

## THE ROLE OF MICROFINANCE BANK IN POVERTY ERADICATION USING POVERTY INDICES AND HOUSEHOLD INCOMES AND EXPENDITURES

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### **ABSTRACT**

*This study examined the role of microfinance bank in poverty eradication using poverty indices and household incomes and expenditures. The study was carried out among rural communities in all the three senatorial district of Oyo State, Nigeria. This study was carried out in 2014 and targets the customers of microfinance banks that were between the ages of 18 and 60 years, who are gainfully employed and can repay loans. Data were also sourced from the records of the microfinance banks through the administration of questionnaire to staff of microfinance banks on the selected local government areas. A total of two hundred and forty (240) questionnaires were administered. Foster-Greer-Thorbecke poverty model (1988) was used to measure poverty index. The results of Chi-square test indicates that socio-economic characteristics varies significantly with Senatorial Districts and was observed to be significant at the probability value of 0.001 that is, it is significant at more than 99% confidence level. For instance 98.8%, 97.9% and 97.2% respectively in Oyo south, Central and North Senatorial Districts reported improvements in their socio-economic lives as a result of participation in microfinance banks poverty alleviation programmes in the study area. The results from Bi-variant analysis showed, there is significant relationship between determinants of the incidence of poverty in the study area. Conclusions were made that Oyo South, Central and North Senatorial Districts reported improvements in their socio-economic lives as a result of their participation in microfinance bank poverty alleviation programmes. Moreso, education, monthly income, large household size, expenditure is the major determinants of the incidence of poverty in the study area. Among others, it was recommended that microfinance bank should be encouraged on the formation of co-operatives with members in the similar business that can enjoy credit facility jointly to reduce operating cost, which will reduce interest rate as well as a reduction in the likelihood for borrowers to default.*

**KEYWORDS:** *Poverty Indices, Microfinance Bank, Poverty Eradication, Loan, Rural Area*

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### **INTRODUCTION**

Poverty is a global phenomenon which affects continents, nations, and people differently. It afflicts people in various depths and levels, at different times and phases of existence. There is no nation that is absolutely free from poverty. The main difference is the intensity and prevalence of this malaise (Oyemoni, 2003). It is a state, where an individual is not able to cater adequately for his or her basic needs of food, clothing and shelter; is unable to meet social and economic obligations, lacks gainful employment, skills,

assets and self-esteem; and has limited access to social and economic infrastructure such as education, health, portable water, sanitation and consequently has limited chance of advancing his or her welfare to the limit of his or her capabilities (CBN, 1999). An early definition of poverty is given by Aboyade (1975) that, it is a condition of life so degrading as to insult human dignity. In the same way, Abumere (1999) opined poverty as a state of households command over resources at a level, which is insufficient to obtain a basket of goods and facilities judged to be minimum necessities in the contemporary circumstances of the society. The Ninth Report of the Development Policy of the Federal German Government stated that people affected by poverty were unable to live a decent life (BMZ, 1992). Poverty means not having enough to eat, a high rate of infant mortality, a low life expectancy, low educational opportunities, poor drinking water, inadequate health care, inadequate housing and a lack of active participation in decision making processes (BMZ, 1992). Poverty is more pronounced in rural areas, because of the lack of job opportunities in the areas. Rural areas are less developed with least infrastructure; low literacy rate, poor health, and educational facilities, unavailability of sufficient food, safe drinking water, improper sanitation system and the most hazardous unemployment; therefore poverty is more dangerous in rural area (Nadia, 2012). According to World Bank Report (2001) an estimated 174 million children under the age of five in most rural areas in the developing countries were malnourished in 1996 - 1998; and 6.6 million out of 12.2 million deaths among children in that age group were associated with malnutrition (Osuala, 2009). "One who has lack of basic human needs to spend prosperous or satisfied life, he/she is considered a poor". Poor people cannot borrow loans from formal and informal financial sectors. Formal sector includes commercial bank that provides large loans at high collateral and poor people are not able to pay any collateral (Osuala, 2009).

Similarly, informal lenders charge high interest and keep their adults labour as collateral. Exploitation of informal lenders, high interest rate and use of adults/children as collateral, starves off most of the poor people from such formal and informal financial services (Nadia, 2012). In such crucial circumstances and the unflinching commitment of the Central Bank of Nigeria to the reduction of poverty and other associated socio-economic malaise in Nigeria, informed the decision of the Central Bank of Nigeria to formulate and implement a functional microfinance policy framework aimed at stimulating sustainable growth and development. In view of this, microfinance's sector and Small Medium Enterprises (SMEs) came in front to help the poor to get rid of the enslavement of vicious circle of poverty (Nadia, 2012). This has become more imperative in view of the limited capacity of the formal banking sector in providing financial services to the vast majority (about 65%) of the Nigeria population considered poor but economically active (CBN, 2010).

