Informal Financial Institutions and Poverty Reduction in the Informal Sector of Offa Town, Kwara State: A Case Study of Rotating Savings and Credit Associations (ROSCAs)

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ABSTRACT The paper is a report of an empirical study on the extent of poverty in the informal sector of Offa town, Kwara State, Nigeria and the role of an informal financial institution (Rotating Savings and Credit Associations ROSCAs) in reducing poverty among the people. Using a set of household data, P-alpha-class poverty measure and a multiple regression analysis. Questionnaire was administered to 500 informal sector operators, who are members of ROSCAs in Offa town. The study found that the infiormal financial institution plays an important role in reducing poverty among the people.

INTRODUCTION

The rapid growth of the informal sector in the recent years in most developing countries like Nigeria has a number of implications for activities in this sector. For instance, in the financial aspect, the strident conditions attached to loan by the formal financial institutions (e.g. commercial banks) and the inability of funds made available by existing banks to reach the poor segment of the population (which constitutes the largest proportion of the total population) have increased the relevance of the informal financial institutions, which include the activities of money lenders, pawn brokers and rotating saving credit associations that provide credit services to meet the needs of borrowers (usually members) in short notice and with little or no control and restriction in the use to which the loans can be put.

In the case of Rotating Saving Credit Associations (ROSCAs), members pool money by making periodic payments into a fund which then rotate among them as a lump-sum payment. This method of mobilizing funds has not only provided a means by which individuals have access to funds, but also provide avenue by which they can have access to inputs and improve technology from which productivity growth in accelerated. The institution also help smoothen temporary shock in consumption by the poor who are members, improve income distribution and the standard of living of most members (World Bank 1989; Chipeta and Mkandawire 1991; Ayreetey 1997; Yaron et al. 1997; Ayreetey 1998).

Closely related to the above is the concern about the failure of most programmes by successive governments in Nigeria to tackle the menace of poverty among the population. Factors like bureaucratic bottlenecks, political instability, corruption, lack of sincerity of purpose, elitist orientation of the programmes and the unwillingness of formal financial institutions to grant credit facilities to the poor have been held responsible for this situation. Again this concern has brought the need to focus attention on the informal financial sector as an existing pragmatic scheme capable of having the desired goal of poverty reduction in the Nigerian society and as well as contributing significantly to the economic development of the country.

Objectives of the Study

The objectives of the study include:

i. to examine the poverty situation in the informal sector of Offa town.
ii. to investigate the activities of the Rotating Saving Credit Associations in Off a town.
iii. to determine the influence of the Rotating Saving and Credit Associations in reducing the level of poverty of its members in the informal sector of Off a town.
iv. to find out the problems faced by the participants especially with regards to fund mobilization, availability and default and it effect on their well-being.
v. provide suggestions on how to solve the problems as a step towards enhancing the economic status of members, thereby serving to reduce the rate of poverty among them.

The study is justified on the following grounds:-

a. A World Bank estimate on the level of poverty in Nigeria indicates that 70.2 percent of the country's population live below the poverty line and that the scourge will continue to rise if nothing is done to arrest it (World Bank 2005a, 2005b). This bizarre picture requires an urgent intervention of which the proposed study on the informal financial institution is one.

b. The preponderance of the poor population in the activities of the informal sector of the Nigeria economy implies that any meaningful effort to reduce the incidence of poverty in the country must necessarily be focused on participants in this unrecognized yet important sector.

c. In the recent time, the activities of the informal financial institutions have witnessed a monumental increase. Consequently, this has provided unique opportunity for scholars, researchers, politician, as well as, other concerned individuals and bodies to direct search light on these institutions in order to obtain relevant data on intervention programmes for poverty reduction in Nigeria.

e. Currently, there is a relatively scanty research on the activities of the informal financial institutions in most developing countries including Nigeria, especially as it relates to poverty reduction. This study is meant to fill this gap by providing first hand data and analysis on the role of Rotating Saving Credit Associations (ROSCAs) in poverty reduction. The role we hoped if improved upon will fulfil some of the aspirations of the Nation's National Economic Empower-ment Development Strategy (NEEDS) and the United Nations Millennium Development Goals.

