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## **Influence of Vocational Agricultural Education (VAE) on Poverty Reduction among Youth in Rivers State**

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### **Abstract**

*The study examined the influence of Vocational Agricultural Education on Poverty reduction among youth in Rivers State. The objectives were to identify how youth can earn a living through vocational agricultural education in Rivers State, determine the extent to which vocational agricultural education has achieved its objectives, among others. The study employed a descriptive survey design. Four (4) higher institutions that offer vocational agricultural education as a course were used. All vocational agricultural education lecturers and students totaling 31 and 285 respectively make up the population for the study and were used as the sample size. Data were collected using a structured questionnaire designed in Likert-5point rating scale of agreement. The reliability of the instrument was tested using Crombach alpha and was found to be reliable at 0.82 reliability coefficient. Data collected were analysed using descriptive statistics (mean and standard deviation) with acceptance mean value of  $\geq 3.00$ , while z-test was used for hypothesis testing at 0.05% level of significances. The study found that majority of the respondents agreed that vocational agricultural education can earn youth a living in Rivers State which brings about employment opportunities; provides means of livelihood, increases income generating opportunities, among others. It also revealed that most of the objectives of VAE were not achieved such as; increase involvement in fishery production, increase enrollment into vocational agricultural education, competitive act in production, increase involvement in crop production, among others. Furthermore, the study revealed that factors such as lack of demonstration farm, insufficient land, lack of practical orientation, poor funding, poor staffing, poor policy implementation among others affects the implementation of vocational agricultural education in Rivers State. The study therefore recommend that, vocational agricultural education should be taught practically to allow students acquire requisite skills needed to take up agriculture as an occupation after school, higher institutions should establish demonstration farms to allow students be involved or participate fully in practical agriculture during their study time in the institution.*

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**Keywords:** Vocational Agricultural Education, Poverty Reduction, Youth

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### **Introduction**

Agriculture has been one of the key sectors in the development of Nigeria economy even before the oil boom in Nigeria in the early 1960's and has been a source of food for her citizens. Recently, the Federal Government come to realization that agriculture is still the major sector that holds her economy and now seek for diversification of the economy towards agriculture. Vocational agricultural education is the transmission of the agricultural heritage of the society to individuals through the formal education process (Akpomedaye, 2016).

Vocational agricultural education is the study of the interrelationship between agriculture as a discipline is also referred to the teaching of skills, knowledge, values and attitude in production of goods, processing and marketing of agricultural and related products (Arokoyu & Ndeobi, 2014). According to Wikipedia (2016), vocational agricultural education is the teaching of agriculture, natural resources and land management through hands on experience and guidance to prepare students (youth) for entry level jobs or to further education, to prepare them for advanced agricultural jobs.

Vocational agricultural education is being taught at all level of education in order to inculcate in youth the basic skills and knowledge required to sustain them after school, thereby making them productive and self-reliant, instead the reverse has been the case. Most young agricultural graduates have been revealed by study not to have basic agricultural skill and knowledge in production. This has cost lot of them ending up unemployed after graduation from the higher institution, whereas agriculture is suppose to make them to be self-reliant.

Adah and Adejohn (2004) stated that vocational agricultural education laid emphasis on result as a test of its validity, which emphasizes on analytical and prescriptive approaches of education. This aspect of education is suppose to equip students and teachers with adequate knowledge and ability to establish and manage a mode farm. It is equally capable of motivating youth to acquire interest in an aptitude for agriculture as an occupation. Arokoyu & Ndeobi (2014) maintained that VAE provides learners with the personal, academic and career experiences and competences needed for participation and entrepreneurship in agriculture. Ochi (2004) stated that VAE has helped to develop people in various areas to satisfy technological advancement and economic development. This is because VAE has various areas of study including animal production/science; crop science/production; horticulture; extension, engineering, veterinary technician or doctor among others that youths can avail themselves to in order to acquire skills (Obinne, 2002).

