

Impact of Vocational Training on Poverty alleviation in Bauchi State, Nigeria

¹Ali Abiso, ²Alhaji Kolo & ³Umaru Sabo

^{1&3}Department of Public Administration, University of Maiduguri,
P.M.B1069 Maiduguri, Borno State, Nigeria.

²Registry Department, University of Maiduguri, P.M.B.1069, Maiduguri Nigeria.
08084225698, 07030166697 & 09071788870

¹aliabiso01@gmail.com, ²alhajiko2010@gmail.com, ³umaru-sabo@yahoo.com

Abstract

Globally, vocational training has become an important programme. In Nigeria various governmental Institutions at different levels are doubling effort in promoting vocational training basically to combat unemployment and poverty. Therefore, this study assessed Impact of Vocational Training on Poverty Alleviation in Bauchi State. The study was a survey which utilized both primary and secondary sources of data. The primary data were obtained through the instrument of questionnaires. While secondary data were gathered from the report of Bauchi State Agency for Rehabilitation and Development of Youths and Women. A total of 367 questionnaires were administered randomly to the respondents out of which 363 were returned valid and used for the analysis. Data were collected, organized and analyzed into tables and percentages. The analyses were done through Statistical Package for Social Sciences (SPSS) version 20. Simple regression was used in analyzing the data. The study revealed that fish farming impacted positively on the income levels of the beneficiaries. The study further found out that computer training has also impacted positively on the educational status of the beneficiaries. The study concluded that vocational training have impacted positively on poverty alleviation in Bauchi state. The study also recommends that; Bauchi state government should initiate policies that will encourage all local government within the state to create vocational training centres so as to train more youths so that their income level will be increase

Keywords: Vocational training and poverty alleviation

Introduction

Vocational training has become a key policy worldwide. Governments at various levels are doubling their efforts in promoting vocational training basically to combat unemployment and poverty in the society as well as to improve the economic performance of nations so that the living standard of the people will be enhanced. It has been an integral part of national development strategies in many societies because of its impact on productivity and economic development. It is a multidisciplinary field of study aimed at equipping the individuals with requisite skills and empower them economically as well as enhance their relevance and functionality in the society. Vocational training is an educational training which encompasses knowledge, skills, competencies, structural activities, abilities, capabilities and all other structural experiences acquired through formal, on the job or off the job training which is capable of enhancing recipients opportunity for securing jobs in various sectors of the economy and enabling the person to be self-

dependent. Despite the fact, Nigerian economy is growing but still the proportion of Nigerians living in poverty is increasing (Bala, 2012). The proportion of the population living below the poverty line increased significantly from 27.2% in 1985 and 42.79% in 1992 before increasing to 65.6% in 2004. The poverty level increased to 68% in 2010 and also decreased to 67.1% and increased to 69% by 2017 (NBS, 2018).

In Nigeria, poverty is more pronounced in the northern part of the country and the north east as the most affected area, where Bauchi State is located. The National Bureau of Statistics reports for 2009 and 2010 indicate that 75% of population of the region is relatively poor, 71.5% absolutely poor and 51.5% poor. Apart from the poverty levels, increase in income inequality between 2003 and 2010 is also predominantly high in the region with Yobe (59.3%), Bauchi (28.9%), Taraba (43%) and Gombe (15.5%). This compared to South-West region, which is less agriculturally endowed yet has lower poverty and income inequality level. The North-East also has

highest level as the worst in the country. Bauchi State is rated among the poorest in the country with poverty rate of 71.8% and 73.4% by 2006 and 86.6% in 2017 (NBS, 2017) Nigeria has adopted many poverty reduction strategies as far back as 1971 (Ibrahim, 2013). The Nigerian Government identified poverty as the major problem of rural development with three pilot, integrated agricultural and rural development projects in Funtua, Gusau and Gombe. The Agricultural Development Projects (ADPs) later spread to other states of the Federation. Agricultural improvement strategies such as Operation Feed the Nation (OFN), Agricultural Credit Guarantee Scheme Funds (ACGSF) and Green Revolution were adopted. The National Directorate of Employment (NDE), State Economic Empowerment and Development Strategies (SEEDS), Mass Mobilization for Social Justice and Economic Reconstruction (MAMSER) and Better Life for Women. The Family Economic Advancement Programme (FEAP) which is to provide micro credit or soft loans for the rural populace, Poverty Alleviation Programmes (PAP) which was amended and revalued National Poverty Eradication Programme (MAP) the Youth Empowerments scheme (YES) and Capacity Acquisition Programme (CAP), (Umar, 2012).

However, all these policies on poverty reduction in Bauchi State proved abortive due to the fact that there was misplacement of priorities such as tribalism and nepotism. In 2005 Bauchi State Government introduced another programme for alleviating poverty known as Vocational Training Programmes. Three (3) Vocational Training Centers were created across the state saddled with the responsibilities of training, the jobless youth on various trades such as fish farming, computer training skills and electrical installation skills. It is against this background that this study will assess the impact of vocational training on poverty alleviation in Bauchi state.