REVIEW OF LITERATURE

Poverty: Definition, Measurement, Causes and Effects

According to Hazell and Haddad (2001) poverty consists of two interacting deprivations-physiological and social. Physiological deprivation describes the inability of individuals to meet or achieve basic material and physiological needs which can be measured either as a lack of income, which limits access to food and to education, health, housing, water and sanitation services or by the failure to achieve desired outcomes, such as a high quality diet rich in micronutrients, health status, educational attainment and the quality of health, water and sanitation services received. Social deprivation refers to an absence of elements that are empowering, such as autonomy, time, information, dignity and self-esteem. Lack of empowerment is also reflected in exclusion from important decision-making processes, even when the outcomes are of considerable importance to the poor- for example, decisions about public investment in the local community, management of common properties and priorities for agricultural research and extension.

Schubert (1994) saw poverty as either absolute or relative or both. Absolute poverty being that which could be applied at all time in all societies, such as, the level of income necessary for bare subsistence, while relative poverty relates to the living standards of the poor to the standards that prevail elsewhere in the society in which they live.

Related to the definition is the measurement of poverty. According to Foster et al. (1984) the most frequently used measurements are :(i) the head count poverty index given by the percentage of the population that live in the household with a consumption per capita less than the poverty line; (ii) poverty gap index which reflects the depth of poverty by taking into account how far the average poor person's income is from the poverty line; and (iii) the distributionally sensitive measure of squared poverty gap defined as the mean of the squared proportionate poverty gap which reflects the severity of poverty.

The importance of the measurement of poverty is to know; who is poor, how many people are poor, and where the poor are located. Levy (1991) stress that in measuring poverty two tasks have to be taken into consideration; (i) a poverty line which is set at $275 and $370 per person a year for the extreme poor and for the moderate poor respectively must be determined[1]; and (ii) the poverty level of individuals have to be aggregated. He furthermore stated that to determine the poverty line two methods are employed: (i) the use of nutritional intake which is set at 2500 calories per head per day; and the use of certain list of commodities considered essential for survival, for instance, food, housing, water, health care, education vis-à-vis income.

Recently, the use of income as a basis for determining the poverty line has lost much of its

relevant since the method of calculation was not adapted to the new economic trends resulting from high rate of inflation and the prevailing high increase in interest rate and exchange rate devaluation, thus consumption-expenditure at household level is now advocated.

According to Grootaert and Braithwaite (1998), total consumption–expenditure is preferred to income because it is usually better reported in household budget surveys. Furthermore, there is the important theoretical consideration that expenditure reflects better long term permanent income and life cycle consumption pattern because it is usually stable and devoid of short–term fluctuations like income. Moreover, if expenditure data is used for welfare analysis, it has the compelling advantage that the poverty line can be derived from the data itself and need not be adopted from other surveys.

Recent studies by UNDP (1998) advocates the use of Human Development Index (HDI). According to UNDP (1998), HDI combine three components in the measurement of poverty: life expectancy at birth (longevity); educational attainment and improved standard of living determined by per capita income. The first relates to survival - vulnerability to death at a relatively early age. The second relates to knowledge–being excluded from the world of reading and communication. The third relates to a decent living standard in terms of overall economic provisioning.

According to the World Bank (2001), poverty has various manifestations which can be linked to the lack of income and assets to attain basic necessities of life, such as, food, shelter, clothing and acceptable levels of health and education; the sense of voicelessness and powerlessness in the institutions of the state and society, which subjects the poor to rudeness, humiliation, shame, inhumane treatment and exploitation in the hands of the people in authority; absence of rule of law, lack of protection against violence, extortion and intimidation and lack of civility and predictability in interaction with public officials, lack of economic opportunities, threats of physical force or arbitrary bureaucratic power that makes it difficult for the people to engage in public affairs; and, vulnerability to adverse shocks and disruptions linked to an inability to cope with them. Example of such shocks and disruptions are when people live and farm on marginal lands with uncertain rainfall, when people live in crowded urban settlements where heavy rain can wipe out

their houses, when people have precarious employment in the formal or informal sector, when people are faced with higher risk of diseases, such as malaria and tuberculosis, civil conflicts and wars, when people are at risk of arbitrary arrest and ill treatment at the hands of local authorities and when people most especially women and the minorities are at risk of being socially excluded and victims of violence and crime.