Youth in Nigeria suffers high level of unemployment due to lack of skills. Even in some cases where opportunities present itself for them to be gainfully employed in well established company. Youth equally undergo some sort of physical and psychological challenges which are as a result of poverty. This sort led to criminal or violent behaviour which some others suffers depression (Ajani, Mgbenka & Onah, 2015). Poverty is a situation and process of serious deprivation or lack of resources and materials necessary for living within a minimum standard conducive to human dignity (UNESCO, 2003). Ajani et al, (2015) stressed that poverty is characterized by a lack of participation in decision making process and in civil and socio-cultural life. Uddin (2013) maintained that poverty connotes deprivation of the means of subsistence, the inadequate distribution of resources, access to basic social services like education and health, food scarcity, low life expectancy and lack of participation in decision making process, lack of better employment opportunity etc.

These situations can be averted with Vocational Agricultural Education in place for youth to acquire desired skills in production. Federal Republic of Nigeria (FRN, 2004) outlined seven major objectives of Vocational Agricultural Education including the ability to stimulate student's interest in agriculture; ability to enable students acquire basic knowledge of agriculture; ability to develop basic agricultural skills in students; ability to enable students integrate with skills in agriculture; ability to expose students to opportunities in the field of agriculture; ability to prepare students for further studies in agriculture and ability to prepare students for occupations in agriculture. Egun (2009) stated that the major aim of agricultural

education for the youth in school is to expose and prepare them for different occupations in agriculture. More so, the mission of agricultural education is to prepare and support individuals for careers, build awareness and develop leadership for the food, fiber and national resource system.

Vocational Agricultural Education offers numerous opportunities for youth to be economically and socially empowered but required the skills to be efficient and productive (Nnodim & Johnwest, 2016). Furthermore, these opportunities abound in crop production, livestock and fisheries production among others. It was maintained that increased participation by youth in agriculture is necessary and vital to facilitate food and nutrition security. This is because the youth form 70% of the Nigerian population. It is heart failing that what vocational agricultural education offered to the students is unproductive and lacking in entrepreneurial content (Tibi, 2013). More so, Vocational Agricultural Education is only taught for examination purpose not for practical purpose which the programme is expected to equip learners with skills. Egun (2009) reported that the instructional strategies used mostly by teachers in delivery of vocational agricultural education is the lecture method and most of the time devoid of demonstration which would have encouraged firsthand practical experience as a result, has led to food insecurity, lack of future entrepreneurs. These situations have been attributed to some factors that are lacking in the institutions causing them not to meet up the demand to which vocational agricultural education was established for leading to poor actualization of the objectives of vocational agricultural education.

According to Egbule (2012) who noted that Nigeria economy is hanging on the edge of a precipice, which has resulted to high level of unemployment on the side of the youth, leading to hard biting of poverty and unrelenting threats of food and social insecurity due to neglect of agriculture as a professional career. Meanwhile, a report by Adofu, Abula & Agama (2012) that agriculture is the panacea to unemployment in Nigeria. Despite this view, youth do not mostly participate in this viable career opportunity which lays in agriculture. This may be as a result teachers not even having the competency to impart skills and knowledge to the learners. In a study carried out by Nnodim and Johnwest (2016), it was revealed that agricultural teachers lacks skills competence in the teaching of agriculture which this cause has being attributed to lack of demonstration farm, poor funding, lack of infrastructures/farm implements among others. This has led to some teachers deviating from practical study to using much of lecture method because there is no practical equipment available for demonstration and practicalizing vocational agricultural education in schools. Due to these situations in school, youth seem not to having the requisite skills and knowledge required to become self-reliant in the society, thereby resulting to unemployment. Looking at the opportunities agriculture presents to the society at large, one may begin to reason if the objectives of vocational agricultural education were rightly stated. Considering of vocational agricultural education actually present the opportunities it poses to make one become relevant and self-reliant in the society after school. It is against this background that this study was carried out to examine the influence of vocational agricultural education on poverty reduction among youth in Rivers State.

### **Purpose of the Study**

The purpose of this study is to examine the influence of vocational agricultural education on poverty reduction among youth in Rivers State. Specifically, the study sought to:

1. Identify how vocational education can earn youth a living in Rivers State.
2. Determine the extent to which vocational agricultural education has achieved its

- objectives.
- Determine the factors affecting vocational agricultural education implementation in institutions in Rivers State.

### Hypotheses

To further verify the data gathered for the study, the following null hypotheses were formulated and tested at 0.5 level of significance to guide the study.

