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An Analysis of Multidimensional Poverty among Returnee Internally Displaced Farmers (RIDF) in Yobe State.

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ABSTRACT

The study focused on analysing the multidimensional poverty status of returnee internally displaced farmers in Yobe state after been displaced by Boko Haram activities. Using International Organisation for Migration (IOM) threshold; purposive sampling technique was used to select Local Government Areas who's up to 80% - 100% of the population were displaced. The population of the study comprised of all returnee households in the selected LGAs while RAO-SOFT sample size calculator was used to obtain a sample of households for the study. Primary data was collected from the sampled households through the use of structured questionnaire. Descriptive statistics, multidimensional poverty index (MPI) and binary logistic regression were used to analyse the data collected. The outcome of the multidimensional poverty (MPI) analysis revealed a poverty head count (H) of 89%, poverty intensity (A) of 82% and MPI value of 73% among the RIDF. The study also revealed that out of the 3 dimensions of poverty (58%) of the poor households exhibits highest level of deprivation in living standard dimension, health dimension contributed 16% to the level of poverty and educational dimension contributed 26%. The output of the Binary Logistic regression shows that Age of the respondent and registration with humanitarian organisation for assistance was found to positively influenced level of multidimensional poverty among the respondents. The study recommends provision of life-sustaining packages to returnees that go beyond food and nutritional aid and relaxing some of the stringent security taken by the military as ways of reducing rate of multidimensional poverty among the returnees.

Keywords: Poverty, Internally Displaced Farmers, Returnee households

INTRODUCTION

Agriculture has been the main livelihood strategy in developing countries. It absorbs a huge rural labour, generates employment and contributes a significant share of the Gross domestic Product. The economy in the North-eastern region, particularly of Yobe State is principally agrarian with over 80% of the population engaged in one form of agricultural activity or the other as the main source of livelihood (Ekele, Njoku & Sidhu, 2021). This is because the climatic conditions of the State make it very suitable for both cereal and leguminous crop production since most cereals and legumes do not require heavy rainfall to thrive well. Also low prevalence of animal diseases occasioned by limited population and incidence of livestock diseases carrying vectors makes the area suitable for livestock production. Some of the livestock kept by the farmers in the area include cattle, camel, sheep and goat. While the cereals and

leguminous crops grown are guinea corn, maize, millet, rice, wheat, groundnut, cowpea, Bambara nut and sesame (Sanusi, S. O. & Madaki, M. J. 2022).

The agricultural sector in Yobe state has however faced a serious challenge as a result of violence perpetrated by the insurgence between the years 2009 to 2015. It was observed by Mohammed (2019) that the killings, kidnappings, capture of villages and destruction of all livelihood assets in parts of the state has seriously affected the livelihood of the farmers in the areas. Many farmers from the affected communities have abandoned their farming and business activities and have subsequently migrated to live with friends and relatives in safer areas or have move to camps for internally displaced people (Balogun, Salleh, Bin, & Ahmad 2020).

Following the emergence of a new democratically elected Government in 2015, a serious, bold and concerted effort has been made to curb the nefarious activities of the dreaded Boko Haram sect. As a result of these efforts, the region experienced an improvement in the security situation particularly in Yobe State; this caused a reduction in frequency of Boko Haram attacks from 21 attacks from 2009 - 2015 to only 2 attacks between 2016-2017 (Yobe State Emergency Management Agency, 2017). With the improvement in security situation between 2015 to 2017, all the displaced communities received clearance from the security agencies that they can return to their communities which implies that they are to start live all over again because all means of livelihood have been destroyed by the insurgent and they were not able to engage in any farming activities throughout the period of their displacement.

Problem Statement

Poverty is a major challenge facing Yobe state where agriculture has been the main source of livelihood with over 80% of the population participating in agricultural activities to make a living. With the advent of violence perpetrated by the insurgence in the State between 2009 to 2017, which severely affected the state by preventing people's movements, restricting agriculture and other livelihood securing activities resulting into widespread destruction of livelihoods leading to displacement of an estimated 112,600 farmers from various communities in the state (IOM, 2017). Furthermore, the insecurity situation have also resulted in exacerbating the poverty situation in the state because; according to the Harmonised Nigeria Living Standard Survey (HNLSS) of 2019; while the average poverty rate is 61 percent at national level, it is 71 percent in Yobe state.

However, despite the fact that the returnee internally displaced farmers (RIDF) have had eight (8) years (2017 – 2025) of economic activities in addition to various assistance and livelihood interventions made by the government and other humanitarian agencies, reports on poverty and situations emanating from the affected areas is discouraging this may be attributable to the poverty among the returnee farmers which inhibits their ability to access the necessary resources for sustainable production and effective functioning.

Notwithstanding, several research on poverty has been carried out in Nigeria, particularly in the North east region in the aftermath of the insecurity situation affecting the region, but most of the poverty assessments carried out are unitary and monetary based assessments which cannot adequately assess a population that has just returned from IDP camps and are struggling to survive under a severely constrain circumstances.

Justification of the Study

Undoubtedly, farmers are among the most valuable assets of any developing economy particularly an agrarian economy, therefore anything that affects them directly or indirectly affects that economy and the consequences would be a threat to livelihood security and increase in rate and depth of poverty. Considering the fact that the activities of the insurgency has led to great consequences on livelihood particularly of those farmers that were displaced, there is therefore a serious need to understand what implications such violence has had on their poverty status.