Objectives of the Study

The objectives of the study are to:

- i. assess the impact of fish farming on the income levels of the beneficiaries in Bauchi state, and
- ii. examine the impact of computer training skills on the educational status of the beneficiaries

Conceptual Clarification

The concept of vocational training

Vocational training is a form of training that leads to the acquisition of practical skills, which enable an individual to be gainfully employed in a chosen occupation or become self-reliant. It entails the transmission of knowledge and acquisition of skills that are related to various occupations (Nwanoruo, 2001). According to Danko (2006), it is a training programme that prepares trainees mainly for occupations requiring manipulative skills or on technical occupations in such field as agriculture, Business Education, Home Economics, Wood work, decoration and others organized to secure confidence and experience by individual student or participant. In the view of Burr (2009), it is an education that prepares trainees for jobs that are based on manual or practical activities, traditionally, non-academic and totally related to a specific trade, occupation or vocation. According to Oziengbe (2009), vocational training is any form of training aimed at developing not only practical skills but also attitudes and habits that make the recipient a creative, innovative and resourceful person.

The study is in line with the views of Nwanoruo (2001), Danko (2006), Burr (2009) and Orji (2011) for their contribution that vocational training is designed to prepare an individual for gainful employment that will improve the living standard of the beneficiaries as an effort to alleviate poverty through training programmes. Meanwhile, Oziengbe (2009), broadened the concept by not only mentioning the skills, practices and procedures that are needed but also highlighted the most important aspect of human attitudes and habits that make the recipient a creative, innovative and resourceful person. According to him, the training programmes are necessary for attitudinal changes that are needed to facilitate the smooth running of the programmes for the beneficiaries to achieve their goals.

Vocational training refers to preparations for profession in the world of work. Its includes preparation for employment in an occupation for which specialized training is prepared for society needs and which can be appropriately done in schools, training centres and classes under supervision. (Oranu, 1993).

According to Mohammed (2001) he viewed vocational training as the education that concerns itself with professionalism. He posits

that, it is directed towards the preparation for occupation life since its recipients are equipped with practical skills. Thus, vocational training can be equated to the acquisition of a training experience that culminates in an industrial experience within a work oriented society.

Orji (2011) defined vocational training as all those experiences whereby an individual learns to carry on successfully any useful occupation. He stated that these experiences may be organized and institutionalized or unorganized and haphazard. He concluded that vocational training may be looked at as a series of controlled and organized experiences arranged to prepare a person for socially useful employment. This statement explains that all education or training is vocation in so far that the individual may serve happily and as far as it prepares for satisfactory living.

The British Council (2011) described vocational training as all forms and levels of the educational or training process involving general knowledge, the study of technologies and related work, the acquisition of practical skills, know-how, attitude, and understanding relating to occupations in the various sectors of economic and social life. Vocational training includes commercial, technical and professional development as well as transferable personal skills. The British Council added that the skills needed by any economy are constantly evolving in line with global trends and technological advances.

However, one common thread that runs through all the definitions of vocational training given above is that it is a training designed to prepare individual for gainful employment as semi-skilled or skilled worker or technician or sub-professional or expert use of hands. This means that vocational training is an aspect of education that leads to the acquisition of practical and applied skills as well as basic scientific knowledge. In this sense, it forms a practical segment of education that involves skill acquisition. However, one common thread that runs through all the definition of vocational training given above is that it is a training designed to prepare an individual for gainful employment as semi-skilled or skilled worker or technician or sub-professional in recognized occupations and in new and emerging occupations.

Vocational training refers to preparations for profession in the world of work, its includes

preparation for employment in an occupation for which specialized training is prepared for societal needs and which can be appropriately done in schools, training centres and classes under supervision. It is a specialized training because courses or programmes are selected by those individuals who have special interest for a particular occupation, in a trade or profession.

The National Policy on Education (2004) stated the objectives of vocational training and education include:

- i. To acquire vocational and technical skills;
- ii. To expose students to career awareness by exploring usable options in the world;
- iii. To enable youths, have an intelligent understanding of the increasing complexity of technology;
- iv. To stimulate creativity.

In the same vein, Olairan (2003) articulated the objectives of vocational training as follows:

- i. To provide trained manpower in applied science, technology and commerce particularly at sub-professional grades;
- ii. To provide technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development;
- iii. To provide people who can apply scientific knowledge to the improvement and solution of environmental problems for use and convenience of man;
- iv. To give training and impart necessary skills leading to the production of craftsmen, technician and other skilled personnel who will be enterprising and self-reliant;
- v. To enable our young men and women to have intelligent understanding of the increasing complexity of technology.