- Ho<sub>1</sub>:** There is no significant difference in the mean responses of lecturers and students on how vocational education can earn youth a living in Rivers State.
- Ho<sub>2</sub>:** There is no significant difference in the mean responses of lecturers and students on the extent to which vocational agricultural education has achieved its objectives.
- Ho<sub>3</sub>:** There is no significant difference in the mean responses of lecturers and students on the factors affecting the implementation of vocational agricultural education in institutions in Rivers State.

### Methodology

This study was conducted in Rivers State. The state is bounded on the south by the Atlantic Ocean, to the North by Imo, Abia and Anambra State, to the East by Akwa Ibom State and to the West by Bayelsa and Delta State. Basic occupation of the people varies ranging from white collar job, company works, farming, trading among others. The study employed a descriptive survey design aimed at eliciting responses from the respondents on the influence of vocational agricultural education on poverty reduction among youth in Rivers State. The study sample comprised of all the vocational agricultural education lecturers and students in the four higher institutions in Rivers State including Rivers State University of Science and Technology, Port Harcourt, Federal College of Education (Technical), Omoku, Ignatius Ajuru University of Education, Rumuolumeni and Rivers State Polytechnic, Bori with lecturers and students distribution of 6, 8, 11 & 6 and 49, 81, 67 and 88 respectively, totaling 31 lecturers and 285 students were used for the study. A well structured questionnaire designed in Likert 5-point rating scale of agreement was used for data collection. The instrument was tested using Crombach alpha coefficient and was found to be reliable at 0.82 reliability coefficient level. Data collected was analyzed using mean statistics (mean and standard deviation) with an acceptance minimum mean value of  $\geq 3$  while Z-test was used for hypotheses testing at 0.05% level of significance.

### Results and Discussion

**Table 1: Mean response of lecturers and students on how vocational education can earn youth a living in Rivers State.**

S/N	Variables	Lecturers			Students		
		$\bar{x}$	SD <sub>1</sub>	Decision	$\bar{x}$	SD <sub>2</sub>	Decision
1.	Brings employment opportunities	4.37	0.48	Agreed	3.48	1.09	Agreed
2.	Provide means of livelihood	4.56	0.50	Agreed	3.33	1.07	Agreed
3.	Increase income generating opportunities	4.43	0.55	Agreed	4.56	0.79	Agreed
4.	Using acquired skills to train others	3.67	0.79	Agreed	4.08	1.56	Agreed
5.	Ability to provide basic need for the family	3.02	1.17	Agreed	3.44	1.00	Agreed
6.	Increases market competition	3.55	1.08	Agreed	3.38	1.08	Agreed
7.	Being able to take care of self	3.50	0.99	Agreed	3.98	0.96	Agreed
	<b>Grand mean and SD</b>	<b>3.81</b>	<b>0.79</b>		<b>3.75</b>	<b>1.08</b>	

Table 1 above shows the mean responses of respondents (Lecturers & Students) on how vocational agricultural education can earn youth a living in Rivers State. The table revealed that respondents agreed that vocational agricultural education bring employment opportunities (4.37 & 3.48), provide opportunities (4.43 & 4.56), using acquired skills to train others (3.87 & 4.08). ability to provide basic needs for the family (3.02 & 3.44), increases market competition (3.55 & 3.38) as well as being able to take care of self (3.50 & 3.98) respectively Adofu, Abula and Agama (2012), stressed that youth participation in VAE is necessary and vital to facilitate food and nutrition security, provide youth with finance, guide on as a panacea to unemployment in Nigeria. Adah and Adejohn (2004) noted that VAE can equip students and teachers with adequate knowledge and ability to establish and manage model farming as well as train others who have interest in agricultural occupations.

**Table 2: Z-test responses of Lecturers and Students on how vocational education can earn youth a living in Rivers State**

Category	N	$\bar{x}$	SD	$d_1$	Sign Level	Z-cal	Z-crit	Decision
Lecturers	31	3.18	0.79	314	0.05	3.61	1.96	Rejected
Students	285	3.75	1.08					

Table 2 shows that Lecturers have mean and standard deviation scores of 3.18 and 0.79 while students have mean and standard deviation scores of 3.75 and 1.08 respectively, at 0.05% level of significant with a degree of freedom 314. The z-cal value of 3.61 is greater than the z-crit value of 1.96. Therefore, the null hypothesis of no significant difference in mean response of lecturers and students on how vocational education can earn youth a living in Rivers State were rejected. By implication, there is a difference between the mean responses of lectures and students on how vocational education can earn youth a living in Rivers State. This shows that VAE present several occupational opportunities to the learners but the learners (youth) have not seize more of these opportunities to better their lives.

