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IMPACT OF YAM FARMING ON POVERTY REDUCTION IN WUKARI LOCAL GOVERNMENT AREA

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ABSTRACT

This study looks into how crucial yam farming is to reducing poverty in the Wukari local government district. It is only cost-effective to produce yam using the current antiquated, conventional methods, which need a minimal initial outlay, in areas where the standard of life among the labor population is poor. A lot more work needs to be done in the areas of improving traditional cultural techniques, choosing and breeding better varieties, and other agricultural changes, particularly through scale mechanization and modern technology, if yam production is to remain viable in the face of shifting socioeconomic conditions. Yam continues to be one of the most important cash crops and the most eaten food crop in West African nations, particularly in Nigeria and Ghana (Babaleye, 2003). Using primary data obtained through questionnaires, the study used a quasi-experimental approach that included field and sample surveys in Taraba State's Wukari Local Government Area. The Cochran formula was used to get a sample size that was sufficient for the investigation. Descriptive statistics, such as frequency counts, tables, charts, percentages, and averages, were utilized to analyze the data in order to examine the respondents' socioeconomic traits. The importance of the correlation between small and medium-sized of yam farming and the economic growth of the Wukari environment was examined using the chi-squared (X2) method. The face and content validity methodologies were used to establish validity. The results showed that in Wukari LGA, yam growing has a significant role in reducing poverty and creating jobs. Additionally, it was determined that the obstacles Wukari LGA yam farmers confront hinder their ability to advance as yam growers. The study concludes by outlining potential solutions for overcoming the difficulties it identified.

Key words: Assessment, Youth Involvement, Yam, Production.

INTRODUCTION

One of the major root crops grown in Nigeria is yam. Because it is only produced in a few places around the nation with climates that are suitable for its growing, there is a great demand for it. This suggests that the tuber crop has the potential to be a very profitable crop given how much Nigerians want to consume it. Therefore, in order to satisfy the huge demand of the Nigerian populace, this crop must be cultivated on a massive scale. Yam is one of the most important food crops in West African countries and a key source of income (Babaleye, 2003). Despite high production costs and market price fluctuations, its cultivation is quite lucrative (International Institute of Tropical Agriculture, 2013). In Nigeria, an average yield per yam seed was estimated to be more than US$13,000 per hectare harvested after harvest and storage (International Institute of Tropical Agriculture, 2013). In Sub-Saharan Africa, household demand for yam consumption is quite high. throughout terms of nutrition, yams are an important staple food consumed by millions of people throughout West Africa. It is consumed in a variety of ways, including boiled, fried, roasted, and fufu (also known as poundo yam and Amala in Nigeria) (International Institute of Tropical Agriculture, 2009). It is impossible to overlook the importance of roots and tubers in smallholder farmers' diets. For more than 150 million individuals in West Africa, it provides more than 200 nutritional calories per person per day (Babaleye, 2003). Yams are high in carbohydrates, manganese, potassium, vitamin C, and other important minerals, and they contain around 21% of the dietary fiber (Maikasuwa and Ala, 2013). Yam is a significant component of social and cultural life in Sub-Saharan African nations like Ghana and Nigeria. For example, it was utilized in certain homes for fertility and marriage rituals. Similar to many other sub-Saharan African nations, Nigeria's primary source of labor is the agricultural sector. Approximately 60% of Nigeria's labor force was employed in agriculture, and this sector produced more than 40% of the average real GDP of the nation each year, according to the National Bureau of Statistics (National Bureau of Statistics, 2012). In rural regions, yams are perhaps the main source of work for family members. According to a 2013 research by Okeoghene, Egbodion, and Ose, more than 65% of smallholder farmers in Delta State, Nigeria, employed family labor.

Despite high production costs and volatile market prices, yam farming is immensely profitable. In Nigeria, more than 60% of people cultivate yams as their main source of income, with an average profit per seed yam after harvest and storage estimated at over US$13,000 per hectare produced (International Institute of Tropical Agriculture, 2013). Since many Nigerians still live in poverty in their rural areas, it is doubtful whether yam cultivation is receiving the attention it deserves, even though yams are important to people and a source of food security.

This study's main goal is to investigate how crucial yam growing is to the fight against poverty in Taraba State, Nigeria's Wukari Local Government. The following are further particular goals: To determine the extent to which yam growing has helped Wukari LGA reduce poverty; To determine the extent to which yam farming has helped Wukari LGA create jobs; To analyze the difficulties that Wukari LGA's yam farmers confront.

The following is the hypothesis that is put out and investigated in this study: yam growing in Wukari LGA has no effect on reducing poverty; it has no effect on creating jobs in Wukari LGA; and yam farmers in Wukari LGA suffer no difficulties.

2. **Literature review**

According to Bamire and Amujoyegbe (2005), the yam increases profitability via outputs, which significantly adds to farmers' revenue creation. Furthermore, Zaknayiba and Tanko (2013) demonstrate that crop-damaging illnesses as well as other challenges farmers face both on and off the farm have a detrimental effect on yam output. Similarly, Maikasuwa and Ala (2013) find that the region's yam yield has been influenced by labor, finances, and material inputs like fertilizer.

In a study titled "Determinants of Rural Poverty in Africa: the Case of Yam Farm households in Ukum Local Government Area," Adzer (2019) conducted research. Regression analysis, tables, averages, percentages, and poverty ratios were used to analyze the obtained data. The results showed that the average household size was 6 people and the average amount spent per person was N113.10, respectively, while the poverty levels for the per-yam household were N678.59 per day. One of the factors contributing to poverty is education level, which has a substantial negative sign at 5%. According to the study's findings, rural yam farmers should get regular training on new technologies that might boost yam output and associated goods, particularly for the less educated ones. Workshops with proper organization might be one method to do it.