It is expected that this study would provide an insight to the government, international humanitarian organisations and Non-Governmental Organisations (NGOs) that are providing humanitarian response to the returnee farmers. The findings and recommendations will assist policy makers, donor agencies and humanitarian agencies working in the areas affected by the conflict trying to manage livelihood insecurity

situations, poverty and other livelihood challenges in these areas. Furthermore, the study will provides reference materials for other researchers in this field and will add to the body of knowledge on this subject matter.

Objectives of the Study

1. Describe the socio-economic profile of the returnee internally displaced farmers;
2. Analyse the multidimensional poverty status of the returnee internally displaced farmers;
3. Identify the key sources of deprivation across the dimensions and indicators of poverty among the returnee internally displaced farmers, and
4. Estimate factors influencing multidimensional poverty status of the returnee internally displaced farmers.

LITERATURE REVIEW

Concept of multidimensional poverty

The phrase "multidimensional poverty" has been variously defined, according to the Organization for Economic Cooperation and Development (OECD) Guidelines for Poverty Reduction (2019). Multidimensional Poverty refers to various forms of deprivation that affect a person's ability to consume and obtain food, as well as their health, education, rights, voice, security, dignity, and ability to find and keep a good job. Poverty must be reduced to ensure environmental sustainability. According to the OECD, reducing gender disparities is critical to addressing all forms of poverty.

The United Nations, 1995: Hunger and malnutrition; disease; limited or no access to education and other basic services; increased morbidity and mortality from illness; homelessness and inadequate housing; dangerous settings; and social marginalisation are all manifestations of multidimensional poverty. It is also distinguished by a lack of participation in decision-making as well as in civil, social, and cultural life. The Multidimensional Poverty Index (MPI), a metric developed by Human Development Report, uses micro data from household surveys to identify numerous deprivations at the household level in terms of education, health, and standard of living.

Empirical Review on Multidimensional Poverty

Admasu et al., (2021) did a multi-country analysis of multidimensional poverty in the context of displacement using MPI and reported that 76.4% of the populations affected by conflicts were estimated to be poor by the global MPI. Abubakar (2022) examined multidimensional poverty using sustainable development implications and found that the poverty predictors are location (place of residence, region and state), demographic (age, gender, household size), social and economic factors (wealth quintile, education and ethnicity), and household characteristics (access to electricity, sanitation type, source of drinking water, roofing and wall materials). These factors account for 66% of the likelihood of a household being poor or non-poor.

In a study conducted by Sunday *et al* (2016) on Level of Income Inequality and Determinants of Multidimensional Poverty Incidence among youth farmers and found that about 45.1% of male youths and 72% of female youths live below poverty line. Income inequality index revealed 0.4009 for male youths and 0.3797 for female youths. Mary and Salman (2015) investigate income inequality among rural farmers using the Gini index, the results indicated that inequality among rural folks as reflected by the Gini index of 0.85 was very high. Bogale, Hagedorn and Korf (2015) examined the determinants of poverty in rural areas using Foster, Greer and Thorbecke. The results of the study revealed that nearly 40% of the sample households live below poverty line with an average poverty gap of 0.047.

Ekpa, Abdullahi, and Ekpa (2017) established a link between climate-smart agricultural practices and poverty and reported that absolute poverty was 42.38% and relative poverty was 27.64%. The studies suggest that policies aimed at promoting education, improving access to credit, and developing facilities for rural development can enhance the economic situation of rural households in Nigeria.

Empirical Review on Factors Influencing Multidimensional Poverty

Buba, Abdu and Jibir (2018) used binary logistic regression to assessed the socio-demographic determinants of poverty and found that labour characteristics and social factors were strong determinants

of incidence of poverty. Onoja *et al.*, (2020) studied the status and determinants of farming household's poverty using OLS regression models and reported that sex of head of household, primary occupation of the head of household, household size and household income as the major determinants of poverty. Orji *et al.*, (2020) examined the incidence and determinants of multidimensional poverty using the Logit regression model and found that income, education, and consumption as the determinants of multidimensional poverty.

Amao, Ayentoye and Fanifosi (2017) also analysed the determinants of multidimensional poverty using Logit regression technique and reported that household size, gender, years of education, number of dependents, land ownership and non-agricultural income were significant determinants of poverty. Suleimon (2022) analysed the state level determinants of multidimensional poverty using ordinary least squares techniques and reported that total fertility rate, and region of residence had significant positive effect on multidimensional poverty while education and health had a significant negative effects.

Mduduzi and Talent (2018) studied the factors that influence multidimensional poverty and household welfare, the result revealed that; compared to traditional rural areas, households living in urban and farms are less likely to be poverty stricken and that educational levels of the household head reduce the probability of being poor.

METHODOLOGY

The Study Area

Yobe State is located on the latitudes $11^{\circ} 45'N$ of the equator and longitudes $9^{\circ} 30'E - 12^{\circ} 30'E$ of the Greenwich meridian. The state shares borders with three states: to the eastern boundary is Borno State, to the west is Jigawa and Bauchi State while to the north is International borders with Niger Republic (Multafu & Dawayo, 2020). The State has area coverage of about 92,898 km² and a projected population of about 3,649,600 people in 2022 from the 2006 population census figure of about 2,532,395 people with 2.9% projected annual growth rate (NPC 2006).

