

Role of Vocational Technical Education on Capacity needs for Palm oil and Kernel marketers in rural dwellers of Niger Delta in Nigeria

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Abstract

The study is focused on the capacity needs of rural marketers of palm oil and kernel business in Niger Delta of Nigeria. Capacity Needs involves the facilities knowledge, skills and attitudes exhibited for improving saleable skills for their products and providing good quantities and quality of palm oil for consumption. The researchers used a questionnaire titled *“Improving palm oil kernel production for Human Capital Development”* using four (4) point Likert scale with 450 copies of the instrument distributed to the respondents. Descriptive statistics of calculated mean value equal or greater than 2.50= 400, was accepted, while below 2.50 (0-2.49) was rejected. Results showed that locally fabricated equipment which are usually not expensive should be provided for the rural dwellers to improve productivity. Inadequate funds have been identified as a major constraint towards increased productivity. However, the products cannot also be exported because of lack of incentives to promote commercialization.

Key words: Vocational Technical education, Capacity needs, rural marketers, Palm oil, Kernel

Introduction

Nigeria as a developing nation is facing serious challenge of depressed economy due partly to inadequate Vocational and Technical Education (VTE) of our youth (Obi, 2009). Improper orientation and lack of guidance and counseling in education are contributory factors to this because students go into wrong carrier choices which on the long run breed mediocre. Many students graduate from higher institutions in the fields of engineering and related disciplines without acquiring the scientific skill needed to improve the country and bring about the desired development as envisioned by 20:20. This is indeed a great challenge if development in the 21st century would be sustained. The scientific international congress held in April, 1999 in Seoul, Republic of South Korea emphasized that technical vocation education and training (VTE) programme should play important role in developing individual who will face the challenge of achieving sustainable socio economic development in Nigeria (Emeagwali, 2003).

Concept of Technical Vocation Education: Technical Vocation Education (VTE) can be described as that aspect of education which exposes the learner to the acquisition and demonstration of skills that could be transformed into economic benefit and sustainable livelihood (Akere, 2007). VTE can therefore be seen as the formal and informal training of a person to acquire skill, knowledge, attitude for gainful employment in a particular occupation. Thus, any education that is planned towards teaching technical skills and attitudes suitable to such skills can be regarded as Vocational Technical Education. VTE is regarded as a vehicle upon which the skills of gainful employment for future and self-reliant for sustainable human capital development is built.

Human Capital Development

It was reported that human capital contributes as much as 64 percent towards economic development as compared to physical infrastructure which contributes 16 percent and available natural resources which is responsible for 20 percent (Anigbogu, 2013). Human Capital Development (HCD) is the process of capital building and strategic mobilization of human capital which enhance modernization, increased productivity and greater global trade as well as integrates them with the world economics, (Kazmi, 2007). Human Capital Development aims at investment activities and processes that produce knowledge, skill health or values that are embodied in people. Human capital development therefore builds an appropriate balance and critical mass of human resources base thereby providing conducive environment for all individuals to be fully involved and contribute to the common goal of an organization or a nation (Erhuma, 2007). Human development could be simply stated to mean an effect to increase human knowledge, enhance skills, productivity and stimulate resourcefulness of individuals Eghagha, 2012).

Marketing Palm Oil and kernel Business: Palm oil and kernel trade were among the most lucrative business in Nigeria during the colonial rule as it brought in a lot of foreign exchange into the nation. Marketing business involves lots of activities which enable the marketers to transfer commodities or services from producers to the consumers of those products. Marketing is an effective arrangement for bringing buyers and sellers into a business contact with one another. Palm oil and kernel are the end products from oil palm. These products can also be sold to other companies and industries as raw materials for the manufacture of several other products. Palm oil and kernel are obtained after harvesting the ripe palm fruits which are allowed to ferment and the fruits extracted from the bunch, boiled and milled before oil extraction. In the Niger Delta sub-region the areas of palm oil and palm kernel production in Rivers State include Ahoada, Elele, Etche and Ubima. Other states in Niger Delta such as Calabar, Akwa Ibom, Abia, Imo, Delta and Edo are also involved in the production of these commodities and share the same idea in marketing of palm oil and the kernel. Each group of marketers acquire about 3 (three acres) of land in nearby bushes as dump sites for the fresh bunches of fruits prior to processing. Small huts are usually built by the producers with thatches where drums for boiling and other processing equipment are kept for easy production. Wells are also dug around the farm hut for provision of water for the processing of the palm fruits.

