

Vocational Agricultural Education: Veritable Tool for Inculcating Entrepreneurial Skills in Youths of Bayelsa State

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Abstract: The work examined Vocational Agricultural Education (VAE), a veritable tool for inculcating entrepreneurial skills in youths of Bayelsa State. The study adopted survey research design. The population was ninety-eight (98) graduands of Agricultural Education from the Niger Delta University (NDU), Wilberforce Island, Bayelsa State. Purposeful sampling technique was used to draw out thirty (30) graduands of Agricultural Education Programme from 2015/2016, 2016/2017 and 2017/2018 academic sessions respectively. The instrument of the study was a well-designed questionnaire in a four (4) Likert Scale with a decision mean point of 2.50. The questionnaire was validated by three experts in the Department of Vocational and Technology Education of NDU. While reliability was carried out with Cronbach Alpha coefficient test which gave a reliability coefficient of 0.62. The questionnaire was administered to thirty graduands that served as the sample for the study. The questionnaire had two parts, namely A and B. The A part deals with ex-students on identification of entrepreneurial skills available in Vocational Agricultural Education Programme. While, B was on the Focus Discussion Group (FDG) of graduands on empowerment offered by their training in VAEP to earn learning. The data collected for part A was analyzed using descriptive mean statistics and standard deviation with an acceptance of minimum mean value of ≥ 2.50 as accepted skill. The FGD data was analyzed using mean ranking which was subjected to Kendall's coefficient of concordance at 0.05% level of significance. The findings of the study showed their ability to provide training and employ others appeared weak but agreed that there are numerous factors militating against full realization of the aims of the VAE Programmes. It was therefore recommended that there is need to revisit the VAE programme. Provision is practical-oriented staff to perform regular supervising visits and commitment of more resources to enable AVEP to be more effective.

Keywords: Entrepreneurial Skills, Inculcating, Veritable Tool, Vocational Agricultural Education, Youths

INTRODUCTION

Vocational Agricultural Education is the imparting of vocational knowledge, skills to effect attitudinal change in youths towards agricultural production processes (Umoh, 2006). This is to empower the youths to acquire the basic agricultural production argued that principles and production practices. According to Wikipedia (2016) assured that such empowerments can be achieved through "hands-on-experience and guidance" for self-reliant. Tiough and Agishi (2004) reported that vocational agricultural education could also be an avenue to effect positive attitudinal change towards agriculture education in established farmers.

Consequently, vocational agricultural education programmes are often designed to offer the basic skill and knowledge

required to ensure sustainable interest in agriculture after undergoing formal training. Surprisingly and most often, graduates of vocational agricultural education programmes end up unemployed or could not practice practical agriculture (Amadi and Ekezie, 2018). In fact in Bayelsa State of Nigeria, the resultant is massive effect unemployment of graduates of agricultural education programmes. This has kept them in perpetual economic bondage and frustration (Obiyai, 2014), which is contributing to increase in social vices such as pipeline vandalism, kidnapping, hostage taking and general youths restiveness (Idoko, 2016). This unfortunate situation according to Arokoya and Ndeobi (2014) could be that the

available vocational agricultural education programmes in higher institutions may not be providing the needed career guidance, experiences and competences for participation in entrepreneurship in agricultural production. In addition, available programmes may not be well-tailored to provide hands-on training and experiences in agricultural production techniques for trainees self reliant. Nnodim and John-West (2016) attributed the present predicament to the teacher's lack of competence in imparting the required skills. Whereas, Amadi and Ekezie (2018) argued that the present day vocational agricultural education programmes may not sufficiently embody hands on training experience for the trainees self reliance at the completion of their training scheme. In Fact, it has earlier been advocated (Oroko, 2014) that an effective starting point of any vocational education scheme is the identification of available entrepreneurial skills addressed by the training programme. It is against this background, this study was conducted.

