Original Research Article

Effects of the reward of internal migration on poverty status of rural households left behind in Ogun and Osun States, Nigeria

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Abstract

In this study we analysed the effect of the reward of internal migration on the poverty status of rural households in South-West Nigeria. The types and channels of internal remittances received by rural households as well as the poverty profile and effect of internal remittances on the poverty status of rural households in South-West, Nigeria were assessed. Structured questionnaire was used to obtain primary data from respondents. Data were analysed using descriptive statistics, Multidimensional Poverty Index and Binary Logit regression. Findings revealed that 56.2% of the household heads were male, 67.4% were married, 42.3% had primary education and 58.3% received internal remittances through personal delivery (69%) with a mean age and household size of 55 years and 5 persons, respectively. However, based on Multidimensional Poverty Index benchmark of 0.333, 80.0% of the rural households were poor with a poverty intensity of 0.863. Binary Logit showed that age squared, remittance receipt, rearing of small livestock and farm size increased households' likelihood of escaping poverty. In conclusion, internal remittances reduced poverty of rural households in the study area and as such continuous flow of remittances into rural households should be enhanced in order to facilitate improved standard of living.

Keywords: questionnaire study; Multidimensional Poverty Index; Remittances;
JEL Classification: I32 – Measurement and Analysis of Poverty;

INTRODUCTION

Nigeria is home to one of the largest internal migrant population in Africa and the domestic remittances sent by them have a significant impact on the socio-economic conditions of the households receiving the remittances (NCAER, 2014). Particularly, in Derived Savannah areas of the country, the inability of agriculture to fully guarantee livelihood security has accelerated migration as a much needed livelihood option, with consequent remittances being used for several purposes that include higher spending on education, health, household consumption, human capital formation, and small enterprises. Remittances (both international and internal often called domestic) are defined as person-to-person transfers of resources (both money and in-kind) sent by migrant workers to other members of the households (Plaza et al., 2011).

Remittances are well targeted to the needs of the recipients, who are often poor, and do not typically suffer from the government problems that are associated with official aid flows. As reported by Ratha et al. (2007), remittances are personal flows from migrants to their families and friends. Remittances can be in form of money, assets or informal or non-monetary forms. Non-monetary forms include clothing, medicine, gifts, tools and equipment. Remittances can form a "family welfare system" that can help to smooth consumption, alleviate liquidity constraints and provide a form of mutual assistance (Orozco et al., 2005). There is evidence that remittances alleviates poverty at household level in some countries by helping to fund schooling, reduce child labour, increase family health and expand durable ownership (World Bank, 2006).

In the 2014 survey on Access to Financial Services in Nigeria, it was reported that 26.3 million adults (28.1% of the 93.5 million adults) received money from family/friends within Nigeria, 17.5 million adults (18.7%) sent money to family/friends within Nigeria and 10.4 million adults (11.1%) both sent money to and received money from family/friends within Nigeria (EFInA, 2014). The survey also revealed that 50.7% (13.3 million) of the 26.3 million adults that reported having received money from within Nigeria were female while 49.3% (13.0 million) were male. Furthermore, about 8.1

million (30.8%) were between 18 and 25 years of age, 14.1 million (53.7%) resided in rural areas compared to 12.2 million (46.3%) that resided in urban areas (EFInA, 2014).

Remittances have been recognized as an important driver of the economy of most developing countries. It plays vital roles in poverty reduction, income redistribution and economic development, especially in rural areas. In Nigeria, as in most developing countries, remittances form a large part of the income of rural households (Akay et al, 2012; Olowa et al., 2013). The overall poverty incidence in the country is 53.3% with about 70% of the incidence more in the rural areas, and as low as 28.1% incidence in the urban areas, and intensity of poverty was measured as 56.8%. Over the years, the multidimensional poverty index of the country was 0.368 in 2003, which decreased to 0.313 in 2008 and in 2013 it was measured as 0.311, implying that over the years the multidimensional poverty status decreased marginally, where there is still a large proportion of the population living as destitute (51.3%) in the rural areas. In Nigeria, about 17.5% of the population is still vulnerable to poverty, with the rural areas vulnerability as 14.4%, while the urban areas escaped with the cut-off of about 2.2%. The severity of poverty in the rural areas lies at 47.7% and 32.8% for the nation, while only about 10.5% of the population in the urban areas lives in severe poverty and 34.6% of the population live as destitute (OPHI, 2016).

