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WORK SKILL IMPROVEMENT NEEDS OF FARMERS IN COCOA PRODUCTION FOR POVERTY ALLEVIATION IN EBONYI STATE, NIGERIA

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Abstract
This study was carried out to determine work skill improvement needs of farmers in cocoa production for poverty alleviation in Ebonyi State, Nigeria. Six research questions were developed in line with the purposes of the study. The study adopted descriptive survey design. The population of the study was 542.The whole population was used for the study therefore no sampling. A–75 item instrument was used by the researcher for data collection. The instrument was face validated by five experts and reliability was determined using Cronbach Alpha Statistics the reliability gotten was 0.79. The administration and retrieval of instrument were through direct contact and use of research assistants with the respondents. Data collected were analyzed using mean and standard deviation. The findings of the study revealed that the respondents accepted all the items presented as the work skill improvement needs of farmers in cocoa production for poverty alleviation in Ebonyi State, Nigeria. It was recommended that governmental and non-governmental organizations should assist in the training of farmers on the identified work skills in Ebonyi States, Nigeria.

Introduction
Cocoa which is botanically called theobroma cocoa belongs to the family of sterculia ceae and is said to have originated from the Upper Amazon Basin in South America specifically Brazil (Iwena, 2008). Cocoa is an important perennial crops cultivated in Southern and Western part of Nigeria. Cocoa came into Nigeria via Bonny River in River State and it later spread to other part of Nigeria through traders, missionaries and soldiers (Atep, 2003). The author stated that it is currently grown in Nigeria in the western states, some parts of Benin in Edo State, Imo State, Cross River State and Ebonyi State. Today, cocoa is an important export crop of Nigeria (Obi, 2003). Apart from its export value, Atep (2003) stated that cocoa is extensively used in Nigeria in the following ways; production of beverage such as chocolate, making cocoa drinks, making polish, processing cream, distilling gin from fermented cocoa wine, ropes gotten from its coupons and shells is used as organic manure. The leaves apart from its use as animal feed and mulching materials can be used in wrapping foods and for preservation. Cocoa products are either processed or consumed locally or sold in the market commercially or exported for foreign exchanging earnings.

There are many varieties of cocoa that are grown in Nigeria such as amelonda (forasero), upper amazon, trinitano, criollo and hybrids (Ogieva, 2003). There are some basic requirement and conditions for cocoa production in Nigeria. Example, cocoa require temperature of 15^0C to 20^0C, rainfall of 125 to 200cm per annum and a deep fertile well drained loamy soil (Ogieva, 2003). Cocoa is propagated mainly by seeds, through vegetative parts, budding and stems cutting (Iwena, 2008). The vegetative method of propagation of cocoa is restricted to research-station while propagation by seeds (sexual propagation) could be done through nursery preparation or insitu planting (Atep, 2003).

Nigeria and Cameroon jointly supply more than two third of the world cocoa and it accounts for about 20 percent of the value of Nigeria agricultural exports (Obi, 2003). Bisong in Obi (2003) reports that an estimate of about 30% total cocoa produced in South-Eastern Nigeria comes from Ebonyi State. The forms and rate at which cocoa is consumed and marketed locally and internationally makes its productions profitable for generating income for the farmers.

Production in view of Olaitan in Ogungbade, Alkali and Ibekwe (2010) is the process of changing or transforming input into output (product). In the view of Iwena (2002) production refers to all activities which results in the creation of goods and services. In the context of this study cocoa production means all the activities involved in the creation of cocoa seeds/products as an output. Cocoa production is squarely the work of the farmers in Nigeria. Farmers are integral part of the society as they provide the populace with food and other agricultural products that are used as raw materials in industries. Farmers that cultivate cocoa are called cocoa farmers. Cocoa farmers in

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Ebonyi State belong to various farmers' co-operative societies and of varied years of experience. Those with large family sizes require less hired labour to carry out certain operations in cocoa production such as pre-planting, nursery practices, planting, post-planting activities when compared with those with small family size. It therefore, mean that for success in cocoa production, irrespective of family size, cocoa farmers' work skills need to be improved.