Microfinance institutions play a pivotal role in meeting the financial needs of both households and micro enterprises. Traditional or formal banking sector has failed to provide adequate credit services to the poor, and microfinance institutions are being developed to fill this gap (CBN, 2012). Hence, microfinance is a financial activity to provide small, collateral-free loans or financial services to the people who have low incomes, minimal assets and who are unable to acquire loans from commercial banks because of the demand of high collateral and tight conditions of security. Furthermore, Microfinance bank credit is collateral free and available on easy installments. Thus, after proper utilization of the credit, incomes of the borrowers increases which ultimately help them to come out of poverty trap. Consequently, microfinance is playing an extensive role in eradication of income based poverty Nadia (2012). It is against this background that this study explores the role of microfinance banks in poverty alleviation among rural communities in Oyo State.

### **Statement of the problem**

Poverty is a global phenomenon affecting almost half of the world population (Mou, 2007). At present, about two-third of the Nigeria's population (about 100 million) are poor and the West Human Development Programme indicated that about 70.8 percent

and 92.4 percent of Nigeria's population live below one and two United State of America Dollar respectively, that is ₦160 and ₦320 a day (UNDP,2007).Based on the data from the FOS, the state by state poverty incidence in Nigeria between 1980 and 1996, the data clearly indicated high and varying poverty levels among the states of the federation. The data further shows that poverty in Nigeria increased sharply both between 1980 and 1985 and between 1992 and 1996. Microfinance banks are established to fill the gap created by the formal financial sector, so as to improve the socio-economic conditions of the people through the provision of loan assistance for income generation, skill acquisition and eradication of poverty.

In his study, Khandker (2006) used a panel household survey from Bangladesh and observed that access to microfinance contributes to poverty reduction, especially for female participants and to the overall poverty reduction at the village level.Morduch (1999) also opined that microfinance has had impact on poverty reduction.

Other similar studies have shown that microfinance may be relevant for poverty reduction, but does not reach the poorest as often claimed. The results from these studies have identified beneficial impacts to the active poor but argue that microfinance does not assist the poorest as it is often claimed mainly because it does not reach them Hulme and Mosley, (1996). Coleman (2006) found that microfinance programs have a positive impact on the richer households, but the impact is insignificant to other poorer households.

It is against the background that this study examines the indices of poverty and impact of microfinance bank on household incomes and expenditure in the study area.

### **Hypotheses of the Study**

Ho<sub>1</sub>: There is no relationship on determinants of incidence of poverty in the study area.

Ho<sub>2</sub>: Microfinance banks have no impact on household income and expenditure in the study area.

### **Scope of the Study**

This research was carried out in some selected rural areas in Oyo State. The study involved a survey of determinants of incidence of poverty in the study area and the impact of microfinance banks on income and expenditure of the household in the sampled area. This study was carried out in 2014, and targets the customers of microfinance banks between the ages of 18 and 60 years, who are gainfully employed and can repay loans.

### **Concept of Microfinance Banks and Poverty**

The concept of microfinance was introduced by that well known Bangladesh Economist Muhammed Yunus in 1976, who was awarded by Noble Peace Price in the year 2006 for the innovative concept.

Yunus (1976) established the Grameen Bank in Bangladesh with the unique approach of Microfinance, Grameen Bank provides loans to the poor people without any collateral. The loans are group based on the behavior of mutual guarantee of the group member for each other. Peer pressure of the borrowers' community urges the members to pay back the installments of loan on time. These loans enabled the poor to increase their incomes as well as their living standard.

Now, the concept of microfinance banks has been broaden and adopted in many developing countries. Though the concept of microfinance banks is not new, savings and credit groups that have operated for centuries include the 'Susus' of Ghana, 'Chit funds' in India, 'Landas' in Mexico, 'Arisan' in Indonesia, 'Ajo', 'Esusu' in Nigeria, 'Cheelu' in Sri Lanka, 'Tontines' in West Africa and 'Pasanaku' in Boliva, as well as numerous saving clubs found all over the world (Yahaya, 2010).

Poverty has been described by scholars and experts depending on its nature, place and volume. Poverty is a multifaceted concept being perceived by different people while using different criteria to assign a concise meaning to it, and therefore, this makes it difficult to give a concise meaning to the term (Kurfi, 2009).