The incidence and depth of poverty has been found to decrease with an increase in remittances from household members across the country (Olowa et al., 2013) and foreign remittances have also been found to be welfare improving in Nigeria (Fonta 2011). A study by Oseni and Winter (2009) showed that 5.5% of the average household income in Nigeria was from remittances with households in the Southern regions receiving more from remittances than their Northern counterpart.

Despite their significance to the domestic economy, internal migrants and the remittances sent by them have not attracted much academic or even policy attention. Also, internal migration remains grossly underestimated due to empirical and conceptual difficulties in measurement. In spite of the role and importance of internal remittances in developing economies, there has been little effort to analyse their economic effect in South-West Nigeria. Thus this study hypothesized that there are no effects of internal reward of migration (remittances) on poverty status of rural households in Ogun and Osun States South-West, Nigeria, with the aim of rejecting this null hypothesis at the end of the study and accepting the alternative hypothesis that there are effects of internal reward of migration (remittances) on poverty status of rural households in the study area. As a result, this study attempted to describe the types and channels of remittances received by the rural households, describe the dimensions of poverty in the rural households, as well as determine the effects of domestic remittances on poverty status of the rural households.

MATERIALS AND METHODS

The study was carried out in South-west, Nigeria using Ogun and Osun States, Nigeria as representative sample of the South-west geopolitical zone of Nigeria. Ogun State is located within latitudes $3^0$30'N–$4^0$30'N and longitudes $6^0$30'E–$7^0$30'E. The State is bounded in the west by the Republic of Benin, in the south by Lagos State and the Atlantic Ocean, in the East by Ondo State and in the North by Oyo State. The State covers a land area of 16,762 square kilometer with a male population of 1,847,243 and a female population of 1,880,855 making a total population of 3,728,098 (NPC, 2006), while Osun State is landlocked and occupies 9,251 square kilometres. Osun State shares borders Kwara State to the North, Oyo State to the West, Ogun State to the South and Ondo and Ekiti States to the East. The coordinates of the State is located within latitudes $7^0$30'N $4^0$30'E and longitudes 7.500^0N 4.500^0E. It has a land area of 8,882 square kilometer, with a total population of 4,137,627, consisting of 1,740,619 males and 1,682,916 females (NPC, 2006). The primary occupation of the people in the two States were farming, handcraft, trading, hunting and paid employment according to the Ogun and Osun State Agricultural Development Programmes (OGADEP and OSADEP).

Sampling procedure and sample size and method of data collection

Multistage sampling procedure was adopted in this study. The first stage involved the random selection of Ogun and Osun States in the South-West zone in Nigeria. At stage two, simple random sampling technique was used to select two ADP zones each from the four and three OGADEP and OSADEP zones in Ogun and Osun States respectively. The sampled zones are Ilaro and Abeokuta (Ogun State), as well as Ife-Ijesha and Iwo (Osun State). At stage 3, four blocks were randomly selected from Ogun and three blocks from Osun, to capture 50 % of each zone this gave a total of seven blocks. The fourth stage also involved a simple random selection of four cells each in Ogun and Osun from the randomly selected blocks. The final stage involved a simple random sampling of ten and fifteen households from each of the selected cells in Ogun and Osun, respectively. In all, a total of six hundred and eighty (680) households were sampled (320 in Ogun and 360 in Osun) but responses from only four hundred and eighty two (482) respondents were valid for the data analysis for this study (giving a 70.9% response rate).

Primary data collected from selected households were used for this study. Households' data collected included socio-economic, demographic characteristics, types and channels of remittances received.

The data collected were subjected to descriptive and quantitative analyses in order to achieve the objectives of this study. The analytical tools employed for this study were Descriptive Statistics; Multidimensional Poverty Index (MPI) and Binary Logistic Regression Model.