**Table 3: Mean response of Lecturers and Students on the extent to which vocational agricultural education has achieved its objectives.**

S/N	Variables	Lecturers			Students		
		$\bar{x}$	SD <sub>1</sub>	Decision	$\bar{x}$	SD <sub>2</sub>	Decision
1.	Increase in agricultural productivity	2.30	1.14	Disagreed	2.60	1.06	Disagreed
2.	Increase enrollment into VAE	2.95	1.01	Disagreed	2.45	1.04	Disagreed
3.	Increase involvement in crop production	2.00	1.11	Disagreed	2.51	1.03	Disagreed
4.	Increase involvement in snailery production	2.23	1.08	Disagreed	2.96	1.02	Disagreed
5.	Increase involvement in investment production	3.48	1.09	Agreed	3.02	0.98	Agreed
6.	Increase involvement in horticultural production	2.31	1.08	Disagreed	2.78	1.03	Disagreed
7.	Increase involvement in fishery production	2.51	1.09	Disagreed	2.30	1.04	Disagreed
8.	Increase in awareness level on the relevance of VAE to the society	3.21	1.04	Agreed	3.72	1.07	Agreed
9.	Competitive act in production	2.10	1.03	Disagreed	2.53	0.01	Disagreed
	<b>Grand mean and SD</b>	<b>2.57</b>	<b>1.07</b>		<b>2.76</b>	<b>1.03</b>	

Result in Table 3 shows the mean responses of respondents (Lecturers & Students) on to which vocational agricultural education has achieved its objectives. The table revealed that respondents agreed that vocational agricultural education has achieved its objectives in only two variables posed including increases in livestock production (3.48 & 3.02) and increase in awareness level on the relevance of vocational agricultural education to the society (3.21 & 3.72) respectively. Whereas respondents (Lecturers & Students) disagreed that vocational agricultural education has not achieved its set out objectives in increasing agricultural productivity (2.03 & 2.60), increase in enrollment into VAE (2.95 & 2.45) involvement in crop production (2.00 & 2.51), involvement in snailery production (2.23 & 2.96), involvement in horticultural production (2.31 & 2.78), involvement in fishery production (2.51 & 2.30) as well as competitive act in production (2.10 & 2.53) respectively. This complements Tibi (2013) who states that Vocational Agricultural Education have not achieved its set objectives and noted that the brand of VAE offered to students in higher institution is unproductive and lacking in entrepreneurial content. The teachers equally lack practical skills that will motivate the students, grow their attitudes in agriculture as this is lacking in the content of teaching VAE in schools.

**Table 4: Z-test responses on Lecturers & Students on the extent to which vocational agricultural education has achieved its objectives**

Category	N	$\bar{x}$	SD	$d_1$	Sign Level	Z-cal	Z-crit	Decision
Lecturers	31	2.57	1.07	314	0.05	0.91	1.96	Accept
Students	285	3.76	1.03					

Table 4 shows that lectures have mean and standard deviation scores of 2.57 and 1.07 while students have mean and standard deviation scores of 2.76 and 1.03 respectively at 0.05% level of significance with a degree of freedom 314. The z-cal value of 0.91 is less than the z-crit value of 1.96. Therefore, the null hypothesis of no significant difference in mean responses of lecturers and students on the extent to which vocational agricultural education has achieved its objectives is thereby accepted. This shows that both lecturers and students accepted that objectives of VAE are gradually being achieved in higher institutions.