Poverty is commonly defined as, a situation of low income or low consumption. It can also be viewed as a situation in which, individuals are unable to meet the basic necessities of life such as food, clothing, shelter, education, security and health. Aboyade (1975) defined poverty as a condition of life so degrading as to insult human dignity. In the same way Abumere(1999) defined poverty as a state of household's command over resources at a level which is insufficient to obtain a basket of goods and facilities judged to be minimum necessities in the contemporary circumstances of the society.

### **Theoretical Review**

The study adopted financial intermediation theory; financial intermediation is the process, by which, financial intermediaries provide linkage between surplus units and deficit units. Surplus units are firms, individuals who have excess funds above their immediate needs while those who need this fund for immediate investment programmes are referred to as deficit unit. Financial intermediary forms a part of the financial system.

Financial system consists of financial intermediaries, financial markets, financial instruments rules, conventions and norms that facilitate and regulate the flow of funds through the macro-economic. The financial system is controlled by the governments through the agency of the Central bank; which supervises the activities of financial intermediaries and monitors adherence to the government monetary and fiscal policies (Akinsulire, 2008).The major types of financial intermediaries are commercial banks, merchant banks, development banks, finance institutions, insurance companies, credit and savings institutions, investment trusts and mortgage institutions.

In the year 2005, microfinance banks were introduced to mobilize savings for intermediation. The financial intermediaries developed the facility which makes lending and borrowing possible. Microfinance banks saddled with the goal of mobilizing savings for intermediation, which is the financial intermediary in this study, while the customers of microfinance banks in the selected local government made up the deficit unit.

There are four aspects of financial intermediation functions; they are Maturity Intermediation, Liquidity Intermediation, Size or Denominational Intermediation and Risk Intermediation (Akinsulire, 2008). The four aspects also explained why financial intermediation exists.

#### **Maturity Intermediation**

Most of the deposits or savings mobilized by microfinance banks have short-term maturities since most of the customers withdraw their deposit on demand while the bank will lend the money for a longer period, the ability to satisfy these two contradictory objectives of that of depositors and loaned are referred to as maturity intermediation.

#### **Liquidity Intermediation**

Banks needs to make sure that there is liquidity in the economy, that is, they have to excuse for not meeting the demand of their customers when they come to withdraw their money despite the short duration of deposit and longevity of loan they give.

### Size or Denominational Intermediation

Without financial intermediaries, it will be difficult for a deficit unit (poor people) to move from one small surplus unit to another in search of investment funds. Microfinance banks accept both small and large deposits from various customers and make the accumulated fund available as loans to the poor.

### Risk Intermediation

Banks reduce both deposit and lending risk by accepting from diverse depositors like individuals, companies in various sectors and by making loans available to different people at various sizes.

### Conceptual Frame Work

The review of literature points to several specific conclusions about the impact of microfinance on poverty alleviation. Evidence showed the positive impact of microfinance on poverty alleviation as it relates to the first six out of seven Millennium Development Goals, (MDGs). There is an overwhelming amount of evidence substantiating a beneficial effect of micro finance bank on increase in income recorded by various researchers (Wright,2000; UNICEF, 1997; Khandker, 1998) and reduction on vulnerability in some studies(Wright, 2000;Zaman, 2000).

The conceptual framework for this study, which is the impact of microfinance banks on household income and expenditure, and the extent to which the households have benefited on microfinance banks, as well as to examine the extent by which the incidences of poverty have reduced among the rural communities in the study area, are shown in the figure below.