Oluwatayo and Adedeji (2019) conducted a comparative examination of the technical efficiency of catfish producers in Lagos State, Nigeria, utilizing various building designs. Three agricultural zones in the state were used to pick a sample that included 37 plastics tanks, 33 cage cultures, and 43 earthen catfish producers. Regression analysis, data envelope analysis, budgetary and profitability analysis, and descriptive statistics were used to examine the obtained data. The mean technical efficiency estimates for earthen catfish producers, as determined by the Variable Returns to Scale (VRS) and Constant Returns to Scale (CRS) specifications, were 0.92 and 0.73, respectively. For VRS and CRS specifications under cage culture catfish producers, the overall mean technical efficiency estimates were 0.92 and 0.79, respectively, and 0.95 and 0.69, overall, for CRS and VRS specifications under plastic tank catfish producers. However, two factors were similarly significant for CRS under earthen pond: farmer age and sex, with t values of 1.82 and − 2.10, respectively. Once more, two significant predictors for CRS under cage culture were years of formal education and principal employment, with t values of − 2.09 and 2.16, respectively. Two factors—religion and age, with t values of 1.99 and 2.04 under CRS for plastic tanks—were significant at 5 and 10%, respectively. The study comes to the conclusion that the earthen pond, cage culture, and plastic tank building styles are the most successful and efficient. This is due to its little environmental impact and cost-effectiveness in terms of administration and design. This work's scope is centered on fish farms despite its comparative study.

Enimu (2018) used a multi-stage random sampling approach to sample 600 farmers in order to examine the household poverty condition of small-scale farmers in Bayelsa State, Nigeria. A structured questionnaire was used to gather the data, and the logistic regression model, FGT index, and descriptive statistics were used to evaluate the results. The findings showed that 79% of the respondents were married, 46% had no formal education, and 80% of the farmers were women. Thirty-eight (38) percent of livestock farmers and twenty-seven (27) percent of crop farmers were impoverished. Additionally, the depth and severity of poverty among crop farmers were 0.072 and 0.038, respectively, whereas those among livestock farmers were 0.098 and 0.052 respectively. The results of the logistic regression model showed that the farmers' poverty status was mostly determined by their age, educational attainment, size of household, farming experience, size of farm or herd, household income, household expenses, and cooperative participation. Therefore, in order to reduce poverty, the research advocated policies that would support and enhance the welfare of farming households in the direction of profitable and sustainable agricultural growth. The research only included data from small-scale farmers in Bayelsa State, and the data was biased towards them. This is not to argue that there aren't any signs of poverty among large-scale farmers. We will include small-, medium-, and large-scale farmers in our research sample.

Solomon (2018) used a multi-stage random sampling approach to sample 600 farmers in order to examine the household poverty condition of small-scale farmers in Bayelsa State, Nigeria. A structured questionnaire was used to gather the data, and the logistic regression model, FGT index, and descriptive statistics were used to evaluate the results. As per the results, the majority of farmers—80% of whom were female—were married (79% of respondents) and 46% of them had no formal education. Thirty-eight (38) percent of livestock farmers were impoverished, compared to twenty-seven percent of crop farmers. Additionally, the depth and severity of poverty among crop farmers were 0.072 and 0.038, respectively, whereas those among livestock farmers were 0.098 and 0.052 respectively. The results of the logistic regression model showed that the farmers' poverty status was mostly determined by their age, educational attainment, size of household, farming experience, size of farm or herd, household income, household expenses, and cooperative participation. In order to reduce poverty, this study suggests policies that should be implemented to support and enhance the welfare of farming households in the direction of profitable and sustainable agricultural growth.

3. METHODOLOGY

In Taraba State, Nigeria's Wukari Local Government Area (LGA), the study was conducted. Between latitude 700 N85'E and longitude 900 N70'E is where it is situated. It is located in the Guinea Savannah Vegetation Zone's southern region. There are 24,546 people living in the study area, which has a land mass of approximately 4,308 km2 (National Population Commission, 2006).

This study used a survey design, which is a quasi-experimental approach, using both field and sample surveys. The Wukari Local Government Area of Taraba State's selected respondents

provided the information used in the survey. The multistage random and purposive sampling techniques are used in the design. Surveys were employed as tools for gathering data. Information from the respondents will be gathered, and the chi-square technique will be used to analyze the data.

3.1 Sampling Procedure

Given a desired accuracy level, desired confidence level, and the expected fraction of the characteristic present in the population, the Cochran formula helps you determine the optimal sample size. Cochran's method is thought to be particularly useful in scenarios with big populations. There is a "correction" that allows the number provided by Cochran's formula to be lowered if the population as a whole is relatively small. A sample of any given size gives more information about a smaller population than a larger one.

The formula for Cochrane is:

$$n_0 = \frac{z^2 pq}{e^2}$$

Where: e is the desired level of precision (i.e. the margin of error), p is the (estimated) proportion of the population which has the attribute in question, q is 1 – p, the z-value is found in a Z table.

To compute the sample size for this study, a variant of the Cochran formula shall be employed thus: sample size = $\frac{Z^2 \times \mathrm{P}(1-\mathrm{P})}{e^2}$

Since we have a large population and an unknown one, our variables are:

Z = 1.96 = 95%

e = 0.05

P = 0.5

Sample size = $\frac{1.96^2 \times 0.5(1-0.5)}{0.05^2}$

= $\frac{3.8416 \times 0.5(0.5)}{0.0025}$ = 384.16 = 384

Method of Data Analysis

Descriptive statistics, such as frequency counts, tables, charts, percentages, and averages, will be utilized to analyze the data in order to examine the respondents' socioeconomic characteristics. The relevance of the link between small and medium-sized businesses and economic development in the context of the Wukari setting was examined using the chi-squared (X2) method. Since the researcher utilized the chi-squared to measure the differences between the

observed and predicted frequencies, the use of the chi-square in testing the hypothesis is appropriate. The following formula is used to determine the chi-squared.

$$x^2 = \frac{\sum (OF - EF)^2}{EF}$$

Where, ∑= Sigma (i.e. summation of values)

OF = Observed frequency which represent the number of respondent.

EF = Expected frequency which also represent the mean of responses.

Degree of freedom (df) = (r-1) (c-1)

Where r=total numbers of rows

C=total number of columns

A 5% level of significance is adopted in this work.

DECISION RULE: if calculated values of X^2 is greater than the tabulated value of X^2 the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted and vice-versa.

Validity & Reliability of Research Instruments

The researcher would do a pilot test. examining the data from the pilot research to make whether the methods, tools, and processes created for the exploratory investigation could produce the data needed to meet the study's objectives.

