

MICRO FINANCE TO MICRO ENTERPRISES: ISSUES AND CONCERNS*

Dr. M. S. Moodithaya **

It is a matter of concern that despite the vast expansion of the formal credit system in India and other developing countries, the institutional credit flow has not effectively reached the rural poor, who include small and marginal farmers, landless labourers, rural artisans, operators of small and tiny micro enterprises and especially women to undertake a wide diversity of production of goods and engage in petty trading and retailing activities. This was primarily because of the difficulties in dealing effectively and economically with a large number of small borrowers who required credit frequently and in small quantity without collateral limitations imposed by the legal framework of the formal institutions and also their perceptions of risks and creditworthiness of the small rural borrowers. The large number of small loans coupled with geographical dispersion also made rural credit considerably more expensive for the banks to administer. As they were commercial organizations and basically interested in profitability and sustainability, these institutions were not interested to finance the rural people due to high transaction costs and low return on capital. Moreover, rural poor found the formal institutions alien and inaccessible; the attributes, characteristics and personal circumstances of the rural people were not very much acceptable to the formal financial institutions (Adams and Fitchett, 1992).

However, with the nationalization of banks, in India, the banks have traversed a long way from

class banking to mass banking, spreading into the rural sector. To involve the banking sector more intensively in rural development, the Regional Rural Banks were brought into the picture in the seventies. Over 32,000 retail rural credit outlets now dot the banking map of the country. They have been able to bring to the banking fold, the savings of the rural customers—nearly Rs.2000 billion, which accounts for nearly fifteen percent of the total deposit base of the banking sector. They have built up a customer base of 135 million of deposit accounts in the rural branches as on March 2006 (RBI, 2006).

Having entrenched in the rural set up for more than three decades now, the bare-foot banker has reconciled to the ground realities. He has also realized the inevitability of dealing with a large section of the illiterate folks, who have remained beyond his reach. For penetrating deeper into this heterogeneous segment of the rural society, he has adopted, willingly or otherwise, many schemes under the populist poverty alleviation programs. The implementation of some of these schemes has improved the banker's accessibility to the needy sections, to some extent. Delinquency apart, the procedural constraints add to the cost of operations. The banker's interest wanes away, when the lending programs become less remunerative, especially in the wake of the Financial Sector Reforms.

A significant innovation in the credit delivery

* Based on the Paper prepared for presentation at the 7th ISTR international Conference held at Bangkok on 9-12 July 2006.

** Director, Justice K. S. Hegde Institute of Management, Nitte

system introduced in the recent years was the fostering of Self-Help Groups by the banks, either directly or in association with NGOs or the State. Extension of microfinance to the otherwise inaccessible sections of the rural society becomes feasible under this arrangement. The National Bank for Agriculture and Rural Development (NABARD) has played a crucial role in the propagation of this operational framework.

There were nearly 2.24 Million SHGs operating in India, with an outstanding credit level of Rs.113.97 billion as on March 2006 (NABARD, 2006). With small doses of credit to the members of their groups, they have been able to provide gainful employment and have brought about some visible changes in their earnings. The achievements of SHGs in India as on 31st March 2006 are presented below:

Table-1
SHG BANK LINKAGE PROGRAMME
STATUS AS ON 31 March 2006

Sl.No.	Particulars	Cumulative as on 31 March 2006 #
1	Number SHGs linked	22,38,525
2	Percentage of women groups	90
3	Number of participating banks	501
	i. Commercial Banks	47
	ii. Regional Rural Banks	124
	iii. Co-operative Banks	330
4	Bank Branches participating	41,082
5	Number of States/UTs	31
6	Number of districts covered	572
7	Number of Partners	4323
8	Bank Loan (Rs in billion)	113.97
9	Refinance (Rs. in billion)	41.56
10	Number of poor households assisted (in million)	32.98
11	Average Loan/SHG (Rs.)	50,913
12	Average Loan/Family (Rs.)	3637
13	Model Wise Linkage (Cumulative) (%)	
	i. SHGs formed and financed by Banks	21
	ii. SHGs formed by other agencies but directly financed by banks	72
	iii. SHGs financed by banks using financial intermediaries	7

Data are provisional except those shown in Serial numbers 1,2,8 & 10
 Refinance refers to the liquidity support provided by NABARD to formal banking institutions for extending credit support to SHGs
 one US \$= Approx Rs 45/-
 Source: NABARD Fact Sheet, 2006.

