

## **THE EFFECT OF PUBLIC-PRIVATE PARTNERSHIP IN TECHNICAL VOCATIONAL EDUCATION AND TRAINING ON AGRICULTURAL PRODUCTION IN ANAMBRA STATE NIGERIA**

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### **ABSTRACT**

This study determined the effect of Public Private Partnership in TVET on agricultural productivity and the policy implication. Descriptive survey research design was adopted. Three research questions and two null hypothesis guided the study. Structured questionnaire was employed to elicit information from 135 respondents comprised of by 45 persons each of lecturers, Ministry of Education staff and, staff of agric and agro-allied industries in Anambra State. Data collected were analysed using descriptive statistics, mean, percentages, standard deviation and, ANOVA statistic to test the two null hypothesis at .05 level of significance. The result showed a positive effect of PPP in TVET on agricultural productivity and, the acceptance of the two proposed null hypothesis. Also, the constraints to a robust PPP in TVET were determined as well as the policy implications and recommendations among which is need for policy/legislation for regular analysis and evaluation of the PPP in TVET activities and programmes.

**Keywords:** PPP, TVET, Policy, Education, Agriculture, productivity.

### **INTRODUCTION**

Public-Private Partnership (PPP) is a relationship between government and the private sector which could be employed to finance, build and operate infrastructures that will benefit the masses ([www.investopedia.com](http://www.investopedia.com)). Such projects are in the area of roads, hospitals, schools, transportation networks, convention centres. Projects financed through PPP are easily realized. This is so as the private sector technology and innovation help provide better public services through improved operational efficiency, with the public sector providing the needed base which is pivotal to development. Public-Private Partnership in Education relates to the collaboration between the government and the private sector-in an effort to develop education (Aina and Akintude, 2013). According to Oni & Akinbinu (2005), this arrangement always specifies

targets, responsibilities, priorities and feedback process. It also primarily involves sharing of resources, knowledge and risks between the two sectors so that the country at large can benefit from the arrangement. Developing the educational system is not solely the responsibility of government but also that of all stakeholders, with emphasis on Public-Private Partnership.

The public private partnership has the capacity to improve on education facilities, upgrade machineries and equipments, reducing skills shortage, help government improve on their services such as providing vocational training, workplace training, technical assistance (Okoye & Okwelle, 2013). This is consistent with well developed labour force sufficiently prepared in technological know-how to compete effectively in the complicated labour market.

TVET- PPP in Nigeria according to Abanyam, Abanyam & Awoli (2015), exists at different levels with different kinds of partnership depending on what is to be achieved from the partnership. They further stated that TVET partnership exist at policy, training, design and development levels with the United Nations Education Scientific and Cultural Organizations (UNESCO); African Development Bank (ADB), United Nations Development Programme (UNDP), International Labour Organisation (ILO). Maigida (2014) in Abanyam et al (2015) stated that the National Board for Technical Education (NBTE) is into PPP with different organizations in Nigeria to facilities the TVET development.

Technical – Vocational Education and Training (TVET) is a comprehensive term referring to all forms and levels of the educational process involving, in addition to general knowledge, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (Federal Republic of Nigeria, FRN 2013). In their own word, Akaninwor (2004) and Okwelle (2003) stated that the programme offered by TVET are meant to help individuals acquire relevant knowledge, develop skills and appropriate attitudes in specific occupational areas which will enable them enter and progress in the world of work. It is an effective means of empowering young people to engage in productive and sustainable livelihood (Osinem, 2014). The TVET education programme is intended to train the entrepreneurial workforce needed to create wealth, improve productivity and move the society away from dependent to independent state of living. It is an encompassing programme that provide participants with skills, knowledge, and aptitudes that enable them to engage in productive work, adapting to rapidly changing labour markets and economies (World Bank, 2001).

There is no alternative to well-designed and articulate agricultural policies as instrument for promoting agricultural growth and development in Nigeria. (Okeke, 2010). Agricultural policy includes the entire range of government activities directed at Agricultural sector. The concept of Agricultural policy according to Ndiribe (2007), involves inter-related but separate components,

those activities which directly effect the allocation of resources in agriculture and those which deals with the institutional framework within which effort of resource allocation takes place. The two aspects corresponds to what are generally distinguished into quantitative and qualitative policy.