PURPOSE OF THE STUDY

The Purpose of the study is to examine and identify what skills are embedded in higher institutions vocational agricultural programmes, the extent they empower trainees to be self-reliant and militating factors. Specifically the study's objectives are:

1. Identify what vocational skills are embedded in higher institutions' agricultural education programmes in Bayelsa State.

2. Examine the extent these identified skills empowered grandaunts to be self-reliant, hence reducing unemployment and poverty especially in Crop production (cassava), Livestock Production (Poultry) and Fish Production (Fish Farming)
3. Identify factors militating against full implementation of vocational Agricultural Education Programmes.

METHODOLOGY

The Study was conducted in Bayelsa State in the Niger Delta, Nigeria located between Longitude 4.30° North and Latitude 6.0° East (Dada, et el 2007). The State is bisected by numerous rivers, creeks and creek lets. Consequently, fishing and farming including trading are the main occupation of the residents. Purposeful sampling was used to draw out and thirty graduands of Agricultural Education Program from the Niger Delta University, Wilberforce Island, Bayelsa especially 2015/2016, 2016/2017 and 2017/2018 academic sessions. The sample population was randomly selected from the Niger Delta University (NDU) Alumni records.

The Instrument of study was a well-designed questionnaire in a 4 points Likert scale with a decision point of 2.50. The questionnaire was validated by experts in the Department of Vocational and Technical Education of NDU. Reliability was carried out with Crombach and Alpha coefficient test which gave a reliability coefficient 0.62. The questionnaire was in two parts (A & B). Part A sought from the graduands responses if the programme of study embedded elements of Entrepreneurial skills based on the Likert Scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). In hence part B, the sample population was arranged into three (3) groups hence each academic session constituted a group and Focal Group Discussion (FGD) approach was used to cilicit group response by conscious. Each group at

different setting was asked to rank seven identified entrepreneurial skills area that they can use to earn a living after graduation. The ranking was based on 4 points Likert type scale to Strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1).

Data Collected for Part A was analyzed using, descriptive statistics mean and standard deviation with an acceptance of minimum mean value of ≥ 2.50 as accepted skills. The FGD data was analyzed using mean, ranking which was subjected to Kendall's Coefficient of Concordance at 0.05% level of significance.

The Kendall test Statistics is $W = \frac{12 \sum D^2}{M - (N)(N^2 - 1)}$
(Downie & Health, 1970)

Where:

W = Kendall Coefficient of Concordance

D = Difference of the Sum of ranks of each session from the overall ranking mean.

D²= Square of D

M = Number of academic sessions (Group 3)

N = Total Number of Entrepreneurial skills suggested (7) Empowerment Strategy for earning living & contribute to society.

N² = Square of N

Σ = Summation.

If W ≤ 0, No agreement but if W => 1, Perfect agreement.

RESULTS AND DISCUSSION

Table 1 shows the mean responses of the 2015/2016, 2016/2017 and 2017/2018 graduand of Vocational Agricultural Education (VAE) from the Niger Delta University on Entrepreneurial skills embedded in their programme of Study.

Table 1: Mean Responses of Ex-Students on identification of Entrepreneurial skills available in Vocational Agricultural Education Programmes.

S/N		2015 – 2016 Graduands	2016 – 2017 Graduands	2017 – 2018 Graduands	Decision
Crop Production					
1.	Site Selection	3.47 ±0.62	3.53 ±0.65	4.67 ±0.45	Accepted
2.	Land Preparation	3.27 ±0.64	3.60 ±0.62	3.43 ± 0.27	Accepted
3.	Selection of Cultivars	3.17 ±0.98	3.73 ±0.58	3.67 ±0.32	Accepted
4.	Plant Population Mgt.	2.50± 1.14	3.43 ± 0.77	3.47 ± 0.30	Accepted