Discussing the consequences of poverty, Von Hauff and Kruse (1994), highlighted on three major consequences: (i) consequences for those affected, i.e. for the people affected, poverty leads to physical and psychological misery, caused inter alia by inadequate nourishment, lack of medical care, a lack of basic and job related education and marginalisation in the labour market; (ii) consequences for the national economies of countries affected arising through the formation of slums in cities, a worsening of ecological problems, particularly as a result of predatory exploitation in the agricultural sector and through the failure to use the available human resources; and (iii) consequences for the political and social development of the countries affected. That is, mass poverty tends to preserve or reinforce the existing power structures and thus also the privileges of a minority of the population. In some cases, this involves corrupt élites. These privileged minorities in the population are not generally interested in structural changes for the benefit of the poor population. As a consequence, mass poverty tends to inhibit the development of democratic structure and a higher level of participation in decision-making.

According to Narayan et al. (2000), most households are crumbling under the weight of poverty. While some households are able to remain intact, many others disintegrate as men, unable to adapt to their failure to earn adequate incomes under harsh economic circumstance, have difficulty accepting that women are becoming the main breadwinners that necessitates a redistribution of income within the households. The result is often alcoholism and domestic violence on the part of men and a breakdown of the family structure. Women in contrast, tend to swallow their pride and go out into the streets to do demeaning jobs, or in fact, to do anything it takes to put food on the table for their children and husbands.

A critical look at some of these causes and consequences of poverty discussed above

provide some peculiarity with the poverty situation in Nigeria. In Nigeria, the incidence of poverty was 28.1 percent in 1980 which increased to 88.0 percent in the year 2002. As indicated in Table 1, this percentage increase represents in absolute term 86.0 million people out of an estimated population of about 116.4 million people.

The poverty situation in Nigeria also depicts regional variation, for example, within these periods the poverty rate was higher in the north eastern and north western zones with 71.4 percent and 73.0 percent respectively compared with the south western and south eastern zones at 30.9 percent and 44.0 percent respectively (FOS 2004). Similarly, Nigeria's rank in the Human Development Index in the year 2000 remained low (0.452), being the 148th out of 174 countries (ADB 2003).

Table 1: Estimated Total Population and Rate of Poverty in Nigeria (1980-2002)

Year	Estimated total population (in million)[a]	Absolute No. of poor people (in million)[b]	Percentage (%) that are poor
1980	64.6	18.1	28.1
1981	66.7	21.3	32.0
1982	68.4	24.2	35.5
1983	70.6	27.5	39.0
1984	73.0	31.4	43.0
1985	75.4	34.9	46.3
1986	77.9	35.8	46.0
1987	80.4	36.5	45.4
1988	83.1	37.4	45.0
1989	84.9	37.7	44.5
1990	86.6	38.0	44.0
1991	88.5	38.5	43.5
1992	91.3	39.0	42.7
1993	93.5	45.8	49.0
1994	96.2	52.6	54.7
1995	98.9	59.3	60.0
1996	102.3	67.1	65.6
1997	104.0	67.6	65.5
1998	106.3	68.0	69.5
1999	109.3	72.3	72.0
2000	111.3	77.0	74.0
2001	114.0	81.2	83.1
2002	116.4	86.0	88.0

Sources: (a) National Population Commission 1993; Central Bank of Nigeria. Annual Report and Statement of Account (various issues) and Federal Office of Statistics Annual Abstract of Statistics (various issues). (b) Computed by the author from (a) and (c). (c) Federal Office of Statistics (FOS) (1999) Poverty Profile for Nigeria 1980-1996; Federal Office of Statistics' National Household Consumer Survey (various issues)

Poverty Reduction Strategies

To reduce poverty various schools of thought advocated a number of measures. For instance, the early development economists of the 1940s and the 1950s advocates the theory of forced-drift industrialization via Big push, Balanced growth and Labour transfer, while the World Bank (1990) and Sen (1985) emphasise on macro-economic stability, basic needs and capability and entitlement approaches to poverty reduction (see Ijaiya 2002). In Nigeria, various efforts were made by the government, non-governmental organizations and individuals to reduce poverty in the country. According to Ogwumike (2001) poverty alleviation measures implemented so far in Nigeria focuses more attention on economic growth, basic needs and rural development strategies. The economic growth approach focuses attention on rapid economic growth as measured by the rate of growth in real per capita GDP or per capita national income, price stability and declining unemployment among others, which are to be attained through proper harmonization of monetary and fiscal policies. The basic need approach focuses attention on the basic necessities of life such as food, health care, education, shelter, clothing, transport, water and sanitation, which could enable the poor live a decent life, where rural development approach focuses attention on the total emancipation and empowerment of the rural sector.