The degree to which a scale embedded in a series of questions genuinely captures the variability it is intended to capture is referred to as validity. The accuracy of the measuring procedure is referred to as validity. It is the veracity and significance of conclusions drawn from the study's findings (Mugenda & Mugenda, 2003). The face and content validity methodologies will be used to assess the validity of the research tool. In order to make sure that the items measure what they are supposed to measure, the researcher will use the face validity approach and ask an expert in the subject.

4. RESULTS AND DISCUSSION

DATA PRESENTATION

RETURN RATE OF QUESTIONNAIRE

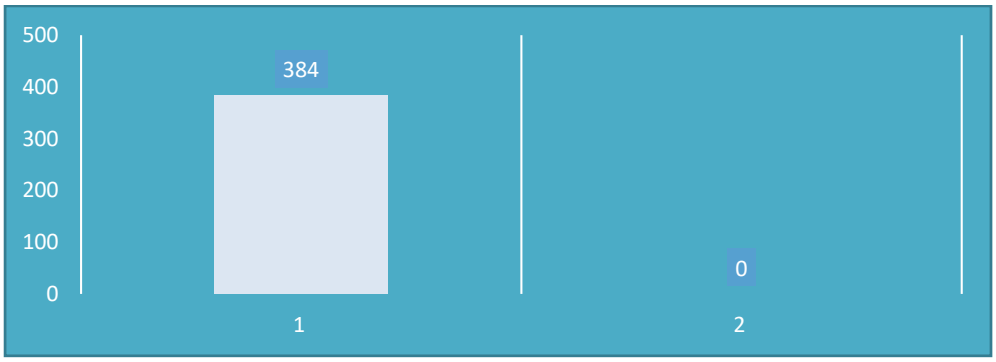
Three hundred and eighty-four (384) accurately completed questionnaire copies were returned after being given to the sample group. This suggests that the respondents are responding and participating at a very high rate. This is seen in the following table, 4.1.

Table 1: RETURN RATE OF QUESTIONNAIRE

Items	Frequency	Percentage (%)
Correctly Filled and Returned	384	100
Not Correctly Filled or Not Returned	0	0
Total Administered	**384**	**100**

Source: ***Field Survey, 2023***

Fig.1: Return Rate of Questionnaire



Demographics of Respondents

The demographics of the Three hundred and eighty-four respondents that participated in the study are presented below.

Sex

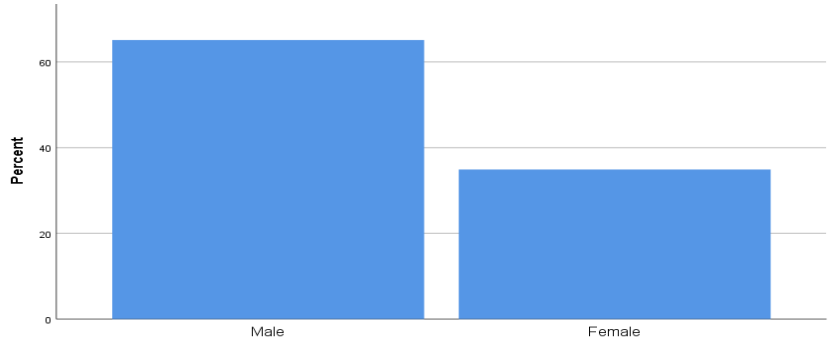
The sex distribution of respondents is presented in table 2.

Items	Frequency	Percent (%)
Male	250	65.1
Female	134	34.9
Total	**384**	**100.0**

Source: ***SPSS 25***

The distribution of respondents according to their sex is; however, more males (65.1%) participated in the study than their female counterparts (34.9%). This is further represented diagrammatically in figure 4.2.

Fig. 2: Sex Distribution of Respondents



Source: ***SPSS 25***

Age

The age distribution of respondents is depicted in the table below.

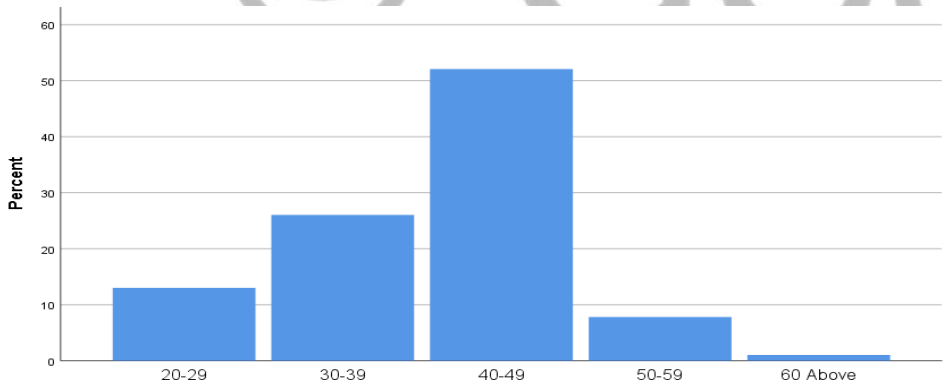
Table 3: Age Distribution of Respondents

Age	**Frequency**	**Per cent (%)**
20-29 Years	50	13.0
30-39 Years	100	26.0
40-49 Years	200	52.1
50-59 Years	30	7.8
60 Above Years	4	1.0
Total	**384**	**100.0**

Source: ***SPSS 25***

Based on their age ranges, the respondents that participated in this study were (13%) i.e. 20 to 29 years old, (26%) i.e. 30 to 39 years old, (52.1%) 40 to 49 years old, (7.8%) 50 to 59 years old, while (1%) are 60 years and above. This is presented graphically in figure 4.3.

Fig. 3: Age Distribution of Respondents



Source: ***SPSS 25***

Occupation

The table below shows various occupations of our respondents.

Table 4: Occupation of the Respondents

Items	**Frequency**	**Percent (%)**

Farmer	340	82.0
Businessman/Woman	44	18.0
Total	**384**	**100.0**

Source: ***SPSS 25***

Respondents that had the highest frequency are farmers with (82%), while (18%) of the respondents are Businessmen and women. This is presented graphically in figure 4.4.

