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MICRO-CREDIT : A WEST BENGAL PERSPECTIVE

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ABSTRACT

Micro-finance as a concept emerged when social innovators began to offer financial services to the working poor – those who were previously considered "un-bankable" because of their lack of collateral. Once given the opportunity, not only did the clients expand their business and increase their incomes, but also their high repayment rates demonstrated that the poor are capable of transforming their own lives given the chance. The most common micro-finance product is a micro-credit loan. In the process the poor gets a secured place to save their money, earn social security and leadership qualities and realise the need of education. Micro-credit loans empower the poor to improve their own lives. By giving the world's poor a hand up, not a handout, micro-finance can help break the vicious cycle of poverty in as little as a single generation.

Key words : *Micro-finance, micro-credit loans, poverty alleviation, social empowerment*

INTRODUCTION

Micro-finance has been an important tool of poverty alleviation in many countries across the world for almost three decades. It has been fairly well established that micro-finance smoothes consumption, reduces the vulnerability of the poor and leads to increase in their income. Poverty is a macro problem, with causes as wide as they are deep, trapping the future generations in a vicious cycle without hope and opportunity. The poor have little access to the financial services, health or life insurances, education and lack of infrastructure which uphold the fact that the harsh reality of today will repeat itself tomorrow. This paper attempts to present a review of the sector as it stands in West Bengal today and tries to build up a model that will help the sector to mitigate the problems of the people living below the poverty line in West Bengal.

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MICRO-CREDIT INTERVENTIONS

In West Bengal, the micro-credit programme is primarily supported by :

1. ***NABARD under SHG-Bank Linkage programme***

The Micro-finance programme started by NABARD in 1992 has made rapid strides in the recent years and West Bengal is one among the 13 priority states. There are 1,36,251 Self Help Groups (SHG) in operation as it stands on 31st March, 2006. To motivate and assist members of matured SHGs to take up income generating activities on a sustainable basis, NABARD initiated a pilot project for promotion of Micro-Enterprise (ME) in North 24-Parganas. Under the project, identified NGOs will act as ME Promotion Agencies. Studies undertaken in the state to evaluate the progress made in implementation of the Joint Liability Group (JLG) project revealed that financing JLGs could emerge as an effective mechanism for purveying credit to those who cannot offer collaterals to avail loans from banks.

On a much smaller scale than its main SHG-bank linkage program, NABARD also provides bulk loans to NGOs through revolving fund assistance to enable them to implement innovative credit delivery systems, to Federations of SHGs for on lending to self-help groups. NABARD provides loans in the form of RFA on a very selective basis to NGOs, SHG federations and Credit Unions, which undertake financial intermediation to supplement the loans from the formal banking system. This is to help them build their financial intermediation capacity and to prepare them to take bank loans in future. Fig. 1 shows the district-wise cumulative break up of number of SHGs provided with bank loan up to 31 March 2006.

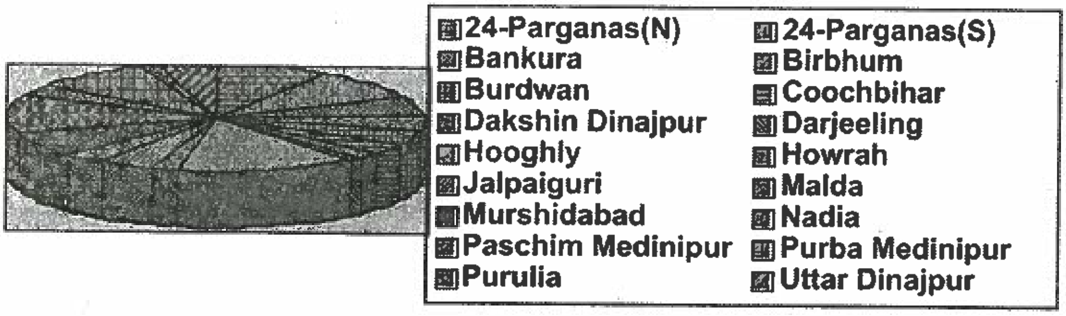


Fig. 1. District-wise cumulative break up of member of SHG's in West Bengal provided with bank loan up to 31.03.2006.

Though SHG-Bank linkage has achieved significant outreach and has thus proved to be vital for the sector, still the program is not without its share of problems.

The enthusiasm of banks to lend to these SHGs and the increasing importance of quantitative 'targets' have led to a clear decline in the quality of the groups that are being linked, most of the newer SHGs being formed by government agencies or by the banks themselves in order to meet their targets.

There is also the problem of cost. The cost of forming new SHGs by NGOs is estimated to be in the region of Rs. 1000 per group. So if an additional one million groups need to be formed, the amount required is Rs. 10 billion. Where is this money going to come from? If the NGOs are not the ones to ensure quality and help the groups with their book keeping and their management, then it is unlikely that the banks will take on this role. The wisdom of having a cap on interest rates (12.5%) has also been questioned as studies have shown quite clearly that the lending to SHGs costs banks anywhere between 22% and 28%. Cross-subsidization may work as long as the portfolio is doing well and forms a minor part of the bank's total operations but it cannot be a permanent solution.