One of the implicit objectives of rural development in India is the creation of off-farm employment opportunities, for reducing the dependence on land-based activities. The growth rate of employment avenues in the rural sector has been almost stagnant during the last decade. The imperative need is therefore for the creation of gainful employment opportunities within the rural economy. This can prevent the huge cost, financial and social, involved in the massive displacement of rural labour force migrating into the cities. Quite a few State-sponsored programs are being implemented with this objective.

The banking system also has been directed to play its role in this process. In rural credit disbursement, concerted efforts are made to promote the non-farm activities in rural areas. Self-employment ventures in trading the farm and non-farm products and production of consumer goods, food articles, and garments are some of the programs commonly promoted by banks, through the SHGs. There are reasons to believe that given the necessary support and guidance, some of the SHGs have been successful in influencing the employment environment of their members. It may be intangible in some cases, explicit in some others. There is a need for documenting their achievements, for drawing inferences from their experiences.

Objectives of the Study:

This is a study of the evolution of Self-Help Groups as Micro Finance clients to micro enterprises. The study analyses how SHGs work as facilitators of employment generation in the rural sector, at a very nominal investment per unit. The illiterate women come together, pool their meager savings and lend a helping hand to the needy to take up a self-employment venture.

Taking a small loan, she dares to engage herself in some productive activities. She takes the risk of investing the borrowed money; she struggles to earn enough money to maintain her family and to repay the loan. From disguised unemployment, she graduates into under-employment initially; and if she succeeds, she can provide partial employment to one or two others. Success brings in an improvement in income and other changes follow, albeit haltingly. If she fails -- as there are enough hurdles to cross and uncertainties to encounter it may be a disaster for her whole family. But it is heartening to note that the number of SHGs is on the increase and the volume of Micro Finance extended to them also is growing. Banks and NGOs are no doubt playing a pro-active role. But what is pertinent to enquire is what motivates these illiterate women to take the risk of starting the self-employment activities? This has to be critically analyzed on the basis of the perceptions and observations of the stakeholders.

The sustainability of self-employment ventures has to be assessed over a fairly wider time horizon and also over a wider variety of activities undertaken. Its critical appraisal is necessary to ascertain the long-term utility of such programs. If the financial scaffolding is removed, can the SHGs remain strong enough to carry on the programs? What is the gestation period for different types of self-employment ventures? These issues have to be examined empirically, based on the field data.

The benevolence and guidance of the NGOs or the non-profit organizations are very much needed in the initial stages. But how long should they hold the hands and make the SHGs to walk? What type of support is required for them to become self-reliant? This has to be assessed

objectively, based on the feedback from all those concerned with the development of SHGs and women empowerment. The banks and the self-employment training institutes established through private initiatives are among the interested agencies, consulted for this purpose.

The specific objectives of the study are briefly stated as follows:

1. To study the process of evolution of SHGs as a facilitator of rural employment generation.
2. To evaluate the sustainability of the SHGs and their self-employment ventures.
3. To suggest appropriate measures for making the transition of SHGs as Micro Finance clients to micro enterprises.

The study has used both secondary and primary data. A thorough review of the literature on the subject and the official reports as well as evaluation studies available was the basic approach adopted in the study, supported by a purposive field survey. The reports of the committees and study groups appointed by the Government of India, Reserve Bank of India and NABARD were studied, besides the reports of the evaluation studies available.

SCOPE OF THE STUDY:

Empirical part of the research study was based on a field survey confined to the Karnataka State of South India. Karnataka has been in the forefront of rural banking, and today occupies the third position in promoting SHGs, among all the States in India, after Andhra Pradesh and Tamil Nadu. The total number of SHGs operating in Karnataka is 0.23 million and the total amount of credit lent through them is Rs.9.93 billion as on March 2006 (NABARD, 2006).

Six districts in Karnataka State are selected for the study, Dakshina Kannada, Udupi, Shimoga,

Mysore, Hassan and Uttara Kannada districts. In these districts, as a result of the efforts made by commercial banks and *grameena* banks, 23,716 SHGs are in operation. A sample of 200 SHGs is selected from these districts for detailed analysis. Selection is made from the list of SHGs promoted by six banks, namely; Syndicate Bank, Netravati Grameena Bank, Sahyadri Grameena Bank, Cauvery Grameena Bank and Varada Grameena Bank. Two District Central Cooperative Banks also were included, namely South Kanara District Central Cooperative Bank Ltd and Kanara District Central Cooperative Bank Ltd. Cauvery Grameena Bank, in fact, has been considered as a pioneer among the *grameena* banks in sponsoring and supporting SHGs.