Marital Status

The distribution of the respondents according to their marital status is presented in table 4.5.

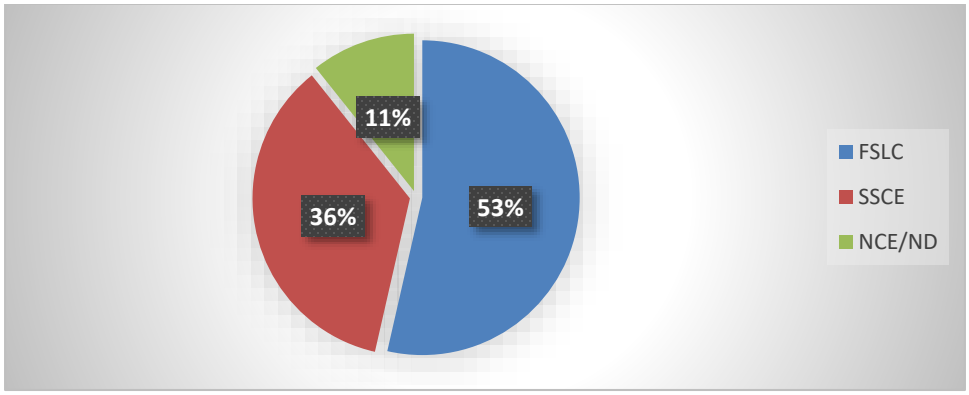
Table 5: Respondents' Distribution by Marital Status

Items	Frequency	Percent (%)
Single	100	26.0
Married	200	52.1
Widow	84	21.9
Total	**384**	**100.0**

Source: ***SPSS 25***

Majority of the respondents (52.1%) are married, who are twice the number of the unmarried respondents (26%) and almost triple times the number of the widowed (21%). This is presented graphically in figure 4.5.

Figure 4: Respondents' Distribution by Marital Status



Source: ***SPSS 25***

Education Background

Responses in table 4.6 show the educational background of the respondents

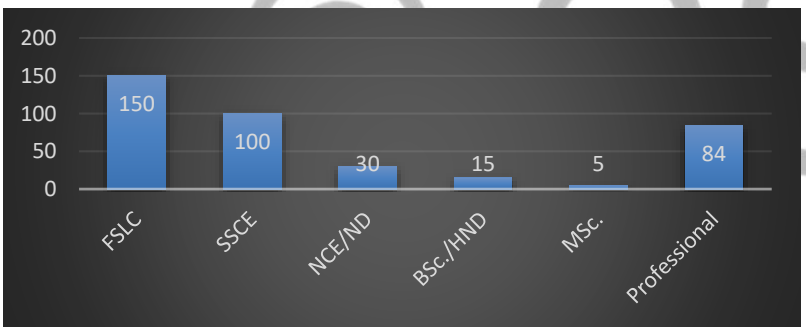
Table 6: Education Background

Items	Frequency	Percent (%)
FSLC	150	39.1
SSCE	100	26.0
NCE/ND	30	7.8
BSc./HND	15	3.9
MSc.	5	1.3
Professional	84	21.9
Total	**384**	**100.0**

Source: SPSS 25

As shown in table 6, majority of respondents have primary education with 150 (39%), 100 (26%) possess SSCE, 30 (7.8%) possess NCE/ND, 15 (3.9%) possess B.Sc/HND, 5 (1.3%) possess M.Sc. while 84 (21.9%) of the respondents were professionals among the total respondents. This is presented graphically in figure 4.6.

Figure 6: Education Background



Source: SPSS 25

Yam Farming contribution to Poverty Reduction in Wukari LGA.

The distribution of the respondents is presented in table 7.

Table 7: Yam Farming contribution to Poverty Reduction in Wukari LGA.

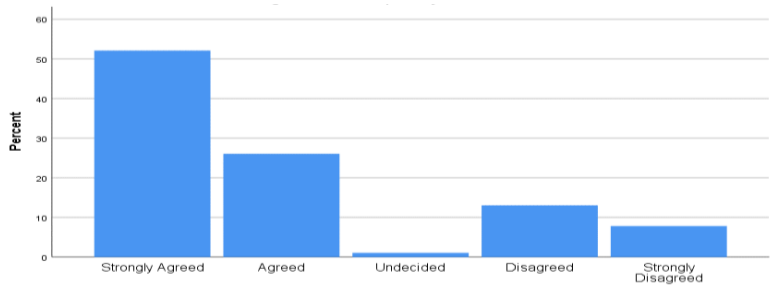
Items	Frequency	Percent (%)
Strongly Agreed	200	52.1
Agreed	100	26.0
Undecided	4	1.0
Disagreed	50	13.0
Strongly Disagreed	30	7.8

Total	**384**	**100.0**

Source: ***SPSS 25***

As shown in table 7, above majority of respondents strongly agreed that yam farming contribute to poverty reuction in wukari LGA with 200 (52.1%), 100 (26%) Agreed, 50 (13%) Disagreed, 30 (7.8%) Strongly Disagreed, while 4 (1%) of the respondents undecided among the total respondents. This is presented graphically in figure 4.7.

Figure 7: Yam Farming contribution to Poverty Reduction



Source: ***SPSS 25***

Yam Production or Farming Reduces Poverty in Wukari LGA.

The distribution of the respondents is presented in table 8.

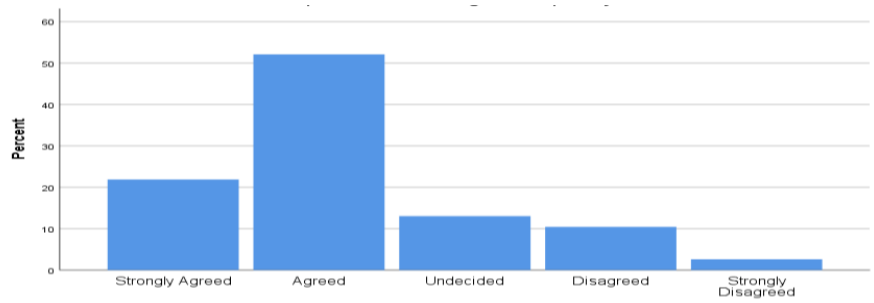
Table 8: Yam Production or Farming Reduces Poverty in Wukari LGA.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	84	21.9
Agreed	200	52.1
Undecided	50	13.0
Disagreed	40	10.4
Strongly Disagreed	10	2.6
Total	**384**	**100.0**

Source: ***SPSS 25***

According to table 8, above showed majority of respondents Agreed that yam production or farming reduces poverty in wukari LGA with 200 (52.1%), 84 (21.9%) Strongly Agreed, 50 (13%) Undecided, 40 (10.4%) Disagreed, while 10 (2.6%) of the respondents Strongly Disagreed among the total respondents. This is presented graphically in figure 8.

