http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Off Farm Employment: An Alternative Strategy of Smallholder Farmers' Financial Income in Gwer West Local Government Area, Benue State, Nigeria

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Abstract

The study investigates off farm employment: as alternative strategy to overcome smallholder farmers' financial income in Gwer West Local Government Area, Benue State, Nigeria. Primary and secondary data were used. Purposive and systematic random samplings were employed and a total of 380 copies of questionnaires were distributed. Descriptive statistics, charts and tables were also adopted. Five points Likert's scale were employed. The study shows that the rationales for peoples' engagement in off farm employments are linked to low income from farming, recent insecurity in farming and quest for alternative source of income for household livelihood outside farming as the most perceived major causes of off-farm employment. The findings further showed that overwhelming majority of respondents were of the assertion that off-farm employment is certainly an alternative strategy to improve household finance. It was recommended that farming households should be well trained formally and informally on other livelihood options in order to be adequately equipped for available and future off-farm employment opportunities in Nigeria. Government should as a matter of fact create cottage industries as well as small and medium scale enterprises in rural areas for the teeming rural farming households as alternative source of income.

Keywords: *Alternative strategy of income, off farm work, smallholder farmers, Nigeria*

Introduction

In Africa, majority of rural households are involved in agricultural activities as their main source of livelihood. In the same vein, smallholder rural farmers also engage in other financial income generating activities to augment their main source of livelihood (Adepoju and Obayelu, 2013). Understanding household livelihood strategies is pivotal in minimizing rural poverty in least developed countries (Paudel, et al. 2017). Painfully, two-thirds of the world's poor inhabit in the rural areas of low-income countries, largely depends on subsistence farming and other natural resources for their livelihood survival (World Banks and IMF 2014). The populations in rural areas experience the highs and lows of a global economy, whereby a drop in price of crops thus affects sustainability (McCatty, 2004). Moreover, poverty is a multi-dimensional problem, it is directly connected with household finance and or earning, asset holding, and other economic behavior that together determine a household's livelihood strategy and outcomes (World Banks and IMF 2014). Generally, the state of Balkan, poverty present is volatile (Bezemer, 2006), Kosovo inclusive (Mazrekaj, 2016). Mezid (2014) stated that a good number of rural farmers are pushed away from on-farm work to off-farm sector due to lack of opportunities and quest for financial survival. In recent years,

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off-farm activities contribute significantly to household financial income. Off-farm employments are supplementary or complimentary job that farmers engage in either off-season or on-season to support themselves (Haggblade et.al, 2007). This entails activities such as casual labour, transportation business, local craft, wine taping, petty-trading etc. In Africa countries, rural communities are faced with many problems including poverty, high unemployment rate and food insecurity amongst others. These social problems are attributed to the decline in agricultural productivity due to agro-climatic conditions and other economic factors such as reduction of agricultural subsidies to small scale farmers, inadequate financial support from government and neglect of agro support scheme. These phenomenon has induced and or forced many farmers to participate in non-farm agricultural activities to make a living (Dixon, 1990, Reardon, 1997 cited in Rantso, 2016).

Stifel (2010) studied revealed that, in Madagascar, the rate of poverty are very high among people who are farmers compared with those that rely on the non-farm sector. In order to show the significance of non-farm activities to employment creation, research shows that, the rural non-farm sector employs upto 20% of the labour force in North Africa and 10% in Africa generally (Haggblade et al. 2010). The off-farm income is the sum total of all rural income and wage earning activities outside agriculture. Also, off-farm refers to all financial income-generating activities excluding crop and livestock production (Barette et.al, 2001, Lanjouw and Lanjouw, 2001). Off -farm income generating activities evidently avert the seasonality of primary agricultural production and generate a uninterrupted stream of income to cater for demands of life (Ovwigho, 2014).

Literature Review

In Nigeria, report has shown that the rural dwellers and households are predominantly the poor and they rely mainly on agriculture as a means of sustenance (World Bank, 2000; FOS 1999; NBS, 2012; Babatunde, et al. 2008). Moreover, socio-economic conditions in most rural communities in Nigeria are generally poorer than what is obtains in the urban town: hence rural–urban migration and off farm labour has been a strategy adopted by many households in a bid to escape poverty (Okali et al., 2001). Chang and Wen (2011) reported that off-farm employment is not essentially connected with lower or higher technical effectiveness. The authors noted that farmers with off-farm work face higher production risk. Their study further revealed that, for farmers in the lower percentiles of the efficiency distribution, those with off-farm job are more resourceful than their counterparts without off-farm work. Even though, the ordinary evidences that income

from non-farm sources assist in calming financial constraints on farm households and enhancing farm investment, fact on the impacts on domestic food supply, production effectiveness and household well-being, in general, remain quite conflicting. For instance, while Lien et al., (2010) noted that off-farm returns had a positive effect on farm productivity but no systematic effect on farm technical efficiency. Lanjouw and Feder (2001) in a study in rural El Salvador establish that the poor were mainly involved in "last resort" non-farm activities. In terms of partaking, the level is even higher. For example, Jolliffe (2004) reported that in 2004, communities in Ghana, about 74% of farm households were engaged in off-farm activities. While in United States and Taiwan, Fernandez-Cornejo (2007) reported that majority of the two countries participated farm households involved in off farm employment respectively. Majority of the opinion in the literature have taken a cue from either of these effects. De Janvry et al. (2005) employed a household survey dataset to study the influence of rural non-farm employment on household finance, poverty and inequality in Hubei province in China. Their findings revealed that rural non-farm employment has active spillover effect on household agricultural production in terms of enhancing on- farm investment strength in the face of scarce rural credit markets. Stampini and Davis (2009) studied the impact of rural non-farm employment on the use of variable inputs in rural Vietnam. The author's findings shows that non-farm employment participation by households is extensively associated with more expenditure on agro-seeds, agricultural services, hired labour and livestock inputs.