TVET programme can only be strengthened when we adopt strategies that can revitalize the TVET system to make it more responsive to the needs of the society. One can begins to articulate the import of this fact when we take into consideration, the increasing unemployment level in the country, with the consequent vices such as armed robbery, kidnapping, prostitution, cultism, youth restiveness, terrorism and others. There is every need for stakeholders and in TVET programme to ensure the involvement of all in the planning and execution of the TVET agenda. The emerging economies has placed so much emphasis on the middle level manpower that are products of TVET, as the veritable tool for economic development and self reliance. However, in our own case, it has all along been a propaganda issue in TVET programme implementation, with just little effort at actualizing the benefits derivable thereof. Hence, this study tries to determine the effect of PPP in TVET on agricultural productivity. The study leverages on the premise that youths that acquired the requisite agricultural production skills will have the passion to exhibit such knowledge into productive activity. The policy issues arising from the study will equally be addressed. Therefore, it is necessary to find answers to the following questions:

- i) What effect does PPP in TVET have in agricultural productivity?
- ii) What practices needs to be developed to facilitate the effect of PPP in TVET on agricultural productivity?
- iii) What constraints militate against the actualization of a robust PPP in TVET?

**Hypothesis 1:** Response from each of the three categories of respondents on the effect of PPP in TVET on agricultural productivity does not differ significantly.

**Hypothesis 2:** There is no significance difference on the mean ratings of the response of the three categories of respondents-lecturers, staff of industries and ministry of education on the practices that need to be developed to facilitate the effect of PPP in TVET on agricultural production.

## **METHODOLOGY**

The study was conducted in Anambra State of Nigeria. Multistage sampling technique was employed to select three tertiary institutions in the state, fifteen(15) industries that regularly

engage their students in students industrial work experiences programme (SIWES) and the state ministry of education. The sample size for the study was comprised of fifteen(15) lecturers from each of the three institutions, three staff from each of the fifteen(15) agric and agro-allied industries and forty-five staff of the state ministry of education. This gave a total sample size of one hundred and thirty five (135) respondents for the study.

Data for the study were collected using both primary and secondary sources. The primary data were sourced using structured questionnaire while, the secondary data were collected through textbooks, journals and seminar papers. The data collected include information on socio-economic characteristics, of the respondents, opinions on the research questions and the related problems and solutions. The data collected were analysed using descriptive statistics, mean, percentage, standard deviation and, ANOVA statistic to test the null hypothesis at 0.5 level of significance. Any item with a mean of 2.50 and above was accepted while, any score below 2.50 was rejected.

## **RESULTS AND DISCUSSION**

Socio-economic characteristics of the respondents is presented in Table 1. The result revealed that 65% of them were male while 35% were female, and majority were within the age range of 35 to 55 years of age and married. 85 percent had tertiary education while 15% had secondary education which is an indication that the respondents are literate. The result also indicated that majority had between 10-20 years experience in their various field and therefore capable of giving reliable response.

**Table 1: Socio-economic characteristics of respondents**

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Age (years)</b>		
Less than 30	7	5
30 – 45	51	38
45 – 55	36	27
55 – 65	41	30
<b>Gender</b>		
Male	88	65
Female	47	35
<b>Marital Status</b>		
Single	13	10
Married	122	90

**Educational level**

Secondary	20	15
Tertiary	115	85

**Working Experience (years)**

Less than 10	30	22
10 – 20	81	60
Above – 20	24	18

Source: Field Survey, 2016

**Table 2: The effective of public private partnership in Technical Vocational Education and Training on Agricultural productivity**