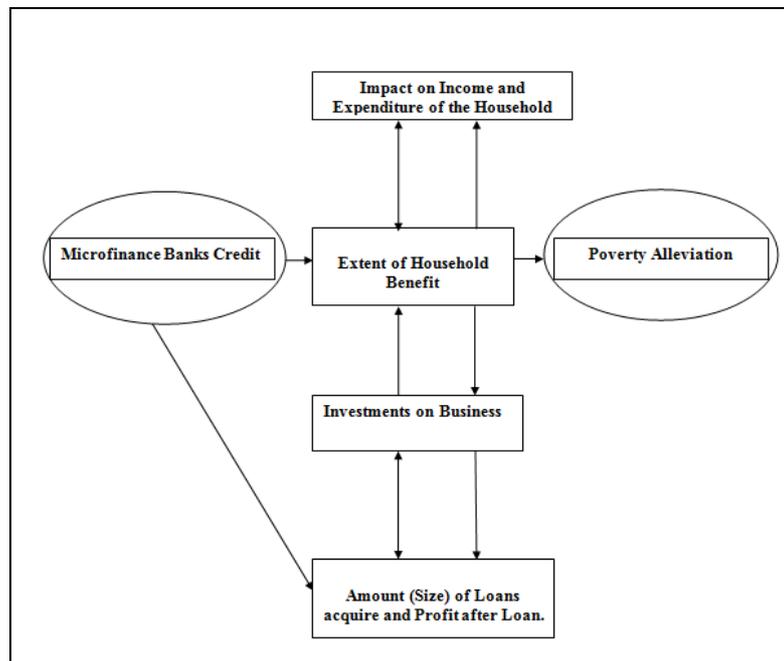


Figure 2: Conceptual Frame Work for the Research Work.

Adapted from: Mohammad and Mohammed (2007)

## METHODOLOGY

The study was conducted in Oyo State. The study employed multi-stage, purposive and random sampling methods to choose respondents from the beneficiaries of microfinance banks in the chosen Local Government areas. Six microfinance

banks were chosen. First, two rural Local Governments areas were selected randomly from three Senatorial Districts of the study area (Oyo North, Oyo South and Oyo Central). Secondly, two rural communities were randomly selected from each of the chosen Local Governments of the Senatorial Districts of the study area, making twelve (12) rural communities/villages. Thirdly twenty (20) households were purposely selected from those chosen rural communities in the study area making a total sample size of 240households, these households were mainly farmers, traders, teachers, artisans among others. Purposive because all the six Local Government areas are rural because poverty is morepronouced in the rural areas than in urban centresUNDP (2003). Both secondary and primary data were used for this study. For primary data collection, this was done through the administration of structured questionnaire to the beneficial of microfinance banks. Data were also sourced from the records of the microfinance banks through the administration of questionnaire to staff of microfinance banks on the selected local government areas. A total of two hundred and forty (240) questionnaireswere administered.

The variables that were used to analyze the determinant of incidences of poverty in the study areas were age, marital status, family size, education, income of the household and their expenditures etc. The variables used to examine the impact of microfinance banks on the income and expenditure of the households member in the study area were; income before collection of loan, income after collection of loan and expenditure before and after the collection of loans, head count of the poor among the respondents before and after collection of loan, poverty line, the international poverty line of \$1 (₦163) per day was used for this study.

The study employed the use of both descriptive and inferential statistics methods of analysis. Descriptive analysis such as cross tabulation, Chi- square test, percentage and Bi-variant were used to analyses the socio-economic characteristics among rural communities in the study area.

**Poverty Indices**

Poverty indices are the measurement of head count (P<sub>0</sub>), depth of poverty (P<sub>1</sub>) and severity of poverty (P<sub>2</sub>). The measure related to the different dimension of the incidences of poverty.

The three measures are based on a single formula, but each index put different weight in the degree to which household or individuals falls below poverty line. This approach is based on the mathematical formula, which explains poverty indices anchored upon existence of households’ classification according to income or consumption expenditure.

To determine poverty profile indices, it becomes necessary to use the so called P-alpha measured analyzing poverty; its mathematical formulation is derived thus;

$$P_x = \frac{1}{N} \sum_{i=1}^q \frac{(Z - y_i)}{Z} \dots\dots\dots(1)$$

Where, N = the total population in the group of interest

Z = poverty line

q = number of individual below the poverty line

Y = Expenditure of income of the household in which the individuals lives

X = the degree of concern of the depth of poverty, it takes on the value of 0, 1, 2 for poverty incidence, poverty gap and poverty severity respectively. The indices are therefore derived as follows;

$$P_0 = \frac{1}{N} \sum_{i=1}^a \left( \frac{(Z - y_1)^0}{Z} \right) \dots\dots\dots(ii)$$

$$P_1 = \frac{1}{N} \sum_{i=1}^a \frac{(Z - y_1)^1}{Z} \dots\dots\dots(iii)$$

$$P_2 = \frac{1}{N} \sum_{i=1}^a \frac{(Z - y_1)^2}{Z} \dots\dots\dots(iv)$$

Regression model is specified as;

$$P_1 = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + e$$

$$P_2 = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + e$$

Where,  $P_1$  = Poverty index before loan = dependent

$P_2$  = Poverty index after loan = dependent

$X_1$  = Education

$X_2$  = Size of loan

$X_3$  = Household size

$X_4$  = Occupation

$X_5$  = Sex

## RESULTS AND DISCUSSIONS

In order to achieve the objective, one of these studies is to examine the determinants of incidence of poverty among the rural communities in the study. The primary data were collected with the aid of questionnaire. The findings are presented below:

The poverty threshold on poverty line is the minimum level of income deemed adequate in a given country. This implies that most of the households sampled in the study area where male (52.5%) mature and responsible, but with large household size between 6 – 9(45.0%) which had the highest proportion, the high rate of poverty in the study area is not far fetching.