2. ***Union Government (implemented by state's P&RD Department) under Swarnajayanti Gram Swarojgar Yojana (SGSY)***

Swarna Jayanti Gram Swarojgar Yojona (SGSY) is the most important programme for self-employment for the rural areas of the country. Central and State Governments fund the programme in the ratio 75 : 25, like other centrally sponsored programmes and is implemented in the districts by the District Rural Development Cells (DRDC) of the Zilla Parishad. The main emphasis of the programme is organizing the poor in Self Help Groups (SHGs) and to augment their capacities for taking up economic activities for generation of income. Financial assistance in the form of bank credit and subsidy is provided for taking up economic enterprises. Though assistance to individual living below the poverty line (BPL) is permitted but the major emphasis under the programme is to assist the SHGs through group lending. However, it is essential to develop strong groups with adequate capacities before extending credit. It also requires change in attitude to look for the assistance as the first step for gradually acquiring more capacities and confidence for absorbing higher quantum of credit so as to augment income without further dependence on government. Such transformation is very process intensive, requiring strong facilitation and, therefore, rather slow, which explains the delay in gaining momentum in implementation of the programme. Till March, 2005, 1,49,896 number of SHGs have been formed in the state under SGSY, out of which 1,16,822 number of SHGs have been formed exclusively by the women.

As per the programme guidelines any SHG is to be provided access to credit by opening of a Cash Credit (CC) account and to augment the limit a corpus of revolving fund is placed by the DRDC in that account. The bank, based on the revolving fund so placed and the group's saving sets the credit limit. Such account can be opened only after the capacity of the SHG to manage fund and is assessed through a gradation exercises by the banks and the government officials. The first gradation is to be done at least six months after formation of the group. Money can be drawn for consumption as well as for taking up micro-enterprises from the CC account. Most of the groups, who have access to cash credit, start generating income, though of a small amount, after acquiring access to credit. The groups become eligible for scheme-based lending after they are graded for the second time, for which only Grade I groups with at least six months experience are eligible. Year-wise position of number of SHGs drawing credit from their CC account and amount of credit drawn on a cumulative basis is shown in a Bar Graph (Fig. 2).

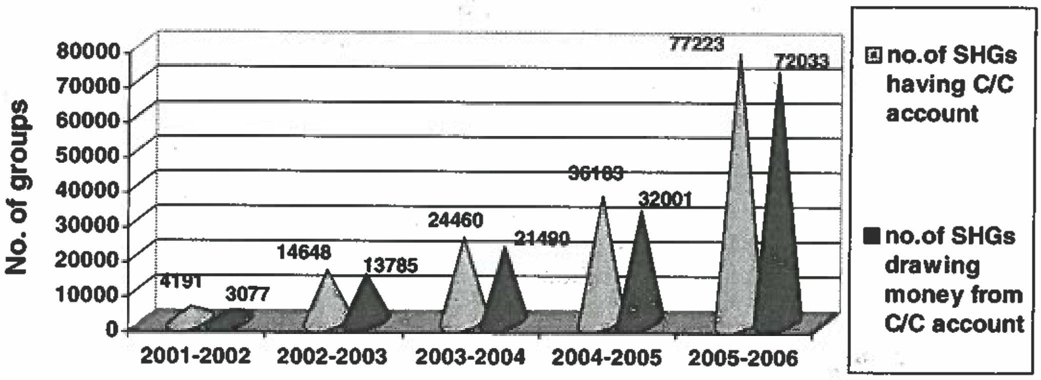


Fig. 2. Year-wise Cash Credit Position of SHGs under SGSY on cumulative basis

Reaching out to the poorest families living in distant villages as well as facilitating and monitoring those groups cannot be done satisfactorily without active support of the Panchayats at the grass root level. For that purpose a Gram Panchayat SHG Management Team (GSMT) is formed in every Gram Panchayat (GP) of the State which is constituted of a few dynamic group members with good communication skill, a few members of the GP, particularly the Conveners of the Sub-committees on Women and Children Development, at least one employee of the GP and representative of any NGO, if available within the GP.

For effective implementation of Swarnajayanti Gram Swarojgar Yojona DRD Cells (DRDC) of Zilla Parishads/SMP/DGHC are to play a very important role. The DRDCs act as a supporting and facilitating organization in the implementation of SGSY in the respective districts and they are to oversee the entire activities initiated either by the Govertment functionaries/Panchayat functionaries or by the NGOs in the area of poverty alleviation programme by way of involving the poor of the rural areas in forming their own Self Help Groups and ultimately on creating self employment opportunities.

The SHGs are generally advised to produce primary products, and such products which are normally sold in the village itself without any difficulty. To promote sale of SGSY products several groups participate in national and state level fairs. Large number of fairs are organized locally at the district and sub-district levels regularly.

Though a sizeable member of SHGs have been formed under SGSY, quality of the groups requires improvement. The number of groups being very large, taking up such an exercise is really a great challenge and it is difficult for the Government alone to take up this daunting task. Keeping this in view P & RD Department has taken up a Special Project on Capacity Building with the assistance of the GOI mainly to augment the self -management capacity of the SHGs after they have passed Grade I test by training them afresh in the field of group management and financial management. The project was launched in 2004 and was scheduled to be carried out in two phases. In the first phase, the project was started in six districts, *viz.*, Coochbehar, Jalpaiguri, Malda, Murshidabad, Hooghly and North 24-Parganas. In the second phase, another seven districts, *viz.*, South 24 Parganas, Paschim Medinipur, Uttar Dinajpur, Bankura, Birbhum, Dakshin Dinajpur and Siliguri Mahakuma Parishad have been included. The P & RD Department is to provide technical and professional support in this process by engaging partner NGOs of CARE, West Bengal. The following partner NGOs of CARE were engaged for the said tasks in districts as shown in Table1.