The study was confined to the rural branches of these banks. The number of branches involved was 50. The sample was selected on stratified sampling basis considering location of the SHGs at different zones of economic development and the variety of self employment activities undertaken. The total number of beneficiaries of the SHGs selected was 1200.

RESEARCH METHODOLOGY:

The field survey was conducted on the basis of a specially designed questionnaire. The members of the selected SHGs were interviewed mostly at their work places. In some cases, they were met in groups at the branch for an informal and unstructured discussion. The managers of the branches concerned were also interviewed separately to have an insight into their perception of the programs.

The NGOs associated with the selected SHGs were approached during the field survey to assess their involvement in the functioning of

the SHGs. Officials of the Rural Development and Self-Employment Training Institutions (RUDSETI) in Udipi were met to elicit their views on the self-employment opportunities created through their training institutions. Similarly, the officials of Syndicate Bank Rural Development Trust at Kumta were interviewed to know about their experiences in creating self-employment avenues for women.

Discussions were held with chairmen and other senior officers of the four *grameena* banks included in the study to get a first hand information about their experiences in forming SHGs and financing their members. Field survey was conducted by the specially trained field investigators, with the help of three questionnaires during the period from December 2003 to April 2004. One questionnaire was used for the financing banks; another was for the selected SHGs and the third was for the individual members of the SHGs, eliciting their views on the impact of SHGs on their life style.

The field data is tabulated to draw inferences relating to the objectives stated earlier, employment generation, gender-empowerment and the role played by various agencies in supporting the efforts of SHGs. An analysis of the employment opportunities created both through an expansion of the existing occupations and the new self-employment ventures adopted is made. The additional income generated and the extent of microfinance availed and utilized is evaluated critically. An attempt is also made to examine as to whether SHGs have received credit support and subsidies under any other poverty alleviation programs in vogue. An appraisal of the supportive role played by the official and non-official agencies is made based on the available data. A SWOT analysis of the sustainability of

the conceptual and operational framework of SHGs is made to assess its future role.

MAJOR FINDINGS OF THE STUDY:

The common perception about microfinance is that it works as a reliable, cost-effective means of generating employment opportunities for the members of the SHGs, enhancing thereby their income. While this expectation is not very far from reality, as the experience the world over indicates, the extent of its fructification depends upon a number of factors. The differences in the socio-economic conditions, close family and farm activity linkage, the nature of avenues available for self-employment ventures and the extent of unemployment situation in the villages concerned influence the employment generation process. In villages, where the ratio of people living below the poverty line is very large, creating employment opportunities would naturally take a longer time. Where the purchasing power is very poor, it would be difficult to enhance the demand for the additional goods and services produced locally as a result of the microfinance availability. There could be lagged response in the demand pattern. Similarly, if a large share of the microfinance availed goes to consumption purposes, its immediate impact on employment would be negligible.

As emphasized by Von Pischeke and Adams (1983), fungibility of money makes it difficult to identify the ultimate end use of loan. The loan only provides more liquidity to the borrower. When farm and family and production and consumption are closely linked, it is hard to say what purpose it is used and what activity it actually stimulates. Therefore, the net contribution of the loan in terms of employment generation and income growth is extremely difficult to assess.

Another problem in this area relates to the assessment of employment generated. In a situation of rampant under-employment or disguised unemployment, it would be difficult to measure empirically the additional employment created, especially during the initial stages of SHG movement. In many cases, there could be marginal improvements in the number of working hours initially. It would be difficult to quantify, without approximating, the additional man-days gainfully employed. In the case of wage employment, it may not pose much of a problem. There is however reasons to believe that micro finance enable the poor section of the community to venture into self-employment opportunities to increase their income levels and improve living standards. Based on the data collected from 200 SHGs and 1200 beneficiaries, an attempt is made in what follows, to assess the impact of SHG microfinance on employment generation and income levels of its members.