The level of education in the study area also showed that majority of the respondents, which were about 48.7% had no formal education, while 17.7%, 20.0% and 14.2% were for secondary, primary and tertiary education, respectively. This result showed that quite a number of people are living in poverty as their level of education will eventually have an impact on their level of productivity as the productive sector needs skilled and trained labor force.

The expenditure distribution of the respondents in the study area also reflect the level of poverty in Oyo Senatorial Districts, as quite a number of respondents spent between ₦2,000 - ₦4,000 per month (56.5%). This was applicable to Oyo South and Oyo Central with 20.5% and 23.0% respectively.

The income distribution of the respondents across the Districts as observed from the study shows the level of poverty among the rural communities in the study area, with 54.2% proportion of the people earned about ₦10,000 per month from all sources. This showed that majority of the people are living in abject poverty.

Furthermore, occupational distribution of the respondents across the Senatorial Districts showed that 48.8% were engaged in farming activities, 25.0% were petty traders, 15.0% were artisans while only 11.2% were in civil service. This showed that only 11.2% were gainfully employed in government works while majority were engaged in farming. This underscored why most of the respondents are trapped in the poverty cycle as they do not have permanent and regular source of income. The agricultural sector is faced with seasonal fluctuations which renders farm income insecure and irregular.

Lastly, types of residence occupied by the respondents in the study area also reflect their level of poverty. The results from the findings showed that 68.7% owned houses by inheritance, 4.7% purchased the house in which they live, 5.2% owned houses by gift while 21.5% inhabited by borrowing. It could be deduced from above that only 4.7% of the total respondents possessed the financial means to purchase houses, or to build their personal houses while 95.3% lived in either hired apartments or houses owned by inheritance and gift. This also showed the level of poverty of the people in the study area.

Furthermore, in order to achieve objective two of the study, which is to examine the impact of microfinance banks on household income and expenditure among rural communities in the study area, Foster-Greer-Thornback poverty model (1988) was used to measure poverty index. The model is specified as;

$$P_1 = \frac{1}{n} \sum_{i=1}^{H_1} \left( \frac{z-y_1}{z} \right)^\alpha$$

and

$$P_2 = \frac{1}{n} \sum_{i=1}^{H_2} \left( \frac{z-y_2}{z} \right)^\alpha$$

Where, P is the poverty index, a non-negative parameter which took the value 0, 1 and 2 and P<sub>0</sub>, P<sub>1</sub> and P<sub>2</sub> indicates the head count ratio, poverty gap and severity poverty gap respectively, n is the total number of respondents which is 240. H<sub>1</sub> is the number of the poor among the respondents before the collection of loan, H<sub>2</sub> is the number of the respondents after the collection of loan, and y<sub>1</sub> and y<sub>2</sub> represent the income of the respondents before and after collection of the loan. Regression analysis was used to determine the variables that affect poverty level.

Table1 shows Foster-Greer-Thorbecke poverty model using the international poverty line of \$1 per day for every person. This was translated to ₦58,680 per annum at the exchange rate of ₦163 per dollar in Nigerian naira (this was the exchange rate at present during this study), therefore any respondents whose income is below ₦58,680 is considered poor.

The result shows that the head count of respondents H<sub>1</sub> represent 77.1% for 185 respondents, who were poor before collection of loan while H<sub>2</sub> represent the head count of the poor after collection of the loan which is 62.5% for 150 respondents, which showed a 14.6% reduction in people that are poor. This result is in consonance with UNDP (2004) publication, which reported that about 70% of Nigerians live below the international poverty line of ₦160 per day. The result from this study agrees with earlier researchers like Yunus (2003), Mohammad and Mohammed (2007), Yeshiareg (2009), Yahaya (2010), Idowu and Salami (2011) and Oyeleye (2012). They reported that microfinance banks loan have positive impact in alleviating poverty and raised the standard of living of the people, which is in consonant with this study.