Table 1. NGO partners for Capacity Buildings in different districts

Sl. No.	Name of the NGO	Districts covered
1.	Sreema Mahila Samity	Murshidabad and Birbhum
2.	Centre for Development of Human Initiative	Coochbehar and Jalpaiguri
3.	SPADE	Malda and Siliguri M.P
4.	St. John's Ambulance	Uttar and Dakshin Dinajpur
5.	Bikash	South 24-Parganas
6.	Manda Unnayan Samity	Hooghly
7.	Swanirvar	North 24-Parganas
8.	Kenduadihi Bikash Society	Bankura
9.	DRCSC	Paschim Medinipur

Workers of the aforesaid NGOs have been attached with the respective DRDCs and they form the District Technical Agency (DTA) to assist the DRDCs of those districts. The overall duties and responsibilities of the DTA are to provide support to all levels to strengthen capacity of officials and non-officials engaged in the implementation of SGSY. DTA teams look after the ways to improve the self-management capacity of Grade I SGSY groups, ensure timely grading and smooth credit delivery as well as to develop effective monitoring and evaluation. All administrative expenditures of the DRD Cells are met from this DRDA Administration Scheme Fund and this is funded both by the Central and the State Governments in the ratio 75 : 25.

There are certain limiting factors that act as constraints in improvement of the pace of implementation of the programme. Though the groups become eligible for scheme-based lending after they are graded for the second time, for which only Grade I groups with at least six months experience are eligible but in practice the groups are taken up for grading after a substantial lapse of time from their dates of eligibility. This is mostly due to inadequate banking services and to some extent slower rate of building capacities by some groups.

The groups take long time to be able to absorb higher doses of credit, required for scheme-based lending involving higher investment. Premature lending may lead to poor return from the venture or even loss of asset. On the other hand per capita investment should be high enough to take the family out of poverty, which cannot happen without heavy dose of credit and subsidy. Against that backdrop the per capita investment in the State under the programme has remained more or less stagnant for the last few years. Wide variation of per capita investment across the districts also exists. Attention of the districts has been drawn for taking corrective measures for improving per capita investment. The low rate of investment has also led to low credit subsidy ratio, which stood at 1.79 : 1 for the year 2005-06, while the desirable figure should have been 3 : 1.

One reason for such low rate of investment is the playing-safe attitude of the banks, who feel more secured with investment involving higher share of subsidy. At the same time the project cost was not always adequate for properly running the business. The other probable reason is that in West Bengal conscious effort has been made in organizing the poorest echelon of the society on a priority basis. Such families have bigger poverty gap and will require more investment for generating higher level of additional income for coming out of poverty. At the same time their capacity to absorb credit and taking risk remains low and grows rather slowly compared to that of the families living just below the poverty line. In a rough estimate one may presume that, a family will require an investment of at least fifty thousand rupees in working capital alone, assuming at least two cycles of rolling of the working capital per year and a ten percent return on that, to be able to earn around Rs. 10,000 per year. This is too simplistic to assume but it is clear that, with present level of per capita investment of Rs. 20,539 though many of the families will be able to increase their income considerably resulting in reduction of poverty gap still not many of them will be able to come out of poverty till they are in a position to absorb more credit.

Out of 77,223 SHGs, who had access to CC account as many as 72,038 SHGs had drawn credit amounting to Rs. 139.70 crore by the end of the financial year from their accounts. Year-wise position of Cash Credit Limit and actual amount drawn on a cumulative basis is shown in a Bar Graph (Fig. 3).

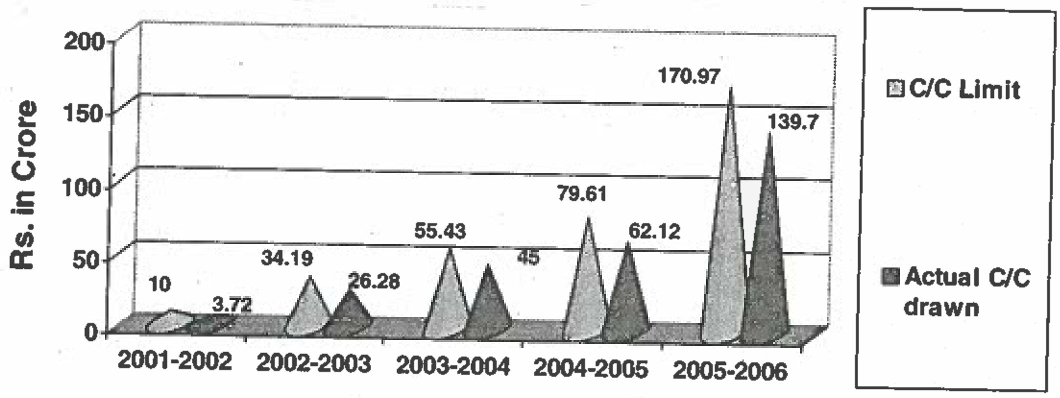


Fig. 3. Year-wise Cash Credit Limit and actual amount drawn by SHGs on cumulative basis

Around nine lakh SHG members of the State have access to CC account and if they could draw and repay more and more amount from those accounts by regularly augmenting their credit limit there would have been perfect match between their growth in credit absorption capacities and availability of such credit. The monitoring mechanism of the programme does not contain this element and there is no organized follow up for enhancing such credit limit.