Multidimensional Poverty Index (MPI)

The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the individual level in health, education and standard of living. The thresholds are as follows:

- Education: having no household member who has completed five years of schooling and having at least one school-age child who is not attending school.
- Health: having at least one household member who is malnourished and having had one or more children die.
- Standard of living: not having electricity, not having access to clean drinking water, not having access to adequate sanitation, using "dirty" cooking fuel (dung, wood or charcoal), having a home with a dirt floor and owning no car, truck or similar motorized vehicle while owning at most one of these assets: bicycle, motorcycle, radio, refrigerator, telephone or television.

Each household is assigned a deprivation score according to the household's deprivations in each of the 10 component indicators. The maximum score is 100 %; with each dimension (education, health and standard of living) equally weighted (thus the maximum score in each dimension is 33.3%). The education and health dimensions have two indicators each, so each component is worth $^5/_3$ (or 16.7%). The standard of living dimension has six indicators, so each component is worth $^5/_9$ (or 5.6%).

The MPI value is the product of two measures:

The Multidimensional Headcount Ratio (H): is the proportion of the population who are multi-dimensionally poor, measured as:

$$H = \frac{q}{n} \quad (1)$$

where:

q = the number of people who are multi-dimensionally poor,

n = the total population.

The Intensity of Poverty (A): reflects the proportion of the weighted component indicators in which, on the average, poor people are deprived; which is measured as:

$$A = \frac{\sum_{i=1}^{n} C_i(k)}{q} \quad (2)$$

where:

$C_i(k)$ = is the censored deprivation score of individual (household) i,

q = is the number of people who are multi-dimensionally poor.

i = total number of households

The cut-off or threshold is used to identify the multi-dimensionally poor, which in the Alkire and Foster (2011) methodology is called the poverty cut-off. Here the poverty cut-off is defined as the share of (weighted) deprivations a person (household) must have in order to be considered poor and is denoted with k. In this way, someone (a household) is considered poor if her deprivation score is equal or greater than the poverty cut-off. Formally, someone is poor if $C_i \geq k$. In the MPI, a person (household) is identified as poor if he or she has a deprivation score higher than or equal to ⅓. In other words, a person's deprivation must be no less than a third of the (weighted) considered indicators to be considered multi-dimensionally poor. For those whose deprivation score is below the poverty cut-off, even if it is non-zero, this (score) is replaced by a "0"; what is called censoring in poverty measurement.

Multidimensional Poverty Index (MPI) = H*A (3)

Binary Logistic Regression Model

To capture effects of domestic remittances on poverty status of the households the Logistic model was used. Following Brown and Jimenez (2008), the model can be expressed as:

$$Y^* = \propto_0 \; + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \ldots + \beta_n \chi_n + \mu \quad (4)$$

where:

Y* = the dependent variable is defined as households not poor = 1 and 0 otherwise

X_1 = Age of the household head (years).

X_2 = Age Squared of the household head (years).

X_3 = Marital status of the household head (dummy, X_3 = 1 If married, 0 if otherwise).

X_4 = Sex of household heads (dummy, X_4 = 1 if Male, 0 if otherwise).

X_5 = Household size (number of persons).

X_6 = Education level of household head (years).

X_7 = Farm size (hectares).

X_8 = Ln household Expenditure (₦)

X_9 = Remittance access (dummy, X_9 = 1 if yes, 0 if otherwise)

X_{10} = Distance to nearest food market (Km)

X_{11} = Distance to modern clinic (Km)

X_{12} = Access to motorable road (dummy, X_{12} = 1 if yes, 0 if otherwise)

X_{13} = Off-farm participation (dummy, X_{13} = 1 if yes, 0 if otherwise)

X_{14} = Rearing of small livestock (dummy, X_{14} = 1 if yes, 0 if otherwise).

Table 1. Distribution of households by remittance receipt

Category	Ogun State		Osun State		All Households	
	Freq.	%	Freq.	%	Freq.	%
RRHHS	139	62.4	142	54.8	281	58.3
NRHHS	84	37.6	117	45.2	201	41.7
TOTAL	**223**	**100.0**	**259**	**100.0**	**482**	**100.0**

Note: RRHHS = Remittance Receiving Households; NRHHS = Non-Remittance Receiving Households

RESULTS AND DISSCUSION

The distributions of the final respondents according to their categories are as shown in Table 1. It was observed that 58.3% of the total households were remittance receiving households (RRHHS), while 41.7% were not receiving any form of domestic remittances (NRHHS).