Ogwumike (2001) further grouped the strategies for poverty reduction in Nigeria into three eras – the pre–SAP era, the SAP era and the democratic era. In the pre-SAP era, the measures that were predominant were the Operation Feed the Nation, the River Basin Development Authorities, the Agricultural Development Programmes, the Agricultural Credit Guarantee Scheme, the Rural Electrification Scheme and the Green Revolution. In the SAP era the following poverty alleviation measures were introduced; the Directorate for Food, Roads and Rural Infrastructures, the National Directorate of Employment, the Better Life Programme, the Peoples' Bank, the Community Banks, the Family Support Programme and the Family Economic Advancement Programme. The democratic era witnessed the introduction of the Poverty Alleviation Programme (PAP) designed to provide employment to 200,000 people all over the country. It was also aimed at inculcating and improving

better attitudes towards a maintenance culture in highways, urban and rural roads and public buildings. By 2001 PAP was phased out and fused into the newly created National Poverty Eradication Programme (NAPEP).

Informal Financial Institutions and Poverty Reduction

Informal Financial Institutions are institutions that embraced all financial transactions that take place beyond the functional scope of various countries' banking and other financial sector regulations (Aryeetey 1998). Chipeta and Mkandawaivre (1991) saw them as financial institutions that are not directly amenable to control by key monetary and financial policy instruments. These institutions are usually created by organizations and individuals and with no legal status.

The informal financial institutions can be classified into three namely:(i) proprietary informal financial entities, such as, money lenders, trader, estate owners, grain millers, smallholder farmers, self-help groups and other businessmen, (ii) staff and social welfare schemes such as those run by employers, friends relatives and neighbours; and (iii) mutual aid entities, such as, Accumulating Saving and Credit Associations (ASCRAs); and a Rotating Saving and Credit Associations (ROSCAs) (see Chandavarkar 1985 cited in Aredo, 1993; Goodland et al. 1999).

Rotating Saving and Credit Associations (ROSCAs) known as *isusu* in Nigeria, *susu* in Ghana *ko* in Japan is defined by the World Bank (2004) as associations whose members regularly (e.g. weekly or monthly) contribute a fixed amount that is allocated to each member in turn (according to lottery, bidding or other system that the group establishes). Levine (1992) cited in Aredo (1993) saw this fixed contribution as an exchange for privilege of receiving a large sum at some point in the life of the group.

Aredo (1993) inferred from these definitions, that in ROSCAs each member agrees to pay periodically a small sum into a common pool so that each, in rotation can receive one large sum. If a member's turn comes early, it is credit mechanism; if it comes late, it is a savings mechanism (i.e. early recipients realize a real net gain, those later a real net loss).

The World Bank (1989) identified three types of ROSCAs.: common ROSCAs, where the leader receives no special consideration (other than possibly getting the first fund); commission ROSCAs which pays their leaders and who in turn assume liability for defaults; and promotional ROSCAs which are used by merchants to sell their goods, especially consumable durables.

Discussing the theoretical importance of Rotating Saving and Credit Associations (ROSCAs), Steel and Aryeetey (1994) observed that they help in mobilizing saving through the people's daily collection of deposits, which are in turn used as working capital to restock supplies which enable them to expand their output and earn a stream of profits, thereby providing a significant source of income to individual household which reduces their level of poverty.

Zaman (1999) also observed that credit provided by ROSCAs could increase income and build assets. It increases income when the credit is used for an income-generating activity which brings returns in excess of the credit round payment, while it builds asset when the credit-financed investment that does not generate a significant net profit but create an asset that serves as investment for the clients.