5.	Soil Management	3.13 ±0.73	3.47 ±0.65	3.47 ±0.13	Accepted
6.	Need Management	3.27 ±0.69	3.73 ±0.45	3.80 ±0.13	Accepted
7.	Agrochemical application	3.13 ±0.65	3.43 0.77	3.37 ± 0.40	Accepted
8.	Disease & Pest Control	3.17 ±1.45	3.70 ± 0.38	3.47 ±0.30	Accepted
9.	Harvesting Mgt.	2.73 ±0.73	3.60 ±0.62	3.47 ±0.31	Accepted
10.	Processing/Marketing Management	3.10± 0.06	3.70 ± 0.75	3.60±0.32	Accepted
Livestock Production					
11.	Stock Selection	3.67 ±0.22	3.53±0.72	4.00 ±0.74	Accepted
12.	Selection & Mgt. of Housing System	3.80 ± 0.41	3.60 ±0.73	3.40 ±0.31	Accepted
13.	Stocking Population Management	3.47 ± 0.93	3.33 ± 0.50	5.33 ±0.13	Accepted
14.	Stocking house Mgt.	3.67 ± 0.48	3.13 ±0.83	3.37 ±0.33	Accepted
15.	Stock Feeding Mgt.	3.53 ±0.62	3.27 ±0.58	3.33 ±0.32	Accepted
16.	Stock health Mgt.	3.73 ±0.33	3.47 ±0.93	3.60 ±0.27	Accepted
17.	Water Management	3.87 ±0.35	3.20 ± 0.81	3.20 0.18	Accepted
18.	Marketing Systems Management	3.47 ± 0.63	3.47 ± 0.51	3.67 ± 0.27	Accepted
19.	Waste Management	3.63 ±0.62	3.47 ±0.51	3.80 ± 0.60	Accepted
20.					Accepted
Fish Farming					
21.	Production System Selection	3.47 ± 0.93	3.50 ±0.51	3.58 ±0.31	Accepted
22.	Choice of Mgt. Level	3.63 ±0.63	3.27 ±0.69	3.53 ±0.31	Accepted
23.	Site Selection	3.40 ±0.72	2.80 ± 0.73	3.27 ± 0.26	Accepted
24.	Selection of Species	3.53 ±0.68	3.60 ± 0.63	3.67 ± 0.13	Accepted
25.	Culture System Const.	3.67 ± 0.48	3.77 ±0.97	3.70 ± 0.14	Accepted
26.	Stocking Regime Mgt.	3.97 ± 0.81	3.50 ±0.92	3.73 0.14	Accepted
27.	Feeds & Feeding Mgt.	3.60 ± 0.50	3.67 ± 0.48	3.50 ±0.17	Accepted
28.	Disease and Pest Management	3.60 ± 0.50	3.63 ± 0.62	3.42 ±0.30	Accepted
29.	Harvesting Regime Management	3.72 ± 0.23	3.73 ± 0.33	3.60 ±0.32	Accepted
30.	Marketing/Processing	3.57 ± 1.11	3.53 ±1.71	3.33 ±0.13	Accepted

The graduands agreed that skills on crop production technology, animal production, fishery production etc. are embedded in the programme of study. The implication of the result is that Vocational and Technical Education of Niger Delta University has entrepreneurial content built in for effective transfer of knowledge to trainees. This is in line with the suggestions Adah and Adejohn (2004) in their study. They argued that Vocational always Agricultural Programme should always have basic skills of agricultural Production technologies embedded in it to train students. In fact, the Federal Republic of Nigeria (FRN 2004) emphasized that the main objective of Vocational Agricultural Education should among others contain skills that addresses the followings:

i. To help students acquire basic knowledge of agricultural production technologies.

ii. Expose trainees (students) to the various opportunities available in Agricultural production technics.

iii. Prepare Students for occupations in agricultural production i.e entrepreneurial.

Also, Amadi and Ekezie (2018) recently reported that vocational Agricultural Education programmes need to stimulate students for entrepreneurial ship in Agriculture.