It has Seventeen Local Government Areas (LGAs) which include: Bade, Bursari, Damaturu, Fika, Fune, Geidam, Gujba, Gulani, Jakusko, Karasuwa, Machina, Nangere, Nguru, Potiskum, Tarmuwa, Yunusari, and Yusufari.

This study was conducted in two Local Government areas (LGAs) namely Gujba and Gulani. Gujba LGA has its headquarters in Buni Yadi town which is at a distance of 56Km from the state capital. It is located on latitude $11^{\circ} 29'52''N/11^{\circ}55'51''N$ and longitude $11.48778^{\circ} N/11.93083^{\circ}E$, it has an area of 3,239km² with a 2022 projected population of 208,849 people from the 2006 census figure of 130,088 people base on 2.9% annual growth rate. Gulani LGA has its headquarters in Bara which is located 146Km from the state capital. It is located on latitude $11^{\circ}00'N/11^{\circ}43'E$ and longitude $11.000^{\circ}/11.717^{\circ}E$ with an area of 2,090km² with a 2022 projected population 162,700 people using 2.9% annual growth rate from 2006 population census figure of 103,510 (NPC, 2006).

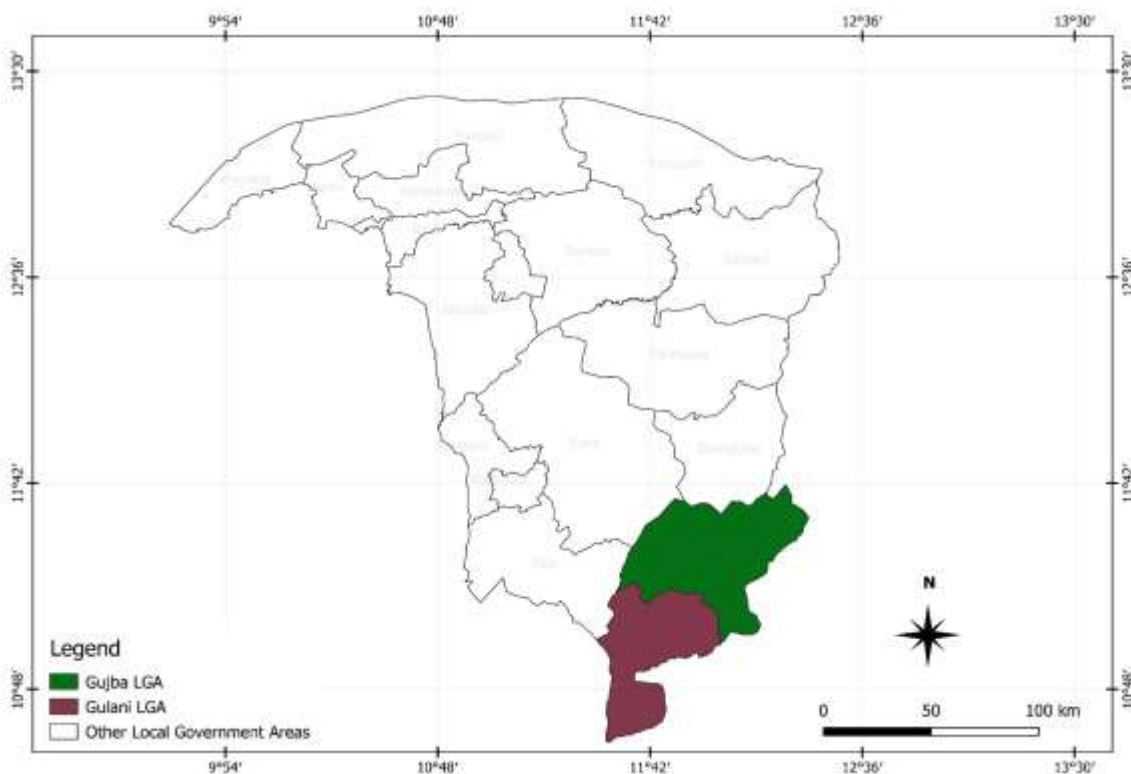


Figure 3.1: Map of Yobe State Showing the Study Area

Source: Yobe Geographical Information System (YOGIS)

Sampling Procedure

This study employed a multi-stage sampling procedure in the selection of respondents for data collection. The first stage involved the purposive selection of two (2) Local Government Areas (LGA) in the state where up to 87 percent of the population were displaced in 2014 International Organisation for Migration (IOM), (2015); to either Internally Displaced People (IDPs) camps or to live with friends and relatives in relatively peaceful areas within and outside the state, and now around 80 percent have returned in 2017 (YOSEMA, 2017). LGAs selected based on this are Gujba and Gulani Local Government Areas.

The second stage involved the purposive selection of towns and villages in the selected LGAs that were completely displaced and have now returned. Accordingly six (6) communities namely; Buni yadi, Gujba, Buni gari, Katarko, Gari Itace and Ngirbuwa were selected from Gujba Local Government Area while six (6) Communities namely; Bumsa, Bularafa, Bara, Teteba, Ngibulwa and Gulani were selected from Gulani Local Government Area.