In Ethiopia, several literatures shows that, off-farm earning can be a vital means to overcome working capital constraints to invest in agriculture mostly if credit markets are thin or missing whereas off-farm options can be accessed easily (Barrett et al., 2001; Hernandez et al., 2010; Oseni and Winters, 2009; Woldehanna, 2000). Oseni and Winters (2009) establish a positive effect of off-farm income on farm investment by compensating missing or imperfect credit markets. Although, agriculture is the main source of livelihoods and households finance well-being in rural Ethiopia, rural households also engage in numerous forms of off-farm employment move by various pull and push factors (van den Berg and Kumbi, 2006; Rijkers et al., 2008; Woldehanna and Oskam, 2001). In another study, off-farm income has shown evidence of no significant influence on household output market participation. But however, has conditional on positive market participation, each additional earning from off-farm work has negative and statistically significant effect on marketed surplus. This buttresses that farmers use earnings from off-farm source rather for consumption purpose than as a source of liquidity to invest in agricultural production and increase marketable surplus (Woldeyohanes, at el, 2015).

Furthermore, researches have shown in several Latin America countries the drivers of participation in rural non-farm employment. In Chile, Berdegué et al (2001) study found that most female-headed households with educational background and access to credit were more likely to participate in non-farm work. Laszlo (2005) also found the same evidence in Peruvian households in districts with more population centres and a more developed tourism sector. In Nicaragua, Isgut (2004) reported that off-farm wage labour was predominantly undertaken by men with a low level of education. In contrast, non-farm self-employment was common among the female, while the well-educated where the one that engage in non-farm wage employment. Ferreira and Lanjouw (2001) studied the determinants of non-farm work in North-East Brazil, finding show that the vastly educated men were more likely to engage in non-farm work with high pay, whereas women engaged in low-income non-farm jobs. Also in Brazil, Jonasson and Helfand (2010) found that the likelihood of participation in RNFE was higher near population centres. Umeh, Ogah and Ogbanje, (2013), Edohen and Ikelegbe, (2019) noted that economically active population of Nigeria fall within the age of 20 - 60 years. This in their various studies shows that, greater degree of agility, strength and opportunities can be explored to boost agricultural labour, off farm work and agricultural output.

Generally, it has been observed that provision of opportunity for participation of members of rural households in rural off-farm activities might turn out to be a means to reduce poverty in the rural areas FAO (1998), Matshe and Young (2004). The economy of off-farm employment in Africa countries has become of interest to governments, non-governmental organizations, international agencies and development practitioners; as such, employment opportunities has become progressively more common in many developing countries. It has been seen as an alternative source finance for the agricultural sector and as an essential way to increase overall rural economic activity and employment in many developing countries. Awoniyi and Salman (2011), Olugbire et al. (2011) and Akaakohol and Aye (2014) in their various studies for instance, Awoniyi and Salman (2011), in an assessment of how rural households in South West Zone of Nigeria could diversify their income and boost welfare status through off-farm jobs concluded that farming household without financial income from other sources are more prone to poverty than those involved in off-farm employment. Similarly, Olugbire et al (2011) while exploring the connection between off-farm income diversification and poverty decrease in Nigeria found out that off-farm job have considerable positive impacts on the welfare and household financial strength. Also, Akaakohol and Aye (2014) study in Makurdi, Benue State, evaluated the diversification and farm household welfare, the results revealed high significant association between household welfare and off-farm employment. The authors

maintained that farming households who engage in off-farm employment have greater buoyancy to food security and other domestic spending when compared to households who depend solely on farming for survival. Globally, particularly Sub-Sahara Africa, recent food price hikes have contributed to greater public awareness of hunger related problems, also resulting in new international commitments to invest in developing country agriculture (Fan and Rosegrant, 2008). Obviously, agricultural development and facility provisions is crucial for reducing hunger and poverty in rural areas; however, non-agricultural growth can be important as well (Diao et al., 2007; Edohen and Egharevba, 2021). Specifically, for African countries, with energetic population growth and increasingly limited agricultural resources, the potential role of the rural off-farm sector deserves particular consideration. Smallholder farm households usually maintain a financial portfolio of income sources, with off-farm income being a major component (Barrett et al., 2001). In spite of all this potential studies on off farm employment done by various scholars both in developed and developing countries, there exist missing links towards addressing the key issues off farm employment as adaptive strategies employed in overcoming rural household financial income constrain drawing evidence from North Central Nigeria, Gwer West Local Government Area, Benue State, Nigeria.

