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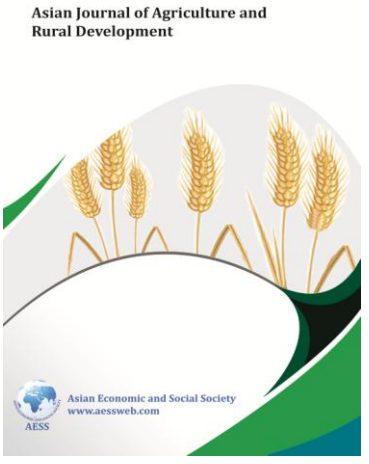

Alleviating Rural Farmers Poverty through Effective Micro credit: Evaluation of UNDP Intervention in Delta State

P. C. Ike and **U. N. Uzokwe** (Department of Agricultural Economics and Extension, Delta State University, Asaba Campus, Nigeria)

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Alleviating Rural Farmers Poverty through Effective Micro credit: Evaluation of UNDP Intervention in Delta State

Author(s)

P. C. Ike
Department of Agricultural Economics and Extension, Delta State University, Asaba Campus, Nigeria
Email: ikepeecee@yahoo.com

U. N. Uzokwe
Department of Agricultural Economics and Extension, Delta State University, Asaba Campus, Nigeria
Email: ucheadauzokwe@yahoo.com

Abstract

The United Nations Development Programme (UNDP) introduced a micro credit scheme of ₦9milllion as one of the projects in the Integrated Community Development Programme (ICDP) in Delta state in 2000. UNDP appointed Lift Above Poverty Organization (LAPO) a Micro Finance Institution (MFI) in Nigeria which has developed a successful model of reaching credit to resource poor households that are generally bypassed by government financial institutions as consultants to implement the scheme in the state. This work sought to determine the return to the different economic activities funded with the loan by the beneficiaries, and ascertain the repayment/default rate of the credit programme. Analysis of data collected from 103 beneficiaries of the scheme spread across the three agricultural zones of the state suggests that the productivity of labour was higher than the estimated wage rate and the rate of return was higher than the interest charged on the loan. It is recommended that since the micro credit has been effective in improving the livelihood of the low income house-holds, the government should mobilize adequate donor support on behalf of the micro credit institutions.

Keywords: Micro credit, Livelihood, Labour productivity, Return on capital

Introduction

Providing credit and organizational support to the poor who do not have assets to use as collateral to formal financial institutions have been the key elements of Non- government organization's (NGO) approach to alleviation of poverty and improving livelihood in many developing countries (Hossain and Diaz, 1999). Although governments realize that resource-poor rural households need affordable credit to enhance household incomes, the formal financial institutions failed to reach the poor because they adhere to stringent collateral requirements, and the credit disbursement and recovery procedures are not suitable for their economic environment (Ike, 2010). The history of successful model of reaching credit to the resource poor households that are generally bypassed by government financial institutions has its origin in the Grameen Bank in Bangladesh (Khandaker 1996).

In spite of the roles of government and private sector in micro-financing activities, more ground needs to be covered. The existing Microfinance Institutions (MFIs) serve less than a million out of the over 40 million people who need their services in Nigeria (CBN, 2005). Also, aggregate microcredit facilities account for 0.2 percent of the GDP and less than one percent of the total credit in the economy (CBN, 2005). The latent entrepreneurial capacity of the poor, it is believed, would be significantly enhanced through the provision of microfinance services to enable them engage in economic activities and be more self-reliant; increase employment opportunities, enhance household income and create wealth.

Microfinance services refer to loans, deposits, insurance, fund transfer services and other ancillary non-financial products such as training and development of social capital targeted at low income clients. Three features distinguish microfinance from other formal financial products: (i) smallness of loans and savings, (ii) absence or reduced emphasis on collateral, and (iii) simplicity of operations (Ike, 2010).

In its bid to assist the Delta state government in her poverty alleviation efforts, particularly at the grass-roots, the United Nations Development Programme (UNDP) introduced a microcredit scheme as one of the projects in the integrated Community Development Programme (ICDP). In 2000, the UNDP embarked on a community based microcredit scheme in collaboration with Lift Above Poverty Organization (LAPO) as both the Microfinance Institution (MFI) and consultants to implement the scheme in the state.

The Lift Above Poverty Organization (LAPO), a non-government organization has been implementing a replication of the Grameen Bank model in Nigeria. LAPO was established in 1987 and has it's headquarter in Benin-city, Edo state, Nigeria.