Ronald (1995) stated that vocational training brings about technological advancement and aims to hit new manpower for employment and provides continuing training for those already qualified, so that they can keep up with modern working methods. Ajibola and Soyemi (2012) posit that vocational training is an integral part of general education, a means of preparing for occupational holds and for effective participation in the world of work. They asserted that the overriding goals and objectives of vocational training in Nigeria are to:

- i. Provide trained manpower in the applied sciences, technology and business particularly art craft, advanced craft and technical levels;
- ii. Provide the technical knowledge and vocational skills necessary for job creation and entrepreneurship development;
- iii. Provide training and skills requirements of industries and develop job specification for purposes of skills training.

Abdullahi (1993) stated that, vocational training is aimed at assisting students to acquire relevant occupational and technical skills, prepare future occupations and make successful transition from schools to world of work. In the view of Thompson (2002), vocational training aims at the development of human abilities in terms of knowledge, skills and understanding so efficiently in carrying on the activities in the vocational pursuits of his choice. He emphasized that vocational training is an integral part of the total education programme and contributes towards the development of good citizens by developing their physical, social, civic, cultural and economic competences.

From the explanations of the various authors on the objectives of vocational training it is pertinent to state that vocational training provides various avenue for discovering and developing the individual's potential for work. It has a broadening effect, which motivates learners to be more exploratory, realize their capabilities and develop their potentials for successful results in lack of access to basic necessities of life. It affects many aspects of human condition, including physical, moral and psychological. Different scholars defined poverty in different ways. Ahmed (1999), opined that poverty in developing countries is basically income determined. It is seen as a result of lack of access to basic things like food, safe drinking water, security, healthcare, education and housing. Townsend (2000), defined poverty as lack of resources to obtain the type of balance diet, participate in the activities and have the living conditions and amenities which are customary in the societies to which people belong to. The World Bank (2000), perceived poverty as hunger, lack of shelter, being sick and not being able to see a

doctor, not being able to go to school and not knowing how to read.

The Concept of Poverty

Green (1981), conceived poverty as a condition in which income is insufficient to meet subsistence needs. Similarly, Johnson (1974), viewed poverty as a situation where the resources of individuals or families are inadequate to provide a socially acceptable standard of living. On his own part, Oladuni (1999), viewed poverty in terms of insufficient income for securing the basic necessities of life such as food, safe drinking water, clothing and shelter. Nwanorno (2011), conceived poverty as lack of command over basic consumption needs, that is, a situation of inadequate level of consumption; giving rise to insufficient food, clothing and shelter. Aluko (1987), defined poverty as lack of certain capabilities, such as being able to participate with dignity in societal endeavours. Poverty has also been defined as the inability to attain a minimum standard of living (World Development Report, 1990). The report constructed two indices based on a minimum level of consumption in order to show the practical aspect of the concept. While the first index was a country specific poverty line, the second was global, allowing cross-country comparisons (Walton, 1990).

According to Ajakaiye (1999), poverty is a living condition in which an entity is faced with economic, social, political, cultural and environmental deprivations. It's a state of involuntary deprivations. To which person, household, community or nation can be subjected. Nonetheless, people constitute the central subject in any poverty situation. While the number of the poor in the advanced countries of the world has reduced considerably over the years, the reverse is the case in many developing countries including Nigeria. As economic inequality is typically the outcome of social inequality and the reverse is also true. This being the cause, a decrease in economic inequality will tend to bring about a decrease in social inequality, and since the latter phenomenon in all its forms is detrimental to productivity; the effect on economic development would be beneficial. Since a large part of the population in third world countries suffers from malnutrition and the lack of elementary health and educational facilities, it is clear that a decline in living levels in the lower brackets would have a detrimental effect

on labour output and efficiency, and thus on production greater social and economic equality is essential for the creation of conditions favorable to poverty eradication and development. He expresses clearly that capitalism is the cause of poverty of most Asian and third world countries and this can be arrested through proper social and economic equality.

The human poverty index must, therefore use a multidimensional procedure in assessing poverty. This is entirely in line with the “human development” approach. The Human Development index examines different features of the quality of life and arrives at an aggregate judgment on the extent of overall human development. In the same way, the human poverty index must examine different features of deprivation in the equality of life, and then arrive at an aggregate judgment on the extent of overall deprivation of the impoverished (Ijaiya, 1997). The identification of principal deprivations tends to vary with social and economic conditions of the community in question. Premature mortality is an extensive problem in impoverished countries in a way it may not be in highly developed countries where most people live quite long. Also, illiteracy may be a frequent form of significant deprivation in any countries with educational backwardness, but not in others. The choice of the indicators to be used in the Human Poverty Index cannot but be sensitive to the context of the evaluation, and in particular to the characteristics of the countries for which this index is primarily intended.