**Table 5: Mean responses of Lecturers and Students on the factors affecting VAE implementation in Rivers State.**

S/N	Variables	Lecturers			Students		
		$\bar{x}$	SD <sub>1</sub>	Decision	$\bar{x}$	SD <sub>2</sub>	Decision
1.	Inadequate farm implements	4.08	0.97	Agreed	2.29	1.03	Agreed
2.	Lack of agricultural laboratory	4.41	0.81	Agreed	4.21	0.95	Agreed
3.	Lack of demonstration farm	4.16	1.04	Agreed	4.35	1.01	Agreed
4.	Poor staffing	4.53	0.59	Agreed	3.90	0.66	Agreed
5.	Poor funding	4.38	1.09	Agreed	4.16	1.59	Agreed
6.	Insufficient land	3.09	1.00	Agreed	3.16	0.97	Agreed
7.	Lack of practical orientation	3.04	0.68	Agreed	3.11	0.91	Agreed
8.	Poor parental perception about VAE	3.30	1.30	Agreed	3.72	1.08	Agreed
9.	Inadequate practical skill by instructors	4.40	0.86	Agreed	3.45	1.08	Agreed
10.	Poor policy implementation	3.45	1.22	Agreed	3.70	1.43	Agreed
	<b>Grand mean and SD</b>	<b>3.88</b>	<b>0.96</b>		<b>3.81</b>	<b>1.01</b>	

Result in Table 5 shows the mean response of respondents (lecturers & students) on the factors affecting VAE implementation in Rivers State. The table revealed that respondents agreed that the following factors affects VAE including; inadequate farm implement (4.08 & 4.29), lack of agricultural laboratory (4.41 & 4.21), lack of demonstration farm (4.16 & 4.35), poor staffing (4.53 & 3.90), poor funding (4.38 & 4.16), insufficient land (3.09 & 3.16), lack of practical orientation (3.04 & 3.11), poor parental perception (3.30 & 3.72), inadequate practical skills by instructors (4.40 & 3.45) as well as poor policy implementation (3.45 & 3.70) respectively. This complements Adebayo (1999), Nnodim & Johnwest (2016) who asserted that lack of adequate facilities/infrastructure, lack of development of vocational skills, lack of fund, insufficient land among others are some factor affecting VAE implementation in Rivers State.

**Table 6: Z-test responses of Lecturers & Students on the factors affecting VAE Implementation in Rivers State**

Category	N	$\bar{x}$	SD	$d_1$	Sign Level	Z-cal	Z-crit	Decision
Lecturers	31	3.88	0.96	314	0.05	0.38	1.96	Accept
Students	285	3.81	1.01					

Table 6 shows that lecturers have mean and standard deviation scores of 3.88 and 0.96 while students have mean and standard deviation scores of 3.81 and 1.01 respectively, at 0.05% level of significance, with a degree of freedom 314, the z-cal value of 0.38 is less than z-crit of 1.96. Therefore, the null hypothesis of no significant difference in mean response of lecturers and students on the factors affecting VAE implementation in Rivers State were accepted. By implication, there is no difference between the mean responses of lecturers and students in the factors affecting the implementation of VAE in Rivers State. This shows that both lecturers and students accepted that there are several factors that has affected the effective implementation of VAE in higher institutions.

### Conclusion

Based on the findings of the study, it is deduced that vocational agricultural education brings employment opportunities, provides means of livelihood, increase income generating opportunities among others. More so, study shows that VAE has not actually achieved its purpose for which it was inculcated into the school curriculum as large aspect of its objectives has not been achieved. Study also revealed that several factors are affecting the implementation of VAE in Rivers State which includes inadequate farm implement, lack of agricultural laboratory, lack of demonstration farm, poor staffing among others. This has never played down well as it has negative effect on the true importance and relevance of VAE to the individuals and society at large.

### Recommendations

Based on the findings of the study, it was recommended that;

1. Vocational Agricultural Education should be taught practically as to allow students acquire the requisite skills, knowledge and attitude needed to take up agriculture as an occupation after graduation.
2. Government at all level (Federal, State and Local) should endeavor to allocate funds to this aspect of education for the establishment of demonstration farms, provision of laboratory and its equipment as to allow the students practicalize agriculture and

- involve in production process while their programme last.
3. Youth should be aware of the relevance of enrolling into the field of agriculture as this will be an eye opener to let the youth have the knowledge and understanding of vast opportunities that abounds in the field of vocational agricultural education as this will help in making them self-employed thereby reducing unemployment level and poverty in general.
  4. Government should back-up enrollment into vocational agricultural education with scholarship as to motivate students to enroll into this vital field of study.

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