LOANS UTILIZATION:

The credit needs of poor vary with time and are divergent. Initially emphasis would be on emergent consumption needs and clearing of old dues. In the second stage repairs of house, purchase of jewellery and creation of durable assets assume importance. It is only in the third stage the focus will be on investing in income generating self-employment ventures. All SHGs studied have extended credit to their members for various purposes. The SHGs provided loans for the purpose of agriculture, petty business, tailoring, floriculture, dairy, settlement of old debts and contingency purposes such as for medical expenditure, children education, purchase of jewellery and marriage expenditures. Table 2 analyses the loan utilization pattern of 1200 sample members of 200 SHGs studied.

Table 2
Purpose-wise Classification of Loans Availed

Purpose	Members Availing Loan		Average Amount Borrowed per Member (Rupees)
	Number	Percentage	
1. Agriculture	281	23.4	6794
2. Floriculture	32	2.7	7051
3. Fishing	36	3.0	6141
4. Poultry	77	6.4	7797
5. Dairy	146	12.2	7653
6. Vermiculture	13	0.1	3978
7. Petty business	134	11.2	7051
8. Pottery	24	2.0	11125
9. Tailoring	96	8.0	9047
10. Incense sticks making	76	6.3	3336
11. Consumption purposes	62	5.2	6084
12. Loan repayment	76	6.3	4168
13. Non-borrowers	147	12.2	nil
Total	1200	100.0	6182

Source: Field Survey Data

Out of 1200 sample SHG members, only 147 members have not availed loans. They are mostly from the recently set up SHGs who have not yet started lending operations. It is very interesting to note that only five percent of the members have borrowed for consumption purposes, which include medical expenses, educational expenses and also expenses incurred for social and religious ceremonies. The average amount borrowed for this purpose is Rs. 6084. This amount is slightly lower than the average amount of credit obtained by the SHG members for all purposes. The average loan amount for all purposes works out to Rs. 6182. Another important finding is that 76 members obtained loans for repaying the costlier loans they have obtained from the moneylenders. The average amount borrowed for this purpose is the lowest at Rs. 4168. This clearly shows that SHGs are gradually replacing the moneylenders in the rural areas.

The most important finding of the study is that 95 percent of the SHG members have borrowed for productive purposes. This feature has very crucial implications. It enhances the scope for additional employment creation and also income. The largest number of SHG members in the sample has borrowed for agricultural purposes. This is understandable, since agriculture is the dominant economic activity in the districts selected for the study. Small size of the farm holdings is a factor limiting the expansion of farming in the coastal districts. The borrowings in these districts are therefore confined to diversification particularly for raising some tree crops like coconut, vanilla or vegetables.

Dairy is the second most important economic activity benefited from the SHG lending in

almost all districts studied. Dairy provides regular income and marketing is not a problem with the establishment of cooperative milk societies and also private processing units in the districts selected. Even the landless farm households can rear a couple of animals and gainfully so, where the facilities for collection of milk as well as veterinary facilities are available. Under the Integrated Rural Development Programs, it has been observed that there has been a virtual redistribution of cattle in favor of the marginal farmers and even the landless farm households. Despite the well-known defects of the poverty alleviation programs - same cattle being shown as collateral to different banks - dairy business has received a fillip, thanks to the milk routes, chilling plants and the growing demand for milk. Small dairy of two high yielding cows has therefore become an attractive economic proposition for SHG members particularly women. Table No. 2 shows that 12 percent of the sample SHG members availed loans for dairy. The average loan for dairy works out to Rs. 7653. Poultry is another important agricultural activity benefited from the SHG lending operations. About six percent of the sample borrowers availed of this loan. The average amount borrowed for this purpose is Rs. 7797, slightly higher than dairy.

Floriculture has attracted the attention of 32 members of 6 SHGs in Udupi district. Jasmine cultivation is a lucrative vocation in this part of the district, as this flower known for its unique fragrance has a ready market in Mangalore and Mumbai. Jasmine flowers neatly woven into garlands are collected daily from the growing centers and sent to Mangalore. It is very interesting to note that 2 SHGs among them sponsored by Shirva branch of a commercial bank, have enabled their members to take up the

cultivation of this crop, which requires tender care, grown in their small holdings. Vermiculture is another new activity on the farm front, gaining the confidence of the SHG members specially in Uttara Kannada district. The infrastructure and the finance needed for this activity being very little, it is being adopted by some of the members, where demand for chemical-free crops is slowly emerging.