S/N	Item statements	N	$\bar{X}$	SD	Decision
1.	Creation of synergies for sharing of responsibilities between the private sector and TVET policies	135	3.10	0.45	A
2.	Formulation of market relevant high quality curricular in TVET key skill needs	135	3.04	0.66	A
3.	Increased students interest in agriculture through provision of employment opportunities for graduates	135	3.37	0.82	A
4.	TVET programme produce students that are labour market relevant, with equitable, efficient and high quality skills	135	3.11	0.76	A
5.	Provision of infrastructures and facilities in TVET institutions	135	3.20	0.58	A
6.	Establishing strong vocational based relationship with related industries for regular partnership	135	3.23	0.84	A
7.	Acquaints TVET participants with industrial needs and challenges	135	2.63	0.93	A
8.	Patterns the work assigned to students on SWES training to be congruent with the requisite practical skills.	135	3.10	0.75	A
9.	Facilitates organization of practicals and on the job training for lecturers and practitioners	135	2.75	0.39	A

10.	Encourages organisation of plant and field trips for students and lecturers	135	3.28	0.73	A
11.	Encourages sponsorship and collaboration in research projects	135	2.98	0.85	A
12.	Prospects for scholarship for the best graduating students in TVET programme	135	3.36	0.58	A

**Source:** Field survey, 2016

The data presented in Table 1 on the effect of PPP in TVET on agricultural productivity, reveals that, items 1-12 had their mean scores ranging from 2.63 – 3.37. The scores fall within the range of Agreed showing that the statement in the items are the effects of PPP in TVET on agricultural productivity.

**Hypothesis 1:** Response from each of the three categories on the effect of PPP in TVET on agricultural productivity does not differ significantly.

**Table 3: Summary of ANOVA test for the response of the 3 groups on the effect of PPP in TVET on agricultural productivity.**

Source of variation	Sum of squares	Mean sum of squares	df	f-cal	f-crit	Decision
Between Groups	.161	.051	3	0.35	2.68	NS
Within Groups	72.57	183.21	130			

Table 3 reveals that the calculated F-value of 0.35 is less than the critical f-value of 2.68 at 0.05 level of significance. Thus the null hypothesis is accepted. This means that there is no statistically significant mean difference or variation in the response of the 3 groups on the effect of PPP in TVET on agricultural productivity.

**Table 4: Practices that need to be developed to facilitate the effect of Public Private Partnership in TVET on Agricultural Productivity.**

S/N	Item statements	N	$\bar{X}$	SD	Decision
1.	Provision of necessary and adequate infrastructures for the TVET programmes	135	3.27	0.65	A
2.	Formulation and implementation of credible policies	135	3.40	0.76	A
3.	Private partners establishment of a strong vocational based connection with schools	135	2.86	0.84	A
4.	Students easy acceptance for industrial attachment training into agric and agro-allied firms	135	2.71	0.66	A
5.	Regular on the job training and exchange programme for lecturers to farms and firms	135	2.82	0.77	A
6.	Regular organization of seminars, workshops and conferences	135	3.10	0.81	A
7.	Effective quality assurance system to monitor and evaluate the partnership	135	3.32	0.78	A
8.	Introduction of incentives for private partners to encourage their activities in the partnership through national awards, granting subsidized credit, tax rebate etc	135	3.74	0.66	SA
9.	Provision of enabling environment for the partnership to flourish	135	3.21	0.68	A
10.	Review of TVET curriculum to accommodate relevant skills required in industries	135	3.01	0.72	A
11.	Encourage training that is tailored towards labour market demand	135	3.32	0.71	A
12.	Adequate funding of TVET programmes and the institutions to enhance TVET activities	135	3.60	0.82	SA
13.	Establishment of TVET institutions and industries partnership trust fund	135	3.78	0.62	SA
14.	Provision of employment to graduating TVET students to encourage increased participation	135	3.23	0.65	A

15.	Partners collaboration in developing policy legislation on the partnership	135	2.83	0.66	A
16.	Partners collaboration in developing training needs and work experience schemes	135	2.76	0.66	A
17.	Integrating ICT in the partnership practices to enhance delivery of training.	135	3.20	0.73	A
18.	Regular analysis and evaluation of the partnership activities.	135	3.68	0.69	SA