However, the real poverty reduction lies in changing the very model of development from traditional economic growth to human development, where human capabilities are built up and human opportunities enlarge, and where people become the agents and beneficiaries of economic growth, such human development models rely on certain core strategies for poverty elimination in particular; basic education and basic health for all; credit to the poor; women’s empowerment; land reforms; equitable growth and good governance. This is the main lesson from the experience of several countries that have substantially reduced poverty over the last two decades including Malaysia, China, Republic of Korea and Columbia (Bantam, 2014). Schelzig (2004) also raised many issues on the

measurement and strategy of poverty alleviation. To him, poverty reduction has become the core objective of international development efforts in the twenty - first century. The poverty measurement question is therefore of central importance. Small variations in a poverty measurement methodology can make significant difference in the population identified to be poor. This has implications for the designing and targeting of poverty reduction or livelihood improvement policies and programmes. Schelzig (2004) identifies the main division in the world of poverty measurement which fails between conventional income and consumption poverty measures and the rest is being identified. At the outset of the 21 century it was generally understood that poverty is more than a simple lack of income and that multidimensional approaches to poverty recognize that; while income is certainly an important determinant of well-being, it is the other alternative interpretations that are developed over the past decades. Largely by social planners and anthropologist working with rural communities in developing countries- allowed for local variation in the meaning of poverty. The problems with poverty lines are perhaps best summarized by Desais (1987) observation that in creating poverty threshold. “Lines have to be drawn where one may be visible. A household survey must be conducted in order to obtain data against which the poverty line is held. Sampling must be very precise. The units of measurement are significant as well.

To safeguard macro-economic stability, the government budget, including the country’s poverty reduction strategies, must be financed in a sustainable and non-inflationary manner (Samuel, 2005). The formulation and migration of a country’s macroeconomics policy and poverty reduction strategy is an iterative process (Adasi, 2009). Poverty and poverty reduction strategies need first to be articulated (that is, objectives and policies specified), then costed, and financed within the overall budget in non-inflationary manner. Klugman (2002) concludes that macroeconomic instability hurts the poor. Inflation, for example, is a regressive and arbitrary at, the burden of which is typically borne disproportionately by those in lower income brackets. Arif (2006), in his own perspective stresses that for poverty reduction policy to be successful; there is need for

accurate measures of poverty which can reflect three things:

- i. An indicator of well-being or welfare,
- ii. A normative threshold representing the well-being of an individual (or household) must attain to be above poverty.
- iii. An aggregate measure to access poverty across a population.

Impact of Fish Farming on the Income Levels of the Beneficiaries

Fishery is the act of fishing involving keeping, rearing and harvesting fish. The need to produce more animal protein for human consumption has led to the rearing of fish in specially constructed, ponds; this practice is called fish farming or aquaculture. It entails the rearing of some fresh water fish in developed agriculture, rearing of shell fish e.g. shrimps, jobsters, crabs and oysters. For ornamental and aesthetic purpose, fish can also be reared in glass or perplex made structure called aquarium (Agbebi, 2000).

Aquaculture contributes to the livelihoods of the poor through improved food supply, employment, and income generation as well as high nutritional value, especially for vulnerable groups such as pregnant and lactating women, infant and preschool children. Increased availability of fish in local rural and urban markets may bring prices down. Increase farm sustainability through construction of ponds which also serve as small-scale on-farm reservoirs and rice/fish culture as a component of integrated arrangement. Majority of people are highly dependent on fish as part of their daily diet in countries in Africa (Omitoyin, 2007).

According to Fagbenro (2002), fish provide at least 40% of dietary animal protein. They also provide highly digestible protein and rich source of fat and water soluble vitamins, minerals and fatty acids. Aquaculture has contributed in the past towards poverty reduction in poor societies in some parts of the world where it is traditionally practiced. According to Johnson (1974), pond consists of and excavated trench which may either be laid with concrete or left in its natural state. A farmer may decide on erecting vertical wall to produce an enclosure in all cases, young fish which are called fingerlings are stocked and fed in the pond until they are ready for harvesting. It is the most popular type of fish farming. Among those

engaged in agriculture i.e. fish farming, poverty alleviation can occur. Through raising income which result from (a) higher agriculture productivity and (b) better market linkages and competitiveness. Thus there are two critical issues, the need to increase productivity of subsistence small holders and the need to support the trend towards more commercial production. Fish farming contributes to reduction of poverty both directly and through its linkages with rural agricultural products, increases the development of rural nonfarm enterprises. Increase agricultural productivity frees up people to work in higher value-added nonfarm work. McGrath (2005) notes that a case can also be made relatively easy for the importance of skills development in supporting rural development, firstly improved skills and improve agricultural development can work in a mutually reinforcing manner to assist with the realization of Millennium Development Goals. Secondly, it is argued by some agencies that a pro-poor focus inevitably requires a major commitment to attacking rural poverty and for several agencies skills development is an integral part of any strategy to address these issues. Thirdly, there is a more growth-oriented case made. There is considerable historical precedence for arguing that arises in agricultural productivity and innovation has been a major engine of overall economic growth and development. Is argued that particularly in Bauchi State, there are real possibilities for significant productivity increases that are easily achievable and are, sustainable. Clearly such a breakthrough will-require improvement in skill and knowledge. Thus, importance is given by some agencies to ways of enhancing skills, knowledge and attitude for productivity, innovation and diversification.