The FGD mean ranking of the three groups of graduands as to the empowerment opportunities offered in their training is shown in Table 2

Table 2: Mean ranking of 2015/2016, 2016/2017, 2017/2018 Graduands on empowerment offered by their training in VAEP to earn a living

S/N	Empowerment Variable	2015/2016 graduands	2016/2017 graduands	2017/2018 graduands	Total	Ranking
1.	Provide self-employment	4	4	4	12	1 st
2.	Provide basic needs of family	4	3	3	10	2 nd
3.	Have skills to train others	2	1	2	5	5 th
4.	Ability to employ others	2	2	1	5	5 th
5.	Can generate fund to pay taxes	3	3	3	9	3 rd
6.	Can supply agric. Commodities	3	3	3	9	3 rd
7.	Can contribute to State/National Economy	3	2	3	8	4 th

The results of the FGD sessions revealed that their training offered them empowerment. in entrepreneurial areas, These skills in descending order are self-employment, provision of basic needs for their family, supply of agricultural communities and ability to pay required taxes. This ranking collaborated with ranking noted by Amadi and Ekezie (2018) in their study of students in Rivers State Nigeria. Also Nnodem and Johnwest (2016) reported the ability noted by to generate income and employment opportunities are some of the benefits noted by ex-students from their training. However Tibi (2013) argued that Vocational Agricultural Education Programmes often failed to provide the needed

entrepreneurial content hence graduands are unproductive and unemployable (Egbule, 2012).

When the students ranking of this study were subjected to Kendal coefficient of Concordance analysis at 0.05% level of significance, a Coefficient of Concordance of $W \geq 1$ was obtained. This implies that the students ranking of the entrepreneurial skills gained in their training were the same and beneficial.

The graduands' view of factors affecting the success of the Vocational Agricultural Education Programm. (VAEP) in shown in Table 2

Table 3: Mean ranking of 2015/2016, 2016/2017, 2017/2018 Graduands on the factors militating against realization of Full benefit from their study

S/N	Constraint Variable	2015/2016 graduands	2016/2017 graduands	2017/2018 graduands	Total	Ranking
1.	Inadequate demonstration facilities	4	4	4	12	1 st
2.	Inadequate farm implement.	3	3	3	9	2 nd
3.	Inadequate practicals	3	2	2	6	4 th
4.	Inadequate qualified teaching Staff	2	2	3	7	3 rd
5.	Inadequate Supervisory	2	2	2	6	4 th
6.	Inadequate Funding	1	1	2	4	5 th

From Table 3, the factors militating against VAEP in achieving its full benefit to students are inadequate demonstration facilities, inadequate farm implements/practical orientation, and inadequate qualified Staff/Staff supervisions among others. This ranking is in line

with the findings by Amadi and Ekewe (2018) and Nnodem and Johnwest (2016). These authors in their separate studies in Rivers State noted that the most common factors militating against Vocational

Agricultural Education (VAE) in training Institutes includes lack/inadequate facilities, funds among others.

The ranking of these militating factors to VAE were subjected to Kendall Coefficient of Concordance (w) to see if the graduands agree on the factors noted at 0.05% level of significant. The resulting (W) was one and above which implies that the graduands in 2015/2016, 2016/2017 and 2017/2018 academic sessions agreed on these militating factors to VAE.

CONCLUSION

Based on the study's findings, it could be concluded that Vocational Agricultural Education Programme in Niger Delta University has entrepreneurial skills content embedded to training students. Consequently, graduands are equipped with the essential skills to be useful in society. These graduands hence are able to;

- Provide self-employment
- Provide basic needs of their family
- Generate income to pay taxes and
- Contribute to state/national economy.

However, their ability to provide training and employ others appear weak in this study. Graduands also agree that there are numerous factors militating against the full realization of the aims of VAE programmes. These include:

- Inadequate demonstration facilities
- Inadequate farm implements for practical's
- Inadequate qualified staff for field supervision among others.

RECOMMENDATIONS

From the results of this study, it is recommended that:

- There is need to revisit the Vocational Agricultural Education Programmes with a view to providing more functional demonstration. Schemes
- Provision of Practical oriented staff to perform regular supervisory visits and Commitment of more resources/fund to enable AVEP to be more effective

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