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ENTREPRENEURIAL SKILLS IN THE PRODUCTION OF CUCUMBER FOR SUSTAINABLE LIVING OF RETIREES IN EDO AND DELTA STATE, NIGERIA

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Abstract

The study examined entrepreneurial skills in the production of cucumber for sustainable living of retirees in Edo and Delta State of Nigeria. The design that was used for the study is descriptive survey design. The entire population for the study was 98, made up of 78 students and 20 lecturers of crop science in two universities. The sample for this study was 49, representing 50% of the population that was purposely sampled. Three purposes and research questions were raised for the study. The instrument used for the study was a structured questionnaire. This was validated by two experts in crop science. The reliability coefficient of the instrument obtained using Cronbach alpha statistics was 0.72. Data were collected by researchers aided by two briefed research assistants. Data were analyzed using mean and standard deviation. Findings from the study revealed that the retirees required eleven (11) skills for successful planning and pre-planting operations in cucumber production, seven (7) skills in planting and management of cucumber ware required by retirees for cucumber production and twelve (12) skills were required in harvesting and marketing of cucumber by the retirees for effective and suitable living in cucumber production. The study, therefore, recommends that identified skills be packaged into modules and used for the training of retirees in cucumber production. It was also recommended that there should be pre-retirement conference and seminar for retirees, where they could be sensitized on availability of training that can help them at retirement.

Keywords: Entrepreneurial, Skills, Retirees, Cucumber.

Introduction

Cucumber is a fruit that has become a great source of income and wealth as the demand and consumption are very high. Cucumber (Cucumis sativus) is an annual, deep-rooted crop with tendrils and hairy leaves. It is native to Asia and Africa (Valenzuela, Hamasaki & Fukuda in Awisigba, 2018). According to Derbew (2019), fruit production is an important part of horticulture that plays a pivotal role in the livelihood, nutrition and food security of country. The authors emphasized that the demand for fruit consumption which include cucumber is increasing.

The fruits of cucumber have many health benefits, these include among others; its antioxidants content that fights free radicals in the body, vitamin content that improves eyesight; rich water and other nutrients, that promotes hydration, and lowers blood sugar.

Cucumber contains many important vitamins and minerals. Consumption of cucumber aids in weight loss because of its low fat, cholesterol, and calories contents. The fruit should be harvested before it is fully mature as picklings or slicing else they turn yellow and the crop will stop producing and become pithy and soft. The fruit should also be harvested in the morning when they are cool and firm, since they tend to shrivel easily because they contain 96% water (Saraswathy, Preethi, Balasubramanyan, Rerathy & Natarajan, 2015). Cucumber has become very popular and accepted by Nigerians, it can be eaten raw as a fruit, used as salad, in smoothies, used as seasons to spice food, meats and other fruits (Akinbobola & Ihensekhien,2020) The benefits have made cucumber to be a well sort after fruit. Therefore, it becomes imperative that the skills required in the production be harnessed

Skill is defined by Osinem and Nwoji in Dumbiri (2020) as the ability to perform an activity expertly. These authors described skill as a well-established way of doing things. Skill is regarded as the ability to carry out a task that is related to some meaningful exercise (Onoriode, Nathaniel & Amewhule, 2020). Skill can be regarded as the dexterity to carry out an activity meaningfully in order to achieve expected results. The expected result or meaningful exercise here is being entrepreneurial. Entrepreneurial skill according to Adelakun, Igrubia and Anaele (2018) are the skills that can be imparted and the characteristics that can be produced in individuals which can enable them to develop new innovation plan. Weihrich, Cannice and Koontz (2011) opined that an entrepreneur is someone that focuses on something new and creativity, thereby being able to transform a dream to a lucrative venture by working outside the setting of the organization. Entrepreneurial skills are the skills that retirees need to be able to identify opportunities to invest in an environment in other to effectively to set up an enterprise. The economic value of cucumber, nutritional value, acceptability and market value are promissory with great prospect. The production of cucumber is easy. The production period is short within 3 months. These advantages of cucumber have made it veritable venture for farmers.