Household General Characteristics

In terms of size, more than half of the households (about 64.6% and 56.0%) have household sizes of between 1–4 persons and 5–8 persons in Ogun and Osun State, respectively. The average household size from the sample of the population is 4.0 and 5.0 persons, respectively. About 69% and 81.5% of the respondents dwell in single room housing units, while only about 2.20% and 1.20% live in flat houses in Ogun and Osun State, respectively. Likewise about 57% and 54% of the respondents live in rented houses while only about 42% and 45% live in their own houses. The commonly used material for the house and floor is concrete about 91.0% and 86.5% for Ogun State, and about 87% and 66.8% for Osun State (Table 2).

Household sanitary level

Access to water and good sanitary environment are major indicators of proper/adequate allocation and management of scarce resources at household, community or State levels. This will consequently have positive influence on the welfare of the general populace, especially in terms or good health and prevention of diseases outbreak. The major source of drinking water was located within 500 metres from the households, and the toilet facility mostly (38.5%) available in the study area was the covered pit, which was assessable within the dwelling of the house and

Table 2. Distribution of households by general characteristics

Characteristics	Ogun State		Osun State		All Households	
	Frequency	%	Frequency	%	Frequency	%
Household size						
1–4 persons	144	64.6	105	40.5	249	21.78
5–8 persons	77	34.5	145	56	222	30.08
Above 8 persons	2	0.9	9	3.5	11	1.87
Mean	4.08	-	5.01	-	5	-
Type of housing unit						
Single rooms	154	69.1	211	81.5	365	75.73
Flat	5	2.2	3	1.2	8	1.66
Whole building	30	13.5	25	9.6	55	11.41
Others	34	15.2	20	7.7	54	11.20
Material of construction of dwelling						
Bricks	203	91	226	87.3	429	89.00
Plank	7	31	6	2.3	13	2.70
Mud	13	58	27	10.4	40	8.30
Material of dwelling floor						
Concrete	193	86.5	173	66.8	366	75.93
Without concrete	13	5.8	52	20.2	65	13.49
Plank	9	4.1	31	12	40	8.30
Others	8	3.6	2	0.8	10	2.07
Dwelling Status						
Rent house	95	42.6	119	45.7	214	44.40
Own house	128	57.4	140	54.3	268	55.60
Total	**223**	**100**	**259**	**100**	**482**	**100.00**

Table 3. Distribution of households by sanitary facilities

Sanitary variables	Ogun State		Osun State		All Households	
	Frequency	%	Frequency	%	Frequency	%
Major sources of drinking water						
Pipe borne water treated (Public)	7	3.1	33	12.7	40	8.2
Pipe borne water treated (Private)	4	1.8	1	0.4	5	1.0
Covered well	84	37.7	102	39.5	186	38.5
Uncovered well	15	6.7	5	1.9	20	4.0
Borehole/hand pump well	30	13.5	20	7.7	50	10.3
River/stream and others	83	37.2	98	37.8	181	37.0
Distance of water source						
In dwelling	90	40.4	105	40.5	195	40.5
Within 500 meters	112	50.2	116	44.8	228	47.0
500–1 km	16	7.2	30	11.6	46	9.5
Over 1 km	5	2.2	8	3.1	13	3.0
Type of toilet facility						
None/bush/dunghill	40	17.9	69	26.6	109	22.6
Covered Pit	140	62.8	106	41	246	51.0
Uncovered Pit	9	4	6	2.3	15	3.1
Water closet	10	4.5	6	2.3	16	3.3
V.I.P Latrine	24	10.8	72	27.8	96	20.0
Distance of toilet facility						
Within dwelling	145	65.0	130	50.2	275	57.1
Within 500 m	60	26.9	90	34.7	150	31.1
500 m–1 km	18	8.1	39	15.1	57	11.8
Refuse disposal						
Government bin /shed	4	1.8	10	3.9	14	3.0
Disposal within the compound	109	48.9	127	49.0	236	48.9
Refuse heap within the community	90	40.4	97	37.5	187	38.7
Others	20	8.9	25	9.6	45	9.4
Total	**223**	**100.0**	**259**	**100.0**	**482**	**100.0**

the refuse disposal was mainly within the compound of the house; this revealed that there might be high prevalence of disease outbreak due to the exposure of the household members to dirt every day, which could lead to illness of any of the household members (Table 3).