Source: Field survey, 2016

Data in Table 4 showed that mean ratings of respondents on the practices that need to be developed to facilitate the effect of PPP in TVET on agricultural productivity. Items 8, 12, 13 and 18 had their mean scores range of 3.60 – 3.78, an indication that the respondents strongly agree that the statements in items are practices that need to be developed to facilitate the effect of PPP in TVET on agricultural productivity. Items 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 14, 15, 16 and 17 had mean scores ranging from 2.71 – 3.40, indicating that the respondents agree that the statement are practices that need to be developed to facilitate the effect of PPP in TVET on agricultural productivity. The standard deviation of between 62 – 84 indicates that the responses do not vary widely from the mean, they are homogeneous in their views on the issue at stake.

**Hypothesis 2:** There is no significant difference on the mean ratings of the response of the three categories of respondents on the practices that need to be developed to facilitate the effect of PPP in TVET on agricultural productivity.

**Table 5: Summary of ANOVA Computation of Practices to be developed**

Source of variation	Sum of squares	Mean sum of squares	df	f-cal	f-crit	Decision
Between Groups	.161	.051	3			
				0.82	2.68	NS
Within Groups	72.57	183.21	130			

Table 5 reveals that the F-value of 0.82 is less than the f-critical value of 2.68 which is an indication that the null hypothesis of no significance difference in the mean ratings of responses of the three groups is accepted.



**Research question 3:** What are the constraints militating the actualization of a robust PPP in TVET

**Table 6: Constraints to PPP on TVET**

S/N	Item statements	Frequency	Percentage (%)
1.	Lack of sustainable credible policies for the PPP in TVET programmes	26	19.25
2.	Lack of incentives to motivate PPP on TVET	21	15.55
3.	TVET programmes curriculum at variance with relevant industrial required skills	19	14.07
4.	Poor infrastructures in TVET institutions	18	13.33
5.	No evaluation/monitoring of PPP on TVET activities/outcomes	17	12.59
6.	Rejection of students for IT by the industrial sectors	15	11.11
7.	Low students interest in TVET	10	7.41
8.	Poor funding of TVET institutions	9	6.67

Source: Field survey, 2016

Table 6 reveals the constraints to the actualization of PPP in TVET programme. The constraints were stated according to the frequency and percentage response from the respondents, with lack of sustainable credible policies toping the list, 26(19.25).

## DISCUSSION OF FINDING

The study was aimed at finding out the effect of Public Private Partnership in Technical Vocational Education and Training on Agricultural productivity in Anambra State, the policy implication. It was found out that all the items identified are the effects of PPP in TVET on agricultural productivity. The result further revealed no significant difference on the response of the three group of respondents on the effect of PPP in TVET on agricultural productivity and practices that need to be developed to facilitate the effects of PPP in TVET on agricultural productivity. The result is in agreement with Abanyam & Abanyam, (2015), who noted no significant difference on respondents responses for human resource development funds in PPP to improve TVET for national development. The frequency and percentage response by the respondents on the constraints to actualization of PPP in TVET programmes ranged from 26(19.25) to 9(6.75).

From the item statements, the establishment of TVET institutions and industries trust fund as well as other incentives for private partners such as subsidized credit, national awards and tax rebate will encourage the PPP in TVET and so, increase agricultural graduates interest and participation in agriculture and agro-allied production activities and consequently affect productivity.

### **POLICY IMPLICATION AND RECOMMENDATION**

1. Legislation to stop the neglect of TVET institutions as this denies the nation the advantage of using graduates of the programme to achieve national development.
2. Legislation on the absorption of TVET graduates by industries and firms.
3. Policies requiring compulsory partnership between TVET institutions and industries
4. Policies on single digit interest loan for participating industries in PPP TVET programme
5. Policies on single digit interest subsidized start-up loan for TVET graduates.
6. Re-examination of TVET curriculum collaboratively by the education administrators, practitioners/participants/lecturers and the industrial workers.
7. Policy/legislation for regular analysis and evaluation of the PPP in TVET activities and programmes.

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