Retiree according to Amusa and Dumbiri (2010) are persons that have severed from their former work after serving for some time, yet are interested and able to continue his/her beinghood in any worthy occupation with less exertion. The different areas of cucumber enterprise that the retirees need entrepreneurial skill for sustainable living include; planning and pre-planting operation, planting and management operation and harvesting and marketing enterprise. According to UNESCO as cited in Urevbu (2015), sustainability means meeting personal needs without compromising on the aptitude of the upcoming generation to satisfy their needs. Sustainable living therefore, is the aptitude of the retirees to take care their needs without being a burden and stretching the resources and income of the future generations.

It is a known fact that most retirees get weak, become sick and even look wretched as a result of non-payment of their gratuity and pension, shortfall of the usual monthly income due to reduction of income and wages and replacement with pension which most times is meager and just for maintenance. Some retirees die quickly after retirement since they did not prepare for the life after retirement. It becomes very imperative to introduce the retiree into cucumber enterprise that will keep them in working and earning, even better

than when they were in active service. Hence, the need to develop entrepreneurial skill in the production of cucumber for sustainable living of retirees is crucial

. Specifically, the purpose of this study include to identify;

1. planning and pre-planting skills in cucumber production
2. planting and management skills in cucumber production
3. harvesting and marketing skill for cucumber production

Research Questions

These research questions were raised for the study:

1. What is the planning and pre-planting skills required by retirees in cucumber production?
2. What are the planting and management skills required by retirees in cucumber production?
3. What are the harvesting and marketing skills retirees required in cucumber production?

Methodology

The design that was used for this study is descriptive survey. The population for this study was 98 comprising, 78 five hundred level (500L) students of the Department of Crop Science in two universities and 20 lectures in the same Department. The sample for the study was 49, which represented 50 percent of the population, which was purposively sampled.

A well-structured instrument (questionnaire) by the researchers was used in the collection of Data. The instrument was a 4-point rating scale of strongly agreed (SA) 4 point, Agreed (A) 3 points, Disagreed (D) 2 points and strongly disagreed (SD) 1 point. The questionnaire named 'Production Skill Required in the Production of Cucumber (PSRPC)' was dispersed by the researchers with the aid of two Assistants and retrieved at the spot to guarantee an efficient return. The questionnaire was validated by 2 specialists in crop science department. Cronbach alpha statistics was used in calculating the reliability of the instrument and this yielded a reliability coefficient of 0.72.

Data collected for the study were analyzed with descriptive statistics such as frequencies, mean and standard deviation. The decision rule mean was 2.5, this is the average of the four-point rating scale. Any item equal or greater than 2.5 was regarded as agreed, as any item less than 2.5 was judged disagreed.

Research Question 1: What are the skills in planning and pre-planting required by retiree for cucumber production?

Table: 1

Mean ratings of respondents on the planning and pre-planting skills in cucumber production.

N=48

S/N	ITEM STATEMENT	SA	A	D	SD	$\bar{x}$	S.D	DECISION
1	Conduct feasibility study for cucumber farming	8	23	11	7	2.65	0.92	Agreed
2	Budget for cucumber farm production	14	22	8	5	2.92	0.92	Agreed
3	Draw a business plan	10	21	10	8	2.67	0.98	Agreed
4	Test for suitable soil between PH of 5.5-7.0	18	20	6	5	3.04	0.94	Agreed
5	Clear all weeds in the land	26	23	-	-	3.53	0.49	Agreed
6	Plough the land	17	25	4	3	3.14	0.81	Agreed
7	Make ridge of about 1.5meters apart	20	23	4	2	3.24	0.77	Agreed
8	Apply compost or inorganic manure	16	14	11	8	2.78	1.08	Agreed
9	Fumigate the land	17	14	10	8	2.82	1.08	Agreed
10	Select viable variety of cucumber seeds	28	21	-	-	3.57	0.49	Agreed
11	Treat the seeds with fungicides	21	23	5	-	3.33	0.65	Agreed

Data on Table 1 reveals that all the eleven (11) skills on planning and pre-planting operation has their mean between 2.65 and 3.57, which are greater than cutoff value of 2.50, indicating that the 11 skills are required by retirees for planning and pre-planting enterprise in cucumber production. The standard deviation is between 0.49 and 1.08, indicating that respondents are not too far from the mean and each other in their responses.