The main objective of LAPO is to extend credit facilities to resource poor households for creating opportunities for productive self-employment for the vast underutilized human resource (Ehigiamusoe, 2000). The credit scheme targets community based organizations (CBOs) with a view to increasing their access to credit for micro economic activities. For takeoff of the UNDP microcredit intervention in Delta state, the scheme conducted identification of groups and need assessments in various communities in Delta state, trained them on capacity building and disbursed loans to the viable groups. This formed the basis of this study which sought to evaluate the intervention programme through investigating the extent to which the credit has reached the target group and the impact of credit on employment generation and improvement in the level of living of the borrower households.

Specifically it sought to:

(i) determine the return to the different economic activities funded with the loan by the beneficiaries, and
(ii) ascertain the repayment/default rate of the credit programme

Methodology

The study utilizes secondary data on financial operations provided by the Lift Above Poverty Organization (LAPO) which is the Microfinance Institution (MFI). The report is on UNDP-Delta state assisted microcredit scheme for targeted communities as at September 30, 2004. The report provides information on the local governments/communities including groups or associations that benefited from the micro credit programme. The number of individual members of these groups including their gender representations and the type of economic activity embarked were also given. The details of the volume of the loan, interest, date of disbursement, repay date and amount repaid were all included in the report. The total number of beneficiaries was 955. Primary data were collected through a survey of 103 randomly selected borrower households representing 10.79% of the entire beneficiaries. The sample has proper representation from the benefiting local government areas/communities and the various business enterprise groups. Of the 25 local government areas in Delta state, 12 were covered by UNDP microcredit intervention scheme. These local government areas/communities are classified into three agricultural zones as follows:

Delta north comprising Oshimili North (Akwukwu Igbo), Ukwuani (Umuebu), Oshimili South (Oko-Ogbelle), Ika North East (Ute-Okpu) and Ndokwa West (Emu Obiogor currently called Emu Anioma);
Delta central which include Ughelli North (Ughelli), Ethiope East (Okpara Island), Ethiope West (Jesse and Ijemi-Oghara), and Ughelli South (Otu-Jeremi); and
Delta south, comprising Isoko North (Emevor), Patani (Agoloma), and Isoko South (Ivrogbo-Irri and Olomoro).

The data were collected by interviewing respondents with a pre-tested structured

questionnaire. Information were sought on credit history of borrowers, their socioeconomic background and asset holding, cost and returns on enterprises financed with the loan, employment and incomes generated from UNDP-LAPO financed and other economic activities of the household.

In the absence of benchmark information on economic conditions of the borrowers, assessment of the economic impact of the credit programme was done by comparing situations of the old and new borrowers. Thus the study required that the sample have representations of different number of loans taken. To assess the financial viability of the credit programme at the member level, it is necessary to estimate the rate of return on investment in enterprises financed with the loan. In the same vein, the rate of recovery of credit and the demand for repeat loans are indirect indicators of the financial viability at the borrower level. If the member incurs loss in the business enterprise, he/she would not have capacity to repay the loan. If he/she has been forced to repay from incomes of other household enterprises, he/she would not demand a repeat loan and would drop from the scheme.

A direct indicator of the financial viability is obviously the rate of return on investment. It is difficult however to estimate the rate of return on investment fairly accurately for the informal activities financed with micro credit for a number of reasons (Hossain, 1984). First is the problem of identification of labour associated with the activity. It is usual to find a farmer in a rural area to be engaged in more than one activity, often on the same day. To get an accurate estimate of employment, it is necessary to generate data on the allocation of labour to these various activities. Collection of information on time allocation needs weekly surveys throughout the year, which is costly and time consuming. The problem is compounded by the fact that a household would often have more than one working members who are engaged in multi enterprises. Money is fungible. The full amount of loan may not be used for the activity for which the loan is taken. It is very likely that household members would pool the available resources (from whatever source they are obtained) for operating them on the household basis.

The activities financed by micro credit are run mostly with family labour (Hossain and Diaz, 1999). There is the need to deduct the cost of family labour from household income to estimate the 'profits' and the rate of return on capital. An important conceptual problem here is how to impute the cost of family labour. Since labour market hardly exists for most of these activities, it is difficult to get information on the wage rate that could be used to impute the opportunity cost of family labour. Even if available, it may not approximate the opportunity cost, as the family labour utilized in these activities might not get equal employment at that wage in alternative occupations. The wage rate would have been depressed if the labour market had to absorb all the surplus labour available in the locality. In view of these problems the findings on rate of return as reported bellow have to be interpreted carefully.