The examination of these conditions among the households in Ogun and Osun State (Table 3) reveals that about 38% and 40% of the sampled population have access to covered well as major source of water for drinking and cooking, although a number of borehole 'hand pump wells especially those provided by the government were no more functional as a result majority of the respondents in the States rely on the nearly river and streams as alternative source of drinking as alternative source of drinking and cooking water.

About 50% and 45% of the households have access to water (cooking and drinking) within 500 meters to their housing units, Ogun and Osun State, respectively. This may be of advantage to the women in the sense that it reduces time spent in searching for water from distant sources and such time can be gainfully employed in engaging in their off farm income generating activities.

The most common toilet facilities among the farming households in the covered pit (about 63% and 41%, respectively) although about 18% and 27% still use the bush/ding hill as toilet facility. As much as 65% and 50% have their toilet facilities written their dwelling place while another 27% and 35% have their toilet facility within 500 meters to their dwelling place.

Proper refuse disposal prevents diseases outbreak and keep households safe from preventable diseases. The study reveals (Table 3) that almost half of the sample population (about 48.9% {Ogun} and 49.0 % {Osun}), dump their refuse/waste within their compound. This may be due to non-provision of refuse/waste disposal/ collection facilities by government in the rural areas especially. The common methods of refuse disposal which is within the compound and the community refuse heap, may be hazardous and may expose members of each household to diseases.

Table 4. Distribution of respondents by general household structure

Household Composition	Ogun State		Osun State		All Households	
	Frequency	%	Frequency	%	Frequency	%
Age (years) (Mean = 54.8)						
30–40	13	5.8	7	2.7	20	4.1
41–50	62	27.8	47	18.1	109	22.6
51–60	117	52.5	150	57.9	267	55.4
61–70	30	13.5	52	20.1	82	17.0
71 and above	1	0.4	3	1.2	4	0.8
Educational level (years)						
No Formal education	14	6.3	35	13.7	49	10.2
Primary school (uncompleted)	12	5.4	17	6.6	29	6.0
Primary school (completed)	99	44.3	105	41.0	204	42.2
Secondary school	72	32.3	48	18.8	120	24.8
Vocational training	26	11.7	54	19.9	80	16.5
Sex of household head						
Male	128	57.4	143	55.2	271	56.2
Female	95	42.6	116	44.8	211	43.8
Marital Status						
Married	129	57.9	196	75.7	325	67.0
Separated/Divorced	87	39.0	59	22.8	146	30.2
Widowed	7	3.1	4	1.5	11	2.8
Married	129	57.9	196	75.7	325	67.0
Farm size (Ha)						
<1.0	127	57.0	209	81.0	336	69.7
1.0–2.0	90	40.4	40	15.0	130	27.0
2.1–3.0	6	2.6	10	4.0	16	3.3
Religion						
Christianity	171	76.7	164	63.3	335	69.5
Islam	42	18.8	90	34.7	132	27.4
Traditional	10	4.5	5	1.9	15	3.1
Total	**223**	**100.0**	**259**	**100.0**	**482**	**100.0**

General Household Composition

The findings in the study area revealed that over half (55.5%) of the respondents were male (56.2%), within the age range of 51–60 years (55.4%), 42.2% had completed primary school, 67.0% were married. In terms of age, the majority 53% (Ogun) and 56% (Osun) of the household heads are in the age bracket of 51–60 years, while another 28% in Ogun State are within the age bracket of 41–50 years and 20% in Osun State are in the age bracket of 61–70 years. This shows that greater percentages of the household heads are no longer written the economic-active age. This implies that, *ceteris paribus*, household income will need to be boosted. As farm income alone will not be able to meet the household total expenditure, therefore remittance income can be seen as a source of additional income for the households to smooth the households' expenditure.