Another problem is that the banks can classify their lending under the SGSY as priority-sector lending they are liable for all the risk associated with these loans. Also, SGSY is driven by targets and has raised concern that it may weaken the SHG movement. This is because though the SGSY also lends mainly through SHGs, the quality of SHGs under it is not very strong and often groups are formed with the lure of a larger loan along with a subsidy.

3. ***Swarna Jayanti Sahari Rozgar Yojana (SJSRY), a centrally assisted programme under State Urban Development Agency***

The programme was launched on 01.12.1997 in order to provide gainful employment to the unemployed and underemployed urban poor through encouraging the setting up of self-employment ventures or provision of Wage Employment. The components of the programme are :

- Setting up of micro-enterprise
- Formation of DWCUA Groups
- Vocational training for skill development
- Formation of Thrift and Credit Groups

The programme targets urban population living below the poverty line, special attention is being given to women. SJSRY is implemented by the municipal bodies through community Development Societies which is a federated body represented by women from BPL families. A three-tier federated structure has been put in place at the municipal level to provide organic links for smooth implementation. This consists of Neighbourhood Groups, Neighbourhood Committees and Community Development Societies formed from among these women.

As per SJSRY survey as on 31.08.2007 number of BPL families in the state are 1302032. The number of community development society, neighbourhood committees and neighbourhood groups formed are 306,3429 and 36384 respectively. Total number of thrift and credit groups formed is 21717, out of which 10513 groups are in receipt of revolving fund. Fig. 4 shows the cumulative target for formation of Thrift and Credit Groups in different districts of West Bengal up to 31.03.2008.

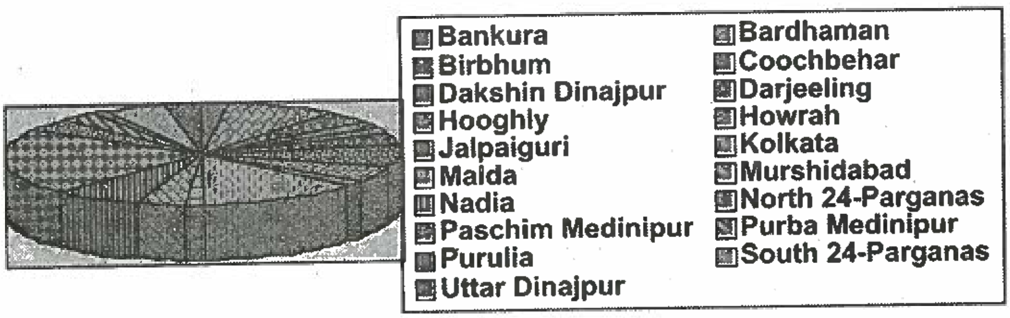


Fig. 4. District-wise cumulative target for formation of Thrift and Credit Groups of West Bengal up to 31.03.2008.

The areas of intervention by the programme are :

1. **Credit linkage :**

- Regular participation at the District and State Level Banker's Committee Meetings.
- Ensuring participation of ULB representatives in the District Consultative Committee meetings.
- Disseminating essential and updated information on SJSRY programme to bank officials.
- Liaison with Lead District Managers of all concerned banks.
- Sponsoring and regulating follow up of loan proposals under the scheme.
- Sensitisation of beneficiaries through ULBs on various aspects, such as, proper scheme development, importance of loan recovery, and so on.

2. **Capacity Building :**

The responsibilities of capacity building of functionaries are mainly shouldered by ILGUS where regular as well as need based training programmes are organized for all the stake-holders. The areas are :

- Programme awareness
- Delegated responsibilities
- Skill development and skill enhancement training
- Accounting training

3. **UPE Cell Formation :**

In light of the responsibilities assigned to ULBs for implementation developmental functions under the provisions in the 74th Constitution Amendment Act, Urban Poverty Eradication (UPE) Cell have been established in most of the ULBs to co-ordinate various poverty alleviation schemes and ensure their convergence. The functions and the responsibilities of the cell includes :

- To delegate specific targets to the concerned functionary in light of the total targets specified for the respective ULB.
- To facilitate the various Thrift and Credit groups and DWCUA groups to take up projects for livelihood generation.
- To ensure all funds pertaining to different poverty alleviation schemes are allotted to the respective Community Development Societies.

LEGAL, REGULATORY AND SUPERVISION ISSUES

An NGO cannot be registered as a non-profit charitable entity if micro-credit is its primary objective. These entities run the risk of losing their 'non-profit' status under the Income Tax Act because 'lending' by definition is not a charitable activity and if this is seen as the main business activity of the NGO and it earns a substantial part of its revenue from it, the Income Tax Department can disallow the tax exempt status under Section 12(A). Similarly, in terms of the provisions of Section 25 of the Companies Act, the objectives of such a "charitable" company are promoting commerce, art, science, religion, charity or any other useful object. There is no clarity in Section 25 of the Companies Act whether micro finance falls under these objectives or not.