Information was collected from the respondents on the number of months different household members worked for UNDP-LAPO financed and other economic activities, the number of days employed in a month, and the average number of hours employed in a day. The respondents also reported average weekly income accruing to the household from UNDP-LAPO financed and other economic activities, which was blown up (multiplied by 52) to get yearly income. The income from land and livestock holding was estimated from input data collected on a seasonal basis.

Three alternative measures of the return from investment has been estimated,

(a) net household income, I,
(b) net income per unit of labour, ie, labour productivity, R_L, and
(c) rate of return on capital, R_K

These have been estimated as follows:

$I = Y - rK - L$…… (1)

$R_L = I/N$…….. (2)

$R_K = (Y - wN)/K$…….. (3)

where, Y = annual gross household income from the activity.

N = number of standard eight-hour days of employment in the activity for all household members.

L = the amount of financial loan obtained from LAPO.
K = own and borrowed capital used in the enterprise.
r = the rate of interest on the loan (3% on reducing balance principal).
w = wage rate or the opportunity cost of labour (estimated to be N800.00)

The net income of the household would be the most appropriate measure of the return on micro credit if the labour employed in the activity would have remained idle in the absence of the access to credit. At the other end, (I – WN) is the most appropriate measure of net income, if all the labour employed in the micro credit financed enterprises could be alternatively employed in other economic activities at the market wage rate. The actual position regarding the operation of informal enterprises is somewhere in the range depending on the economic situation in the locality. For this reason, the net return per labour has been estimated so that one can compare it with one's notion of the opportunity cost of labour to make judgment about the desirability of the investment.

The rate of return on capital would have been the most appropriate indicator for the viability of investment with microcredit when the entrepreneur runs the activity with hired labour (a capitalist enterprise). If the rate of return were higher than the cost of investment (the rate of interest plus a risk premium), it would be profitable to make that investment. But the target group for microcredit run the activities mostly with family labour that face inadequate and uncertain employment opportunities in the market. Hence, the rate of return on capital should not be used as an appropriate guide for the borrower's investment decision and the latent demand for credit. Also, since the amount of investment is very small, R_K would be highly sensitive to the assumption of the wage rate and the error of measurement on employment of labour, for which accurate information is difficult to collect.

Results and Discussion

LAPO report indicates that the sum of ₦9million released by UNDP for the micro credit programme was disbursed to 82 groups in 15 targeted communities from the 12 local government areas that benefited from the scheme. The total number of benefiting group members were 955 composed of 522 males and 433 females (Table 1.) These loans were disbursed in 3 Tranches of ₦3 million each. Tranche 1 was between February and May 2001, Tranche 2 between November and December 2001, while the Tranche 3 was between February and May 2003.

Estimates of the Returns from Micro Credit

The estimates of the returns from micro credit for the sample respondent, as well as for different agricultural zones are reported in Table 2. As claimed by the respondents nearly 97% of the loans got from micro credit scheme were invested in business enterprises and this generated 167 days of employment on the average during the year for each of the beneficiary and another 72 days on the average for other members of the household, generating averagely a yearly gross income of ₦148,540.00 (₦12,378.33 per month). The contribution of the credit-financed activity to net household income is estimated at ₦123,680.00 per annum. The labour productivity is ₦513.33 per day, about 28% higher than the stated wage rate estimated to be prevailing in the informal market. The rate of return on investment is estimated at 142%. Thus, the enterprise financed with microcredit is highly financially viable whatever indicator is used.

The rate of return varies across the zones under study with the estimate for labour productivity being the lowest in Delta south. The labour productivity estimated for the zone is ₦485.00 which is lower than the state average of ₦513.33. This could be because many of the beneficiaries in the zone came on stream to benefit from the loan scheme only in Tranche 3. Some of the beneficiaries in this zone could therefore be regarded as new entrants into the use of the loan. In spite of this low return compared to other zones, the beneficiaries value the UNDP-LAPO disbursed credit highly, because it helps them increase household income by reducing underemployment of family workers. In the course of investigation, beneficiaries of this zone were found to be

highly motivated and interested in participating in the credit programme.