Impact of Computer Training on Educational Status of the Beneficiaries in Bauchi State

Computer training skills is fast becoming a popular means of self-reliance and development and turn around in many countries. It is a related tool that has been known to make institutions and market more productive, enhance skill and learning, improve government at all levels and make it easier for services to be accessed (Musa, 2012). Tamara (2002) said that the development of any country depends very much on the advancement and application of science and technology. If Nigeria is to build an organized,

self-reliant and technologically compliant society, much emphasis has to be continually made on science and technology.

Tamta (2002) opined that Nigeria's interest in the diffusion of computer skills with ICT and the consequent development of an information society has been backed up by programs and numerous related initiatives such as the implementation of its information technology policy in April 2001. Similarly, the National Information Technology Development Agency (NITDA) was established with the responsibility of implementing Nigeria ICT policy as well as promotes healthy growth and development of IT industry. To further straighten ICT development in Nigeria the World Bank recently expressed readiness to kick-start investment on facilities to promote growth and employment project in the next three months. According to Onul (2011) it was an initial budget that would be expanded to create employment opportunities, and self-reliance to boost the nation's economic development. Computer training skills is a viable tool for self-reliant in Nigeria creates fabulous sand numerous employment opportunities which contributes immensely towards development. Some are employed as computer dealers (both hardware's and software) and computer accessories, while many are self-employed as computer maintenance technicians. They can curb problems emanating from computer both hardware and software, which they might encounter hardware problems such as computer

freezing scanner or printer installation, all these are handled by such computer maintenance, technician this made them self-reliance and self-employed and which will alleviate poverty.

Methodology

The study was a survey research which utilized both primary and secondary sources of data. The primary data were collected through the instrument of questionnaires. While, the secondary data were gathered from the report of Bauchi state agency for rehabilitation and Development of youths and women. A total of 367 questionnaires were administered randomly to the respondents out of which 363 were returned valid and used for the analysis. Data were collected, organized and analyzed into tables and percentages. The analyses were done through Statistical Package for Social Sciences (SPSS) version 20. Simple regression was used in analyzing the data.

Simple regression analysis model is shown as follows:

$$Y = \alpha + \beta_1 X_1$$

Where,

Y = Dependent variable

α = Intercept

B_1 = Coefficient

X_1 = Independent variable

For the two objectives

Y = (Income levels and Educational Status of Beneficiaries)

X_i = Fish farming

X_{ii} = Computer training

Discussion of Results

Table 1: Distribution of the respondents based on income levels before the Fish Farming

Variables	Frequency	Percentages (%)
₦500 – ₦1000	15	4.1%
₦1000 – ₦2000	88	24.2%
₦2500 – ₦3000	177	48.8%
₦3500 – ₦4000	72	19.8%
₦4000 and above	11	3.0%
Total	363	100%

Source: Field Survey, 2019

Analysis of Table 1 indicates that 15(4.1%) of the respondents earned between ₦500 – ₦1000, 88(24.2%) ₦1000 – ₦2000, 177(48.8%) ₦2500 – ₦3000, 72(19.8%) ₦3500 – ₦4000 and

11(3.0%) ₦4000 and above. These shows that majorities of the respondents earned between ₦2500 – ₦3000 before the Fish Farming.

Table 2: Income Levels after the Fish Farming

Variables	Frequency	Percentages (%)
₦1000 – ₦2000	4	1.1%
₦3000 - ₦4000	25	6.9%
₦5000 – ₦6000	71	19.6%
₦7000 – ₦8000	101	27.6%
₦9000 and above	162	44.6%
Total	363	100%

Source: Field Survey, 2019

The result of the analysis presented in table 2 shows that 4(1.1%) of the respondents earned between ₦1000 – ₦2000, 25(6.9%) ₦3000 – ₦4000, 71(19.6%) ₦5000 – ₦6000,

101(27.8%) ₦7000 – ₦8000 and 162(44.6%) ₦9000 and above. This means that majority of the respondents earned between ₦9000 and above after the Fish Farming.

Table 3: Extent to which Computer Training affect the Educational Status of the Beneficiaries

Variables	SA	A	UD	DA	SD	Total
Reduced crime rate	187(51.8%)	119(32.8%)	40(11.0%)	12(3.3%)	5(1.4%)	363(100%)
Increase School Enrolment	137(37.7%)	184(50.7%)	21(5.8%)	16(4.4%)	5(1.4%)	363(100%)
Boost Commercial Activities	129(49.3%)	128(35.3%)	42(11.6%)	8(2.2%)	6(1.7%)	363(100%)

Source: Field Survey, 2019

Table 3 indicates that 187(51.5%) of the respondents strongly agreed that computer training affect the educational status of the beneficiaries by reducing the crime rate, 119(32.8%) agreed, 40(11.0%) are undecided, 12(3.3%) disagreed and 5(1.4%) strongly disagreed 137(37.7%) strongly agreed that its increased school enrolment, 119(32.8%) agreed, 160(11.0%) are undecided, 12(3.3%) Disagreed, and 5(1.4%) strongly disagreed. 137(37.7%) strongly agreed that its increased

school enrolment, 184(50.7%) agreed, 21(5.8%) are undecided, 16(4.4%) disagreed and 5(1.4%) strongly disagreed while 179(49.3%) strongly agreed that its boost commercial activities, 128(35.3%) agreed, 42(11.6%) are undecided, 8(2.2%) disagreed and 6(1.7%) strongly disagreed. This means that majority of the respondents strongly agreed that computer training affect the educational status of the beneficiaries by reducing the crime rate.