The result of a preliminary study carried by the researcher shows that the cocoa farmers in the study area need to improve on their work skills to enable them confront challenges facing them such as, poor cocoa yield, increasing pests and diseases infestation, increasing cost of production and poverty among them. Thus for cocoa farmers to over-power these challenges and increase their productivity, they need improvement on their work skills. The improvement need of cocoa farmers should be directed on their skills in the identified activities necessary in cocoa production. Farmers who posses skills among other things has qualities that will enable them succeed in a particular work. Work-skills are the practical activities which farmers must process to perform a task aimed at generating income for a living through cocoa production to alleviate poverty.

Poverty being a misery in its various forms has increasing occupied the attention of the global community in recent decades. Poverty is one of the most serious problems in Nigeria. According to United Nation Development Programme (UNDP, 2003) poverty is a human condition characterized by hunger and malnutrition, poor health, lack of access to safe drinking water, lack of participation in education, lack of marketable skills, insecurity and vulnerability. It is also defined as a state where an individual is neither able to carter adequately for his/her basic needs of food, shelter and, clothing, nor meet social and economic obligations as a result of lack of gainful employment, skills, assets and self esteem (CBN, 1999).

Poverty alleviation refers to conscientious effort put forward by individuals, society, government, non-government organization (NGOs), and international community to reduce economic vices or input of poverty. Obi (2005) added that the slow pace of poverty and hunger reduction points out to a very urgent need for up-skilling of resource poor farmers especially on activities which their lives depend. In recent years cocoa production and marketing is experiencing big constraints and as a result this, the standard of living of the Ebonyi people who depend largely on cocoa production has been brought to the lowest level.

The low standard of living of cocoa farmers in Ebonyi State could be linked to poor or low yield of cocoa as well as fluctuation of cocoa price in international market Obi (2003). The poor yield of cocoa could equally be as a result of inappropriate work-skills posses by cocoa farmers where certain work-skills needed for cocoa production are not carried out expertly by farmers which created a gap. For this gap to be filled, the farmers need improvement through training programmes in different stages of cocoa production such as nursery practices, planting operation, field management, harvesting, processing and marketing among others. It is against this background that the researcher investigated the work-skill improvement needs of farmers in cocoa production for poverty alleviation in Ebonyi State, Nigeria.

Statement of the Problem

The production of cocoa in Nigeria is significant as it provides food and raw materials for our industries. Cocoa contributes meaningfully to foreign-exchange and it is a veritable source of livelihood for majority of farmers who are cocoa farmers. Ebonyi State is one of the states in Nigeria where cocoa is produced. Unfortunately the production of cocoa in Ebonyi State is at its downward spiral in the last decade. Example, cocoa farmers are suffering from poor yield of cocoa, increased pest and disease infestation, increase cost of production, fluctuation in price of cocoa and poverty. The major reason why some of these problems have continued is that most of the farmers stick only to mono-cultural method of cocoa production without improvement in their work-skills. According to Obi (2003) poor yield of cocoa among farmers are attributed to inappropriate work-skill possessed by them.

Cocoa farmers in Ebonyi State therefore need improvement in their work-skills in cocoa production in the following areas: nursery practices, planting operations, field management operations, harvesting, processing and marketing of cocoa as a way of increasing yield, reducing cost of production and making higher gain which could help to eradicate poverty.

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Justification of the Study

The findings of this are beneficial to farmers, government, Non-Governmental Organizations, extension agents and future researchers.

a. Farmers: The result of the study could be beneficial to the farmers as it provided the lists of the work-skills they need improvement so as to increase yield; increase income generation; and to eradicate poverty among others.
b. Government: Government of Ebonyi State in collaboration with the state Ministry of Agriculture could benefit from the result of this study by knowing the areas farmers need to improve their work-skills in different areas of cocoa production. This could enable the government to know when farmers need skill training or financial assistant in Ebonyi State, Nigeria.
c. Non-Governmental Organizations: Non-governmental organizations could benefits from this study as the lists of areas that farmers need to improve their work skills were made available to them for training.
d. Extension Agents: The extension agents could benefit from the lists of work-skills needed by cocoa farmers to improve on themselves. They could take it to agricultural research institute to verify them and send to the farmers for on-farm trial to eradicate poverty. The result could help them to organize workshop for farmers to improve their work-skills.
e. Future researchers: Future researchers could benefit from this study because the lists of skills that farmers needed improvements on were made available to them. This result could serve as a literature to fall back on when carrying out similar research on other crops in the state in other parts of the country.