The rate of return is found to be the highest for Delta north zone. The size of financial loan is the highest for the zone, and the borrowers have put up large amount of their own fund in the enterprises financed with UNDP-LAPO disbursed credit. An average enterprise generated 249 days of employment for the borrower, and another 91 days of employment for other family members, and contributed ₦180,200.00 additional income for the household. The labour productivity is almost 33% higher than the wage rate. Obviously the borrowers in this zone should have no difficulty in repaying the loan.

The estimate of rate of return for borrowers classified on the basis of number of loans taken in the scheme is as presented in Table3.

The findings show that in general the financial viability of the enterprises gets stronger with longer association of members with the credit programme. The labour productivity in enterprises run by new borrowers (₦396 per day) is, in fact, lower than the average wage rate, and the rate of return on capital is negative when the cost of family labour is imputed by the market wage rate. The beneficiaries who have received more than two loans have had substantially higher levels of income and employment from the UNDP-LAPO financed activity. The rate of return on capital is 196% for members who took two loans and 217% for those with three loans.

Table 4 reports estimates of the return from investment in specific activities undertaken with the loan. The most common activities financed with the credit are butchering/meat vending, pig keeping, soap making, clothe sales/sowing, food stuff, arable farming, petty trading welding/fabrication, fish farming, cassava processing, wood work, palm oil milling, poultry and boat transportation. Among the economic activities sampled, agricultural activities such as piggery, food stuff/petty trading, arable farming and palm oil processing have the highest labour productivity and returns on capital.

Loan Repayment/default in the UNDP-LAPO micro credit scheme

The findings presented above amply demonstrate that if the microcredit is properly utilized, the financial viability of the enterprise poses no problem. The challenge is how to ensure proper utilization of the loan and recovering the credit from the additional income accruing to the borrowers.

Available records from LAPO show that in the first, second and third segments, the sum of ₦3million were each disbursed to the beneficiaries. The repayment performance report by the beneficiaries is as presented in Table 5.

The report shows that more than 60% of the loan amount was repaid in each of the loan segment. On the average the scheme recorded 64.8% repayment rate. The success in repayment performance can be attributed to measures taken by LAPO towards achieving efficient credit repayment.

The LAPO model of intensive interactions of her workers with the borrowers and developing group solidarity and exerting peer pressure through informal organization of the members are appropriate institutional innovations in this context. The group functions as an institution to ensure mutual accountability. The credibility of the group and future benefits in terms of new loans are in jeopardy if one member breaks the credit discipline, does not properly utilize the loan and defaults on loan repayments. So, the individual is kept in line by a considerable amount of pressure from other members of the group. The existence of a well functioning organization thus acts as the collateral for loan in the scheme.

The recovery of the loan is facilitated by another institutional innovation of LAPO, the procedure of collecting the repayments in large numbers of small regular installments. In a poor household there is always a compulsion of utilizing whatever additional income is generated to satisfy the unmet basic needs. It is difficult for such households to accumulate savings for repaying the loan at large-size installments. The key to ensuring high percentage recovery rate of the loan lies in

collecting repayments in weekly installments. As the loan is repaid in small installments every week, it is easy for a borrower to pay the installment from the income leaving the capital intact. With repeat loans, it is possible for the borrower to divert some creditor incremental income for making medium and long term investments, such as purchase of furniture or acquisition of machinery, tools and equipment.

The accumulation of these assets will contribute to increasing productivity of enterprises other than those financed with the LAPO loan.

Summary and Conclusions

The United Nations Development Programme (UNDP) has introduced microcredit scheme as one of the projects in her integrated community development programme with the Lift Above Poverty Organization (LAPO) as both the microfinance institution (MFI) and consultants to implement the scheme in the state. LAPO has been implementing a slightly modified Grameen approach to delivery of microcredit for alleviation of poverty. It adopts the essential features of Grameen such as targeting the poor as the clientele; organizing borrowers in small homogeneous groups to develop group solidarity and peer pressure to ensure effective utilization and recovery of loans; collecting the principal in small regular weekly installments so that the repayment does not put pressure on low-income households; developing collective funds for compulsory savings from borrowers for their mutual benefit to cope with financial crises and saving them from the clutches of usurious money lenders at times of emergency; and promoting social development of members using credit as an entry point.