Fisher women, who formed SHGs in the coastal districts have borrowed for enlarging their marketing activities and not for fishing activities. Instead of carrying the fish on head or by the local transport, a group of them from fishing villages of Murdeshwar Taluk have thought of an alternative and quicker means of transporting fish. They have borrowed from their Kasturba Swasahaya Sangha, sponsored by the Murdeshwar branch of the Regional Rural Bank for purchasing a tempo for transporting fish to the nearby towns. Transporting the perishable fish from the fishing centers, using ice for preservation, they are now in a position to reduce the time for transportation and sell it in the consuming centers at higher prices.

Petty business and retail trading in consumer goods and eatables are the most important non-farm activities benefited from the SHG micro-financing. About 11 percent of the members of SHGs studied have borrowed for this purpose. Interestingly, they include selling the consumer products of a multi-national company like Hindustan Lever Ltd Kumta Taluk of Uttara Kannada district. The FMCG giant, instead of extending its own retail network in remote villages, is marketing their products through the SHGs. It delivers the products at selected centers for the SHGs to pick up. The SHG members get a commission of 5 percent on their sales. During

an interaction with these women, it was observed that some of the relatively costlier cosmetic items were also sold in the villages. The changing consumer preferences for some non-essential products were evident, as these ladies have revealed that they also use some of these items. The average amount borrowed is Rs. 6958.

Preparing food articles like pappad, pickles, soft drinks, chips, wafers and selling them are the other gainful activities undertaken by the SHGs. These products are marketed through local shops with the brand of SHGs manufactured. Some SHGs also use religious or marriage functions for marketing their food items in bulk. Inter-dependence of a few SHGs in the production and sale of a number of eatables is also observed in Jali village of Bhatkal Taluk in Uttara Kannada district. It was a win-win situation, where one SHG (Deviprasada Swasahaya Sangha) was selling some of the ingredients required for the production of certain eatables and the other SHG (Manjunatha Mahila Swasayaha Sangha) was selling its finished products to the former. An enterprising SHG, Spandana Swasahaya Sangha, was producing an ingenious variety of soft drink, filled in plastic sachets and marketed in the nearby villages. A boy appointed by the SHG goes round on a cycle, selling this product.

Pottery, a dying occupation, is the traditional occupation of 24 members. They are in two SHGs included in the survey at the Dhanwadi village of Shimoga district and Bajagoli village of Dakshina Kannada district. Those pursuing this occupation in the latter village earn meager income. They are 11 of them, all male members of Sri Devi Swasahaya Sangha promoted by the

Bajagoli branch of the selected commercial bank. Fighting against a declining market for earthen pots, they continue to slog for making pots, which they sell in the local market. The other 13 borrowers from Basaveshara Kumbhara Swasahaya Sangha financed through the Kallihar branch of the Regional Rural Bank are better off as they have changed their production process in tune with the market demand. They are making the pipes, which are purchased by the Agricultural Department for laying the irrigational canals. The captive market for their products has assured them a steady source of income. The amount borrowed is incidentally the highest for this group among the sample SHG members.

Tailoring is almost a universal occupation particularly for women in the villages. When banks entered the villages in the initial phase of rural branch expansion after bank nationalization, lending for the purchase of sewing machines was the most popular line of credit they were adopting. This was partly to the initiative taken by the sewing machine dealers to widen their market. These machines, in many cases, were distributed in a small public function held in the nearby town. The dealers were spontaneous in delivering the machines after the ceremony, at the doorsteps of the borrowers. The bankers and the dealers were happy having reached their targets. The problems of the borrowers would begin thereafter, as the demand for the tailoring services would not be growing as anticipated since there were more tailors in the village. There were cases of villages having sewing machines more than what could be gainfully utilized. Both the bankers and borrowers appear to have become wiser now. In the selected SHGs, only 96 members or 8

percent of the sample have borrowed for pursuing the tailoring business. Lady tailors have also become conscious about the viability and the changing market conditions for ready-made garments. This was visible from the display of garments stitched by the members of an SHG promoted by the Kagal branch of the Region Rural Bank, shown to the Survey Team at the branch premises. Their average borrowing was Rs.9047, which is the second highest next to pottery.