Methodology

This study was conducted in North Central Nigeria, Gwer -West Local Government Area of Benue State. The LGA are surrounded by communities which are predominantly an agrarian economy. Thus, the communities selected for the study are: Kyande, Aondoana, Nagi, and Agagbe. The study employed the use of primary and secondary sources of data to elicit information that robustly address the fundamental issues concerning off farm employment. This research adopted purposive and systematic random sampling technique. First, purposive random sampling technique was used in the selection of the four communities. The reason was that, these communities were the most dominant amongst other communities in respect of off-farm work. While systematic random sampling technique was used in the selection of households that are involved in off-farm employment. The research population consisted of farming households who are involved in off farm employment from the selected communities in Gwer-West LGA. The working of this was that in each area, the first residential house was selected and thereafter every 5^{th} household along the area, until the sample size was obtained. In a case where there is no household that involve in off farm work, the next house will be selected. In order to obtain the sample size, the 1991 population of the four selected communities in Gwer-West LGA which stood at 3288 people as released by the National Population Commission and was projected to year 2020 as 7850 people. Since it is practically impossible to study the

entire population, the researcher adopted Taro Yamane's (1967) formula cited in Agheyisi and Ebinum (2019) for sample size calculation which is stated as follows:

$$n = \frac{N}{1+N(e^2)}$$

Where:

n = sample size; N = population size; e = level of precision (0.05)

Therefore;

$$n = \frac{7850}{1+7850\ (0.05)^2}$$

$$= \frac{7850}{1+7850(0.025)}$$

$$= \frac{7850}{1+19.65}$$

$$= \frac{7850}{20.63}$$

= 380.5 Approximately 381

Proportion for questionnaire distribution according to each sample communities

Kyande: $\frac{1704}{7850}\ X\ 381 = 83$

Aondoana: $\frac{1516}{7850}\ X\ 381 = 73$

Nagi: $\frac{1622}{7850}\ X\ 381 = 79$

Agagbe : $\frac{3008}{7850}\ X\ 381 = 146$

Table 1: Distribution of Respondents/ Questionnaires in Gwer-West LGA

LGA	Communities	Population size	Sample size	Number of Questionnaires retrieved
Gwer-west	Kyande	1704	83	83
	Aondoana	1516	73	73
	Nagi	1622	79	79
	Agagbe	3008	146	145
	Total	**7850**	**381**	**380**

Source: Fieldwork (2021)

The validity of the study instrument was subjected to professional scrutiny by the authors and other experts to ensure that the research instrument covered the variables to be investigated while ensuring it content

validity. The reliability of the research instrument was determined using the Cronbach Alpha (*a)* technique. Thus, the responses were subjected to the Cronbach Alpha test via SPSS 22 version which fall within the recommended range by (Pallant, 2011).

Study Area

This study will be conducted in Gwer -West LGA of Benue State. Gwer-West LGA is located between latitudes 9 and 12°N and longitudes 6 and 9°E. It is bounded by Makurdi and Guma LGAs to the north, Gwer-East LGA to east, Otukpo LGA to the South and Apa and Agatu LGAs to the West (See Fig. 1&2). The headquarters of the LGA is Naka which is strategically located at killometre 40 along the Makurdi - Ankpa interstate road. The LGA occupies a land mass of about 456.45 sq km. According to the NPC (2006), Gwer-West has population of 122,313 people.