Almost all the groups visited by the researchers adopted the same methods in their processing. To encourage commercialization of this business, it is important that the various groups visited should come together as a cooperative to boost productivity. However, it is important to state at this point that most of the oil palm and palm kernel dealers in Rivers State and Abia State have formed strong alliance with big agricultural firms owned by their various states. For instance there is the Risonpalm estate in Rivers State and the Adapalm estate in Abia State. The groups at Rivers State and Imo State have gone into commercial production and have acquired buy tractors and other processing equipment for increased production. The processing of palm oil and kernel is not an easy task however, the marketers reported that they quite comfortable with it haven been involved in it for but for a period of between 5 to 30 years (five to thirty years ago). It was also gathered from the marketers that a major challenge they face is that Risonpalm and Adapalm, companies have sophisticated equipment which process the oil palm in a large scale more than the marketers thereby creating a serious competition with the marketers. Below are some vital observations made by the marketers as they visited some companies that are involved in the processing and marketing of Palm oil and palm kernel:

1. These companies have different kinds of machines that do almost the same work they do almost the same work they do manually and they produce very large quantity of palm oil and palm kernel.
2. They have machines that break, sifters the nuts from the fluid.
3. Another machine cracks those kernels after drying it for some days.
4. There is another grade of oil which traders buy for making bar soap and other things.
5. The remnants of this palm oil chaff are burnt and packaged for sale abroad which the oil marketers discard. The local marketers emphasized that if the government can help them in anyway, they would do better. They also emphasized that youths should be encouraged to be part of the business to reduce the problem of unemployment.

This study therefore focused on managing capacity building needs on palm oil and kernel products in Niger Delta Region. It also demands the increasing individual's ability to perform any task given to them or any activity that is productive. This is focused on increasing the individual's productivity to enable him/her cope with societal demand. Capacity building is aimed at increasing the level of existing knowledge to higher level as illustrated by the marketers visited in this research who tried to enhance their productivity by visiting Risonpalm and Adapalm where they saw different machines that would ease off much stress and labour to increase their production. This group of people could be motivated through workshops and seminars to improve on their technological knowledge of oil palm processing. Competence could be regarded as an ability to do a thing so well that people will cherish and appreciate. Competences as a study requires these rural marketers be acquainted with those who are experts to enable them demonstrate knowledge skills and attitudes that are sufficiently needed to perform reasonable task for jobs. This should be demonstrated in practical situations in other to achieve the desired aims and objectives of the research with the expected results.

The researchers in course of this work were able to see some of the rural dwellers, palm oil, and also tasted and commented on the taste of the products. It was also gathered from the marketers that in the market some palm oil are very reddish and in very cold weather the down side of the rubber will be thick with some dark spots an indication that these ones are adulterated products. Some of the products that of low quality are those produced from rotten palm fruits and indeed have very bad taste.

Purpose of the study

The purpose of the study was to find strategies to improve palm oil and palm kernel production among local producers in Nigeria. The specific objectives of the study were to:

1. Determine the skills needed by rural dwellers to achieve adequate planning to execute their business?
2. Determine ways that could be used to transport the palm fruits to the milling site.
3. Identify the facilities needed in the local mill for enough production of palm oil, kernel.

Research Questions

The following research questions were posed to guide the study.

1. What are the skills needed by rural dwellers to achieve adequate planning to execute their business?
2. What means could be used to transport the palm fruits to the milling sites?
3. What are the facilities needed in the local mill for enough production of palm oil, kernel.