Richardson and Lennon (2001) also reiterate that ROSCAs provides security for people through the saving facilities provided, thus safeguarding the people's money from incessant appeals from family and friends, while Miller and Northrip (2000) observed that ROSCAs also provide insurance facilities where small premiums are collected from which relatively large payments are made to clients that suffers losses from a specified risky event.

Bolnick and Miltlin (1980) asserted that ROSCAs are also used by their clients to finance their finished houses, while Wilson (2001) observed that people join ROSCAs when they are faced by disaster, e.g. asset destruction from either flood or drought. Thus ROSCAs provide loan by allowing clients take loan early in anticipation of a disaster or by waiting until the end of the disaster to salvage the situation.

Brass and Henderson (2000) further said that ROSCAs are usually used by subsistence farmers to provide adequate storage facilities to protect their farm produce from seasonal price swing. This enables farmers to store their products in a reliable warehouse/store until prices are high thereby enabling farmers reap the rewards of high profit.

Discussing the empirical importance of ROSCAs, the World Bank (1989) reported that in

Bolivia, one–third to one-half of all adults living in urban areas often participated in ROSCAs which amounted on the average to about one-sixth of their salaries, and in rural Niger Republic about 398 village households in 1986 indicated that informal credits, most especially ROSCAs accounted for 84 percent of total loans they collect and was equal to 17 percent of their agricultural income.

Goodland, et al. (1999) also observed that in Senegal, ROSCAs assisted in equitable distri-bution and utilization of local resources most especially income and raw materials because credit taken are used to finance income generating activity with returns in excess of the loan, thus reducing the level of poverty of the people. Dia (1996) also said that saving facilities provided by ROSCAs in Senegal are used for financing health care and education, thus increasing the people's access to these social facilities.

METHODOLOGY

Data Source

In addition to the use of secondary data, a survey aimed at generating primary data on the impact of Rotating Saving and Credit Associations (ROSCAs) on poverty reduction in the informal sector of Offa town was conducted between the months of September 2004 and January 2005, using a set of questionnaire and participatory poverty assessment method. The questionnaire was based on the World Bank Living Standards Measurement Study (LSMS); International Labour Organization's Rapid Assessment Surveys of Poverty (RASP); World Bank Household Priority Surveys (HPSs) and the Federal Office of Statistics' National Integra-ted Surveys on Households (NISHs) methods, which among other things provided a comprehen-sive monetary measure of welfare and its distribution and the description of the patterns of access to and use of social services e.g. education and health care services. The Participatory Poverty Assessment (PPA) method was used to obtain information from key informants who are also members of ROSCAs on their perception of the impact of ROSCAs on poverty reduction in the informal sector of Offa town (Grootaert 1986; Robb 2000).

Sample Selection Method

A stratified sample method was used in the selection of the respondents. To have an unbiased selection of samples the study area was divided into 12 sample units based on proximity, ecological, socio-cultural and economic varia-tions. In accordance to these sample units, a structured questionnaire was distributed to about 500 operators in the informal sector of Offa town. The issues raised in the questionnaire included; the background of the respondents i.e. martial status, educational status, employment status, household size and composition, income, total consumption-expenditure at two different time, their membership and type of ROSCAs they belong, their monthly contribution to ROSCAs, the amount of credit collected from ROSCAs for various economic activities like for purchase of foods, for purchase of house or building of a house, for finance of health care and education, the problems encountered as members of the ROSCAs in the last 12 months.

Data Analysis

Both qualitative and quantitative methods of analysis were used. The qualitative analysis based on content analysis and the perception of the members of the ROSCAs was used in deter-mining influence of ROSCAs on poverty reduction in the informal sector of Offa town. The quanti-tative method comprised the use of descriptive statistics, the P-alpha class measures of poverty adopted by Foster and others in 1984 and a multiple regression analysis. The descrip-tive statistics such as frequency distribution and percentile were used in describing the socio-demographic characteristics of the respondents (who are members of the ROSCAs in the informal sector of Offa town), the nature of ROSCAs in Offa town. Weighted Rank Analysis which is descriptive in nature was also used in determining the most severe problem of members of ROSCAs in the informal sector of Offa town.