Table 1: Distribution of Selected Returnee internal displaced farmers in the 2 LGAs

S/N	LGAs	*Sample Frame	Sample Size
1	Gujba	2027	185
2	Gulani	2015	178
Total	2	4042	363

*Source: YOSEMA 2026

The population of returnees from each LGA was obtained from (YOSEMA), Damaturu Office, which formed the sampling frame from which the sample size for the study was computed using RAO-SOFT sample size calculator. From the sample frame of 4042 a total of 363 RIDF was considered and selected for the research work.

3.3 Data Collection Method

The study used primary and secondary data. The secondary data was collected from Yobe State Emergency Management Agency (YOSEMA) while the primary data was collected through the use of structured questionnaire. Data collection were centered, among others, on respondents’ socio-economic and institutional characteristics such as marital status, educational level, household size, farmers assets and various indicators of the dimensions of multidimensional poverty.

3.4 Analytical Techniques

Descriptive statistics was used to describe the socio-economic characteristics of the respondents while Multidimensional poverty index (MPI) and Binary logistic regression were used to determine the multidimensional poverty status and factors influencing poverty status of the respondents . The various models are specified as follows:

3.4.1 Multidimensional poverty index

The Multidimensional Poverty Index was used to measure the poverty status of the respondents. The index was first published in the World Bank (2010) Report; the index identifies deprivations across three dimensions, it shows the number of people who are multidimensional poor and the numbers of weighted deprivations with which poor households typically contend with. To conform to the fundamental requirement of computing any MPI (global, regional, national or sub-national, all the data for the household came from the same survey. Ten indicators belonging to three dimensions were used in constructing the index; each dimension was assigned a weight.

Base on the number of indicators that made up the dimension. The MPI requires a deprivation cut-off for each indicator, the indicators’ deprivation cut-offs were noted as Z_i , so that person i is considered deprived if their achievement in that indicator X_i is below the cut-off, that is, if $X_i < Z_i$

The dimensions and the indicators are as follows:

Table 2: Standardised MPI dimensions, indicators and weights

Dimensions	Indicators	Weight
Education	Years of schooling: Attended at least 6 years of schooling	1/6
	School attendance: Child of school age that is not in school	1/6
Health	Child mortality: If a child has died 5 years prior to survey	1/6
	Nutrition: If any household member reported malnourished	1/6
Living standard	Access to electricity	1/8
	Access to improved sanitation	1/8
	Access to clean drinking water	1/8
	Nature of floor: Having dirt, sand or dung floor	1/8
	Type of cooking fuel: Dung, wood or charcoal	1/8
	Ownership of assets	1/8

Source: UNDP Training materials for producing national development report.

The deprivation score of each person was calculated by taking a weighted sum of the number of deprivations, so that the deprivation score for each person lies between 0 and 1. The score increases as the number of deprivations of the person increases and reaches its maximum of 1 when the person is deprived in all component indicators. A person, who is not deprived in any indicator, receives a score equal to 0. This is expressed as:

$$C_i = w_1I_1 + w_2I_2 + w_3I_3 + \dots \dots \dots w_dI_d \dots \dots \dots (1)$$

Where $1i = 1$ if the person is deprived in indicator i and $1i = 0$ otherwise, and W_i is the weight attached to indicator i with $\sum_{i=1} W_i = 1$.

The MPI combines two key pieces of information: (1) the proportion or incidence of people (within a given population) who experience multiple deprivations and (2) the intensity of their deprivation: the average proportion of (weighted) deprivations they experience. Formally, the first component is called the multidimensional headcount ratio (H):

$$H = \frac{q}{n} \dots\dots\dots(2)$$

Here q is the number of people who are multidimensionally poor and n is the total population.

The second component is called the intensity (or breadth) of poverty (A). It is the average deprivation score of the multidimensionally poor people and can be expressed as:

$$A = \frac{\sum_{i=1}^q C_i(K)}{q} \dots\dots\dots(3)$$

Where $C_i(K)$ is the censored deprivation score of individual i and q is the number of people who are multidimensionally poor.

The MPI is the product of both: $MPI = H \times A$(4)

The contribution of dimensions and indicators to the MPI were computed using the censored poverty head count as follows:

$$MPI = w_1CH_1 + w_2CH_2 + w_3CH_3 + w_4CH_4 + \dots\dots\dots w_nCH_n \dots\dots\dots(5)$$

Where w = weight of indicator 1 and CH = censored head count ratio of indicator 1

And contribution of indicator to MPI = $\frac{wnCHn}{MPI} \times 100$ (6)

A household was identified as multidimensional poor (or ‘MPI poor’) if they are deprived in at least one third of the weighted indicators; in other words, the cutoff for poverty (k) is 33.33%.

The proportion of the population that is multidimensional poor is the incidence of poverty, or headcount ratio (H). The average proportion of indicators in which poor people are deprived is described as the intensity of their poverty (A).

If a household is deprived in 20-33.3% of the weighted indicators they are considered ‘Vulnerable to Poverty’, and if they are deprived in 50% or more (i.e. $k=50\%$), they are identified as being in ‘Severe Poverty’.