Research Questions

The following research questions were formulated to guide the study:

1. What are the work-skills improvement needs of cocoa farmers in nursery practices?
2. What are the work-skills improvement needs of cocoa farmers in planting operations?
3. What are the work-skills improvement needs of cocoa farmers in field management operations?
4. What are the work-skills improvement needs of cocoa farmers in harvesting of cocoa?
5. What are the work-skills improvement needs of cocoa farmers in processing of cocoa?
6. What are the work-skills improvement needs of cocoa farmers in marketing of cocoa?

Methodology

Design of the Study

The study adopted descriptive survey research design. Descriptive survey research design in the opinion of Olaitan, Ali, Eyoh and Sowande (2000) is a plan, structure and strategy that the investigator wants to adopt in order to obtain solution to research problems and test the hypotheses formulated for the study.

Area of the Study

The area of the study was Ebonyi State which comprised of thirteen Local Government Areas namely: ; Abakaliki, Afikpo North, Afikpo South, Ebonyi, Ezza North, Ezza South, Ohaozara, Onicha, Ohaukwu, Ikwo, Ishielu, Ivo and Izzi. The area is known for cocoa production by the famers as means of livelihood. Because of this, many cocoa farmers live in the state with their families. Similarly many Extension Agents work in the state to help farmers in the production of cocoa.

Population for the Study

The population for the study is 542 which comprises of 502 Registered Contact Cocoa Farmers and 40 Agricultural Extension Agents in Ebonyi State (Ebonyi State Agricultural Development Programme (EBADEP), The farmers was used because they are the people involved in cocoa production and know the area they need improvement in their work-skills to alleviate poverty while the Extension Agents serve as the bridge between the farmers and agricultural research institutes.

Sample and Sampling Technique

The sample for the study was 542 which included all the Registered Contact Cocoa Farmers and all the 40 Agricultural Extension Agents in Ebonyi State. Therefore no sampling was done. This technique according to Eboh (2009) is adopted when the population is small and can easily be covered by the researcher. These Registered Contact Cocoa Farmers and Agricultural Extension Agents were identified through the assistance of Ebonyi State Ministry of Agriculture.

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Instrument for Data Collection
The instrument for data collection was structured questionnaire. The questionnaire was used to collect information from the Registered Contact Cocoa Farmers and Agricultural Extension Agents. The items in the questionnaire were structured on a modified four point rating scale with the following response mode: Highly Needed, Moderately Needed, Slightly Needed and Not Needed.

Validation of the Instrument
The instrument was subjected to face-validation five experts. Three of the experts came from the Department of Agricultural Education, Faculty of Vocational and Technical Education, University of Nigeria, Nsukka, Nigeria while the remaining two experts came from the Department of Science Education (Measurement and Evaluation option) Ebonyi State University Abakaliki, Nigeria. Their suggestions and corrections were incorporated into the final draft of the questionnaire. The questionnaire had 100 items before validation and later reduced to 75 items after validation.

Reliability of the Instrument
Forty copies of the questionnaire were administered to forty respondents (Twenty Cocoa Farmers and Twenty Extension Agents). The respondents were drawn from Cross River State, Nigeria which is outside the study area. The choice of Cross River State is because it is in the same agro-climatic condition with Ebonyi State. The data gotten was computed using Cronbach Alpha Formular and it yielded a co-efficient of 0.79 showing that the instrument is reliable.