The analysis of poverty in this study was in line with most recent works on poverty that are based on money–metric measure of utility and welfare. For measure of utility and welfare, the total household consumption-expenditure was used as a measure of household welfare and for determining the poverty line. The analysis also took into consideration differences in needs of the respondents due to the difference in household size and composition, and therefore adopted the household expenditure per adult equivalent as the welfare measure recommended by Organization for

Economic Co-operation and Development (OECD), because of its simplicity of use and wide familiarity. This scale is expressed as follows:

EXPeq $= \text{EXP}/n^{(0.7)}$ ……………………..(3.1)
where:
EXP = total household expenditure
n   = household size
0.7 = exponential formation representing other adults in a particular household (Grootaert and Braithwaite 1998).

From the above, a cut–off point was selected to serve as a poverty line across the distribution of real household consumption-expenditure per adult equivalent. An absolute line such as X dollars in Purchasing Power Parity (PPP) was therefore used in identifying the poor in the informal sector of Offa town (World Bank 2001).

b_1……. b_{10}= parameter estimates associated with the influence of the independent variables (ROSCAsi) and the dependent variable (POVRi).

U=disturbance term.

The Study Area

The study area covers the people operating in the informal sector of Offa town in Kwara State of Nigeria. Offa town is located some 250 kilometers from Lagos and 500 kilometers from Abuja, the Federal Capital of Nigeria and on Latitude North 80^0 25' and Longitude East 40^0 30' of the Equator. The town is situated in the transition zone between the forest and savanna regions of Nigeria. Presently, the town is the headquarters of Offa Local Government Area of Kwara State, and has an estimated population (by 1991 census figures) of about 350,113 people (Emielu 1991; NPC 1993).

RESULTS AND DISCUSSION

Demographic Characteristics of the Respondents

The demographic characteristics of the 150 women included in the analysis are presented in table 2.

The survey conducted on the people operating in the informal sector of Offa indicated that 48 percent of them fall within the 41-60 years age bracket, and 65.2 percent of them are married. About 52 percent of the respondents had a minimum of primary education, while 7.5 percent had no formal education. The survey also indicated that 76 percent of the respondents are

Table 2: Demographic Characteristics of the Respondents

Characteristics	Percentage (%)
a. Age of Respondent	
Below 40	41.0
41-60	49.0
above 60 years	10.0
b.Membership by Marital Status	
Single	25.4
Married	65.2
Divorced/Separated	9.4
c. Membership by Educational Status	
No School	7.5
Primary	52.0
Secondary	32.0
Tertiary	8.5
d. Membership by Employment Status	
Informal Sector/Farming	76.0
Organized Private Sector	14.0
Organized Public Sector	10.0
Unemployed/Schooling	-

fully engaged in informal sector activities and farming, while 14 percent are engaged in both the informal sector and organized private sector and 10 percent in both the informal sector and public sector.

The Nature of the Informal Financial Institution (ROSCAs) in Offa Town

In the course of this study certain features were identified as typical of ROSCAs in the informal sector of Offa town. Some of these features are the membership and type of ROSCAs involved in by the respondents, the average monthly contributions by members, the amount of credit collected by members per month and the most severe problem mitigating against members of ROSCAs.

As indicated in Table 3, 93 percent of the operators in the informal sector of Offa town belong to the common types of ROSCAS where the co-ordinator of the scheme in each group received no special contribution other than possibly getting the first fund while 7 percent of them belong to the promotional type, monthly used by merchants within the informal sector. As shown in the table, 31 percent of them contribute below N1000.00 monthly while only 43 percent contribute between N5001 and N10000 monthly.

Since mobilization of fund and disbursement of same to the members is the basic reason for the formation of ROSCAs 73 percent of the members have benefited from an average of N10000 monthly, while only 6 percent of them have benefited from receiving between N1001

Table 3: The nature of the ROSCAs in the informal sector of Offa Town

Variable	Parentage (%)
Membership by Type of ROSCAs	
a. Common ROSCAs	93.0
b. Commission ROSCAs	-
c. Promotional ROSCAs	7.0
Average Monthly Savings	
a. below 1000	
b. 1001 – 5000	31.0
c. 5001 - 10000	32.0
d. above 100000	43.0
Average Monthly Credit Collected	
a. below 1000	-
b. 1001 –5000	6.0
c. 5001 – 5000	21.0
d. above 10000	73.0
Item Most Used for	
a. Purchase of tool	9.0
b. Assets accumulation	2.0
c. Payment of house	17.0
d. Insurance of Property	-
e. Education	1.06
f. Health care services	14.4
g. Restock of business	56.0

and N5000 a month.