Savings are being mobilized by several NGOs from their borrowers. But strictly speaking this is in violation of Sec 45(S) of the Reserve Bank of India Act that prohibits entities that are not 'bodies corporate' from accepting deposits. The NGO, if it is a society, cannot claim that the savers and borrowers are its members while in a trust there is no concept of membership at all. Therefore savings mobilization by these NGOs is technically against the law. Most MFIs start out as NGOs, either societies or trusts. Any form of savings services provided by them is not legally permitted. As they grow and wish to expand, they find that donor funds are not sufficient and that they need borrowings, which they find difficult to raise domestically because of their NGO status and are not allowed to raise from foreign sources due to ECB regulations. Equity cannot be raised because NGOs being registered as societies or trusts, do not have any concept of equity capital and can never be "capital adequate".

NGOs that wish to overcome these constraints and transform their micro finance work into regulated entities need to establish a new entity and raise a start up capital of Rs 20 million or Rs 50 million depending on whether they wish to be a Non Banking Finance Company or a Local Area Bank. This is generally beyond their capacity. Any interested foreign investors have to bring in $500,000 at the very least for a 51% share in the ownership, which means raising an equal amount from Indian investors. The fact that currently there are no domestic investors of equity (although SIDBI has a possibility to do so) makes the foreign investment useless. The general slowness of the economy in the central, northeastern and eastern regions of the country means less demand for credit among the poor. The credit discipline in these regions is questionable and MFIs generally are unwilling to assume the risk of working in these regions unless they are extremely committed to the cause. Another reason is the shortage of high quality NGOs (the good NGOs at present are too few to have an impact) that can take micro-finance forward in these regions.

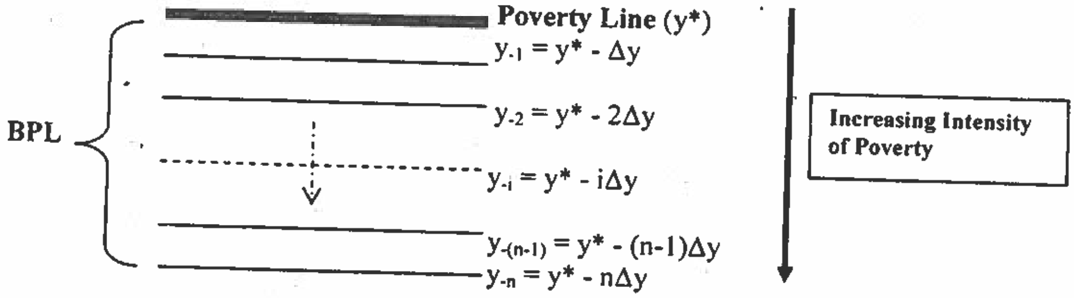
Now we attempt to present a model apparently free from these constraints.

MICRO FINANCE AND POVERTY ALLEVIATION MODEL

Abstract : Poverty has always been the biggest bolder blocking economic development. This model tries to mitigate poverty using micro finance.

Assumptions : y^* = Level of income associated with the poverty line; BPL (i.e. Below Poverty Line) forms of income levels $y < y^*$; APL (i.e. Above Poverty Line) forms of income levels $y > y^*$.

BPL is divided into equidistant layers. With each layer, intensity of poverty increases by Δy.



Where, i = 1, 2,... n and y_{-n}^{th} level income denotes minimum income set to be incorporated in our Micro-Credit Exercise. Thus $y_{-(n+1)}^{th}$ level income set cannot be incorporated in our model. They are termed 'The Poorest of Poor (TPoP)' [Intuitive reason for this condition will be given later].

Model : The fundamental logic for the operation of this model is to provide a financial 'push' at y_{-i}^{th} level of income in a given 'period' such that by the end of that period y_{-i}^{th} level of income jumps to $y_{-(i-1)}^{th}$ level of income, *i.e.*, because of the 'push' and 'period' supplied, there has been Δy increase in y_{-i}^{th} level income.

Income Function : According to the given conditions, 'push' and 'period' are complementary. They are used in a ratio a : b. Since the 'push' provided is partly in the form of loan and partly incentive for completion of the 'period', we term the intra period income generated to be the Micro-Credit Function (MCF). As we established, the MCF is of Leontief Type.

Thus, $Y_{-i}^{j} = \min\{P/a, C/b\} + y_{-i} + (j-1)\Delta y$

Where, Y_{-i}^{j} = i^{th} level income and j^{th} cycle income. where, i = 1,2,..., n; j = 1,2,...k, k+1,...,

$\min\{P/a, C/b\}$ = Leontief type Micro-Credit Function

P/a = Push Factor = Loan amount + Incentive

C/b = Period Factor (i.e. Cycle)

$P : C = a/b$

Income function is presented here under (Fig. 5) :

Explanation (Fig. 5) : At j = k the income function (I_0) makes intercept OA_0 and OB_0 with vertical and horizontal axis respectively. At j = k+1 the income function (I_1) makes intercept OA_1 and OB_1 with vertical and horizontal axis respectively. Thus an increment in j by 1 unit (*i.e.*, at the end of 1 Cycle, C/b) leads to increase in income by Δy.