Figure 8: Increase in Yam production.



Source: ***SPSS 25***

Significant Decrease in Poverty level since Yam Farming began in Wukari LGA.

The distribution of the respondents is presented in table 9.

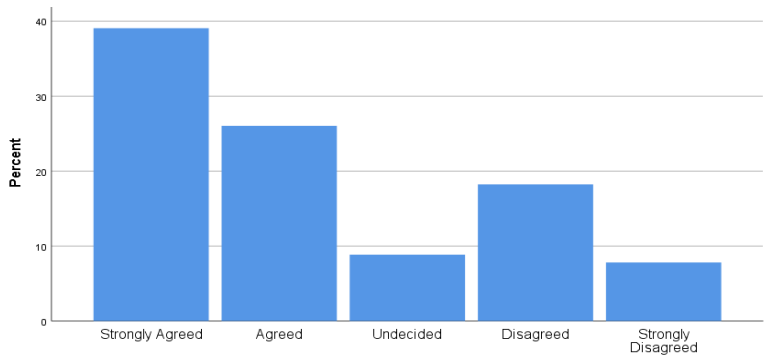
Table 9: Significant Decrease in Poverty Level.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	150	39.1
Agreed	100	26.0
Undecided	34	8.9
Disagreed	70	18.2
Strongly Disagreed	30	7.8
Total	**384**	**100.0**

Source: ***SPSS 25***

According to table 9, above showed 150 (39.1%) of the respondents "Strongly Agreed", 100 (26%) Agreed, 34 (8.9%) Undecided, 70 (18.2%) Disagreed, while 30 (7.8%) Strongly Disagreed, that there is significant decrease in poverty level since yam farming began in wukari LGA respectively. This is presented graphically in figure 9.

Figure 9: Significant Decrease in Poverty Level since Yam Farming began in wukari.



Source: ***SPSS 25***

Yam Farming Plays a Role in Employment Creation in Wukari LGA.

The distribution of the respondents is presented in table 4.9.

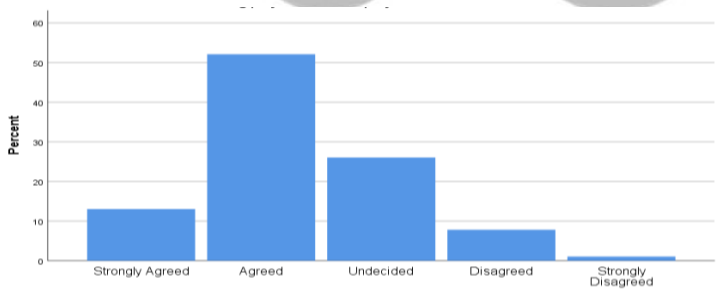
Table 10: Yam Farming Role in Employment Creation.

Items	Frequency	Percent (%)
Strongly Agreed	50	13.0
Agreed	200	52.1
Undecided	100	26.0
Disagreed	30	7.8
Strongly Disagreed	4	1.0
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 10 above showed 200 (52.1%) of the respondents "Agreed", 50 (13%) "Strongly Agreed", 30 (7.8%) Disagreed, 4 (1%) Strongly Disagreed while 100 (26%) remained Undecided, that Yam farming plays a role in employment creation in wukari LGA respectively. This is presented graphically in figure 10.

Figure 10: Yam Farming Role in Employment Creation in Wukari LGA.



Source: ***SPSS 25***

Yam Farming Decreasing Unemployment in Wukari LGA.

The distribution of the respondents is presented in table 4.11.

Table 11: Yam Farming Decreasing Unemployment.

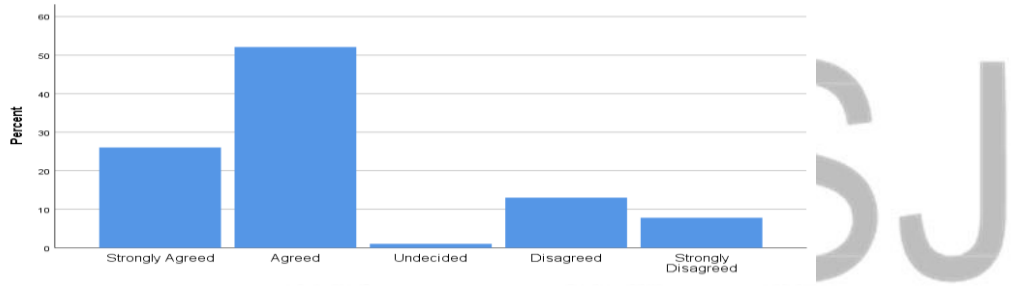
Items	Frequency	Percent (%)
Strongly Agreed	100	26.0

Agreed	200	52.1
Undecided	4	1.0
Disagreed	50	13.0
Strongly Disagreed	30	7.8
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 11 above showed 200 (52.1%) of the respondents "Agreed", 100 (26%) "Strongly Agreed", 50 (13%) Disagreed, 30 (7.8%) Strongly Disagreed while 4 (1%) remained Undecided, that Yam farming decreases unemployment in wukari LGA respectively. This is presented graphically in figure 11.

Figure 4.11: Yam Farming Decreases Unemployment in Wukari LGA.



Source: ***SPSS 25***

Yam Farming Decreasing Unemployment in Wukari LGA.

The distribution of the respondents is presented in table 4.12.