Methodology

The design employed in this study was a descriptive survey. The study was carried out in 9 states from south-eastern geo-political zones, Nigeria. The samples comprised of 450 respondents, 50 each from the states of Abia, Anambra, Akwa-Ibom, Bayelsa, Cross-rivers, Delta, Edo, Imo and Rivers State. A questionnaire titled, "Improving Palm Oil, Kernel Production for Human Capital Development Questionnaire" (IPKPHCDQ) was the instrument used for data collection for the study. The IPKPHCDQ had sections A, B, C and D. Section A sought information on selected personal data of the respondents, sections B to D consisted of 28-items relevant for answering research the questions posed in the study. The response categories of IPKPHCDQ were a four point Likert scale using Strongly Agree, Agree, Disagree and Strongly Disagree with corresponding values of 4, 3, 2, and 1 respectively.

The IPKPHCDQ was used and validated by four experts in palm oil milling business and technician from Risopalm Company in Rivers State. The reliability quotient was determined by using Cronbach's Alpha reliability method on data collected through a pilot test on 12 respondents outside the population. The reliability coefficient of 0.84 was obtained which was above the accepted value of 0.7 for adequate reliability (Nunnally, 1978). Therefore the instrument was reliable enough for use in the study.

Out of the 450 copies of the instrument distributed to the respondents by the researcher, 261 copies were completely filled and retrieved. The retrieved questionnaire was made up of 176 from the south-south state and 85 from the south-eastern state representing 68 percent of the total number of questionnaire sent out and was used for the study. The descriptive statistics of mean was used to answer the research questions. Any item with a calculated mean value equal or greater than 2.50 (2.50 – 4.00) was accepted, while an item with calculated means below 2.50 (0 – 2.49) was rejected.

Results

The results of the data analysis of the study are presented in Tables 1 to 4
Table 1: Mean rating on the skills needed by rural dwellers to achieve adequate planning to execute their business.

S/	ITEMS	X	SD	REMARK
1	Having a good and specific plan	2.97	0.79	Accepted
2	Evaluate the process to know if it is profitable	2.88	0.73	Accepted
3.	Estimate the budget before executing the business	3.13	0.83	Accepted
4.	Ensure the equipment are ready before starting the	3.03	0.78	Accepted
5.	Have enough capital for the business	3.01	0.86	Accepted
6.	Keep proper record of all expenses	2.93	0.76	Accepted
7.	Have enough manpower	3.28	0.77	Accepted
8.	Have a lay done rules and regulation as a pride for the business	2.87	0.78	Accepted
9.	Identify various way of selling the palm oil and	3.48	0.72	Accepted
10.	Ability to control and manage the worker for effi-	2.74	0.80	Accepted
11.	Good marketing strategies to persuade buyers	3.18	0.88	Accepted
12.	Ability to communicate effectively	3.07	0.65	Accepted

The results presented in Table 1 showed that the respondents agreed with all the items as expected in the skills needed by rural dwellers to achieve adequate planning to execute their business.

Table 2: Mean rating on the facilities that could be used to transport the palm fruits to the milling site?

S/	ITEMS	X	SD	REMARK
13	Mobile tractor with a stand-by driver	2.99	0.73	Accepted
14	Adequate open van	3.43	0.52	Accepted
15	Wheel-borrow	2.67	1.11	Accepted
16	Adequate Cracker machines	3.22	0.77	Accepted
17	Bagging of the palm kernel to the milling side.	2.65	1.01	Accepted
18.	The use of motor cycle	2.28	1.33	Rejected
19	Open Truck	3.44	0.56	Accepted

The results in Table 2 above revealed that the respondents accepted six items (13, 14, 15, 16, 17 and 19) and disagreed with item 18 as inappropriate facilities to transport the palm fruits to the milling site.