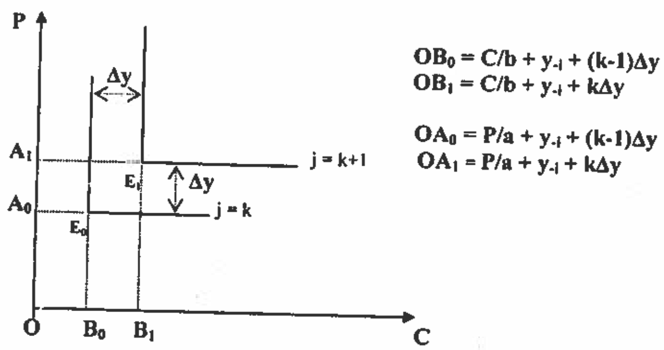


Fig. 5. Income Function for y_{-i}^{th} income set

Expenditure Function : Since ith ($\leq$ n) level income set is eligible for participating in the Micro-Credit Exercise thus its income is divided into 3 types of expenditure.

a) Contribution towards credit generation = a' (P/a)

b) Interest repayment for credit acquired = r (P/a)

c) General expenditure within the specified cycle = $b'_{-(i-j)}(C/b)$

Where, a' = amount required for 1 unit credit generation

r = interest per unit of credit

b'-(i-j) = general expenditure per unit of j^{th} cycle

Let, $b'_{-(i-1)} < b'_{-(i-2)} < b'_{-(i-3)} < \ldots < b'_{-(i-k)} < b'_{-\{i-(k+1)\}} < \ldots < b'_0$

Thus, $y_{-i}^{\ j} = a'(P/a) + r\,(P/a) + b'_{-(i-j)}(C/b)$

$= \{(a' + r)/a\}P + \{b'_{-(i-j)}/b\}C$

Note : For $y_{-(n+1)}^{\ th}$ level of income set the members are assumed to be unable to spend $\{(a' + r)/a\}.P$ from their income. If they consider so they would not be able to sustain themselves in the period C/b. Thus income levels $y_{-(n+1)}^{\ th}$ and below are termed as TPoP.

Slope : $dP/dC|_j = \{b'_{-(i-j)}/b\}\{a/a'+r\} = a/b\,\{b'_{-(i-j)}/a'+r\} < 0$

Therefore, $dP/dC|_{j=k} < dP/dC|_{j=k+1}$

Expenditure function is depicted in Fig. 6 :

Explanation (Fig. 6) : At j = k the A_0B_0 is the expenditure function while at j = k + 1 the expenditure function shifts to A_1B_1. Thus an increment in j by 1 unit (*i.e.*, by the end of 1 cycle, C/b) the expenditure function shift to that of the next higher level where $y_{-i}^{\ th}$ income level receives $y_{-(i-1)}^{\ th}$ level income.

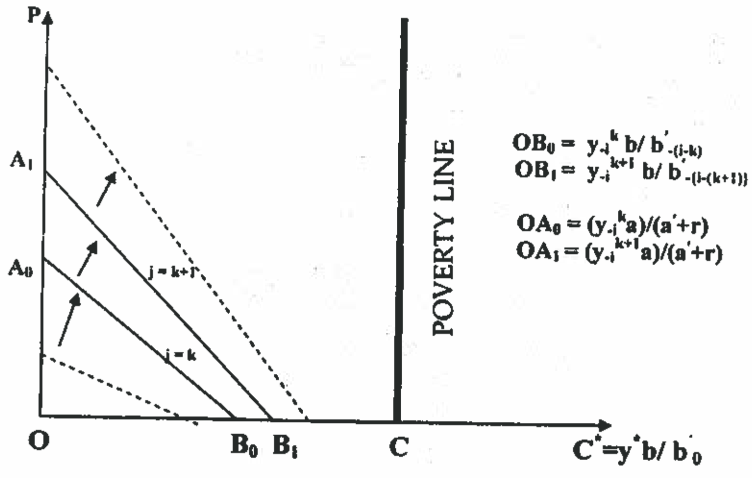


Fig. 6. Expenditure Function for $y_{-i}^{\ th}$ income set

Now, $B_1B_0 = [b\{y_{-i}^{k} . b'_{-\{i-(k+1)\}} - y_{-i}^{k+1} . b'_{-(i-k)}\}] / (b'_{-\{i-(k+1)\}} . b'_{-(i-k)})$

$A_1A_0 = a(y_{-i}^{k+1} - y_{-i}^{k}) / (a' + r)$

Thus, $A_1A_0 > B_1B_0$

Note : The above inequality has been established considering a simple mathematical intuition as follows. Growth in the intercept along C axis is because of simultaneous growth in magnitude of numerator and denominator, the former being of a greater value. On the other hand, there is only increment in the magnitude of the vertical intercept's numerator thus intuitively causing intercept of the vertical axis to be greater than the horizontal axis.

When j = i, *i.e.*, i-th income set has achieved poverty line income.