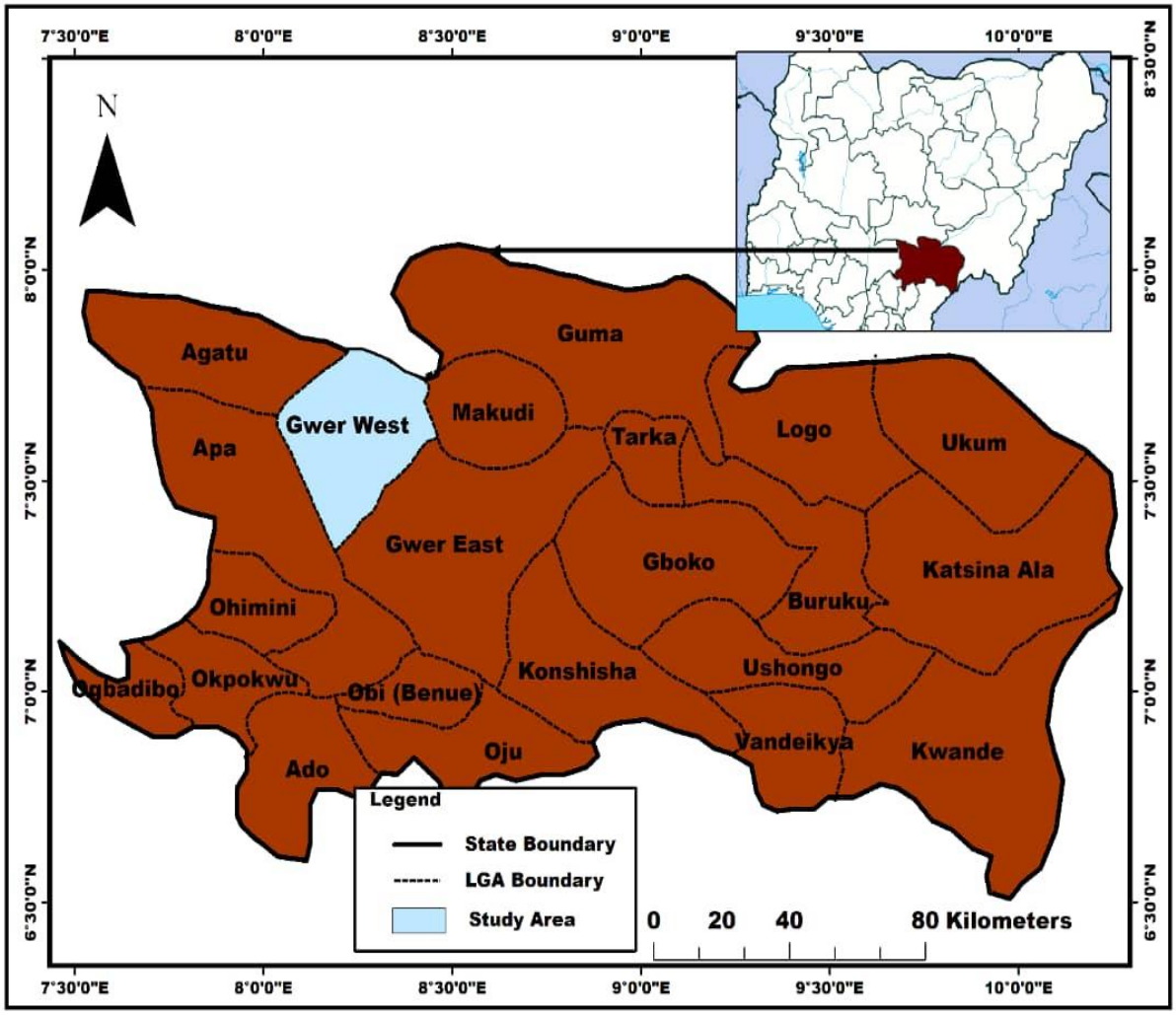

Figure1: Map of Benue State showing Gwer-west LG.

Data Analysis

In order to achieve the aim of this study, descriptive statistics, such as frequency counts, simple percentage were used to analyze data. Charts and tables were also used in presentation of result of the analysis. Likert's scale is a statistical approach for analysing four or more Likert items that inquire about the same subject such as attitude, perception and statements about a phenomenon. This summary is a numerical indication of over positive or negative orientation towards that subject. This study adopted a five points Likert's scale to address the research. The five – points Likert's scale were used to investigate the major causes of off-farm employment in this Gwer-West LGA. This ranged from Strongly Agree (SA), Agree (A), Note sure/undecided (UD), Disagree (D) and Strongly Disagree (SD) with the weight of 5, 4, 3, 2 and 1 respectively.

To enable the researcher evaluate the strength of respondents' opinion, the weighted count were obtained. These weighted counts were determined as a function of count and weights. The weighted means score (WMS) was also derived as a proportion of overall weighted count on the sample and were subsequently ranked in decreasing order. The WMS were used in explaining the overall level of respondents' opinion/agreement on the subject matter under investigation.

Pearson Product Moment Correlation Analysis

Pearson product moment correlation is a bivariate correlation analysis that facilitates the determination of linear link between two variables (X and Y). Values of the correlation coefficient range from -1 to 1. The sign of the coefficient indicates the direction of the relationship, and its absolute value indicates the strength, with higher absolute values indicating stronger relationships (Udofia, 2011). The Pearson correlation was used to test the null Hypothesis below:

H_1: There is no significant relationship between off-farm employment and household's financial income

Pearson Product Moment Correlation Co-efficient is calculated using the formula below:

$$r = \frac{n.\sum XY - \sum x. \sum y}{\sqrt{n. \sum x^2 - (\sum x)^2} . \sqrt{n. \sum y^2 - (\sum y)^2}} \quad - \quad - \quad (1)$$

Where:

r = the correlation coefficient

X = the independent variables (*rating of increase in households financial income*)

Y = the dependent variable (*off-farm employment*)

n = sample size (380)

Results and Discussion

In other to holistically address the key issues of this study in the four sample communities in Gwer -West LGA relating to off farm work as alternative strategy to overcome households income risk constrain, certain observation and questions that will enhance the report findings were necessary. Thus, in view of this, the generality of the results in age, occupation of households, farm type, monthly income, reason/causes of off farm work and off farm as alternative strategy were all investigated. The result revealed the modal age category of sampled respondents. 20 - 40 years 180 (47.4%) while above 60 years 37 (9.7%) was the age group with lowest number of sampled respondents. Also, 90 (23.7%)and 73 (19.2%) respondents had their ages within the range of Less than 20 years and 41 - 60 years respectively as presented in Figure 3. Taking a look at the result, it is clear that majority of respondents (66.6%) falls within the most economically active population of 20 - 60 years. It portrays greater degree of agility, strength and opportunities which can be explored to boost agricultural labour off farm work and agricultural output (Umeh, Ogah and Ogbanje, 2013, Edohen and Ikelegbe, 2019). In terms of occupation, greater number of the respondents were farmers 201 (52.9%) whereas 139 (36.6%) were traders. Also, 35 (9.2%) were civil servant while 5 (1.3%) were drivers. This finding indicates that Gwer-West LGA is largely an agrarian area as in many other LGAs in Benue State due to availability of rich arable lands that can be cultivated to ensure sustainable food security and wealth creation. The finding therefore agrees with that of Odoh *et al* (2020) who reported that farming is a key source of revenue for large proportion of households in Benue State and it also buttress Edohen and Ikelegbe (2020) study on assessment of the trend of farm labour patterns in rural Benin.