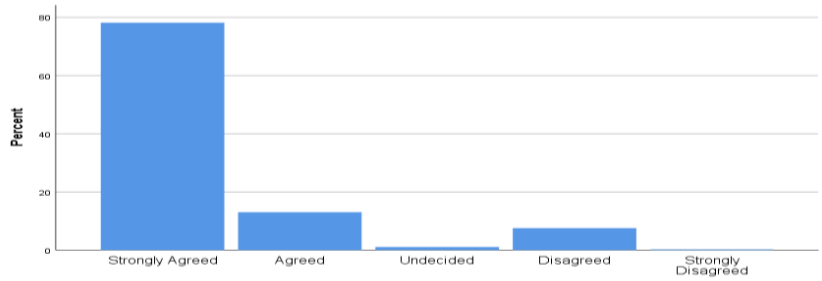
Table 12: Yam Farming Decreasing Unemployment.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	300	78.1
Agreed	50	13.0
Undecided	4	1.0
Disagreed	29	7.6
Strongly Disagreed	1	0.3
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 12 above showed 300 (78.1%) of the respondents "Strongly Agreed", 50 (13%) "Agreed", 29 (7.6%) Disagreed, 1 (0.3%) Strongly Disagreed while 4 (1%) remained Undecided, that Yam farming has a significant role in the economy of Wukari LGA respectively. This is presented graphically in figure 12 below.

Figure 4.12: Yam Farming Significant Role in the Economy of Wukari LGA.



Source: ***SPSS 25***

Challenges facing Yam Farmers in Wukari LGA.

The distribution of the respondents is presented in table 4.13.

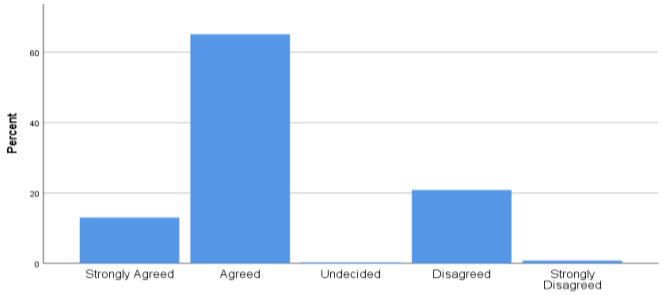
Table 13: Challenges facing Yam Farmers.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	50	13.0
Agreed	250	65.1
Undecided	1	0.3
Disagreed	80	20.8
Strongly Disagreed	3	0.8
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 13 above showed 250 (65.1%) of the respondents "Agreed", 50 (13%) "Strongly Agreed", 80 (20.8%) Disagreed, 3 (0.8%) Strongly Disagreed while 1 (0.3%) remained Undecided, on the challenges facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 13 below.

Figure 13: Challenges Facing Yam Farmers in Wukari LGA.



Source: ***SPSS 25***

Ethno – Religious conflict serves as a Challenge to Yam Farmers in Wukari LGA.

The distribution of the respondents is presented in table 4.14.

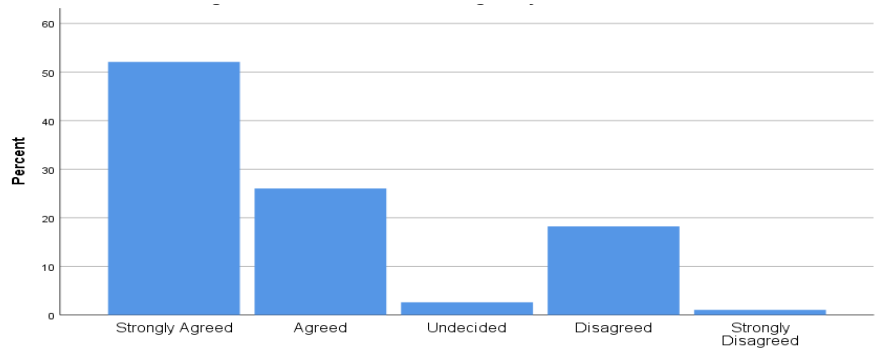
Table 14: Ethno – Religious conflict as a Challenge.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	200	52.1
Agreed	100	26.0
Undecided	10	2.6
Disagreed	70	18.2
Strongly Disagreed	4	1.0
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 14 above showed 100 (26.1%) of the respondents "Agreed", 200 (52.1%) "Strongly Agreed", 70 (18.2%) Disagreed, 4 (1%) Strongly Disagreed while 10 (2.6%) remained Undecided, ethno – religious conflict is one of the major challenge facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 14 below.

Figure 14: Ethno – Religious Conflict as a Challenge.



Source: ***SPSS 25***

Farmers/Headers conflict is one of the major challenge facing Yam farmers in Wukari LGA.

The distribution of the respondents is presented in table 15.

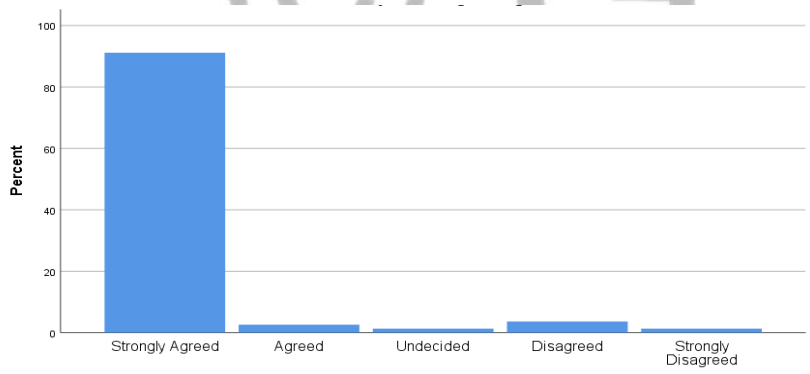
Table 15: Farmers /Headers conflict as a Challenge.

Items	Frequency	Percent (%)
Strongly Agreed	350	91.1
Agreed	10	2.6
Undecided	5	1.3
Disagreed	14	3.6
Strongly Disagreed	5	1.3
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 15 above showed 10 (2.6%) of the respondents "Agreed", 350 (91.1%) "Strongly Agreed", 14 (3.6%) Disagreed, 5 (1.3%) Strongly Disagreed while 5 (1.3%) remained Undecided, Farmers/Headers conflict is one of the major challenge facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 15 below.