Method of Data Collection
The data was collected through the help five research assistants that were trained on how to administer the instrument. Five hundred and two copies of the questionnaire were administered to the Registered Contact Cocoa Farmers and forty copies to Agricultural Extension Agents in the study area. The instrument was collected by the researcher and the assistants after completion.

Method of Data Analysis
The data collected from the Registered Contact Cocoa Farmers and Agricultural Extension Agents were analyzed using Mean Statistic and Standard Deviation. The values attached to the response options of the questionnaire were: Highly Needed (4); Moderately Needed (3); Slightly Needed (2); and Not Needed (1). The interval scale of 0.05 was used to determine the upper and lower limit of the value of the mean. The arithmetic mean was determined through the summation of the values of the options and dividing by the number of columns.

Which is $\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$

Therefore any work skill item with a mean response of 2.50 and above was regarded as needed while any work skills item with a mean response less than 2.50 was rejected.

Results

Research Question One
What are the work-skill improvement needs of cocoa farmers in nursery practices?

Table 1: Mean Ratings of responses of Registered Cocoa Farmers and Extension Agents on the work skill improvement needs of cocoa farmers in Nursery practices.

S/N	Item Statement	$\bar{x}$	SD	Remarks
1	Select a deep fertile well drained loamy soil.	3.63	0.50	Needed
2	Select a soil rich in organic matter for nursery.	3.56	0.51	Needed
3	Select a flat area for the nursery.	3.60	0.51	Needed
4	Select a place closer to source of water and planting materials.	2.68	1.14	Needed
5	Select a place easily accessible to the nursery operator.	2.74	1.09	Needed

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6	Select a nursery site nearer to the farm.	2.57	0.91	Needed
7	Fence the nursery site to prevent strangers or animals from entering.	2.58	1.13	Needed
8	Clear the bush using cutlass, herbicides or tractor.	2.69	1.37	Needed
9	Plough the land using hoe or plough.	2.89	1.32	Needed
10	Harrow after 3-4 weeks.	2.51	1.09	Needed
11	Raise the bed to a height of about 10cm to 20cm, 120cm wide and a length of about 2m in other to allow water to filter the bed.	3.07	1.25	Needed
12	Make the distance between each bed to be 60cm if more than one bed is constructed.	2.82	1.21	Needed
13	Make the nursery beds to be level.	2.77	1.09	Needed
14	Provide shade of about 30-60cm above the seed beds.	2.68	1.14	Needed
15	Provide furrows in-between the beds to drain excess water.	2.74	1.09	Needed
16	Water of nursery beds before sowing of seeds 32	2.73	1.13	Needed
17	Use a string to makes lines 60cm apart along the entire length of each bed.	2.51	1.09	Needed
18	Make holes on each line twice the size of cocoa seeds at 5cm apart.	3.64	0.52	Needed
19	Sow the seeds into the holes with the pointed end up.	3.66	0.54	Needed
20	Cover the holes and water the nursery bed twice daily	3.77	0.47	Needed
21	Use poly bags in nursery practice	3.66	1.13	Needed
22	Use thin wall black poly bags as the preferred bags for the medium	3.51	0.47	Needed
23	Mix about 10% dried manure and 10% organic matter with 80% of sieved soil.	2.58	1.13	Needed
24	Use bags of 5 x 8cm for short nursery periods of less than 4 months.	3.25	0.72	Needed
25	Use bags of 8 x 25 cm if the seedlings to raised will be 5 months and above in the nursery.	3.55	0.62	Needed
26	Open each poly bag and fill it with the preferred medium and press the mixture so that the poly bag stand firm.	3.53	0.50	Needed
27	Provide shade of about 2m for poly bags to allow people work easily under it.	3.32	0.60	Needed
28	Arrange the bags in packs of 5 or 10 bags to allow people work easily under it.	3.44	0.62	Needed
29	Allow about 50cm space between two packs to serve as paths when nursery operator is watering and weeding the poly bags.	2.69	1.37	Needed
30	Apply liquid fertilizer for young seedlings with a watering can	2.89	1.32	Needed
31	Ensure that granules do not remain on the leaves to prevent damage	3.32	0.60	Needed

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32	Water the seedlings thoroughly after applying granule fertilizer to dissolve the granules and ensure root contact	3.71	0.66	Needed

The data presented in Table 1above revealed that the 31 work-skill items in nursery preparations had their mean items values ranged from 2.51-3.77. This means that each of the mean values is above the cutoff point of 2.50. This indicated that they are all needed by cocoa farmers in Ebonyi State for practicing nursery preparation in coco production.