Table 4: Summary of Simple Regression

Variable	Coefficient	Standard error	T-Statistics
Constants	1.724	0.221	7.79%
Earning of the respondents before the training	0.74	0.055	1.334
Earning after the training	0.741	0.047	15.766
Objectives of fish farming	0.298	0.51	5.786
R ²	0.873		
Adjusted R ²	0.852		
F – Calculated	683.193		
Prob. (E-Stat)	0.000*	0.000**	

Source: Fieldwork, 2019

Table 4 Indicates that the model is very healthy and has strong predictive power with an interestingly strong goodness of fit. The

regression shows R²=0.873 which suggest that about 87% changes on income levels of the beneficiaries are accounted for by the variables

in the model while the remaining is accounted for by factors not captured by the model. The healthy and goodness of fit of the model is further confirmed by a strong adjusted R^2 of 0.852 which implies that 85% of variation in the dependent variable is accounted for by our regressor. Also f-statistic, which test for overall significance of the regressor shows that the

regressor is significant at 5% level of significance. The f-calculated is 683.193 while the f-tabulated is at 5% level of significance. Since the f-calculated is greater than F-tabulated, so we reject the null hypothesis and conclude that there is significance relationship between fish farming and income levels of the beneficiaries in Bauchi State.

Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std Error of Estimate
1	0.951	0.873	0.852	0.240

a. Predictors: (Constant) income of the Respondent after the training.

ANOVA

Model	Sum of Square	Df	Means	F	Sig
Regression	26.525	3	8.842	12.57	0.000 ^b
Residual	252.467	359	0.703	3	
Total	278.992	362			

a. Predictors (Constant, income of the respondents after the training.

b. Dependent variable: Income of the respondents before the training.

Coefficient

Model	Unstandardized Coefficients		Standardized coefficient	T	Sig
		Sdf. Effort	Beta		
(constant)	1.724	0.221		7.790	0.00
Earning of the respondents before the training	0.74	0.055	0.072	1.334	0.183
Earning of the respondents after the training	0.741	0.047	0.85	115.766	0.000
Objective of fish farming	0.298	0.51	0.291	5.786	0.000

a. Dependent variable: Income of the respondents before the training

Table 5: Simple Regression

Constants	0.885	0.102	8.685
Crime rate	0.271	0.048	5.688
Commercial activities	0.111	0.45	2.442
R^2	0.761		
Adjusted R^2	0.619		
F – calculated	664.765		
Prob. (E-Stat)	0.000*	0.000**	

Sources: Fieldwork, 2019

Table 4 shows that, the model is very robust and has a strong predictive power with an interesting strong goodness of fit. The regression result depicts R^2 of 0.761 which indicated that about 76% change in the educational status of beneficiaries are accounted for by the variable in the model while

the remaining 24% is accounted for by the factors not captured by the model. The robustness and goodness of fit of the model is further affirmed by a very strong adjusted R^2 of 0.619, which signifies that 61% of variation in the dependent variable is accounted for by the regressor. The F-statistic which test for general

significance of the regressor exhibits that the regressor significantly at 5% level of significance. Since the F- calculated 664.765 is greater than the F-tabulated at 5% level of significance, so the null hypothesis is rejected

and concluded that there is significant relationship between computer training and the educational status of the beneficiaries in Bauchi State.

Model Summary

Model	R	R Square	Adjusted R Square	Std Error of Estimate
1	0.814 ^a	0.761	0.619	0.826

a. Predictors: (Constant) Educational Status of the beneficiaries after the training

ANOVA

Model	Sum of Square	Df	Means	f	Significance
Regression	36.068	3	12.023	25.542	0.000 ^b
Residual	168.979	359	0.471		
Total	205.047	362			

a. Predictors (constant) Educational status of the beneficiaries after the training.

b. Dependent variable: Respondents views on the Educational status before the training.