About 57% (Ogun) and 52% (Osun) of the household heads are male and married (58% and 76%) in Ogun and Osun State, respectively, also majority of the household heads are Christians 77% (Ogun) and 63% (Osun) as reported in Table 4.

Types of remittances received by rural households

Table 5 shows the distribution of respondents by type of remittances the households received. Findings from the study area revealed that the major type of remittances received by the households were cash (56.5%), non-food (33.0%) and food remittances (10.32%). In Ogun State most (50.4%) of the households received only cash remittances, 19.42% and as low as 7.91% received other combinations of remittances; non-food and food only as remittances, in Osun State, majority of the rural households (62.68%) also received cash only as remittances, 12.68%, and 10.56% of the households received food only remittance, and non-food remittances, respectively.

Table 5. Distribution of households according to types of remittances received

Remittances	Ogun State		Osun State		All Households	
	Frequency	%	Frequency	%	Frequency	%
Cash only	70	50.37	89	62.68	159	56.58
Food only	11	7.91	18	12.68	29	10.32
Non-food	58	19.42	35	10.56	93	33.09
Total	**139**	**100.0**	**142**	**100.0**	**281**	**100.0**

Table 6. Distribution of households by channels of receipt of remittances

Channels	Ogun State		Osun State		All households	
	Frequency	%	Frequency	%	Frequency	%
Brought back home during visits	96	61.87	98	58.45	194	69.0
Through friends or relatives	17	12.24	14	9.86	31	11.02
Transfer to personal bank account	13	9.35	11	7.75	24	8.50
Others	13	9.35	19	13.38	32	11.38
TOTAL	**139**	**100.0**	**142**	**100.0**	**281**	**100.0**

Channels through which remittances are received by the rural households

Remittances were sent to the households through various channels to the study area. Majority (69.0%) of the respondents received their remittances during visitation of the member living in another location to the household and 11.02% through friends or relatives. (Table 6). In Ogun State, recipients of remittances receive theirs majorly (61.87%) by themselves when the remitters come home visiting. About 12.24% of the respondents receive through friends or relatives, while about 9.35% receive their remittances through their banks and by other means. 58.45% of the respondents receive their remittances during visits, while about 9.86% and 13.38% receive their remittances through friends or relatives and through their personal bank accounts in Osun State.

Multidimensional poverty profile (MPI) of rural households

The MPI revealed that 80.8% of all the households were multi-dimensionally poor, with a poverty head count of 0.937 and poverty intensity of 0.863. The distribution of the deprivations measured by the multidimensional poverty indicators revealed that 63.9% of the households were deprived in education, 79.6% in health and 80.3% in standard of living. With this large proportion of poverty deprivations in the rural households it therefore implies that the various indicators used in measuring poverty status of the households has to be given proper attention in order to improve the standard of living of the rural households as shown in Table 7.

The poverty status of the respondents as measured by the multidimensional poverty index revealed that 67.88% and 59.33% of the total respondents are multidimensional poor in Ogun and Osun States respectively, which implies that 67.8% and 59.3% of the respondents are multi-dimensionally deprived in one or more indicators measured. The head count ratios (0.872 and 0.901) implies that about 87.2% and 90.1% of the respondents are the proportion of the total population who are multi-dimensionally poor and live in poor households while the average poor household is deprived in about 77% and 65%s of the weighted indicators (incidences of poverty 0.776 and 0.658) in Ogun and Osun States, respectively.

This table reveals core areas of indicators in which the households are deprived. As observed majority (60.1% and 67.2%) of the households are deprived in the indicators of having a household member not completing at least five years of educating 69.5% and 56% had school age children that were not currently in school as at the time this research study was conducted.

In terms of health dimension that was measured, majority of the households were deprived in the indicator of their choice heath care provider (78.9% and 80.3 %), while about 42.1% and 51.7% of the households were deprived in terms of having lost a child in Ogun and Osun States, respectively.

The measured standard of living indicated that majority (63.7% and 62.5%) were deprived in assets, 86.5% and 66.8%s of the households were not deprived by their floor material indicator and about 56.1% and 59.1% were not deprived in terms of clean portable water in Ogun and Osun States, respectively.