Thus $y_{-i}^{i} = y^* = y_{-i} + (i-1)\Delta y = b_0'.C/b$

or, $C^* = y^*b / b_0'$ .... equation of poverty line

Proposed Working Mechanism of the Model

Let us assume that a group of "x" people forms a SHG and enlist the group under a regulatory body. The regulatory body gives a choice option regarding the banks ready to offer loans to the BPLs. The group opens an account in a bank of their own choice from among the given options and starts their saving process. Similarly they also approach a training institute made for the purpose according to their need. A part of the loan amount they receive is invested for receiving training and another part goes in buying raw materials and capital. The training institute offers training in the fields of technical know how, skill development and marketability of products. The SHGs produce the final goods and search for an appropriate market for their goods. After completion of the given cycle period the SHG repays back the loan amount and takes home the profit they gained from the sale of the product. They also receive an amount as incentive for participating in the exercise.

The following flowchart (Fig. 7) gives a diagrammatic exposition of the working mechanism :

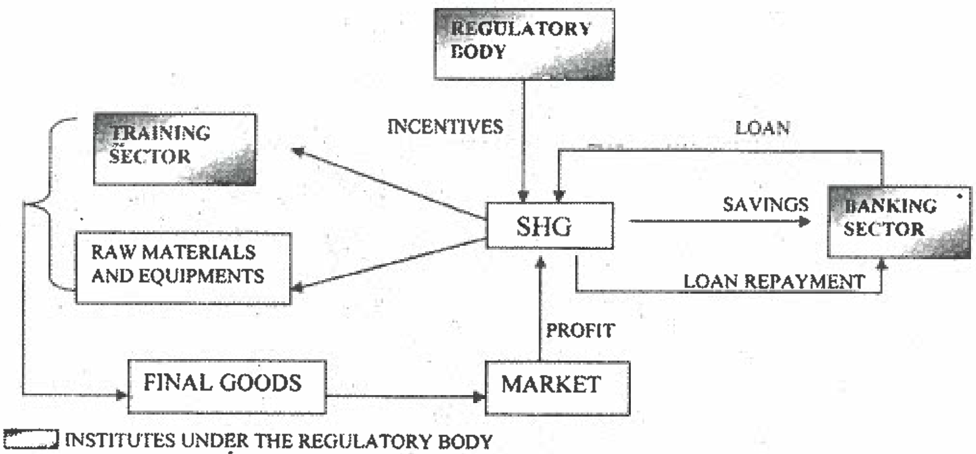


Fig. 7. Diagrammatic exposition of the working mechanism

At equilibrium : Equilibrium for y_{-1}^th^ income set is presented in Fig. 8.

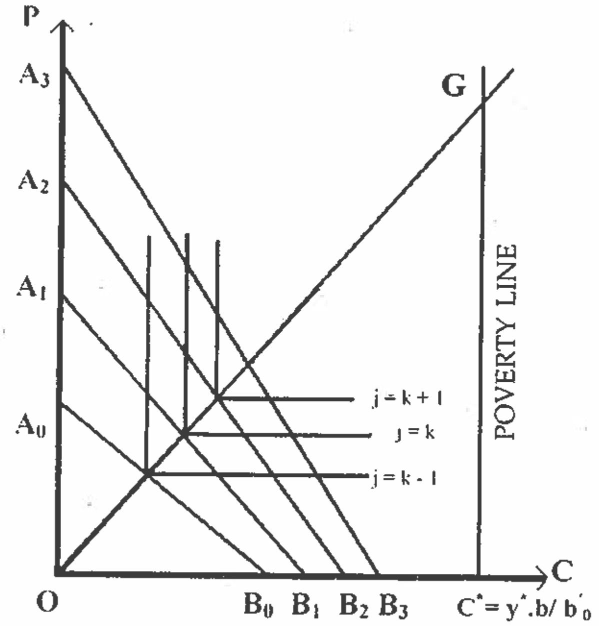


Fig. 8. Equilibrium for y_{-i}^{th} income set

At j = (k–1)th period, expenditure function (A_0B_0) for y_{-i}^{th} income set meets its respecitve income function (I_0) to create an equilibrium at e_0. Thus the push, P/a, recieved at e_0 will shift expenditure function A_0B_0 to A_1B_1 by the end of the (k–1)th cycle C/b. At j = kth period, expenditure function (A_1B_1) meets its respective income function (I_1) to create an equilibrium to e_1. Thus the push, P/a received at e_1 will shift expenditure function A_1B_1 to A_2B_2 by the end of the kth cycle C/b. At j = (k+1)th period, expenditure function (A_2B_2) meets its respective income function (I_2) to create an equilirbium at e_2. Thus he push, P/ a, received at e_2 will shift expenditure function A_2B_2 to A_3B_3 by the end of the initial cycle. The process is comtinued until poverty line is acheived.

The locus joining the equilibrium points of the income and the expenditure function at different values of j can be called the 'income expansion path' (I.E.P.). In the preceding diagram (Fig. 8), the I.E.P touches the poverty line at point G.

Income Expansion Path

The locus joining the equilibrium points of the income and the expenditure function at different values of j can be called the 'Income Expansion Path' (I.E.P). In the following diagram (Fig. 9), the I.E.P touches the poverty line at point G. Micro credit giving institutions can choose between different I.E.P's according to their choice of the ratio a : b. If the institution opts for a higher a : b ratio, then we may consider it to be push-centric. On the contrary, if the institution opts for a lower a : b ratio. We may consider it to be cycle-centric.