Figure 15: Farmers /Headers conflict as a Challenge.



Source: ***SPSS 25***

Lack of education and Technological farm inputs serves as a hindrance to the yam farmers in Wukari LGA.

The distribution of the respondents is presented in table 16.

Table 16: Lack of Education and Technological farm inputs as a Challenge.

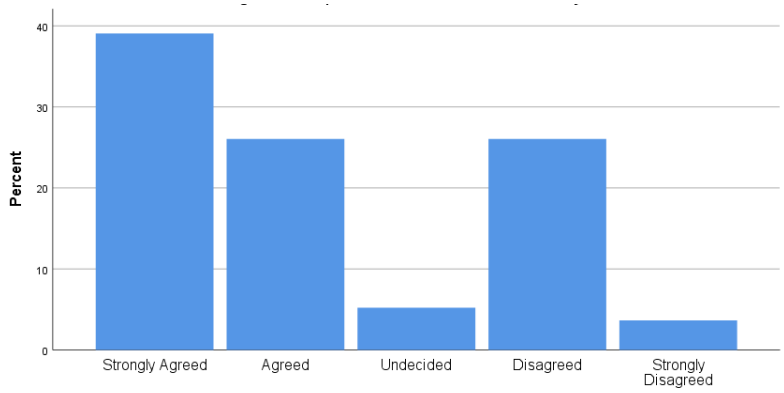
Items	Frequency	Percent (%)
Strongly Agreed	150	39.1

Agreed	100	26.0
Undecided	20	5.2
Disagreed	100	26.0
Strongly Disagreed	14	3.6
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 16 above showed 150 (39.1%) of the respondents "Strongly Agreed", 100 (26%) "Agreed", 100 (26%) Disagreed, 14 (3.6%) Strongly Disagreed while 20 (5.2%) remained Undecided, that lack of proper education and technological inputs is one of the major challenge facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 16 below.

Figure 16: Lack of Education and Technological Inputs as a Challenge.



Source: ***SPSS 25***

Lack of education and Technological farm inputs serves as a hindrance to the yam farmers in Wukari LGA.

The distribution of the respondents is presented in table 17.

Table 17: Lack of marketing knowledge and strategies stands as a challenge to yam farmers in Wukari LGA.

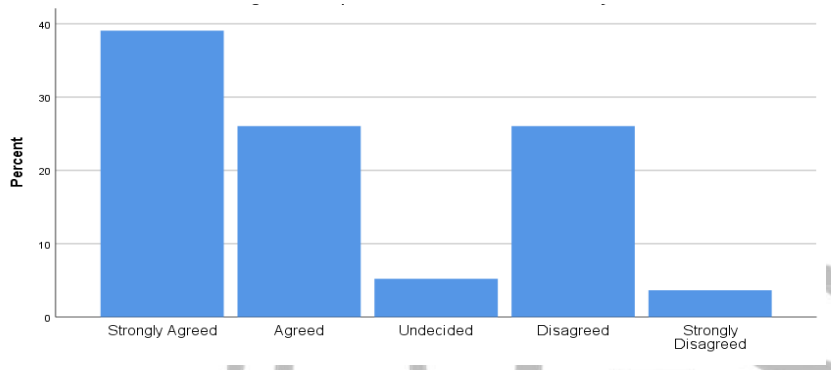
Items	**Frequency**	**Percent (%)**
Strongly Agreed	180	46.9
Agreed	100	26.0
Undecided	4	1.0
Disagreed	60	15.6

Strongly Disagreed	40	10.4
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 17 above showed 180 (46.9%) of the respondents "Strongly Agreed", 100 (26%) "Agreed", 60 (15.6%) Disagreed, 40 (10.4%) Strongly Disagreed while 4 (1%) remained Undecided, that lack of marketing strategies or knowledge is one of the major challenge facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 17 below.

Figure 17: Lack of Marketing Strategy/Knowledge as a Challenge.



Source: ***SPSS 25***

Lack of education and Technological farm inputs serves as a hindrance to the yam farmers in Wukari LGA.

The distribution of the respondents is presented in table 18.

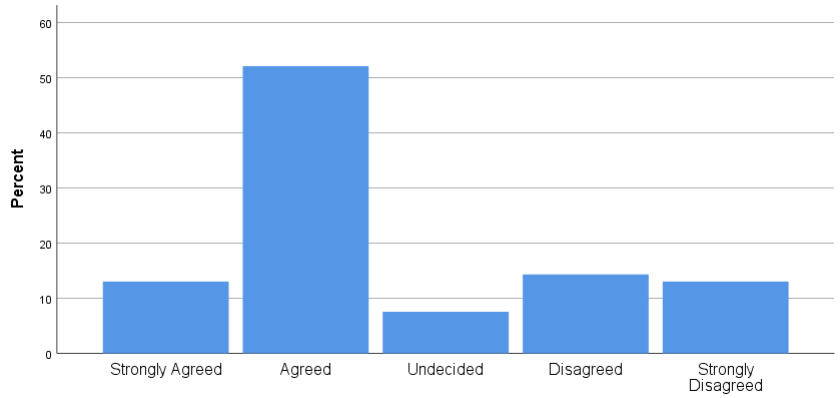
Table 18: Inadequate government policy implementation and supports for the yam farmers is a great challenge facing them in Wukari LGA.

Items	**Frequency**	**Percent (%)**
Strongly Agreed	50	13.0
Agreed	200	52.1
Undecided	29	7.6
Disagreed	55	14.3
Strongly Disagreed	50	13.0
Total	**384**	**100.0**

Source: ***SPSS 25***

The table 18 above showed 50 (13%) of the respondents "Strongly Agreed", 200 (52.1%) "Agreed", 55 (14.3%) Disagreed, 50 (13%) Strongly Disagreed while 29 (7.6%) remained Undecided, that lack of policy implementation and governmental supports remain a big challenge facing Yam farmers in Wukari LGA respectively. This is presented graphically in figure 18 below.

Figure 18: Lack of Policy Implementation and Governmental Supports as a Challenge.