Research Question 2
What are the work-skill improvement needs of cocoa farmers in planting operations?

Table 2: Mean ratings of response of Registered Cocoa Farmers and Extension Agents on the work skill improvement needs of cocoa farmers in planting operations.

S/N	Item Statement	$\bar{x}$	SD	Remarks
33	Select healthy seedlings for uniform growth and vigour.	3.39	0.91	Needed
34	Plant between April to June.	2.93	0.93	Needed
35	Dig a hole of 30cm deep and 5-7cm larger than the size of the seedlings basket or polythene bags to avoid damage.	2.69	1.93	Needed
36	Cut the polythene bag with sharp knife or razor blade to avoid damaging the young cocoa plant	3.25	0.93	Needed
37	Place the seedlings with the ball of earth in the hole.	2.52	1.09	Needed
38	Press the ball of earth in the hold firmly without causing any injury to the roots.	3.25	0.72	Needed
39	Create planting space of 3 x 3m from each plant.	2.96	0.84	Needed
40	Plant cocoa seedling only in the morning or evening.	3.45	0.50	Needed
41	Plant plantain in the same place with cocoa to provide shade at a spacing of 2m x 2m apart.	3.05	0.84	Needed

The data in table 2 research question two above revealed that the 31 work-skill items in planting operations had their mean values ranged from 2.52-3.45. This means that each of the mean values is above the cutoff point of 2.50. This indicated that they are all needed by cocoa farmers in Ebonyi State for practicing planting operations in cocoa production.

Research Question Three
What are the work-skill improvement needs of cocoa farmers in field management?

Table 3: Mean ratings of response of Registered Cocoa Farmers and Extension Agents on the work skill improvement needs of cocoa farmers in field management

S/N	Item Statement	$\bar{x}$	SD	Remarks
42	Apply urea or sulphate of ammonia at 3000kg/ha when the plant is about 8-12 weeks old on the field.	2.96	0.84	Needed
43	Apply 50kg/ha of potassium fertilizer per year.	3.45	0.50	Needed
44	Cover the young plant with which material for a period of time.	3.05	0.84	Needed

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45	Apply compost manure around the trunk of cocoa trees between March-April or July-August.	3.12	0.54	Needed
46	Weed 3-4 times per year.	3.66	0.47	Needed
47	Prune with saw to ensure better canopy formation, more light penetration and improved air movement.	3.37	0.57	Needed
48	Spray with insecticides like Gammalin 20 Didimac 25 o control cocoa capsids, mealy bags.	3.04	0.98	Needed
49	Shift mulch materials from touching the cocoa plant.	3.70	0.46	Needed
50	Dig pit around the farm land to hold back run-off water.	3.39	0.91	Needed
51	Clear bushes to prevent fire incidence during dry season.	2.93	0.93	Needed

The data in table 3 research questions three above revealed that the 10 work-skill improvement needs items in field management had their mean values ranged from 2.93-3.70. This means that each of the mean value in above the cutoff point of 2.50. This indicated that they are all needed by cocoa farmers in Ebonyi State for practicing field management operations in cocoa production.

Research Question Four

What are the work-skill improvement needs of farmers in the harvesting of cocoa?

Table 4: Mean and Standard Deviation of the responses of Registered Cocoa Farmers and Extension Agents on the work skill improvement needs of cocoa farmers in harvesting of cocoa.