In other to have a clearer justification of the above findings, it was therefore necessary to known the generality of employment status of sampled respondents and the result showed that majority 191 (50.3%) were Self-employed, 112 (29.5%) were Employed, 71 (18.7%) were Unemployed whereas 6 (1.6%) Can't say whether they are employed or not. It is crystal clear that smallholder farmers in the locality are fully into farming and their perception in it is that, they are self-employed but still involve in alternative sources of income as a survival strategy to cushion the effect of low income from farming.

The study further investigated the monthly income of households. The study showed that majority 147 (38.7%) of the study population earned ₦11, 000.00-₦20,000.00 monthly while 5 (1.3%) earned ₦51,000 and above. On the other hand, 69 (18.2%) earned ₦31, 000.00 - ₦40,000.00, 66 (17.4%) earned ₦21,000.00 - ₦30,000.00, 49 (12.9%) earned ₦21,000.00 - ₦30,000.00 while 44 (11.6%) earned ₦41,000.00 - ₦50,000.00 respectively as monthly income. On the whole, it could be said that the study population was largely low income earners with about 69% earning monthly income that is below the Nigeria national minimum wage of ₦30,000.00 per month. This translate to majority of the respondents earning about ₦1,000.00 per day which cannot even carter for the need of the entire household. Again, this finding aligns with that of Umeh et al (2013) study that revealed that households with such daily earnings are in abject poverty which requires proactive measures to boost their socio-economic status and living standards.

Reasons for Off-Farm Work in Gwer-West LGA

One of the prime motivations for carrying out this research was to investigate the major reasons for off-farm work in Gwer-West LGA. When respondents were inquired on whether the peoples in the community involve in off-farm employment, majority 245 (64.5%) responded 'Yes' while the number that said 'No' were 135 (35.5%). The study went further to know individual involvement in off-farm employment and the result revealed that majority of the respondents 206 (54.2%) reported to have involved in off farm work whereas 174 (45.8%) indicated their non-involvement in off-farm employment in the study area. This finding align with the work of Ogunmefun and Achike (2015) who asserted that off farm employment is an opportunity to reduce over-dependence on unreliable and seasonal revenue from farming.

The study further investigated the reasons/ causes why farmers engaged in off farm work using various variables. In achieving this study, a five-point Likert's scale analysis was used and the result is shown in Table 2. The first variable, *Low income from farming* respondents stood at 193 (50.8%) Strongly Agree while 174 (45.8%) Agree. On the other hand, 10 (2.6%) respondents were Not sure/ undecided while 3 (0.8%) Disagree that the involvement in off-farm work is as a result of *Low income from farming*. Concerning *because of the recent insecurity in farming*, 183 (48.2%) respondents strongly Agree, 175 (46.1%) Agree while 22 (5.8%) were Not sure/ undecided to the reason for involvement in off-farm working the area. With reference to *alternative source of income for household livelihood outside farming* as a reason for engaging in off farm work, 182 (47.9%) respondents strongly Agree, 166 (43.7%) Agree, 28 (7.4%) Not sure/ undecided and 4 (1.1%) Disagree. Pertaining to *because there is more stress in farming*, as the reason

for off farm work, 168 (44.2%) respondents Strongly Agree, 165 (43.4%) Agree, 46 (12.1%) Not sure/ undecided while 1 (0.3%) Disagree respecively. The result also revealed respondents opinion if *new educational qualification obtained by farmers* where reasons for off farm work. 110 (28.9%) respondents Strongly Agree, 252 (66.3%), Agree whereas 18 (4.7%) Not sure/ undecided to the off-farm employment induced factor in the area. The result of the respondents also shows that 121 (31.8%) respondents Strongly Agree, 201 (52.9%) Agree, 42 (11.1%), Not sure/ undecided while 13 (3.4%) Disagree and 3 (0.8%) and Strongly Disagree to the variable that *farming is no longer viable* hence the reason for off-farm employment. Also, 118 (31.1%) sampled respondents Strongly Agree, 163 (42.9%) Agree, 66 (17.4%), Not sure/ undecided, 30 (7.9%), Disagree and 3 (0.8%) Strongly Disagree to the fact that *because of the seasonality of agricultural activities* is one of the reasons that make people in the study area to engage off-farm employment. With respect to *getting income that will help boost agriculture as* reason for off farm employment, 88 (23.2%) respondents Strongly Agree, 182 (47.9%) Agree, 18 (4.7%) Not sure/ undecided, 21 (5.5%) Disagree while 71 (18.7%) Strongly Disagree. The result further shows if *Government policy on farming* was the reason for off farm work, 55 (14.5%) respondents Strongly Agree, 120 (31.6%) Agree, 45 (11.8%) Not sure/ undecided, 47 (12.4%) Disagree and 113 (29.7%) Strongly Disagree. Regarding *Aging*, 17 (4.5%) Agree, 18 (4.7%) Not sure/ undecided, 109 (28.7%) Disagree and 236 (62.1%) Strongly Disagree to the off-farm employment stimulating factor in the area.