Source: ***SPSS 25***

TEST OF HYPOTHESES

The various hypotheses were tested and the results presented in this section.

Test of Hypothesis One

This is restated in the null form

H_{01}: Yam farming does not play any role in poverty reduction in Wukari LGA.

Data presented in tables 10, 11, and 12 was used in testing hypothesis two, with the Ztest statistics.

Table 19: One-Sample Kolmogorov-Smirnov Test Result for Hypothesis Two

Does Yam farming plays a role in employment creation in Wukari LGA?		
N		384
Normal Parameters[a,b]	Mean	2.3177
	Std. Deviation	.83532
Most Extreme Differences	Absolute	.299
	Positive	.299
	Negative	-.222

Test Statistic	.299
Asymp. Sig. (2-tailed)	.000[c]
a. Test distribution is Normal. b. Calculated from data.	

Source: ***SPSS 25***

Decision Rule

If $X^2_{cal} > X^2_{critical}$, the responses in tables 4.10, 4.11, and 4.12 have same proportion of values the null hypothesis should be rejected and the alternative hypothesis accepted. Otherwise, the null hypothesis should be accepted and the alternative hypothesis rejected.

Decision

As presented in table 4.3, since $Z^2_{cal} = .299 > X^2_{critical} = 2.32$, responses in table 10, 11, and 12 have almost the same proportion of values. This agreement among the responses is proven that the null hypothesis should be rejected and the alternative hypothesis accepted accordingly. Yam farming play one of the major role in poverty reduction in Wukari LGA.

Test of Hypothesis Two

This is restated in the null form

H_{02}: Yam farming does not contribute in employment creation in Wukari LGA.

Data presented in tables 7, 8, and 9 was used in testing hypothesis one, with the Ztest statistics.

Table 20: One-Sample Kolmogorov-Smirnov Test Result for Hypothesis One

Does Yam Farming contribute to poverty reduction in Wukari LGA?		
N		384
Normal Parameters[a,b]	Mean	1.9844
	Std. Deviation	1.32648
Most Extreme Differences	Absolute	.292
	Positive	.292
	Negative	-.229
Test Statistic		.292
Asymp. Sig. (2-tailed)		.000[c]
c. Test distribution is Normal. d. Calculated from data.		

Source: ***SPSS 25***

Decision Rule

If $Z^2_{cal} > Z^2_{critical}$, the responses presented in table 7, 8, and 9 are normally distributed. Based on this the null hypothesis should be rejected and the alternative hypothesis accepted. Otherwise, the null hypothesis should be accepted and the alternative hypothesis rejected.

Decision

As presented in table 20, since $Z^2_{cal} = .292 > X^2_{critical} = 1.98$, responses in table 4.7, 4.8 and 4.9 are normally distributed. Thus, Yam farming contributed in employment creation in Wukari LGA.

Test of Hypothesis Three

This is restated in the null form

H_{03}: Yam farmers do not face any challenge in Wukari LGA.

Data presented in tables 4.13, 4.14, 4.15, 4.16, 4.17 and 4.18 was used in testing hypothesis three, with the Z-test statistics.

Table 21: One-Sample Kolmogorov-Smirnov Test Result for Hypothesis Three

Does Yam Farming contributes to poverty reduction in Wukari LGA?		
N		384
Normal Parameters[a,b]	Mean	2.3125
	Std. Deviation	.97018
Most Extreme Differences	Absolute	.408
	Positive	.408
	Negative	-.243
Test Statistic		.408
Asymp. Sig. (2-tailed)		.000[c]
e. Test distribution is Normal.		
f. Calculated from data.		

Decision Rule

If $Z^2_{cal} > Z^2_{critical}$, the responses presented in table 4.13, 4.14, 4.15, 4.16, 4.17 and 4.18 have the same proportion of values indicating agreement. Accordingly the null hypothesis should be rejected and the alternative hypothesis accepted. Otherwise, the null hypothesis the null hypothesis should be accepted and the alternative hypothesis rejected.

Decision

As presented in table 4.3.5, since Z^2_{cal} = .408 > $X^2_{critical}$ = 2.3125, responses in table 4.13, 4.14, 4.15, 4.16, 4.17 and 4.18 have the same proportion of values. Thus, the null hypothesis should be rejected and the alternative hypothesis accepted. Therefore, Yam farmers face any challenges in Wukari LGA.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The categories of Does Yam Farming contributes to poverty reduction in Wukari LGA? occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
2	The categories of Does Yam farming plays a role in employment creation in Wukari LGA? occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.
3	The categories of Are there challanges facing the Yam farmers in Wukari LGA? occur with equal probabilities.	One-Sample Chi-Square Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: ***SPSS 25***

According to the survey, the people living in Wukari LGA have a general awareness of farming and a favorable attitude toward the practice. The responses in tables 4.6, 4.7, 4.8, and 4.9 demonstrate this knowledge and understanding. They show that farming has an increasing, intensifying, speeding up, and widening impact on national connectedness and interrelationships (52.1%), a movement of people, ideas, goods, technology, and culture across (39.1%), reduces poverty, and increases yam production. The majority of respondents in Table 4.9 support the notable decline in the rate of poverty. 39.1% of this is represented. This result supports Ojoye's (2019) assertions that agriculture may reduce poverty and unemployment while also bringing about a host of other positive economic effects.

Nonparametric Tests

FINAL VERDICT

Nigeria and Benue state are now entangled in the process and movement of globalization. This is due to the fact that globalization is both a cutting-edge movement for global growth and the defining process of our time. Consequently, it has had a significant effect on Benue state's health. Therefore, it is essential to manage globalization efficiently in order to limit its negative effects, costs, burdens, and impacts on projected health outcomes and sustainable development, while maximizing its good effects, benefits, and impact. The study suggests that the Benue state government adopt strong health policies, programs, and projects that will be successfully and efficiently executed to achieve targeted health outcomes as a development aim. This recommendation is

based on the study's results and conclusion. Additionally, the health sector should get appropriate financial allocations and support to transform community health centers and urban hospitals into "healing centers" rather than just "killing centers" or consulting clinics. For the greatest possible good and influence, the government should put in place the necessary infrastructure to combine conventional and alternative medicine.

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