Also 73% of the household were not deprived in terms of electricity in Ogun State, while 51% of the households were deprived to easy access and assess to electricity in Osun State. In terms of type of cooking fuel and sanitation that were measured, majority of the rural households (70.9% and 88.4 %) were deprived which implies they use dirt as their source of cooking fuel, and 65.5% and 56.4% of the households do not have clean and hygienic sanitation in both Ogun and Osun States, respectively (Table 7).

Table 7. Distribution of multidimensional poverty deprivation

Dimensions	Indicators	Dep.	Ogun		Osun		Pooled	
			Frequency	%	Frequency	%	Frequency	%
Education	5 years of education not completed	N.D.	89	39.9	85	32.8	174	36.1
		D.	134	60.1	174	67.2	308	63.9
	School age child not in school	N.D.	68	30.5	114	44.0	182	37.8
		D.	155	69.5	145	56.0	300	62.2
Health	Having one or more children die	N.D.	118	52.9	125	48.3	243	50.4
		D.	105	42.1	134	51.7	239	49.6
	Choice of health provider	N.D.	47	21.1	51	19.7	98	20.3
		D.	176	78.9	208	80.3	384	79.6
Standard of Living	Assets	N.D	81	36.3	97	37.5	178	36.9
		D.	142	63.7	162	62.5	304	63.1
	Floor material	N.D.	193	86.5	173	66.8	366	76.0
		D.	30	13.5	86	33.2	116	24.0
	Water	N.D.	125	56.1	153	59.1	278	57.6
		D.	98	43.9	106	40.9	204	42.4
	Electricity	N.D.	163	73.1	128	49.4	291	60.4
		D.	60	26.9	131	50.6	191	39.6
	Cooking fuel	N.D.	65	29.1	30	11.6	95	19.7
		D.	158	70.9	229	88.4	387	80.3
	Sanitation	N.D.	70	31.4	113	43.6	183	38.0
		D.	153	68.6	146	56.4	299	62.0
Head count(H) =			0.901		0.8729		0.937	
Incidence (A) =			0.658		0.7769		0.863	
Multidimensional Poverty Index (MPI) =			0.5933		0.6782		0.8086	
MPI of all households = 0.8086								

Source: Result of Analysis of Field Survey Data, 2015
Note: N = number of Respondents, N.D. = Not Deprived, D./Dep. = Deprivation

Determinants of Poverty Status of Households

The binary logistic regression model was used to capture the factors that influence poverty status of the respondents in the rural areas. The model revealed that age-squared, education, farm size, remittances and rearing of small livestock are factors that influence the households to escape poverty. This implies that with increase in age of the household head (OR = 0.456), the households are 45.6 times (54.4%) likely to be poor, furthermore education (OR = 0.021), farm size (OR = 0.515), remittances (OR = 0.673), off-farm participation (OR = 4.035) and rearing of small livestock (OR = 0.279) increase the likelihood of the households to exit poverty, while marital status (OR = –1.283), sex (OR = 1.103), household size (OR = –1.758) and household expenditure (OR = 1.874) increases the likelihood of households to remain poor (Table 8).

In terms of age-square the results showed that variable with Odds Ratio (OR) of 0.364 Ogun and 0.426 (Osun) implies that with increases in age the household are 0.36times (64%) and 0.42 times (57.4%) less likely to be non poor. This connotes that increase in age reduces the like hood of the households being non-poor by 64% and 57.4% in Ogun and Osun States, respectively (Table 8).

Household size was found to have a negative influence on the poverty status of the households. The OR revealed that household in Ogun State have likelihood to be more poor about 1.82 times and households in Osun State have chance to be more poor 1.70 times, this implies that household in Ogun State are more likely to be poor by 82% having reached a threshold of 4 persons, while households in Osun State have a likelihood of being more poor by 70 % having attained a maximum of 5 persons in the households. This means that an increase in the households by an additional one person increases the chance of the households to be more poor, because an additional person implies increases in household expenditure and consumption as well as stressing/expending the limited resources used by the households. This result is in agreement with the findings of Olowa and Shittu (2012), who revealed that as household size increases, the likelihood of poverty exit becomes slimmer.