Coefficient

Model	Unstandardized Coefficients		Standardized coefficient	T	Sig
	B	Sdf. Effort	Beta		
(constant)	0.885	0.102		8.685	0.000
Crime rate	0.271	0.048	0.321	5.688	0.000
School enrolment	0.490	0.049	0.54	10.84	0.000
Commercial activities	0.111	0.45	0.129	2.442	0.015

a. Dependent variable: Educational status of the beneficiaries before the training

Discussion of Findings

Fish Farming on the Income Levels of the Beneficiaries

The findings of the study from the hypothesis tested revealed that fish farming has significantly impacted positively on the income levels of the beneficiaries. To buttress this, the responses of the beneficiaries before fish farming shows that majority of the respondents with 80% earned between ₦2500-₦3000 as shown in Table 4.1.2 while after the Fish Farming Table 4.1.3 shows that the income level of the beneficiaries increased to ₦9000 and above with 46.6% This implies that there is increase in the income levels of the beneficiaries which shows a positive impact. The findings of this study also corroborate with Audu and Jamil (2013) and Adasi (2009) which revealed that fish farming has helped in generating more income. However, this study contradicts with the findings of Yakubu (2011) which revealed that fish farming has negatively affected the income levels of the beneficiaries. Therefore, Fish farming proved to be a poverty alleviator, but the level of alleviation differ from

place to place. This is attributed from factors that may favour one area to the other.

Computer Training on the Educational Status of the Beneficiaries

The findings of the study from the hypothesis tested revealed that Computer training has significantly improved the educational status of the beneficiaries. Table 4.1.6 indicated that 50.7% of the respondents agreed that computer training has improved the educational status of the beneficiaries by increasing the school enrolment, reducing the crime rate and it also enhanced commercial activities within the educational institutions. The finding of the study is supported by Abiola (2011), Akintola (2009) and Rafiq (2014) which revealed positive and significant impact of computer training on the educational status of the beneficiaries.

This study is in line with system theory and the Input in this regard includes funds, materials, equipment and facilities. The conversion process are the programmes and activities of vocational training that will be transform into output for alleviating poverty. The output

represents the end result, outcome of the activities and strategies of the state in terms of poverty alleviation and improving the living standard of the citizens of Bauchi State, while the feedback represents the responses, opinions and perception of the citizens from the environment on how it affect or perceive the outputs of the state as well as demands placed on it.

Conclusion

Based on the findings of this study, it can be concluded that vocational training helps to increase income levels of the beneficiaries. This is attributed to the fact that, the income levels after the fish farming increased significantly. Meanwhile, the educational status indicated a positive result through increased in school enrolment and educational attainment of the beneficiaries. Lastly, as regard to the consumption levels, the programme enhanced and improved significantly.

Recommendations

In view of the findings and conclusion reached at the end of the research, the following recommendations are made;

- i. Bauchi state government should initiate policies that will encourage all local government within the state to create vocational training centres so as to train more youths so that their income level will be increase
- ii. Bauchi state government should encourage and support non-governmental organizations to establish vocational training centres in both rural and urban areas so as to train beneficiaries and give loans that will enable them establish their businesses in order to improve their educational status
- iii. The government should set up a special scheme meant for provision of loans to enable the beneficiaries to establish their own business so as to sustain their consumption levels.

References

- Abani, T. A. (2002). Accelerated Poverty alleviation and Economic Empowerment of Small Business Entrepreneurs in Mali. *Journal of Social Sciences Vol.21 No (1)*.
- Abdullahi, J. M. (1993). Preservice Skill Needs for increasing Employability of Vocational and Technical College Graduates. Unpublished M. Sc. Thesis University of Nigeria, Nsuka.
- Adasi, N. T. (2009). Impact of Fish Farming on Poverty Alleviation in Imo State. *Journal of Social Sciences Vol. 1 No (1)*.
- Ahmed, A. G. (1999). *The Role of the United Nations Development Programme in Poverty Alleviation*. paper presented on the occasion of visit to Gombe state by NIPSS et 21 participants.
- Ajakaiye, O. M. (1999). Overview of the cunnt poverty Eradication Programmes in Nigeria in A.M. Jega and H. Wakili (eds), *The poverty Eradication programmes in Nigeria*, the Centre for Democratic Research and Training Mambaya Howe, Bayero University, Kano.
- Ajegi, S. O. (2002). *The Affluence of poverty*, Benue, University press.
- Ajibola, Y. M. & Soyemi, J. (2012). Achieving Sustainable Economic Development in Nigeria through Technical and Vocational education and Training: The Missing Link. *International Journal of Academic Research in Business and Social Sciences* 2(2)
- Aluko, O. E. (1987). *Poverty Alleviation in Nigeria*. Kins Ibadan University Press.
- Arif, G. M. (2006). The Reliability and Credibility of Statistical Data for Poverty Analysis, Asian Development Bank. Background Series. Project Number, 37717 February, 2006.
- Atkinson, T. K. (1987). *Theories of Poverty and Anti-poverty Programmes*. Ibadan. The Nullion publication.
- Bala, A. (2012). Vocational and General Education. *Nigeria Journal of Education Research*. 4(1).
- Bantam, N. (2014). *Poverty alleviation in Nigeria: The Role of the private sector*. BMS management review. Kaduna.
- British council (2011). *Vocational training Matters*. London British Academy policy publication.
- Burr, P. J. (2009). A Study of Vocational training Needs of 10 - 18 years old out: of School I Rural youths in the North-East District of Botswana. *Journal of Vocational Educational Research* 2