S/N	Item Statement	$\bar{x}$	SD	Remarks
52	Harvest only pods that have turn yellow and sound hollow when tapped.	3.47	0.58	Needed
53	Harvest cocoa with hand by shaking the pods up and down.	3.45	0.60	Needed
54	Harvest cocoa with sharp knife when it is within the reach of the farmer's land.	3.41	0.61	Needed
55	Harvest with long sharp sickle when it is not within the reach of the farmers land.	3.30	0.56	Needed

The data in table 4 research question four above revealed that the four work-skill improvement needs items in processing of cocoa had mean values ranged from 3.30-3.47. This means that each of the mean value in above the cutoff point of 2.50. This indicated that they are all needed by coca farmers in Ebonyi State for practicing harvesting of cocoa.

Research Question Five

What are the work-skill improvement needs of coca farmers in processing of cocoa?

Table 5: Mean and Standard Deviation of Registered Cocoa Farmers and Extension Agents on the work-skills improvement needs of cocoa farmers in processing of cocoa.

S/N	Item Statement	$\bar{x}$	SD	Remarks
56	Collect and pack open with the harvested pods in heaps.	3.45	0.60	Needed
57	Break the pod open with stone, or break them with sharp knife or by knocking two pods together.	3.41	0.61	Needed

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58	Collect the cocoa beans and put into a basket.	3.30	0.56	Needed
59	Ferment the cocoa beans in heaps by piling the cocoa beans and covering it up with banana leaves in order to generate heat.	3.45	0.60	Needed
60	Ferment cocoa beans using sweat box.	3.38	0.54	Needed
61	Ferment cocoa beans using tray method of fermentation.	3.47	0.58	Needed
62	Dry the fermented cocoa beans under the sun on a raised platform or concrete slabs.	3.44	0.77	Needed
63	Dry cocoa beans with drying machine.	3.43	0.67	Needed
64	Put the dried cocoa beans in the bags in the evening to avoid getting cold and being attacked by mould.	3.50	0.64	Needed

The data in table 5 research question five above shows that the nine work-skill improvement needs items in processing of cocoa had their mean values ranged from 3.30-3.50. This means that each of the mean value is above the cutoff point of 2.50. This indicated that they are all needed by coca farmers in Ebonyi State for practicing processing of cocoa.

Research Question Six
What are the work-skill improvement needs cocoa farmers in marketing of cocoa?

Table 6: Mean and Standard Deviation of the responses of Registered Cocoa Farmers and Extension Agents on the work-skill improvement needs of cocoa farmers in marketing of cocoa.

S/N	Item Statement	$\bar{x}$	SD	Remarks
65	Carry out marketing survey for sales of processed, dried cocoa beans.	3.40	0.64	Needed
66	Register with cocoa producer marketing board.	3.57	0.53	Needed
67	Fix prices according to grade and market trend.	3.65	0.51	Needed
68	Find distribution channels.	3.53	0.63	Needed
69	Bargain prices of the cocoa with the buyers.	3.48	0.58	Needed
70	Transport sold cocoa to buyers depot as agreed by the two parties.	3.58	0.56	Needed
71	Determine the price of cocoa in other market through radio stations.	3.53	0.56	Needed
72	Determine the price of cocoa in other market and disseminate it to other farmers.	3.51	0.50	Needed
73	Search the price of cocoa in internet to know the international and local price of cocoa in the market.	3.51	0.55	Needed
74	Keep sales record.	3.76	0.47	Needed
75	Keep money realized into savings account in the bank for cocoa production next year.	3.65	0.51	Needed

The data in table 6 research question six above revealed that the 12 work-skill improvement needs of farmers in marketing of cocoa had their mean values ranged from 3.40-3.76. This means that each of the mean value in above the cutoff point of needed by cocoa farmers in Ebonyi State for the marketing of cocoa.