Table 8. Binary logistic regression result

Variables	Ogun State		Osun State		Pooled	
	OR	P > |Z|	OR	P > |Z|	OR	P > |Z|
Age	0.432	0.281	1.029	0.023	–0.172	–0.67
Age Squared	0.364*	0.086	0.426***	0.002	0.456**	0.051
Marital status	0.910	0.746	1.031	0.571	1.283***	0.003
Sex	1.570*	0.050	0.852	0.901	1.632	0.015
Household size	1.817**	0.039	1.702***	0.001	1.732***	0.003
Education	0.273**	0.049	0.175	0.456	0.021***	0.004
Farm size	0.619***	0.001	0.205**	0.010	0.515***	0.002
LnHousehold expenditure	1.968*	0.076	1.598**	0.049	1.874**	0.019
Remittance access	0.602***	0.002	0.564***	0.006	0.673***	0.004
Distance to market	2.067*	0.100	1.057	0.877	0.302	0.256
Distance to modern clinic	0.632	0.339	0.976	0.829	1.410	0.986
Access to motorable road	0.230*	0.053	0.300***	0.003	0.181**	0.010
Off-farm participation	2.373	0.105	0.553*	0.070	1.032**	0.045
Rearing small livestock	0.259*	0.062	0.156***	0.005	0.279**	0.014
Log likelihood	–209.235		–131.394		–107.812	
LR Chi²	65.22		60.40		72.93	
Prob > Chi²	0.0002		0.0000		0.0001	
Pseudo R Squared	0.5543		0.5113		0.5831	

***, **, * coefficients are significant at 10%, 5% and 1%, respectively

Farm size was revealed to be significant at 0.619 ($P < 0.01$) in Ogun State, and 0.205 ($P < 0.05$) in Osun State. This means the with the odds ratio of 0.619, rural households in Ogun State have the likelihood of being non-poor by 38%, while rural households in Osun State have the chance of being multidimensionally non-poor by 80% with response to an increases of farm size of above 1.38 and 1.45 acres, respectively, in Ogun States.

The OR of household expenditure was negative and significant 1.96 ($P < 0.10$) in Ogun State and 1.59 ($P < 0.05$) in Osun State. Revealing that rural households have the likelihood to be poorer by 1.96 and 1.59 to chance in Ogun and Osun sates respectively. This implies that an increase in the household expenditure will increase the likelihood of the household to be poorer by 96 and 59 % in Ogun and Osun State. This may be connected with increases in household size, which is in concordance with Olowa and Shittu (2012).

In terms of remittances, the OR was revealed to be positive (0.60, 0.56) and significant ($P < 0.01$) in Ogun and Osun States respectively. The OR of 0.602 of Ogun means that rural households have the chance of being less poor, by a factor of 0.602 when they have increased remittance income, which implies that rural household in Ogun State have a reduced chance of being poor by 40% whenever they receive remittance income, while rural households in Osun State also have a likelihood of being non-poor 0.554 times, with receipt of remittance income, this means that when rural households receive remittances income in Osun State, they have 44% likelihood of not being poor. This result is in agreement with the findings of Olowa et al. (2013).

Access to small-livestock showed a positive influence on the poverty status of the respondents. The variable was significant ($P < 0.01$). In Ogun State having small livestock reduces the likelihood of being poor 0.25 times, while it reduces the chances of being poor 0.15 times in Osun State. This implies that with access to animal assets, the likelihood of being poor is reduced by 74% and 84% in Ogun and Osun States, respectively.

CONCLUSION AND RECOMMENDATION

This study analysed the effects of internal remittances on poverty status of rural households in South-West Nigeria and the findings provide evidence to show that remittances have significant effect on poverty. Thus incorporating the findings through some policy measures indicate that internal remittances would help reduce poverty in Nigeria. With a large number of internal remittances in this study which are mostly dependent on hand carriage to remit, there is need to ensure more flow of remittances in order to improve the standard of living of the rural households likewise, government should engage in policies that are geared towards development of rural infrastructure.

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