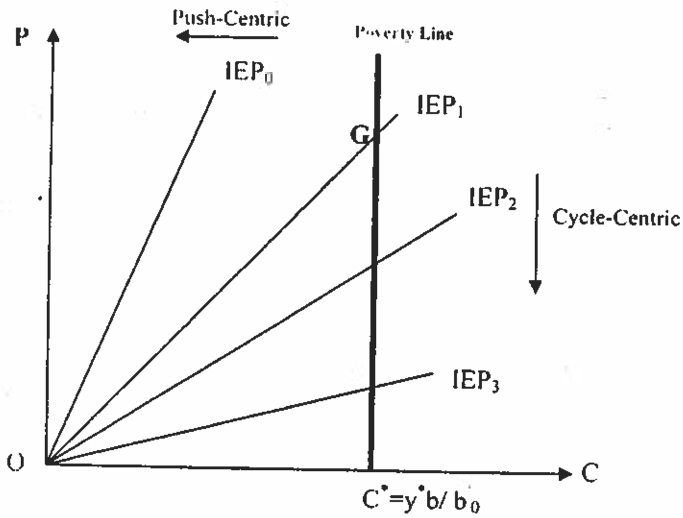


Fig. 9. Income Expansion Path for $y_{.i}$th income set

Stability Condition

Sustainable functioning of this model requires fulfillment of the following 2 conditions:

a) $0 < a' < 1$

The proportion of income spent for generating the 'push' should obviously be lesser than the push itself or else the impact of push would not increase the income from its initial levels.

b) $P/a = C/b = \Delta y$

Amount of push (Loan + Incentive) along with the given cycle-period should be sufficient enough for the conversion of push into potential gain in income generation or else the exercise will take the opposite direction.

Logical Explanation

The logic of the model is that i^{th} level of income set receives (P/a) push in (C/b) cycle. Thus the increase in assumed income, *i.e.*, (y_i + P/a) provides temporary boom to the members of this income set. This boom acts as a mean as well as a positive psychological factor which can then be utilized for the enhancement of personal capability and skills of the members within the cycle period C/b. Thus by the end of the cycle period, we can assume that the members of the income set will end up possessing the capability and skills to enable themselves to earn P/a (= Δy) at the beginning of the next cycle. As pre-assumed, Δy increase in ith level of income help the members to jump up to the next higher level of income So the initial micro-credit exercise helped to mitigate poverty in a single cycle. If we allow this process to continue, it is evident that, eventually BPL families, of all levels as defined, will make to the summit of poverty line by the 'push-cycle' mechanism.

JOURNEY TOWARDS LIGHT

Although, most of the models follow similar logic, still the beauty of this particular model is the absence of intermediaries and enlargement of the capability set of the BPL families. The groups formed by the BPL families save their money (since, they are above y_{-n}^{th} level) in order to make 'push' available to them. They deposit their savings in a bank of their own choice for a stipulated time period. They also approach a training institute of their own choice according to their requirement. The group interacts directly with the institution providing micro-credit and the institute that provides them with guidance and skill enhancement tools to make sustainable approach towards crossing the poverty line. Thus a substantive freedom to achieve alternate functioning combinations makes the micro-credit exercise more beneficial and effective. The freedom to do what the group wishes to do with the commodities they come to possess not only increases the standard of living by income generation but goes beyond that, emphasizing that a person may value his or her capability to be socially useful.

Special attention is to be given in the marketing arena. The groups lack the wherewithal to compete with the more organized private sector endeavours and are constrained by their inability to assess the market needs and potential. The existing gap should be bridged by dissemination of marketing concepts through group interaction in the training institutes. The form of training should be at par with the current form of consumer taste prevalent in the market. Opportunities for opening of retail outlets for products marketed by the groups in local markets and linkage with different promotional and merchandising establishment should develop. Participation in various promotional events and fairs to ensure better market reach and visibility and necessary follow up on trade leads generated is essentially required. A successful marketing initiative is an absolute imperative for the growth and survival of the business activities of the SHGs.

Absence of intermediaries enables close monitoring mechanism that is performed by the group members themselves. The micro-credit exercise process becomes more transparent and flexible as the groups now become less dependent on the regulatory body. The groups, mainly formed by women, also earn social security, leadership qualities and realize the need of education while performing book-keeping operations. The group members themselves act as guarantor. A flexible mode of operation also gets incorporated as the group members, forming neighborhood groups, knows each other closely, develops a better mode of operation and communication. The groups behave independently with self-esteem. Freedom from dependence on an intermediary helps in building confidence that provides a positive psychological impact. Thus the model results in improvement of quality of life that acts as an icing on the cake of income generation.

The visible changes are reflected through —

- Enhanced social and economic security
- Rejuvenated local economies
- Increasing access to education and health services

- Growing income opportunities
- Groups playing a greater and active role in decision making

The proposed model is expected to bring sea change in the sector if improvement in policy and regulatory framework, financial resources and capacity building takes place along with it to strengthen its institutional outreach and sustainability.

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