A survey of 103 borrowers selected from three agricultural zones, conducted for this evaluation, shows that UNDP has largely succeeded in reaching low-income households with credit. The average size of loan taken by a borrower was ₦10,000.00 of which was used for running enterprises on a self-employed basis. The economic activities financed with the credit are butchering/meat vending, pig keeping, soap making, clothes sales/sowing, food stuff, arable farming, petty trading welding/fabrication, fish farming, cassava processing, wood work, palm oil milling, poultry and boat transportation. The average labour productivity in enterprises financed with the loan is ₦525.00 per day, 28% higher than the estimated market rate.

Since the micro credit has been effective in improving the livelihood of the low income house-holds, the government should mobilize adequate donor support on behalf of the micro credit institutions. The micro credit institutions should encourage borrowers to undertake small scale production activities through subcontracting arrangements with large-scale business enterprises who could benefit from the low opportunity cost of labour for the borrower households. This would help increase absorptive capacity of capital and reduce the time needed by borrowers to achieve financial viability.

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Table 1: Number of Loan Beneficiaries in the Local Government Areas by Gender

Local Govt.	Tranch 1		Tranch 2		Tranch 3		TOTAL	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Oshimili North	25	25	-	5	-	5	25	35
Ukwani	40	11	17	11	-	-	57	22
Ughelli North	43	22	-	-	-	-	43	22
Isoko North	22	17	26	22	14	30	62	69
Oshimili South	16	19	42	45	48	56	106	110
Ethiope East	25	20	10	10	2	3	37	33
Patani	18	8	-	-	8	5	26	13
Ethiope West	20	5	33	23	12	8	65	36
Ika South West	-	-	33	21	-	10	33	31
Ndokwa	-	-	-	-	16	14	16	14
Isoko South	-	-	-	-	47	43	47	43
Ughelli South	-	-	-	-	5	5	5	5
Total	**209**	**117**	**161**	**137**	**152**	**179**	**522**	**433**
Grand Total								**955**
Percentage	**64.1**	**35.9**	**54**	**46**	**46**	**54**	**54.7**	**45.3**

Source: Lift Above Poverty Organization

Table 2: Rate of Return on Labour and Capital: By Agricultural Zones

Items	**Delta North**	**Delta Central**	**Delta South**
No. of Cases	39	29	35
Gross Income (₦/annum)	198,200	125,440	121,980
Total capital (₦)	**27,400**	**28,200**	**21,820**
Equity	12,400	13,300	10,500
Loan	15,000	14,900	11,320
Employment (days/year)	**340**	**212**	**164**
Beneficiary	249	144	107
Other members of family	91	68	57
Household income (₦/annum)	180,200	111,300	79,540
Labour productivity (₦/day)	530	525	485
Return on capital (%)	210	162	260

Source: Computed from Survey Data

Table 3: Rate of Return on Labour and Capital: By Number of Loans Taken

Items	Number of Loans taken		
	Once	Twice	Thrice
Number of cases	40	39	24
Gross income (₦/annum)	123,820	238,307	360,341
Total capital (₦)	22,138	37,508	112,691
Equity capital	12,138	17,508	67,691
Borrowed capital	10,000	20,000	45,000
Employment (Days/year)	170	250	324
Beneficiary	112	175	263
Other household members	58	75	81
Household income (₦/annum)	67,320	131,750	174,960
Labour productivity (₦ /day)	396	527	540
Capital productivity (%)	-76	196	217

Table 4: Rate of Return on Labour and Capital by Activity

Activity	Number of cases	Total capital invested	Net household income	Labour productivity	Return on capital
Piggery	11	8100	53468	195	383
Clothes sales/sowing	4	5000	17000	93	87
Food stuff/petty trade	25	3000	11040	197	113
Arable farming	25	9000	43746	160	260
Welding/fabrication	5	6000	16042	88	26
Fish farming/processing	15	6000	25238	184	248
Palm oil milling	2	10000	17528	162	104
Poultry	7	5400	18483	128	137
Boat transportation	3	34000	30400	83	3

Source: Computed from Survey Data

Table 5: Repayment Performance of UNDP micro credit in Delta state (Feb. 2001- Feb. 2003)

Loan Repayment	Time Disbursed	Amount Repaid	Percentage
₦3,000,000.00	Feb. – May 2001	₦1,824,915.00	61.4
₦3,000,000.00	Nov. – Dec. 2001	₦2,105,880.00	70.0
₦3,000,000.00	Feb. May 2003	₦1,873,070.00	63.0
Total cumulative repayment from the scheme			

Source: Lift Above Poverty Organization