Research Question 2: What are the planting and management skill required by retirees in cucumber production?

Table 2

Mean rating of respondents on the planting and management skill required by retirees in cucumber production.

N=48

S/N	ITEM STATEMENT	SA	A	D	SD	$\bar{x}$	S.D	DECISION
1	Open the soil with cutlass at 2-4cm depth	20	27	2	-	3.37	0.56	Agreed
2	Sow 2-3 seeds 90cm apart	22	27	-	-	3.45	0.50	Agreed
3	Replace ungerminated seeds after a week of planting	15	23	9	2	3.04	0.81	Agreed
4	Weed twice in the first 6-8 weeks	21	28	-	-	3.43	0.49	Agreed
5	Apply manure again after 30days	23	27	7	2	3.24	0.84	Agreed
6	Stake the cucumber plant	17	32	-	-	3.35	0.48	Agreed
7	Irrigate the crops regularly	10	28	9	2	2.94	0.74	Agreed

Data from Table 2 indicates that the seven (7) items on planting and management skills in cucumber production required by retirees have mean ratings range of 2.94 and 3.45, which are above the cut off mean of 2.50. This therefore indicates that all the skills items are required for production of cucumber by retirees, the items have standard deviation range between 0.48 and 0.84, thus indicating that the respondents are not far from the mean and each other in their responses.

Research Question 3: What are the harvesting and marketing skills required by retirees in cucumber production?

Table: 3

Mean and standard deviation of respondents on the harvesting and marketing skills required by retirees in cucumber production.

N=48

S/N	ITEM STATEMENT	SA	A	D	SD	$\bar{x}$	S.D	DECISION
1	Make first harvest 40-60 days after planting	14	26	6	3	3.04	0.81	Agreed
2	Harvest fruits of uniform length, shape, and diameter	13	32	4	-	3.18	0.56	Agreed
3	Harvest fruits in the morning	20	21	6	2	3.20	0.81	Agreed
4	Harvest fruit before yellowing at blossom end	24	16	7	2	3.27	0.87	Agreed
5	Harvest three times a week	16	27	5	1	3.18	0.69	Agreed
6	Check cucumber fruits against any mechanized injury during harvesting	14	35	-	-	3.29	0.49	Agreed

7	Wash cucumber in chlorinated water for few minutes	15	21	8	5	2.94	0.93	Agreed
8	Sort the fruits according to size and quality	20	29	-	-	3.41	0.49	Agreed
9	Advertise your cucumber for sale	13	36	-	-	3.27	0.44	Agreed
10	Pack marketable cucumber fruits in fiber board or carton	11	35	3	-	3.16	0.51	Agreed
11	Sell fruits at farm gate to buyer	8	41	-	-	3.16	0.37	Agreed
12	Sell to distributors and retailers	12	37	-	-	3.24	0.43	Agreed

Data in Table 3, indicates that the 12 items have mean value range of 2.94 to 3.41, which is greater than cut off mean of 2.50, indicating that all the skill items are required by retirees in harvesting and marketing enterprise in cucumber production. The standard deviation also is between 0.37 and 0.93 evidence that respondents are not distant from each other and the mean in their responses.