Binary logistic regression

The binary logistic regression methodology has been used in several livelihood and poverty studies that requires the analysis and prediction of dichotomous outcome such as secured or insecure, poor or non poor and adopters and non adopters, for example Ukpe 2016, Buba, Abdu and Jibir (2018), Onoja *et al.*,(2022) and Regasa 2016). Binary logistic regression requires the dependent variable to be converted into a dichotomous variable coded 1 and 0. The Logit model for the study is specified as follows:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \dots\dots\dots + \beta_kx_k + \mu \dots\dots\dots(7)$$

Where:

x = specified socioeconomic characteristics

β_0 = constant term

μ = error term

Y = Poverty status (Taking value 1 for poor and 0 for non poor)

- X₁ = If household has received any assistance (Yes = 1, No = 0)
- X₂ = Any assistance towards reconstruction of shelter (Yes = 1, No = 0)
- X₃ = Received cash assistance (Yes = 1, No = 0)
- X₄ = Received medical assistance (Yes = 1, No = 0)
- X₅ = Received food and nutritional aid (Yes = 1, No = 0)
- X₆ = Received any livestock assistance (Yes = 1, No = 0)
- X₇ = Received agricultural inputs (Yes = 1, No = 0)
- X₈ = Received clothing materials (Yes = 1, No = 0)
- β₀ = Intercept
- β₁ – β₈ = Coefficient
- μ = error term

RESULTS AND DISCUSSIONS

Socioeconomic Characteristics of the RIDF.

Socioeconomic characteristics have been previously reported to affect the overall productivity of farmers in any community (Danladi *et al.*, 2021). It is therefore essential to understand the socioeconomic characteristics of the RIDF. The socioeconomic characteristics evaluated were age, sex, educational status, educational status, number of dependants and household annual income. The results were presented on Table 4

Age of RIDF

The results in Table 4 indicated the age of the returnee internally displaced farmers, the statistics showed that majority of the returnee farmers (46.3%) are within the ages of 30 – 49 years which is an indication that the population is characterised by a predominantly active population. This was evident by the statistical distribution of the minimum and mean of their age which was 20 and 44 years respectively. This conformed to the findings of Otekhile and Verter (2017). Having the majority of the respondents in their economically active stage showed that they can actively participate in farm operations and could easily learn and adopt new agricultural technologies. This implied that; if their energy is properly channelled and given a favourable environment for agricultural and other income generating activities, the farmers have the potentials to invariably achieve a secured multidimensionally poverty status.

Table 4: Socio-economic Characteristics of RIDF

Variables	Frequency	Percentage
Age		
20 – 31	2	0.5
32 – 42	168	46.3
43 – 53	151	41.6
54 – 64	40	11.1
65 – 75	2	0.5
Min	20	
Max	75	
Mean	44	
Sex		
Male	313	86.2
Female	50	13.8
Educational status		
No formal education	55	15.2

Had some formal education	308	84.8
Number of dependents		
1 – 5	113	31.1
6 – 10	170	46.8
11 – 15	48	13.2
16 – 20	21	5.8
21 – 25	11	3.1
Min	1	
Max	25	
Mean	6	
Household annual income(₦)		
30,000 – 109,999	267	73.6
110,000 – 189,999	31	8.5
190,000 – 269,999	17	4.7
270,000 – 349,999	10	2.8
350,000 – 439,999	5	1.4
440,000 – 529,999	33	9.0
Min	30,000	
Max	500,000	
Mean	146,944.9	

Source: Field survey, 2026

Sex of RIDF

The study also examined the sex of the respondents and the findings indicated that majority (86.2%) of household heads are male (Table 4) this might be attributable to the cultural background and religious belief in the study area which stipulates that in marriage it is the male that marries the female and he is to be responsible for the wife's welfare not the other way round.

The 50 households that are headed by female are mostly those that lost their husbands as a result of the conflicts perpetrated by the insurgence, and are most likely to face more challenges towards recovery than male headed households because men are more involved in complex and physically demanding farming operations, this is agreed with the findings of Babagana *et al.*, (2019) who reported that 86% of the returnee farmers household in Gujba LGA were male headed households.

From the context of poverty; female headed households were also found to be deeper in poverty when compared to male headed households ((Khamfula and Mah, (2019). This implied that; to achieve an acceptable level of poverty, efforts should be made towards improving the agricultural productivity of the returnee farmers with special attention to female headed households because agriculture is one of the main source of livelihood in the study area.

Educational status of the RIDF

The literacy status of the returnee internally displaced farmers is also showed in Table 4; the result indicated high level of literacy with 84.8% of them having one form of formal education or the other. The average duration of formal education is 7 years while the minimum and the maximum duration is 4 and 28 years respectively. A farmer's level of knowledge acquired through education can determine the ability of the farmer to make profitable decisions on investment, adopt various livelihood diversification activities and apply several approaches to risk management that best reduces the incidence of production failure and the expected outcome of which is reduced poverty level and more secured livelihood. This finding in some ways agreed with that of Aminu *et al.* (2017), where they reported that the majority of farmers had basic education, but their finding reported a higher proportion in terms of tertiary education among farmers. It has been reported that farmers willingness to accept new farming technologies is positively correlated to their literacy level (Magesa & Noah, 2021), therefore the literacy level of the

returnee internally displaced farmers can be utilised to improve their livelihood security and poverty status by introducing new farming technologies that can improve their agricultural productivity.