**Table 1: Percentage of Poor Respondents before and after Collection of Loans**

Poor Respondents	Head Count	Percentage %
Before	185	77.1
After	150	62.5

Source: Field Survey (2014)

**Table 2: Regression Analysis to Determine Relationship between Characteristics of the Respondents, Size of Loan and Poverty Level Before Loan.**

P	Co-efficient	Std.error	Z	P > (Z)	95% Conf. Interval	X
Education	-1.621379	1.0343210	-1.31**	0.179	-3.2815474	0.6789982
Size of loan	-1.601379	0.5912401	-2.65**	0.006	-2.5641253	0.445182
Household size	-1.684914	0.4774387	-2.43**	0.125	-1.4565222	0.766742
Occupation	-1.572340	0.3760219	0.47	0.590	-0.8048941	1.415832
Sex	0.308610	0.5675476	0.53	0.690	-0.7047941	1.315834
Constant	1.80213	1.33726	1.49	0.175	-0.6034516	4.106612

Source: Author's computation (2014)

Number of Observation = 240 LR Chi 2(5) = 0.00040

Pseudo R<sup>2</sup> = 0.5272

\*\*Significant at 5%

The adjusted R<sup>2</sup> is 0.5272 and this implied that 52.7% of the variation on the reduction of poverty is being explained by the model shown in table 2 above. The size of loan obtained is negatively correlated to poverty index at 5% level of significant; which implies that an increase in size of loan obtained by an individual reduces the poverty level. Also, the level of education and household size were negatively correlated, though not statistically significant, this implies that as the educational level increases poverty level decreases. Household size was also negatively correlated to poverty before the collection of loan.

**Table 3: Regression Analysis to Determine Relationship between Characteristics of the Respondents, Size of Loan and Poverty Level after Loan.**

P	Co-efficient	Std.error	Z	P > (Z)	95% Conf. Interval	X
Education	-1.0700220	1.134272	-1.74*	0.070	-4.271436	0.5686682
Size of loan	-0.3861339	0.9581611	-2.58**	0.010	-2.264126	0.4113981
Household size	-0.3916326	0.6033085	-2.47*	0.060	-2.984460	1.4918362
Occupation	-1.8144231	0.7066372	2.34	0.288	-2.736427	-3.2711328
Sex	-1.7667723	1.3342376	1.46	0.687	-1.726164	0.4101134
Constant	1.9508471	1.231501	1.58	0.111	-0.342007	3.1374742

Number of Observation = 240

LR Chi 2(5) = 19.43

Pseudo R<sup>2</sup> = 0.6932

Prob> Chi 2 = 0.00030

\*Significant at 1% \*\*Significant at 5%

Source: Author's computation (2014)

The R<sup>2</sup> after the collection of loan is 0.6932, which implies that 69.3% of the variation in poverty reduction is explained by the model. The education, size of loan and household size were negatively correlated to poverty and significantly at 5% and 1% level (Table 3). This implies that the higher the level of education, the lower the poverty severity. Likewise, the higher the size of loans and reduction in household size would eventually reduce or lower the poverty severity. Therefore, the size of loans given out to customers of microfinance banks should be increased in other to enhance business activities (farming, trading, and artisans). The rural dwellers needs proper orientation to increase their level of education and reduces household sizes as this will eventually help in alleviating poverty level in the study area.

## Test of Hypotheses

### Hypothesis One

This implies that there is no relationship on determinants of incidence of poverty in the study area. It was also used to test for objective one which is to examine the determinants of the incidence of poverty among rural communities in the study area.

There is significant relationship on determinants of incidence of poverty in the study area as shown in table 4 below. For example, education and monthly earning (income) with  $r = 0.201$  and  $P\text{-value} = 0.002$  at 0.05 significant level. It is observed that as the level of education increase in the study area, the monthly earning/income will also increase and this will cause the level of poverty to be reduced among the rural communities in the study area.

There is significant relationship between household size and age in determinant of the incidence of poverty in the study area. With  $r = 0.200$  and  $P\text{-value} = 0.200$  at 0.05 alpha level. It was observed that age determine the household size in the study area.

Furthermore, age and education gives negative correlation. This implies that age is not a barrier to acquire more education. The people in the study area can still go to school, most especially, people with no educational background as they can enroll for adult education. This will go a long way to improve their standard of living which will eventually reduce the rate of poverty among them.

Lastly, sex and household size are not significant. The implication of this is that whether a male or female is the head of the family, it does not determine the size of the household.

Therefore, from the findings, the null hypothesis which states that there is no relationship on determinants of incidence of poverty in the study area should be rejected.