Given the nature of business of the members of ROSCAs, about 50 percent of them used the fund collected for restocking their business and none of members have ever used it for insurance purpose.

Problems of ROSCAs in Offa Town

Problem-by-Problem Analysis of the level of constraints faced by members of ROSCAs in the Informal Sector of Offa Town**.**

Based on the questionnaire, some potential constraints of the members of ROSCAs in the informal sector of Offa were drawn. Table 4 summarizes the results obtained by the use of percentage rating which provides a measure of the relative severity of some of the problems comfronting the members. As revealed on the table, lack of trust and fear of default are the most difficult problems of the members having been rated the first with 25.1 percentage score. The second most difficult problem is saving mobilization, followed by the death of a member and lack of participation in decision making by most members with 25.0, 20.0and 17.1 percentage scores respectively. The less difficult problem of the members is leadership problem because it is rated the 5th with 13.0 parentage score.

Incidence of Poverty in the Informal Sector of Offa

In estimating the indices of poverty, this study measures the well-being of individual respondents in the sector by their total consumption-expenditure and by their household size using the adult equivalent scale. Having esta-blished the individual's consumption–expen-diture, a cut off point that serve as the poverty line (using one dollar a day as consumption-expenditure of the whole population under study) was established at N6255.00 per month per adult equivalent. From this the popular P-alpha class of poverty measures was used in determining the incidence, the depth and the severity of poverty in the informal sector of Offa.

As indicated in Table 5, the head count poverty index (0.62) represents 62 percent of the respondents with consumption level below the poverty line. Thus 62 percent of them lived in households that are poor since their adult equivalent consumption–expenditure falls below the poverty line (N6255. 00 per month).

Within the same period the poverty gap index

Table 4: Problem-by-problem analysis of the level of constraints faced by members of ROSCAs

Problem	N	VDP	LDP	NP	Total score per problem			Total	Total % score per problem	Cumu-lative rank
					3	2	1			
Lack of trust/ Fear of default	319	280	30	9	840	60	9	909	25.1	1ST
Saving mobilization	319	271	37	11	813	74	11	898	25.0	2ND
Leadership	319	31	88	200	93	176	200	469	13.0	5TH
Death of a member	319	101	199	19	303	398	19	720	20.0	3RD
Lack of participation in decision-making	319	96	113	110	288	220	110	618	17.1	4TH

Source: Authors' Computation

Table 5: Poverty incidence, depth and severity in   the informal sector of Offa (%)

Total sample	No. of poor respondents based on N6255.00 poverty line	Poverty head count index P_0 (in %)	Poverty gap index P_1(in %)	FDT P_2 index (in %)
500	319	62	28	7

Source: Authors' computation

was 0.28 (representing 28 percent of those whose average consumption–expenditure falls below the poverty line). This gap is referred to as the poor's degree of misery. Thus representing the percentage of expenditure required to bring each person that is poor below the poverty line up to the poverty line. The severity of poverty index was 0.7 which represents 7 percent of the poorest of the poor in the informal sector of Offa town whom policy makers must pay attention to in the town in the distribution of the standards of living indicators such as health care services, clean water, sanitation, food and income generating activities. In summary therefore, the use of these three (3) measures of poverty clearly indicates that the rate of poverty in the informal sector of Offa town is relative high when compared with the total population of the people that are poor in Nigeria (72 percent) as provided by the World Bank Africa Development Indicators of the year 2005.

The people operating in the informal sector of Offa who are also members of ROSCAs also perceived poverty from the point of view of lack of or insufficient fund to finance their businesses and the deterioration in the quality of their living conditions due to the lack of basic social services, like safe water, electricity, health care services, good road network in the town. The lack of sufficient fund is linked to their limited access to banks and credits schemes of the government and formal financial institutions like banks because of the excessive interest rates and the unrealistic collateral requirements usually demanded by the banks. The poor state of social services are linked to the local government ability to repair and maintain the existing ones that have deteriorated all because of lack of focus, corruption and over politicization of the delivery of the services.