Number of dependants among the RIDF

The distribution of respondents based on number of dependants is also showed in Table 4, the distributions indicated that majority (49.9%) of the households in the study area has a minimum of six (6) and a maximum of ten (10) dependants while 31.1% of the households has a maximum of 5 dependents, 13.2% has minimum of 11 and maximum of 15 dependents; and 5.8% has between 16 and 20 dependents. The households have a minimum, maximum and mean value of 1, 25 and 6 members respectively.

In a typical agrarian society particularly in rural setting, families with large number of dependants utilises members for the provision of unpaid labour during production hence such households use to be economically better off than small sized households. But the implication of number of dependants in resettlement and rehabilitation situations where households largely depends on humanitarian aids for sustenance is always challenging for households with large number of dependants because what is normally given as nutritional aid and other forms of aids is given per household regardless of the number of dependants, therefore households with small number of dependants tends to be better off. Adebayo (2017) also reported that; large number of dependants had a negative influence on household livelihood security and poverty level.

Annual household income of the RIDF

Income has been a vital tool in assessing human wellbeing since individuals standard of living is measured in terms of their level of income. With respect to annual income of the respondents, the results in Table 4 revealed that majority of the respondents (73.6%) which translates into 267 households have a maximum annual income of ₦109,999 while 8.5% of the respondents which translate into 31 households have an annual income ranging from ₦110,000 to ₦189,999. An annual income of ₦100,000 which translates to ₦277.7 per day is an indication that; going by the current exchange rate of Naira to U.S Dollar (₦1,500/\$), majority of the respondents are living on \$0.18/day which is far below the poverty threshold of \$2.9 per day as stipulated in the World Bank report of 2020.

The findings also revealed an average income of ₦146,944.9 among the RIDF with minimum and maximum income of ₦30,000 and ₦500,000 respectively. The low level of income among the respondents can be attributable to the fact that being agrarian communities, the displacement from their settlements as a result of the conflicts has deprived them off the opportunity to participate in agricultural activities which is the major source of their income and this situation still lingers two years after their return, consequently they have to rely on cash transfers from donor organisations as their main source of income. This agrees with the findings of Joseph, Joseph and Chris (2018) who reported that the average annual income among farming communities in North eastern Nigeria ranges between ₦81,000 – ₦100,000.

Multidimensional Poverty Status of RIDF

This aspect of the study examined the level of poverty among the returnee internally displaced farmers which was computed using the multidimensional poverty index approach. The approach uses three livelihood dimensions namely education, nutrition and living standard dimensions with 2 indicators each for education and nutrition dimensions, and 6 indicators for living standard dimensions, making a total of 10 indicators.

The results in Table 5 showed the estimated poverty status of the returnee internally displaced farmers, the results revealed that the poverty head count (H) in the study area was 0.89 indicating that 89% of the respondents which translate into 323 households are poor while 11% which is 40 households are non-poor.

Table 5: Poverty Head Count, Intensity and Status among RIDF

Variables	Score
Poverty Head Count (H)	0.89
Poverty Intensity (A)	0.82
MPI Poor (H x A)	0.73

Poverty Status	Frequency	Percentage
Poor	323	88.9
Non-Poor	40	11.1
Total	363	100

Source: Field survey, 2026

The intensity of poverty (A) among the poor households was 0.82 which shows that the poor households were deprived of at least 82% of the indicators used in constructing the index. The result also shows an MPI value of 0.73 which is an indication that 73% of the poor households which translate into 236 households are in acute poverty that is they are deprived at least in all the indicators of a single dimension considered in the index or in a combination of indicators across all the dimensions. For instance a household having a child of school age not attending school, having a malnourished child, has no clean drinking water and having an un-improved sanitation. This finding is in agreement with that of OPHI (2017) who reported an MPI value of 71.5 for Yobe state while compiling Nigeria's country briefing on poverty using MPI approach. Yobe State Poverty Mapping and Situational Analysis, (2020) also reported poverty head count of 71% and 70% for Gujba and Gulani LGAs respectively. Similarly, Abubakar (2022) also reported 75.3% multidimensional poverty among farming households affected by insurgency in North eastern Nigeria.

This high level of poverty in the study area can be attributable to the fact that; even during pre-displacement era, Cheri (2014) has reported that 76.3% of the population in the north eastern Nigeria was poor and that made it the last but one poorest State in the country, only ahead of north western region with 77.7% rate of poverty, therefore when the social and economic consequences of crisis, displacement, return and resettlement collides with that level of poverty certainly an escalation of the poverty level were quite expected.

Contribution of MPI dimensions and indicators to poverty among the RIDF.

Multidimensional poverty use to occur when a household is deprived in at least one indicator across the MPI dimensions or deprived off all the indicators of a particular dimension, therefore the result in Table 6 showed the contribution of the various dimensions to poverty among the respondents and it revealed that (58%) of the 323 poor households which translate to 187 households exhibits highest level of deprivation in living standard dimension which indicated that each of the households is deprived in one or more of the following indicators; access to electricity, availability of clean drinking water, availability of improved sanitation facility, type of floor in their houses, type of cooking fuel been utilised by the household and assets owned by the household.