**Table 4: Bi-Variant Analysis on Determinants of Incidence of Poverty**

		Age	Sex	Education	Size of Household	Monthly Earning
Age	Pearson Correlation	1	.206**	-.154*	.200**	.365**
	Sig. (2-tailed)		.001	.018	.002	.000
	N	239	239	239	239	239
Sex	Pearson Correlation	.206**	1	-.213**	.118	-.232**
	Sig. (2-tailed)	.001		.001	.069	.000
	N	239	240	240	240	240
Education	Pearson Correlation	-.154*	-.213*	1	-.232**	.201**
	Sig. (2-tailed)	.018	.000		.000	.002
	N	239	240	240	240	240
Size of Household	Pearson Correlation	.200**	.118	-.232**	1	-.090
	Sig. (2-tailed)	.002	.069	.000		.163
	N	239	240	240	240	240
Monthly Earning	Pearson Correlation	.365**	-.232**	.201**	-.090	1
	Sig. (2-tailed)	.000	.000	.002	.163	
	N	239	240	240	240	240

\*\* . Correlation is significant at the 0.01 level (2-tailed)

\* . Correlation is significant at the 0.05 level (2-tailed)

Source: Author's computation (2014)

**Hypothesis Two**

This states that microfinance banks have no significant impact on household income and expenditure in the study area. This was used to test for objective two which is to examine the impact of microfinance banks on household income and expenditure among rural communities in the study area.

It was discovered from Table 5 that head count of the poor reduced from 185 to 150 people. This showed that the people that cannot afford basic necessities have reduced. The table showed that the poverty severity (P<sub>2</sub>) which measured how poor the people are or how low the poverty line was, had also reduced from 0.0032 to 0.0027. This revealed that those that are still poor are not as poor as before collection of the loan, hence the standard of living of the people had increased. Hypothesis two was rejected and we concluded that there is significant relationship between household income, expenditure and microfinance bank activities. This is line with the findings earlier researchers' like Yunus (2003), Mohammad and Mohammed (2007), Yahiya (2010) and Oyeleye (2012).

**Table 5: Poverty measurement before and after collection of Loan using FGT Model**

Loan Collection	P0	P1	P2
Before	0.77	0.8771	0.0032
After	0.63	0.7546	0.0027

Source: Field Survey (2014)

To determine the impact of microfinance banks on income as well as use the same to explain the effect of the former on the latter. The four variables were subjected to a multi-regression analysis and the results are presented in table 7 and table 8 below.

**Table 6: Model Summary**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.666	.433	.354	1.396

**Table 7: ANOVA<sup>b</sup>**

Model		Sum of Squares	DF	Mean Square	F	Sig.
1	Regression	38.775	4	9.694	4.974	.004a
	Residual	48.725	25	1.949		
	Total	87.500	29			

Source: Author's computation (2014)

**Table 8: Regression Coefficient of Income Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant)	5.165	2.860	.072	1.806	.083
	Microfinance banks have improved lives of rural dwellers.	.682	1.501		.459	.650
	Microfinance is the answer to poverty reduction					
	least loans	-.269	.192	-.226	-1.403	.173
	largest loans	-.297	.464	-.101	-.641	.528
		2.071	.563	.572	3.675	.001

Source: Author's computation (2014)

Table 8 implies that a unit change in x result into 0.682 and 2.071 change in y. In other words, 68.9% and 207.1% change in income of the respondents is associated with change in microfinance banks variables in the senatorial districts of the study area. And, with the t-value of 0.459, 3.675 and probability value of 0.650 and 0.001, respectively. It was observed that such a relationship between two variables of microfinance banks (microfinance banks has improved lives of rural dwellers and largest loans) are significant at 0.05 alpha level. For example, across the Oyo Senatorial Districts, 75% of the respondents were ready to patronize microfinance banks while 25% showed otherwise. The implication of this is that if more loans are given out to people to expand their business, this will definitely have positive impact on the lives of the rural dweller and eventually reduce their level of poverty.

### Discussion of Findings

The results of Chi- square test indicate that socio- economic characteristics vary significantly with Senatorial Districts. This is because, the Chi- square value which is observed to be significant at the probability value of 0.001, that is; it is significant at more than 99% confidence level. For instance 98.8%, 97.9% and 97.2% respectively in Oyo south, Central and North Senatorial Districts reported improvements in their socio- economic lives as a result of participation in microfinance banks poverty alleviation programmes in the study area. The results from Bi – variant analysis showed, there is significant relationship between determinants of the incidence of poverty in the study area;

The results of education and monthly earning income are significant with  $r = 0.201$ ,  $p = 0.002$  which is  $< 0.05$  alpha level, the result showed that an increase in the education level of the people in the study area will eventually increase their monthly earning or income, thereby necessarily improve their standard of living, which will now result in reduction of their poverty level.