Results of the Multiple Regression Analysis of the Role of ROSCAs and Poverty Reduction in the Informal Sector of Offa Town

The results of the regression analysis conduct at 5 percent level of significance are

Table 6: Regression results of the role of ROSCAs and poverty reduction in the informal sector of Offa Town

Variables	Co-efficient estimate and t-values
Intercept (t)	47.5 (2.98)
MFOi (t)	2.19 (0.59)
MASOi (t)	-0.12 (–2.15)*
MHOUi (t)	8.28 (3.45)*
MINSi (t)	-0.31 (–1.91)**
MEDUi (t)	-7.85 (–0.55)
MHEi (t)	8.75 (1.91) **
MBSSi (t)	2.06 (7.33)*
HHSi (t)	1.33 (0.62)
OCCSi (t)	2.13 (1.31)
EDUSi (t)	2.13 (0.72)
R^2	0.52
R^2 Adjusted	0.51
F	23.3

t-values in parentheses
* and ** statistically significant at 5 percent and 10 percent level respectively

presented in Table 6.

A look at the model shows that the model has an R^2 of 0.52. This shows that 52 percent variation in the dependent variable (poverty reduction) is explained by the explanatory variables (the contribution of ROSCAs and the vector of household characteristics of the respondents that are poor), while the error term take care of the remaining 48 percent which are variables in the study that can not be included in the model because of certain qualitative features. At 5 percent level of significance the F-statistic that is 23.3 is greater than the tabulated F-statistic valued at 1.83.

In terms of the individual independent variables, the coefficients and the associated t-values of ROSCAs money spent on food, housing (e.g. rents), health care, business activities have the expected signs, thus fulfilling our a-priori expectations. But when viewed statistically money spent on housing and on business activities are statistically significant at 5 percent level and money spent on health care services are statistically significant at 10 percent level, while those spent on food are not. The positive signs of the variables are indications that the more money received from ROSCAs and spent on them the more the number

of people that would get out of poverty.

The co-efficients and the associated t-values of ROSCAs money spent on asset accumulation, education and insurance are inversely related to poverty reduction in the informal sector of Offa town, thus contradicting our a-priori expectations. Statistically only the money spent on assets accumulation and on insurance are significant at 5 and 10 percents respectively. The negative signs of the variables are indications that the money spent on them have not impacted much on the people's well-being. Situations that can be linked to the merger amount contributed as savings and the amount accrued to individual operator in the informal from ROSCAs.

Drawn from the perception of some of the respondents, their involvement in this type of informal financial institution has helped smoothened temporary shocks in their consumption and made them have enough funds to restock supplies in their businesses, which in the long run has helped improved their living standard and those of their family.

A general look at these results thus conformed with the views of Steel and Aryeetey (1994) that observed that ROSCAs has helped in mobilizing saving through the people's daily collection of deposits, which are in turn used as working capital to restock supplies which enable them to expand their output and earn a stream of profits, thereby providing a significant source of income to individual household which reduces their level of poverty. Zaman (1999) also observed that credit provided by ROSCAs could increase income and build assets. It increases income when the credit is used for an income-generating activity which brings returns in excess of the credit round payment, while it builds asset when the credit-financed investment that does not generate a significant net profit but create an asset that serves as investment for the clients.

CONCLUSION AND RECOMMENDATIONS

An empirical study of the impact of ROSCAs on poverty reduction in the informal sector of Offa was carried out by the use of a collection of household data and regression analysis. The findings shows that money received from ROSCAs and spent on food, housing (e.g. rents), health care, business activities have the expected signs, thus fulfilling our a-priori expectations, while those spent on asset accumulation, education and insurance are inversely related to poverty reduction in the informal sector of Offa town, thus contradicting our a-priori expectations.

To make ROSCAs have broad based impact on the people's well-being some of the problems that have hinderes members effective contribution to the growth and operation of the association should be addressed. Prominent among the problems are the problem of low-income earning of the members which has made saving mobilization difficult and the fear of default that is common among members. The government can augment the low-income earnings of members by making soft loans (with very low interest) available to members through co-operative societies that the members belonged. The fear of default can be taking care of if members can institutionalized the concept of social capital that places emphasis on trust, information sharing, and reduction of opportunistic behaviour and facilitation of collective decision-making.

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