The result also revealed that deprivation in the dimension of education contributed 26% to the poverty head count among the respondents indicating that out of the 323 poor households in the study area, 84 households had a child that has not attain 5 years of education or a child of school age that is not in school or both. Deprivation in health dimension contributed 16% to the level of multidimensional poverty among the responders which indicates that 92 out of the poor households had an adult or child whose nutritional information was reported as malnourished or had a child of less than or equal to 5 years of age that died.

The contribution of the deprivations is mainly attributed to the living standard domain, this implied that addressing the living conditions indicators will significantly reduce multiple deprivations and invariable multidimensional poverty by prioritizing the standard of living indicators such as housing, electricity, sanitation, water among others are the major drivers of multidimensional poverty among the RIDF.

Table 6: Contribution of MPI dimensions and indicators to poverty among RIDF

Dimensions	% Contribution to MPI	Indicators	% Contribution to MPI
Education	26	Year of schooling	14
		School attendance	12
Health	16	Nutrition	10
		Child mortality	6
Living standard	58	Asset	13
		Cooking fuel	7
		Drinking water	12
		Sanitation type	8
		Electricity	10
		Type of floor	8
Total	100		100

Source: Field survey, 2026

These findings were corroborated by that of Bina (2020) who examined the effects of insecurity on Borno and Yobe communities reported that development projects geared towards improving health, education as well as water and sanitation have been abandoned due to the activities of the insurgents.

The result shown in Table 6 further decomposed the contribution of various indicators that made up the multiple dimensions of poverty. The result shows that within the dimension of education which contributed 26% to the level of poverty in the study area; 14% was contributed by years of schooling which implied that 14% of the multidimensionally poor households have children that have not attain up to 5 years of schooling while 12% was contributed by school attendance indicating that such households have children of school age that are not in school. Within the dimension of health which contributed 16% to poverty among the multidimensionally poor households, nutrition has contributed 10% to the level of deprivation indicating that 10% of the poor households had an adult or child whose nutritional information was reported as malnourished. The other indicator of the health dimension is child mortality which contributed 6% to the level of deprivation among the poor households, which implied that such poor households had a child of less than or equal to 5 years of age that died.

The result further revealed that the dimension of living standard has contributed 58% to level of deprivation among the respondents was also decomposed into its various indicators, where lack of access to electricity has contributed 10%, absence of improved sanitation contributed 8%, lack of access to clean drinking water 12%, having dirt floor contributed 9%, cooking with wood, charcoal or dung contributed 7% and lack of assets contributed 13%. This finding agreed with that of Babagana, *et al.*, (2019) while assessing the socioeconomic problems facing returnees displaced by Boko Haram insurgency in Gujba LGA of Yobe state who also reported that the level of poverty among the returnees was contributed by lack of education, paucity of portable water supply, complete absence of power supply, poor health care delivery, inadequate housing, destroyed road network and lack of telecommunication facilities.

Factors influencing poverty among the RIDF.

This aspect of the study provides the outcome of the binary logistic regression used to determine the factors influencing multidimensional poverty among the respondents. The dependent variable was poverty status with value of 1 for non-poor and 0 for poor households while the independent variables were the various forms of social and economic assistance received by the RIDF which were also considered as binary that is whether the returnee have received the assistance (1) or not (0) as well as whether they have received assistance in particular area (Yes =1) of livelihood or not (No =0). The choice of the independent variables was informed by the empirical leanings of the study as well as the fact that the respondents have

just returned from IDP camps where no meaningful economic activity was done, therefore their route to recovery was mainly through social and economic assistance from government and NGOs.

Result from Table 7 revealed that a pseudo-R square of 0.77 which suggests that the variation in the dependent variable accounted for 77% of the variation on the dependent variable. The result further revealed that assistance towards reconstruction of shelter and assistance in the form of food and nutritional aid were found to significantly influenced poverty status among the respondents.

The coefficient of assistance towards reconstruction of shelter was positive and significantly related to the poverty status of the RIDF at $P < 0.1$ level of probability. This corroborates with the fact that living standard domain and its indicators were found to be key contributors (58%) to multidimensional poverty among the respondents and a good quality shelter is expected to have good floor, quality sanitation, electricity and potable water supply. This implied that improving the living standard of the RIDF by humanitarian agencies through provision and reconstruction of shelter has the potentials of addressing the level of multiple deprivation and multidimensional poverty among them.

Table 7: Factors Influencing Poverty Status of Returnee Internally Displaced Rural Farmers

Variables	Coefficient	Std. Error	Wald	Sign.	Exp (β)
Constant	- 21.203	16337.387	.000	.999	.000
Reconstruction of shelter	.617	0.355	3.028	.082*	1.854
Received Cash assistance	19.130	10638.420	.000	.999	.476
Received livestock	- .343	0,357	.919	.338	.710
Received agric. inputs	- .168	19495.799	.000	1.000	.845
Received food aid	.733	0.364	4,049	.999**	2.081
Model summary					
– 2log likelihood	237.661				
Cox & Snell R^2	0.038				
Negel Kerke R^2	0.77				

Source: Field survey, 2026

** $P < 0.05$ * $P < 0.1$

This result is consistent with the findings of Suleiman (2020) who examined multidimensional poverty and its determinants and reported that standard of living including sanitation, potable water and type of cooking fuel were positive and significant determinants of multidimensional poverty among rural farming households and that of Adepaju (2018) who analysed the determinants of multidimensional poverty transitions among displaced households also reported similar findings where he found registration with humanitarian agencies among others as a positive and significant variable influencing multidimensional poverty.

