was less than the t-table value of 1.96 at $P\leq0.05$ significance and at 54 degree of freedom otherwise the item was rejected.

Results

The results for the study were obtained from the research questions answered and hypotheses tested through the data collected and analyzed.

Research question

What are entrepreneurial skills needed by retirees in planning and pre-planting operations of walnut production?

Hypothesis 1

There is no significance difference in the mean ratings of the response of walnut farmers and extension agents on entrepreneurial skills needed by retirees in planning and pre-planting operation of walnut production.

The data for answering research question 1 and for testing hypothesis1 are presented in table 1.

Table 1: Mean ratings and t-test analysis of responses of walnut farmers and extension agents on entrepreneurial skills needed by retirees in planning and pre-planting of walnut production.

S/	Planning and post planting operations	_	SD	t-cal	t-	Remarks	HO

S/No	(a)Planning operation	$\bar{X}$	SD	t-cal	t-table	Remarks	
						RQ ND	HO NS
1	Formulated specific objectives for walnut production	3.38	0.231	1.245	1.96	ND	NS
2	Revised the objectives periodically	3.54	0.095	0.311	1.96	ND	NS
3	Budgeted for the walnut enterprise	3.76	0.166	1.140	1.96	ND	NS
4	Identified sources of finance for the walnut production	3.73	0.086	0.902	1.96	ND	NS
5	Identified materials, equipment for the enterprise	3.42	0.191	1.524	1.96	ND	NS
6	Drew up activities for the enterprise on seasonal basis	3.62	0.195	1.554	1.96	ND	NS
7	Selected suitable site for the seedling production	3.89	0.096	1.604	1.96	ND	NS
8	Tested for soil suitability within the PH range of 5-8	3.50	0.142	0.125	1.96	ND	NS
(b) Pre-planting operations							
9	Cleared the weeds on the farm site for easy tillage	3.72	0.444	1.253	1.96	ND	NS
10	Packed dry weeds from farm land or burn	3.57	1.319	1.576	1.96	ND	NS
11	Stump stems and roots on the site before tillage	3.88	0.181	1.235	1.96	ND	NS
12	Tilled and designed the nursery beds into suitable blocks	3.64	0.136	0.365	1.96	ND	NS
13	Fumigated the nursery beds with fungicide	3.54	0.083	1.242	1.96	ND	NS
14	Identified the source of quality seeds for walnut enterprise	3.59	0.145	0.345	1.96	ND	NS
15	Prepared shade around and above the nursery blocks	3.55	0.178	0.563	1.96	ND	NS
16	Filled the nursery pots or polythene begs (30x17cm) with suitable soil	3.87	0.137	0.902	1.96	ND	NS
17	Carried out seed germination test on the selected seeds	3.59	0.145	0.345	1.96	ND	NS
18	Established the nutrient status of the soil before planting	3.40	0.103	1.341	1.96	ND	NS

Key _ N = 56

X =Mean
SD=Standard Deviation
RQ=Research Question
HO=Null Hypothesis
ND=Needed
NS=Not Significant

Table 1 revealed that all the 18 Entrepreneurial skill items had their means ranged from 3.38 to 3.39 and were greater than 2.50 indicating that all the 18 entrepreneurial skills (8 skills in planning and 10 skills in pre-planting operations) were needed by retirees for success in walnut production in Ondo State.