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Discussion of the Findings

Work-skill improvement needs of cocoa farmers in Nursery practices.
Responses to items on research question one revealed that both the Registered Contact Cocoa Farmers and Extension Agents accepted the items presented as the work-skills where the cocoa farmers needs improvement for them to effectively venture into nursery practices. These areas include: select a deep fertile well drained loamy soil; select a soil rich in organic matter for nursery; select a flat area for the nursery; select a place closer to source of water and planting materials; select a place easily accessible to the nursery operator; select a nursery site nearer to the farm; select a nursery site nearer to the farm; fence the nursery site to prevent strangers or animals from entering; clear the bush using cutlass, herbicides or tractor; plough the land using hoe or plough; harrow after 3-4 weeks; raise the bed to a height of about 10cm to 20cm, 120cm wide and a length of about 2m in other to allow water to filter the bed; raise the bed to a height of about 10cm to 20cm, 120cm wide and a length of about 2m in other to allow water to filter the bed; make the distance between each bed to be 60cm if more than one bed is constructed; make the nursery beds to be level; provide shade of about 30-60cm above the seed beds; provide furrows in-between the beds to drain excess water; water of nursery beds before sowing of seeds; use a string to makes lines 60cm apart along the entire length of each bed; make holes on each line twice the size of cocoa seeds at 5cm apart; sow the seeds into the holes with the pointed end up; cover the holes and water the nursery bed twice daily; use poly bags in nursery practice; use thin wall black poly bags as the preferred bags for the medium; mix about 10% dried manure and 10% organic matter with 80% of sieved soil; use bags of 5 x 8cm for short nursery periods of less than 4 months; use bags of 8 x 25 cm if the seedlings to raise will be 5 months and above in the nursery; open each poly bag and fill it with the preferred medium and press the mixture so that the poly bag stand firm; provide shade of about 2m for poly bags to allow people work easily under it; arrange the bags in packs of 5 or 10 bags to allow people work easily under it; allow about 50cm space between two packs to serve as paths when nursery operator is watering and weeding the poly bags; apply liquid fertilizer for young seedlings with a watering can; ensure that granules do not remain on the leaves to prevent damage; and water the seedlings thoroughly after applying granule fertilizer to dissolve the granules and ensure root contact. The findings is in agreement with Akubuilo, Anochili, Offurum and Muoka (1989) who outlined the skills in Nursery practices to include: Dig and loosen the soil, start the bed with gravel, Raise the bed to a height of about 10cm to 20cm and four others. The findings is also in agreement with Asare and David (2011) when they outlined the procedure involved in Nursery preparation to include: water the nursery bed, use string to make lines 60cm apart, make holes twice the size of the seed, sow the seeds in the hole.

Work-skill improvement needs of cocoa farmers in planting operations.
Responses to the items on research question two revealed that both the Registered Contact Cocoa Farmers and Extension Agents accepted the items presented as the work skills areas where cocoa farmers needs improvement in planting operations. These areas includes: select healthy seedlings for uniform growth and vigor; plant between April to June; dig a hole of 30cm deep and 5-7cm larger than the size of the seedlings basket or polythene bags to avoid damage; cut the polythene bag with sharp knife or razor blade to avoid damaging the young cocoa plant during stripping of the polythene bags; place the seedlings with the ball of earth in the hole; press the ball of earth in the hold firmly without causing any injury to the roots; create planting space of 3 x 3m from each plant; plant cocoa seedling only in the morning or evening, and Plant plantain in the same place with cocoa to provide shade at a spacing of 2m x 2m apart. The finding agreed with Emedo, Maduka and Oranekwulu (1995) when they stated that planting hole for cocoa should be 30cm deep. The findings are also in agreement with Ogieva (2003) who stated that the planting of cocoa should take place between April to June.

Work-skill improvement needs of cocoa farmers in field management.
Responses to the items on research question three revealed that both the Registered Contact Cocoa Farmers and Extension Agent accepted the items presented as the work-skill areas where cocoa farmers needs improvement in field management. These areas includes: apply urea or sulphate of ammonia at 3000kg/ha when the plant is about 8-12 weeks old on the field**; a**pply 50kg/ha of potassium fertilizer per year; cover the young plant with which material for a period of time; apply compost manure around the trunk of cocoa trees in March-April or in July-August; weed 3-4 times per year; prune with saw to ensure better canopy formation, more light penetration and improved air movement; spray with insecticides like Gammalin 20 Didimac 25, control cocoa capsids, mealy bags; shift mulch materials from touching the cocoa plant to prevent termite attack during decaying; dig pit around the farm land to hold back run-off water that could destroy the farm land; and clear bushes to prevent fire incidence during dry season. The findings are in agreement with Ogieva (1998) who noted that urea or sulphate of ammonia

should be applied 300kg/ha when the plant is between 8-12 weeks. The findings are also in agreement with Asare and David (2011) when they noted that shade for seedlings in a field should be about 30-60cm high and about 2m for people to easily work under it.