Preparing incense sticks and *kumkum* are other self-employment ventures taken up by some SHGs in Uttara Kannada district. Kumkum is a product, which is in large demand, specially, during the temple festivals. Shringara Pragathi Swasahaya Sangha, sponsored by Kanara District Central Cooperative Bank Ltd in Sirsi has an arrangement with the famous Maarikamba Temple for supplying the *kumkum* produced by them. The average loan amount availed for these purposes work out to Rs.3336, which is the lowest among the various purposes for which SHGs lent.

In general, SHGs lends to various purposes, both for consumption and investment. The pattern of lending clearly shows that microfinance operations of SHGs not only facilitate diversification of agriculture but also enables rural poor to move towards income generating non-farm activities.

Employment Generation:

Before assessing the changes in the employment generation as a result of SHG financing, a review of the occupational pattern of the 1200 members of the SHGs selected is important. Table 3 presents relevant data in this regard.

Table 3
Occupational Pattern of Sample SHG Members

Occupations	Number	Percentage
Agriculture	193	16.1
Non-agriculture	307	25.6
Self-employment	260	21.7
Home makers	287	23.9
Others	114	9.5
Unemployed	39	3.3
Total	1200	100.0

Source: Field Survey Data

It is relevant to note in Table 3 vis-à-vis Table 2 that the occupational pattern and the purposes for which the loans were availed are not directly comparable. This is largely on account of a separate classification of home makers which is numbering 287. Besides this there are 114 respondents classified as *others* in addition to 39 respondents unemployed.

One peculiar feature of the sample members of SHGs, is that majority of them are not from the agricultural families. Only 16 percent of them belong to agriculture as the main occupation. It is quite likely that the non-farming households take more interest in joining SHGs than those from the farming communities. This may also be due to the fact that most of the members of the agricultural community belong to the upper caste and fully engaged in one or the other activities relating to farm operations during various periods. Their desire to join SHGs may not be as effective as that of other occupational groups. The analysis of socio-economic characteristics of the SHG members has clearly shown that most of the SHG members belong to scheduled caste and backward community without agricultural land. They depend upon

casual labour, *beedi* rolling and other off farm activities for their livelihood. Those who depend on agriculture are mainly small and marginal farmers.

Nearly one-fourth of the selected SHG members are engaged in non-farm activities. One of the most common part-time job particularly for women in the villages of Dakshina Kannada and Udupi districts is *beedi* rolling. The recent down turn in the fortunes of the *beedi* industry, it is revealed during the field survey, is one of the factors inducing most of the women in these two districts to join SHGs. About 22 percent of the sample is associated with self-employment ventures. Retail trading in food articles and tailoring are the two most common self-employment avenues. Homemakers, not engaged in any specific activity, are 287 in number, constituting 24 percent of the sample. In rural areas housewives do find some time to engage themselves in one or other economic activity, sitting at home. If this is a case of disguised unemployment, 39 members have informed that they are totally unemployed. Most of them are unmarried girls, both illiterate and literate, joining the SHGs with

some hopes of either improving their marriage prospects or for engaging themselves in some activities in the village. About 10 percent belong to "Others" which include seasonal labor employment in agriculture or non-farm activities.

As already mentioned, the quantification of the additional employment generated as result of the utilization of the micro-credit facility availed from the SHG is a difficult task. The inability of the respondents in assessing the changes in their own employment pattern before and after availing the credit is the major bottleneck. In the early stage of lending operations, emphasis is on emergent consumption needs, SHG lending operations in this regard does not generate employment. Even in the case of agricultural loans, SHG lending is mainly for carrying on seasonal farming operations, which does not result in additional employment. It is only in the case of expansion or venturing of new income generating activities, the employment elasticity

is higher. With these limitations, an attempt is made to gather the data relating to the additional man-days of employment generated under various activities financed by the selected SHGs. The man-days are worked out based on gainful employment of 6 to 8 hours per day depending on the type of work.

The positive impact of employment generation on group members, who have availed of SHG finance, is found in 81 percent of group members. Out of 1200 members studied, 147 members of the groups are non-borrowers. They mainly comprise young girls and the new comers without any gainful employment. About 12 percent of the sample SHG members have borrowed for repayment of existing loans and consumption purposes, which do not have any positive impact on the additional employment generation. Table 4 provides data on the additional employment generated as a result of SHG financing for various income-generating activities.