The coefficient of access to food and nutritional aid is also positive and significantly influenced the level of multidimensional poverty among the RIDF at $P < 0.05$ level of probability. The dimension of health which comprised of nutrition and child mortality has been found to be one of the drivers of deprivation among the respondents. Nutritional aid is suppose to correlate negatively with level poverty, that is the more nutritional aid received the lower should be the level of poverty because the resources that will be used for food can be utilised to improve the other domains such as education and health. This implied that poverty reduction efforts should not focus on single or unitary factor but rather it should be multifaceted in order to address multidimensional deprivations. This result corroborates with the findings of Abubakar (2022) who reported food consumption expenditure as one of the major predictors of multidimensional poverty

SUMMARY

The research focused on analysis of multidimensional poverty status of returnee internally displaced farmers and its determinants in Yobe state, Nigeria. The specific objectives of the study were to describe the socio economic characteristics, determine the level of multidimensional poverty status and factors influencing poverty status among the RIDF. Primary data was obtained from 363 returnee internally

displaced farmers using structured questionnaire while secondary data was collected from YOSEMA. Descriptive statistics, multidimensional poverty index and binary logistic regression were used to analyse the data.

The findings on the socioeconomic characteristics of the RIDF showed that the average age of the returnees is 44 years with 46.3% having the age of 30 to 49 years, 86.8% of them are male, 84.8% had one form of formal education or the other for an average duration of 7 years. The returnee households have an average of 6 dependents with 46.8% having 6 – 10 dependents, the average annual income of the households is ₦146,944.9 with majority having an annual income of ₦30,000 – ₦109,999. Most of the returnees (89.3%) were displaced in 2014 where 78.8% of them went to IDP camps after been displaced. Following an improvement in security situation; 86.7% returned in 2017 and 100% have received one form of assistance or the other on return. Out of the returnees, 27.8% have received assistance in respect of reconstruction of shelter, 94.2% are receiving cash transfers of ₦20,000 per month, 92.3% have received one form of medical assistance or the other, 86.5% are receiving food and nutritional aid, 65.8% have received livestock assistance which comprises of cattle, sheep and goat, 29.2% have received machinery and equipment which includes grinding machine, sewing machine and knitting machine, 23.7% received assistance in respect of poultry production, 69.7% received various farm inputs while 23.4% have received clothing materials.

The outcome of the multidimensional poverty analysis revealed a poverty head count (H) of 89% representing 323 households, poverty intensity (A) of 82% and MPI value of 73%. The findings also revealed that out of the 3 dimensions of poverty (58%) of the 323 poor households which translate to 187 households exhibits highest level of deprivation in living standard dimension, health dimension contributed 16% to the level of poverty and educational dimension contributed 26%. The result further shows that the various indicators of living standard dimension to poverty were lack of access to electricity contributed 10%, absence of improved sanitation contributed 8%, lack of access to clean drinking water 12%, having dirt floor contributed 9%, cooking with wood, charcoal or dung contributed 6% and lack of assets contributed 13%. The dimension of education which contributed 26% to the level of poverty in the study area; 14% was contributed by years of schooling and 12% was contributed by school attendance, for health dimension; 10% was contributed by malnourished while child mortality contributed 6%. Access to assistance towards reconstruction of shelter ($P < 0.1$) and food and nutritional aid ($P < 0.05$) were found to be significant and positively influenced level of poverty among the RIDF.

5.2 CONCLUSION

The study examined the multidimensional poverty status and factors influencing it among the returnee internally displaced framers in Yobe state, Nigeria. Based on the findings of the study the level of multidimensional poverty is very high among the RIDF with poor standard of living as the major dimension contributing to their level of poverty. Access to assistance towards reconstruction of shelter and food and nutritional aid were found to be significant and positively influenced level of poverty among the RIDF.

5.3 RECOMMENDATIONS

Base on the findings of the study, the following recommendations were proffered:

1. The low level of annual income of the returnee households showed almost total reliance on cash transfers particularly at the onset of return, therefore government and other humanitarian organisations should consider an upward review of the ongoing monthly amount of ₦20,000 to ₦30,000 to reflect the existing minimum wage and also educate the beneficiaries on the need of savings and investment from the amount received by engaging micro finance banks in the process.
2. The major source of deprivation among the multidimensional poor returnee households is living standard; therefore more assistance should be rendered towards reconstruction of shelter to

- enable the returnees to have decent housing with good floor, portable drinking water and proper sanitation thereby uplifting their living standard.
3. The study also recommends that government with the support of humanitarian support organisations should design and implement returnee livelihood support strategies that will enable transition from 'status' to 'needs based' assistance in order to alleviate multidimensional poverty.
 4. Since low level of economic security is the major cause of livelihood insecurity, there is the need for government and NGOs to facilitate access to vocational training programmes for returnees in profitable farming and non farming activities.
 5. The returnees have return and had settled to some extent, therefore their representatives and community leaders needs to be fully involved in the planning and implementation of interventions to ensure that the major sources of deprivation among the community members are addressed.

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