Work-skill improvement needs of cocoa farmers in the harvesting of cocoa

Responses to the items on research question four revealed that both the Registered Contact Cocoa Farmers and Extension Agents accepted the items as the work-skills where the cocoa farmers need improvement in harvesting of cocoa. The findings include: harvest only pods that have turned yellow and sound hollow when tapped; harvest cocoa with hand by shaking the pods up and down; harvest cocoa with sharp knife when it is within the reach of the farmers' hand; and harvest with long sharp sickle when it is not within the reach of the farmers' hand. The findings are in agreement with Emedo et al (1995) when they stated that ripe pods always change colour from green to yellow and they also sound hollow when tapped.

Work-skill improvement needs of cocoa farmers in the processing of cocoa

Responses to the items on research question five revealed that both the Registered Contact Cocoa Farmers and Extension Agents accepted the items presented as the work-skills where the cocoa farmers need improvement in processing of cocoa. The findings include: collect and pack open with the harvested pods in heaps; break the pod open with stone, or break them with sharp knife or by knocking two pods together; collect the cocoa beans and put into a basket; ferment the cocoa beans in heaps by piling the cocoa beans and covering it up with banana leaves in order to generate heat; ferment cocoa beans using sweat box; ferment cocoa beans using tray method of fermentation; dry the fermented cocoa beans under the sun on a raised platform or on concrete slabs; dry cocoa beans with drying machine; and put the dried cocoa beans in the bags in the evening to avoid getting cold and being attacked by mould. The findings are in agreement with Iwena (2002) who stated that cocoa pods should be carefully opened with a blunt cutlass or by hitting them with heavy rod to remove the cocoa beans.

Work-skill improvement needs of cocoa farmers in the marketing of cocoa

Responses to the items on research question six revealed that both the Registered Contact Cocoa Farmers and Extension Agents accepted that the farmers' needs improvement in the marketing of cocoa. The findings include: carry out marketing survey for sales of processed, dried cocoa beans; register with cocoa producer marketing board; fix prices according to grade and market trend; find distribution channels; bargain prices of the cocoa with the buyers; transport sold cocoa to buyer's depot as agreed by the two parties; determine the price of cocoa in other market through radio stations; determine the price of cocoa in other market and disseminate it to other farmers using phone calls or SMS; search the price of cocoa in internet to know the international and local price of cocoa in the market; Keep sales record; and Keep money realized into savings account in the bank for cocoa production next year. The findings are in agreement with Thomson (2012) who stated that marketing try to reduce the amount of post harvest waste and secure guarantees for the sale or of produce.

Recommendations for Implementation

Based on the findings, the following recommendations were made:

1. There should be general campaign to the farmers so that the findings of the study can be better utilized.
2. Government should sponsor seminars and workshops for farmers on the identified work-skills.
3. Non- governmental organizations should train farmers on the areas they need improvement.
4. Government should post more extension agents in all the Local Government Areas to help teach farmers the identified items.
5. Ebonyi State through its Ministry of Agriculture should step up its extension programe on agriculture with respect to cocoa production.

Conclusion

Cocoa production is a profitable venture in Ebonyi State, Nigeria because it has good arable land that favours the growth of the crop but it appears that the farmers are deficient in modern production work-skills which are making them not to use the comparative advantage offered by the crop in the area to increase its productivity. The study therefore identified work-skills areas that the cocoa farmers in Ebonyi State need improvement which should be packaged into workshop and seminar papers to train farmers in the area. This could increase the productivity of farmers and enhance the use of the crop for poverty alleviation.

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