- (25).
- Danko, A. S. (2006). Refocusing Vocational Education for Relevance and sustainable Development in Nigeria. *Multidisciplinary Journal of Research Development* 9(1). 1-8.
- Desais, N. (1987). *Processes and problems of community organization of self-reliance Nigerian institution of Social Economic Research*, Ibadan. Monograph series No. 1.
- Fagbenro, M. R. (2002). The impact of vocational Training and Education on poverty Reduction. *Journal of Asian and South Pacific Adult Education* 5(1).
- Green, A. (1981). *Inequality Re-examined*. Oxford: Oxford University Press.
- Ibrahim, M. (2013). *Poverty Alleviation Reduction Strategies in Nigeria*. Oyo: Ibbe Press
- Ijaiya, P. (1997). *Poverty alleviation in Nigeria: The Role of the private sector*. LBS management review. Ibadan.
- Johnson, T. (1974). *Plan for growth*: London Him Treasury.
- Klugman, J. (2002). A source Book for Poverty Reduction Strategies. *Macro Economic and Sectional approaches, Volume 2*, Washington: The World Bank.
- Mason, B. (1998). *Poverty Alleviation strategies in Nigeria*, Ibadan publishers.
- Mohammed, I. B. (2001). A Survey of Vocational Training Needs of 15-25 years Old out of School Youths in Bauchi Metropolis. *Journal of Career and Technical education*. 21(1).
- Musa, S. K. (2012). The Impact of Government Alleviation Programmes on Entrepreneurship Development in Nigeria. *Development Policy Center Ibadan*.
- National Bureau of Statistics (2018). Annual Abstract of Statistics, Abuja, National Bureau of statistics.
- National Policy on Education (2004).
- Nwanorno, C. C. (2011). Vocational Technical Education and Training for Self-Reliance: Towards National Development. *Mediterranean Journal of Social Sciences*. 2(5).
- Ogboyanya, T. B. (2005). Skill and Acquisition and its effect on Poverty Reduction in Nigeria. *Economic Society Vol. 2* (6).
- Oladuni, S. I. (1999). Perspective on Poverty and Poverty Alleviation Strategies in Nigeria. *NES Annual Conference*.
- Olairan, S. O. (2003). *Vocational and Technical Education: Issues and Analysis*. Onitsha: Nobel Graphic Press.
- Omitoyin, F. O. (2007). A Schema, for Monitoring Poverty Alleviation. *Journal of Economics and Finance* vol. 6 No. 2 Portland Societies: An introduction to Rural Sociology. Prentice Hall, New Jersey.
- Onul, O. S. (2011). Urban poverty incidence in Nigeria. A case study of Ilorin Metropolis. *Nigeria Economic Society Vol. 3* (2).
- Oranu, R. N. (1993). Vocational Education and Manpower Development in Nigeria. *Journal of Technical Education*. 1 (2), 32 - 34.
- Orji, P. C. (2011). Vocational Training and Skills Acquisition in Nigeria Educational System: A Myth or reality. *Journal of Qualitative Education*, 6(2).
- Oziengbe, U. V. (2009). Industrializing the Nigerian Society through Creative Skill Acquisition, Vocational and Technical Education Programme. *International NGO Journal*. 4(4):142-145.
- Raj, B. (2012). Appraisal of Auto Rickshaw as Poverty Alleviation Strategies in Nigeria. Unpublished seminar paper. UNIBEN, Nigeria.
- Roland, J. E (1995). *History of Development in Vocational and Technical Education*. London: George Allen and Urwin Ltd.
- Samuel, N. (2015). *Theories of Poverty Alleviation*. Ibadan: Stickly Press.
- Scheizing, B. (2004). *The Roles of Nigerian Economy*. Oxford: Oxford University Press.
- Tamar, C. O. (2002). Poverty alleviation from grass root: problems prospects and modalities. *Journal of the chartered institute of Bankers Vol. 5* (1).
- Tamta, D. (2002). An Analysis of computer training on poverty Alleviation. *Journal of the Academic of marketing science Vol. 30* (4).
- Thompson, J. W. (2002). *Vocational and Technical Education*. USA: Technical

- Publishers Inc.
- Towsend, T. A. (2000). Theoretical Perspectives on Poverty Reduction: challenges for policy in Nigeria International. *Journal of Economic and Development Issues Vol. 9 (2)*.
- Umar, A. (2012). Effect of skills acquisition on poverty reduction. *Journal of Social Sciences 2 (1)*.
- Walton, A. (1999). Vocational Education and Training Indicators Project EU Priorities and Objectives Related to VET. European Union European Centre for the Development of vocational Training.
- World Bank (2000). *World Development Report*, Oxford: Oxford University Press.
- World Development Report (1990). *Attacking Poverty* Oxford: University press.