In general, Table 2, also reveals that the most perceived cause/reason (ranked 1st) of off-farm employment in Gwer-West LGA based on the weighted mean score (WMS) of 4.46 was *low income from farming*. *While the recent insecurity in farming* based on (WMS) of 4.42 was (ranked 2nd) most perceived cause of off-farm employment in the study area. The 3rd most perceived factors encouraging off-farm employment (WMS) 4.38 was *alternative source of income for household livelihood outside farming*. Also, the variable *more stress in farming* (WMS) 4.32 occupied the 4th position in the result table. The result further revealed the (WMS) 4.24 to the variable *because of the new educational qualification obtained by farmers* in the area as the 5th most perceived factors stimulating off-farm employment in the study area. Also, *because farming is no longer viable* (WMS) stood at 4.12 while *because of the seasonality of agricultural activities* (WMS) 3.96 were categorized as the 6th and 7th most perceived factors respectively that stimulated off-farm employment in the study area. The study findings also shows the results of the variables *to get income that will help boost agriculture* (WMS) 3.51 and *Government policy on farming* (WMS) 2.89 became the 8th and 9th most perceived factors respectively as cause/reason for off-farm employment in the study area.

Table 2: Major Causes of Off-farm Employment in Gwer-West LGA, Benue State

Major causes of off-farm employment		Extent of Agreement/Disagreement					Total	WMS/ Rank
		Strongly Agree	Agree	Not sure/ undecided	Disagree	Strongly Disagree		
Low income from farming	Count/ Percent	193 (50.8)	174 (45.8)	10 (2.6)	3 (0.8)	0 (0.0)	380 (100)	4.46
	Weighted Count	965	696	30	3	0	1694	1st
Because of the recent insecurity in farming	Count/ Percent	183 (48.2)	175 (46.1)	22 (5.8)	0 (0.0)	0 (0.0)	380 (100)	4.42
	Weighted Count	915	700	66	0	0	1681	2nd
An alternative source of income for household livelihood outside farming	Count/ Percent	182 (47.9)	166 (43.7)	28 (7.4)	4 (1.1)	0 (0.0)	380 (100)	4.38
	Weighted Count	910	664	84	8	0	1666	3rd
Because there is more stress in farming	Count/ Percent	168 (44.2)	165 (43.4)	46 (12.1)	1 (0.3)	0 (0.0)	380 (100)	4.32
	Weighted Count	840	660	138	2	0	1640	4th
Because of the new educational qualification obtained by farmers	Count/ Percent	110 (28.9)	252 (66.3)	18 (4.7)	0 (0.0)	0 (0.0)	380 (100)	4.24
	Weighted Count	550	1008	54	0	0	1612	5th
Because farming is no longer viable	Count/ Percent	121 (31.8)	201 (52.9)	42 (11.1)	13 (3.4)	3 (0.8)	380 (100)	4.12
	Weighted Count	605	804	126	26	3	1564	6th
Because of the seasonality of agricultural activities	Count/ Percent	118 (31.1)	163 (42.9)	66 (17.4)	30 (7.9)	3 (0.8)	380 (100)	3.96
	Weighted Count	590	652	198	60	3	1503	7th
To get income that will help boost agriculture	Count/ Percent	88 (23.2)	182 (47.9)	18 (4.7)	21 (5.5)	71 (18.7)	380 (100)	3.51
	Weighted Count	440	728	54	42	71	1335	8th
Government policy on farming	Count/ Percent	55 (14.5)	120 (31.6)	45 (11.8)	47 (12.4)	113 (29.7)	380 (100)	2.89
	Weighted Count	275	480	135	94	113	1097	9th
Aging	Count/ Percent	0 (0.0)	17 (4.5)	18 (4.7)	109 (28.7)	236 (62.1)	380 (100)	1.52
	Weighted Count	0	68	54	218	236	576	10th

Source: Fieldwork (2021)

The WMS of 1.52 placed *aging* as the 10th most perceived factor encouraging off-farm employment Gwer-West LGA. In view of the above finding, it is fundamentally clear that the major reason/cause of off farm work as a means of adaptive strategy to overcome households income constrain in the study areas is because of poultry income that smallholder farmers gets from farming. This study agree with the work of (Woldehanna and Oskam, 2001; Van den Berg and Kumbi, 2006; Rijkers et al., 2008 and Ovwigho, 2014).

Off-farm Employments as Alternative Strategy to Household Financial Income and Well-being in Gwer-West LGA

In general, to achieve the goal of this research and to further justify if off farm employment stand as alternative strategy to increase households finance and well-being in the study areas, the study again employed the use five-point Likert's scale to address this goal and the result as presented in Figure 2, showed how an overwhelming majority respondents 372 (97.9%) Strongly Agree to the assertion that off-farm employments is certainly an alternative strategy to improve household finance and well-being of smallholders farmers. On the other hand, 8 (2.1%) respondents Agree to the notion that an off-farm employment was an alternative strategy to improve household finance and well-being. The findings therefore buttress with that of Awoniyi and Salman (2011), Olugbire et al. (2011) and Akaakohol and Aye (2014). For instance, Awoniyi and Salman (2011), in an assessment of how rural households in South West zone of Nigeria could diversify their income and boost welfare status through off-farm jobs concluded that farming household without income from other sources are more prone to poverty than those involved in off-farm employment. Similarly, Olugbire et al (2011) while exploring the relationship between off-farm income diversification and poverty reduction in Nigeria established that off-farm employment have significant positive impacts on the welfare of the household. Also, Akaakohol and Aye (2014) evaluation of diversification and farm household welfare in Makurdi, Benue State revealed high significant association between household welfare and off-farm employment. The authors maintained that farming households who engage in off-farm employment have greater resilience to food insecurity and other domestic expenses when compared to households who depend solely on farming for survival.