Table 3: Mean rating on the facilities needed in the local mill for enough production of palm oil, kernel

S/	ITEMS	X	SD	REMARK
20	Adequate chute that carry the bunches' to remove	2.93	0.79	Accepted
21	Hydraulic processor to mix the fibre, oil and nut	3.17	0.88	Accepted
22	Adequate digester to transfer oil from water and	3.28	0.77	Accepted
23.	Enough digester to mashes out the oil	3.10	0.86	Accepted
24.	Equipment for stripping palm fruits	2.98	0.67	Accepted
25	Machine to sterilize the palm fruits	2.91	0.74	Accepted

The results presented in Table 3 showed that the respondents agreed with the item as the facilities needed in the local mill by rural dwellers for enough production of palm oil and kernel.

Discussion

The findings of this study revealed skills needed by rural dwellers and facilities needed to achieve adequate human capital development. Table 1 shows that having a good and specific plan, evaluating the process of the business to know if it is profitable, proper budgeting and planning, provision of necessary equipment, and provision of adequate capital are very essential for a viable business venture. However, adequate manpower is also a very vital tool to achieve increased production and should also be provided for a successful business. Proper record keeping of expenses and income, laid down rules and regulations, good managerial quality and good marketing strategies are also very essential for a successful business. The results showed that all the items embodied in the questionnaire were accepted with the maximum mean of 3.48 and accepted minimal mean of 2.74. Akalugo (2011) had earlier stated the need for VTE as an essential tool for human capital development. Also in line with his statement, Okoye (2010) affirms that entrepreneur skill which involves VTE training is that individual should possess requisite skill for effective service delivery for human capital development.

Table 2 showed the needed facilities that will enable the raw materials to be transported from the farm land or market place to milling site which includes mobile tractor with a stand driver, open van, wheel borrow, adequate cracker machine, open truck and bagging materials. The findings revealed that open trucks are proper means of transportation of these commodities from the farms to the milling sites with a mean response of 3.44. It therefore suggests that rural people who are involved in the palm oil and palm kernel business require appropriate transportation facilities that will enhance their business and at the same time boost production. The results in Table 3 shows the needed facilities required in a local mill for effective production. This includes adequate chute to carry the bunches to remove the palm fruits from the hustles, hydraulic process digester to transfer the oil, digester to mash out oil, equipment for stripping palm fruits and machine to boil the palm fruits. All the items listed for efficient processing of palm fruits for palm oil and palm kernel production were accepted with item NO.22 recording the highest mean of 3.28 which implicated high acceptability of the suggestions towards better skills improvement. This finding revealed facilities needed for appropriate production of palm oil and palm kernel for human capital development if any meaningful progress must be made. According to Romijin (2000) VTE training provides skills for adequate capital development. He also attests that small firms contribute greatly in technical innovation that can improve not only human skill but also efficiency in human efficiency and development.

In the findings from this research, for VTE to sustain Human Capital Development skill and facilities are required. According to Omolayo (2006) reported that arranging business deals and taking risks in order to make profit required skills. Martins-Umehim Obi (2009) acknowledges that Human Capital Development through VTE should possess ability to identify investment opportunities, decide what opportunities to exploit for profit, know various scarce resources needed for production and distribution of goods and services, organize and manage the human resources for the attainment of the business, risk taking and innovation.

Conclusion

Vocational and Technical Education creates and promotes good technical and entrepreneurial skill and training among individual. Small-scale industries play a critical role in achieving dynamic linkage and industrial cluster that facilitate technological development. The operation and production of palm oil and palm kernel by rural dwellers are made feasible by appropriate technological competencies, which can be acquired via VTE. Hence, in the world today, the encouragement of local production of palm products is imperative for Human Capital Development. Therefore any nation desirous of growth and development must vigorously pursue VTE program integrated with vocational entrepreneurial competencies.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Low-cost equipment should be provided for rural dwellers who are involved in palm oil and palm kernel processing in order to improve their production.
2. There should be adequate provision and expansion of good market strategies and avenue for producer to export their products.
3. The governments should construct and provides good road network for the rural dwellers to enable them to convey their raw materials from the farm land to the milling site and market place.
4. Government and NGOS should assist the rural dwellers involved in the processing and marketing of palm oil and palm kernel by providing them with incentives such as loans to boost production.

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