Discussion of findings

The finding of the study in Table1 reveals the skills in planning and pre-planting in cucumber production. These skills include: conduct feasibility study, budget for cucumber farm, draw business plan, clear all weed, treat for PH, plough the land, make ridge, apply compost or inorganic fertilizer, fumigate the land, select viable seed and treat seeds with fungicide. These findings are in consonant with the report by Uzoamaka (2011) in planning for snail production in entrepreneurial skills that is required by secondary school graduate to include; decision on the location for snail production, identify input required for the business and budget for the business. This is in alignment with the study by Asogwa, Dumbiri and Omeji (2010) in a study on the planning and pre-planting competency of Okra framers for commercial production to increase income to include; choose the location of the Okra farm, identify source of fund for the production, make budget for the production, acquire land that is well drained and having fertile soil, clear the land of existing vegetation, spread manure on the area of land, till the ground to specification. The findings in Table 2 on planting and management skills required by retirees in cucumber production, reveal that the 7 skills were required which include: Replace un-germinated seeds after a week, open the soil with cutlass 2-4cm depth, sow 2-3 seeds 90cm apart, weed twice in the first 6-8 weeks, apply manure after 30days, stake the cucumber and irrigate the crops regularly, this is in accord with the opinion of Igbinosun (2014) on the out grower rubber plantation establishment and exploitation, where skill in planting operations are enumerated as; holing, supply planting, row weeding among others. The study is equally in concord with Ukonze (2010) on vegetable production skill needs of instructor in universities for effectiveness in teaching of vegetable crops in Enugu State. The study listed management skill to include; mark out tilled land for beds and sow, fumigate with fumigants, manure the soil, water thoroughly after transplant, weed at interval among others.

The findings in Table 3 on harvesting and marketing skills required by retirees in cucumber production revealed that the 12 skills are required and these include: make first

harvest 30-60days after planting, harvest fruit before yellowing, harvest fruit of uniform size, harvest 3 times in a week, check fruit against any mechanical injury, wash fruit in chlorinated water for few minutes, sort fruits according to size and quality, advertise cucumber for sale, pack marketable fruits in fibre board, sale fruit at farm gates to buyer, sell to distributors and retailers etc., these findings aligmed with Ogungbade, Alkali and Ibekwe (2010) in a study on work skills required by secondary school graduates for groundnut production enterprise in Kaduna State, where they revealed skills in post planting of groundnut to include; identify mature groundnut with yellowing leaves or wilting leaves, harvest mature groundnut, sort out the seeds to different sizes, bag and store dried seeds, advertise the seeds for sale, transport the seeds to market place, sell out groundnut to buyers among others. The findings were also in concord with Asogwa, Dumbiri and Omeje (2010) on competency-capacity building needs of Okra farmers for commercial production to enhance income in Enugu State. They listed the post planting and post harvesting operation as: Harvest when mature, store harvested fruits in a cool place, advertise the fruit immediately for sale, sell fruits at farm site or in the market.

Conclusion and Recommendation

Findings of the study revealed that respondents agreed that the retirees required the following planning and pre-planting skills in order to be able to practice cucumber farming for sustainable living. These skills include among others; conduct feasibility study, budget for cucumber farm production, clear and plough land, apply manure, fumigate the farm and select viable seeds. It was also concluded that retirees need entrepreneurship skill in planting and management of cucumber. These skills include sowing 2-3 seeds at required depth, replace un-germinated seeds after a week, weed the farm twice in the first 6-8 weeks, apply manure or fertilizer, stake and irrigate the crops regularly.

Based on the findings from the responses of the respondents too, it was concluded that the skills in harvesting and marketing are required by the retirees in order to practice cucumber farming for sustainable living. These skills include ability to harvest uniform fruits as from 40 days of planting, harvesting fruits 3 times in a week, before it becomes yellowish, sorting cucumber fruits by size and quality, advertise the fruits, pack in fibre board or carton and sell to buyers.

Based on the findings from study, it was recommended that:

1. The identified skills required for cucumber production should be packed into modules that will be used in training retirees on entrepreneurial skills for cucumber production.
2. There should be a pre-retirement conference to sensitize retirees on the availability of entrepreneurial skill in cucumber that will help them in sustainable living after retirement.
3. Farmers on cucumber should sensitize the public, especially middle aged workers on the values, prospect and reward in cucumber and cucumber farming.

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