NO	(A) PLANTING OPERATIONS	X			table	RQ ND	NS
1	Selected ripe and quality fruits from established trees. The ones that had already dropped to the ground from the vine.	3.81	0.193	0.525	1.96	ND	NS
2	Extracted the seeds by splitting the fruit carefully with sharp knife.	3.75	0.184	0.357	1.96	ND	NS
3	Washed seeds in water to remove fluidy pulp monocarps on them.	3.73	0.183	0.240	1.96	ND	NS
4	Dry washed seeds at room temperature for 24-48 hours	3.52	0.091	1.625	1.96	ND	NS
5	For easy germination dehusked or partial-cracked or soaked seeds in 1500ppm Giberelic for 12hours	3.80	0.235	0.179	1.96	ND	NS
6	Sowed seeds into polybags with size 30X 17cm	3.69	0.120	0.754	1.96	ND	NS
7	Perforated the polybags to allow easy drainage of water and prevent rottening of seeds	3.81	0.193	0.525	1.96	ND	NS
8	Wet the filled soil in polybags for 3 days.	3.88	0.181	1.235	1.96	ND	NS

The standard deviation of all the 18 items ranged from 0.083 to 0.231 indicating that the respondents were not far from the mean and from one another in their responses. The hypothesis tested in table 1 revealed further that all the 18 skills items had their calculated t-values ranged from 0.125 to 1.604 which were less than the t-value of 1.96 at 0.05 level of significance and 54 degrees of freedom. This indicated that there is no significant difference in the mean ratings of the responses of the two groups of respondents (i.e. walnut farmers and agricultural extension agents) on the 18 skills needed by retirees for planning and pre-planting operations for walnut production in Ondo State. With this result, the null hypothesis was upheld for all the 18 skills items

Research question 2

What are the entrepreneurial skills needed by retirees in planting and post planting operations?

Hypothesis 2

There is no significant difference in the mean ratings of the responses of walnut farmers and extension agents on entrepreneurial skills needed by retirees in planting and post planting operations of walnut production.

The data for answering research Question 2 and for testing hypothesis 2 are presented in table 2.

Table 2: Mean ratings and t-test analysis of the responses of walnut farmers and extension agents on entrepreneurial skills needed by retirees in planting and past-planting operations of walnut production.

Data in table 2 showed that all the 20 Entrepreneurial skills items had their mean values ranged from 3.45 to 3.93 and were greater than 2.50 indicating that all the 20 entrepreneurial skills (9 skills in planting operations and 11 skills on post-planting operations) were needed by retirees for success in walnut production in Ondo state. The standard deviation of all the 20 entrepreneurial skill item s ranged from 0.083 to 0.235 indicating that the respondents were not far from the mean and from one another in their responses.

The hypothesis in table 2 revealed that all the 20 skill items had their calculated t-values ranged from 0.179 to 1.657 which were less than t-table values of 1.96 at 0.05 level of significant and 54 degree of freedom. This indicated that there is no significant difference in the mean ratings of the responses of the two groups of respondents on the 20 skill items needed by retirees for planting and post-planting operations for success in walnut production in Ondo State. With the above results, the null hypothesis of no significant difference was upheld for all the 20 skill items.

Research question 3

What are entrepreneurial skills needed by retirees in harvesting, packaging and marketing of walnut for profitability?

The data for answering research question 3 are presented in Table 3

Table 3: Mean ratings of the responses of walnut Farmers and extension agents on entrepreneurial skills needed by retirees in harvesting and marketing and processing of walnut production for profitability.

S/No	Harvesting, processing and marketing operations	X	SD	Remark
	HARVESTING			RQ ND
1	Collect ripe fruit that have fallen from the top of the supporting tree (can be done at weekly interval)	3.42	0.472	ND
2	Pack the fruit to a place where there is shade for processing	3.26	0.813	ND
PROCESSING				
3	Split the fruit with a sharp knife to bring out the seeds	4.33	0.871	ND
4	Wash the seeds thoroughly in water until the fluidy pulp is removed	3.83	0.912	ND
5	Dry in cool place to remove the water from the seed coat	3.60	1.412	ND
6	Put the seeds in bags or seed container	3.55	0.963	ND
MARKETING				
7	Make market survey for walnut	3.51	1.425	ND
8	Fix appropriate price for walnut seed	3.65	1.364	ND
9	Sell to buyers at market or at site	3.26	0.812	ND
10	Keep and balance farm account at the end of the fruiting period	3.20	1.231	ND

Key _ N = 56

X =Mean
SD =Standard Deviation
RQ =Research Question
HO=Null Hypothesis
ND=Needed
NS=Not Significant

Table 3 revealed that all the 10 Entrepreneurial skills items had their mean values ranged from 3.20 to 3.83 and were greater than 2.50 indicating that all the 10 entrepreneurial skills (2 skills in harvesting, 4 skills in processing and 4 skills in marketing operations) were needed by retirees for success in walnut production in Ondo state.