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ISSN 2522-3186

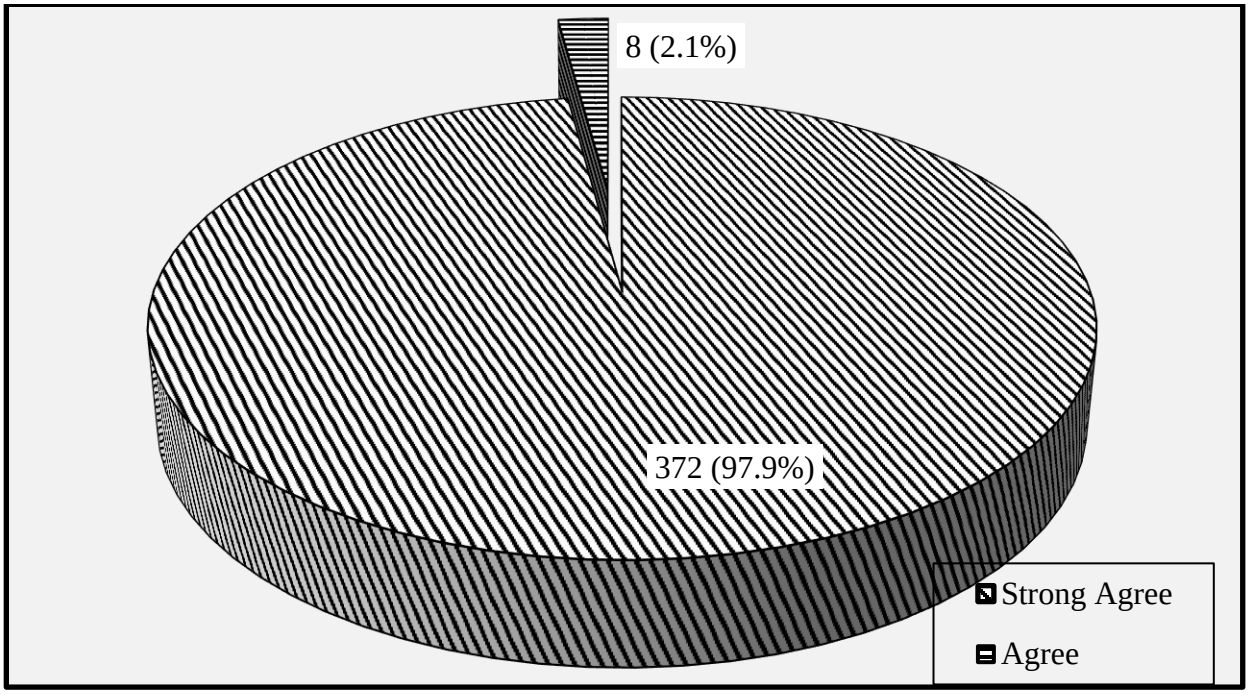

Figure 2. Off-Farm Employments as Alternative Strategy to Improve Household Finance and Well-being in Gwer-West LGA

Source: Fieldwork (2021)

The Sector with the Highest Engagement of Off-farm Workers in Gwer-West LGA

In other to have a clearer picture of the sector that has the highest opportunity base for off farm workers in the study area, the result shows that, majority 239 (62.9%) indicated *petty-trade*. Also, *civil Service* based on the responses of 125 (32.9%) was the off-farm employment sector with the second highest opportunities in the area. While, 16 (4.2%) respondents also indicated *commercial driving* see (Figure 3). This finding supported Ogunmefun and Achike (2015) study of evaluating the socio-economic profiles of rural farmers in Odogbolu LGA, Ogun State. The authors pointed out that majority of farmers engaged in petty trading.