The results of age and education from the analysis show a negatively significant with  $r = 1.54$ ,  $p - \text{value} = 0.018 < 0.05$  at alpha level. This result showed that age is not a barrier to improvement in the level of education, as the majority of the people in the study area had no formal education background. This result showed that age is not a function of not advancing in education level, the people in the rural communities can enroll for adult education within their locality. The implication of this is that it will increase their level of productivity, which will eventually have positive impact in reducing their level of poverty in the rural areas.

The results also showed that sex and household size were not significant with  $r = 0.118$ ,  $P - \text{value} = 0.069$   $P > 0.05$ , this shows that sex does not determine the size of household in the study area. The results of age and size of the household were significant with  $r = 0.200$ ,  $P - \text{value} = 0.002$ ,  $P < 0.05$  at alpha level. This showed that as the age of respondents increases, the size of household increases across the senatorial districts. This reflected the rural nature of the study area that increase in age is not a barrier for the people to give birth to more children. In addition, as the majority of the respondents were farmers, they give birth to more children to help/assist them in the farm.

The results from impact of microfinance banks on income and expenditure on incidence of poverty in the study area showed that poverty has reduced from 185 respondents that were poor before collection of the loan to 150 respondents after collection of the loans. The poverty gap ( $P_1$ ) before collection of the loan was 87.71% (88%) and poverty gap ( $P_2$ ) after the loan was collected was 75.46% (75%) which showed a reduction of 13% of the poor. 31 people moved from the poverty level to a comfortable living through the microfinance bank loan. The results showed that microfinance bank has impacted on the welfare and standard of living of the respondents, positively. This is in conformity with the work of Yunus (2003),

Mohammed and Mohammad (2007), Yeshiareg (2009), Yahaya (2010), Idowu and Salami (2011), but in variance with Adam, Douglas and Vonpischke (1984) that said that rural credits or loans has negative effects in reducing poverty.

The Regression analysis showed that poverty level does not depend on sex of the respondents but inversely dependent on size of loan and education. The higher the size of loan and increase in the level of education will lead to reduction on the poverty level. This agreed with Asad (2010) that reported that for microfinance loans to have impact, it must increase the level at which individual meet their basic needs and hence reduce poverty. Littlefield (2002) also confirmed that increase in education and increase in access to credits/loans reduces poverty

The results on the expenditure of the respondents in the study area also increased, this reflects on increase level of tangible asset acquisition. Some of the respondents, who could not afford buying of television sets, radio, handset, bicycle etc., were able to purchase them since the loans collected from the banks were put to use. This eventually has a positive change in their profit, increases their income and led to increase in their expenditure. The implication of this is that microfinance banks have a positive impact on alleviation of poverty in the study area.

## **CONCLUSIONS**

Based on the findings made in the study, the following conclusions were derived;

The results showed that the bulk of respondents (98.9%), (97.9%) and (97.2%) respectively in Oyo South, Central and North Senatorial Districts reported improvements in their socio- economic lives as a result of their participation in microfinance bank poverty alleviation programmes.

The study shows that education, monthly income, large household size, expenditure is the major determinants of the incidence of poverty in the study area. It also showed that microfinance banks have positive impact on income of the respondents and improved the standard of living of the rural dwellers in the study area. The Foster-Greer-Thorbecke model showed a reduction of 13% (88% to 75%) in poverty level and the regression analysis showed that the higher the size of loan, the lower the poverty level. However, the effect is not well shown because of the high interest rate charged by the banks. The high interest rate “eat up” respondents’ capital and also affects the profit from their investment.

The conclusion was also drawn that the customers of microfinance banks preferred to use their personal savings (66%) as startup business funds. Also, when asked to appraise the activities of microfinance banks, majority of the respondents suggested reduction on interest rate and also increment on the amount of loan disbursed.

## **RECOMMENDATIONS**

Based on the findings made in the course of this study, the following measures are suggested for improvements.

- Microfinance bank should be encouraged on the formation of co-operatives with members in the similar business that can enjoy credit facility jointly, to reduce operating cost which will reduce interest rate as well as a reduction in the likelihood for borrowers to default.
- The amount being given as loan should be increased so as to increase the profit or yield from the loan, which will in turn increase standard of living and hence alleviate poverty.
- There are needs for establishment of more microfinance banks especially in the rural communities as to increase the level of participation in the activities of microfinance banks

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