The standard deviation on the 10 items ranged from 0.425 to 1.425. This indicated that the respondents were not far from the mean and from one another in their responses.

Discussion of results

The result of the study revealed that the respondents (walnut farmers and Agricultural extension agents) agreed that the retirees needed entrepreneurial skills in all the 80 identified entrepreneurial skill items (8 skills in planning and 10 skills in pre-planting operations); 20 identified entrepreneurial skills items (2 skills in harvesting; 4 skills in processing and 4 skills in marketing operations). The findings of this study are in agreement with the opinion of Olaitan and Mama (2001) who said that planning activities for project included formulation of specific objectives for the enterprise, revising objectives periodically and budgeting for the enterprise among others. The result of study are also in line with findings of Ibrahim (2009) in a study conducted on entrepreneurial skills required by secondary school graduates for success in rice

production enterprise in Kwara state were it was found out that 11 skills were required in planning for rice production. These included: decide on type of farming practices to be adopted for growing, processing and marketing of rice, identify input for production and identify source of funds among others.

The findings of this study is in consonance with the findings of study carried out by Dibio (2008) on requisite skill required by teachers of agriculture for improving the teaching of cocoyam production in pre-plating operations, planting operations, post planting operations, yam processing and storage. The findings also agreed with the view of Opeke (1997) who stated that major post-planting operations that must be carried out in groundnut production are weeding, fertilizer application and spraying insecticide to control pest. The result of this study are also in line with the result of Anete, Amusa and Eze (2009) in a study conducted on entrepreneurial competency required by students of school of Agriculture in south west Nigeria for processing cocoyam into flour and chips for employment on graduation. The researchers found out that students required thirty three (33) entrepreneurship competencies for planning, cocoyam processing enterprise, processing cocoyam into flour and chips and marketing processed cocoyam productions. The findings from hypotheses tested indicated that there is no significant difference in the mean responses of walnut farmers and Agriculture extension agents in the forty eight (48) entrepreneurial skills needed by retirees for success in walnut production in Ondo state.

Conclusion

Observation had shown that the retirees in Ondo State are at crossroads due to lack o entrepreneurial skills with which they need to re-engage themselves after their retirement. Since these retirees have retired from government jobs but are not tired, they need to learn a less strenuous job that will supply their daily financial needs. It was also observed that walnut production requires minimal initial capital, with short period of gestation. The crop is high revenue yielding with regular flow of streams of income. However, walnut production requires that the would-be entrepreneur learns some skills that will enhance its successful production. It was on this note that the study was conducted to investigate the entrepreneurial skills needed to re-engage the retirees for success in walnut production. The study found out that forty-eighty (48) skill items were needed by retirees in planning, pre-planting, planting post planting, harvesting, processing and marketing operations. With these entrepreneurial skills, retirees are sure that their reduce, fear will be removed, business failure will reduce, they will have sustainable means of livelihood and their life span will be elongated.

Recommendations

i. It was therefore recommended that the 48 entrepreneurial skills identified by this study be used at the vocational centre in training the retirees for success in walnut production enterprise in Ondo state.
ii. Ondo state government should establish more skill acquisition centres in various locations in order to accommodate the training of the retirees in walnut production.
iii. Government should provide necessary facilities for the training of the retirees in the identified skills in walnut production.
iv. Since walnut production is a money making venture, schools and colleges could be encouraged to go into the production of walnut.

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