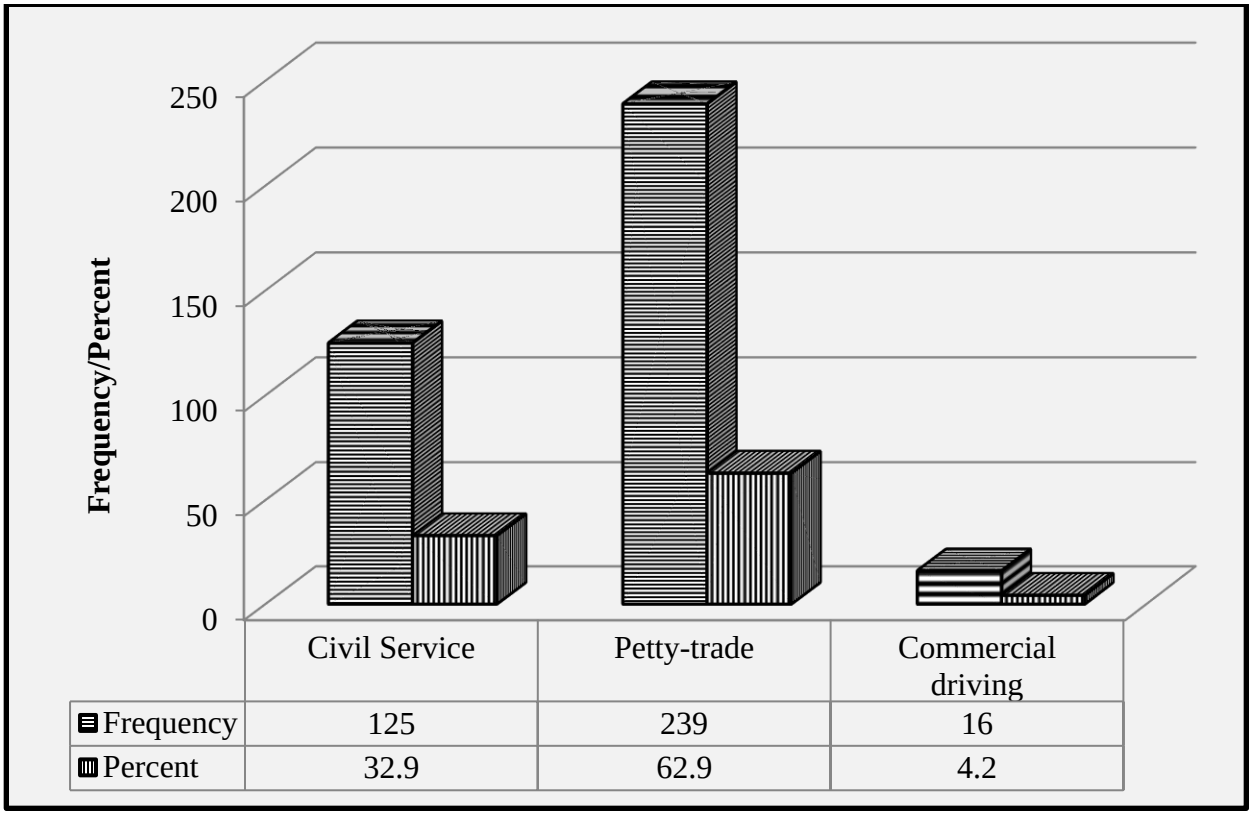

Figure 3: Off-farm Employment with the highest opportunities in Gwer-West LGA

Source: Fieldwork (2021)

Hypothesis

The study also tested the null hypothesis that state "*there is no significant relationship between off-farm employment and households financial income*". Again, PPMC was used in testing this hypothesis and the result as presented in Table 5 showed a high *R* of 0.845. With the coefficient of multiple determinations (R^2) of 0.71403, it could be inferred that 71% of the *household's financial income* can actually be linked to the engagement in off-farm employment. Also, taking a critical look at the p-value of 0.010 shows that it is less than 0.05 level of confidence (2-tailed test) pointing to the fact that the correlation is actually statistically significant. Hence, the null hypothesis is hereby discarded while the alternate hypothesis accepted. We therefore conclude that *there is significant relationship between off-farm employment and households' financial income*.

Table 5: Correlations between Off-farm Employment and Households Financial Income in Gwer-West LGA

Test variables/Statistics		Work with the highest off-farm employment opportunities in the area	Alternative Strategy to improve household financial income
Work with the highest off-farm employment opportunities in the area	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	380	
Alternative Strategy to improve household financial income	Pearson Correlation	*0.845	1
	Sig. (2-tailed)	0.010	
	N	380	380
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Fieldwork (2021)

Conclusions and Recommendations

Based on evidence from the result, it is clear that the generality of the findings in age, occupation of households, and monthly income were all investigated a look at the result, the majority of respondent's falls within the most economically active population. It portrays greater degree of agility, strength and opportunities which can be explored to boost agricultural off farm work. In terms of occupation, greater numbers of the respondents were farmers, this finding indicates that Gwer-West LGA in Benue State, Nigeria is largely an agrarian area. In respect of monthly income, it could be said that the study population was largely low income earners. The findings also revealed that majority of the study population involve in off-farm employment. The study revealed the result of the sector that has the highest opportunity base for off farm workers, majority of the respondents indicated petty-trade. A look at the reason/ cause of off farm work, the study shows that the rationales for peoples' engagement in off farm employments are linked to low income from farming, because of the recent insecurity in farming and alternative source of income for household livelihood outside farming as the most perceived major causes of off-farm employment in Gwer-West LGA, Benue State, Nigeria. The findings further showed how an overwhelming majority of respondents were of the assertion that off-farm employment is certainly an alternative strategy to improve household financial income and well-being of smallholder farmers in the study area. It was recommended that there is need for evolution and effective implementation of comprehensive rural development strategies which guarantees socio-economic transformation, eradication of poverty as well as food security. It was also recommended that farming households should be well trained formally and informally on other

livelihood options in order to be adequately equipped for available and future off-farm employment opportunities in Nigeria. Government should as a matter of fact create several cottage industries as well as small and medium scale enterprises in rural areas to create more off-farm employment opportunities for the teeming rural farming households as alternative source of income. It was further recommended that there is need for the integration of off-farm employment into the current agricultural extension policies and rural development programs if rural poverty and vulnerability to climate change induced threats are to be effectively tackled.

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