Table 4
Additional Employment Generated from SHG Lending
(Average Man-days)

Activity	Employment Prior to borrowing	Additional employment generated	Total employment after using loan
Agriculture	133	22	155
Floriculture	190	56	246
Fishing	167	15	182
Poultry	157	62	219
Dairy	144	46	190
Vermiculture	124	24	148
Petty Business	205	56	261
Pottery	180	89	269
Tailoring	212	72	284
Incense sticks Making	93	20	113
Weighted Average	154	41	195

Source: Field Survey Data

Agricultural activities have lower employment potential compared to poultry, dairy, floriculture and non-farm income generating activities such as tailoring, petty business etc Financing for fish marketing generated only 9 percent increase in employment, which is the lowest amongst the various activities financed. This is followed by agriculture, where employment increase is 16 percent. Agriculture being seasonal in nature, demand for labor employment is limited. It is only in the case of dairy and poultry, demand for labor continuous throughout the year. Vermiculture also provides the lower employment opportunities, as the labor involved in this activity is very low.

In the case of non-farm income generating activities, the employment potential depends on the local demand for the end products. In the study undertaken, the percentage increase in employment in these activities ranges between 30 percent and 50 percent. The highest employment increase is in the case of cottage industry like pottery, followed by tailoring. Petty business and tailoring provide fairly large number of days gainful employment. Though seasonality does not directly influence the number of days of employment in these two occupations, religious and social ceremonies do to a large extent. As the

demand for incense sticks and *kumkum* is determined mainly by the festivals and annual religious functions in the temples, the employment opportunities they create are not very high. The average number of days employed by the members of the selected SHGs is 154 days prior to SHG finance. With the financial assistance, SHGs have been able to increase employment of their members by 41 days or 27 percent within a short period of 4 years of their existence. With the repeat loans and shift towards more and more income generating non-farm activities, employment elasticity of SHG finance will go up, which will definitely have multiplier effect on employment generation.

Income Enhancement: In the ultimate analysis, the benefit derived by both SHGs as microfinance institutions and members in terms of income enhancement is important for the success of the SHG program. An attempt is therefore made to assess the impact of the program on the income status of the group members as well as SHGs studied. The field data on gross and net income were collected from 1200 SHG members according to the purpose for which they borrowed for both prior to loan and after loan periods. They are analyzed in Table 5

Table 5
Impact of SHG lending on Income of the Borrowers
(Average income in Rs.)

Purpose of loan	Borrowers		Net Income prior to borrowing	Net Income after using loan	Incremental Income
Agriculture	281	23.4	6365	9575	3210
Floriculture	32	2.7	6633	6000	4850
Fishing	36	3.0	5983	11483	3870
Poultry	77	6.4	2470	9260	6790
Dairy	146	12.2	6480	15120	8640
Vermiculture	13	0.1	3850	6690	2840
Petty business	134	11.2	-	6000	6000
Pottery	24	2.0	4289	7889	3600
Tailoring	96	8.0	6038	13238	7200
Incense making	76	6.3	3450	7320	3870
Consumption	62	5.2	5438	5438	-
Loan repayment	76	6.3	5898	5898	-
Non-borrower	147	12.2	3650	3650	-
All Purpose	1200	100.0	5336	8869	3533

Source: Field Survey Data

The incremental income earned depends on the type of the activity undertaken by the group members with the financial assistance from SHGs. Those who have taken loan for consumption purpose, they have not benefited in terms of income increase. It is likely that they benefited in terms of repayment of costlier loan, freeing from the clutches of moneylender, educating their children, improving their health and repairing their houses. All these have definitely contributed to improve their standard of living. In terms of income enhancement, dairy and tailoring followed by poultry, petty business and floriculture appear to be more attractive to SHG members. Incremental income earned in vermiculture is the lowest, followed by agriculture.

The average income of the group member prior to loan works out to Rs. 5336. After the investment with the financial assistance from the SHGs, the average net income earned works out to Rs. 8869, giving the benefit of incremental income of Rs. 3533. If the borrowings for consumption purposes, loan repayment and

non-borrowers are excluded from computation of income at post loan period, the average net income earned works out to Rs. 10896. This gives an average incremental income of Rs. 5560 per borrower. It clearly indicates that the microfinance has benefited the SHG members significantly in terms of additional income.

As regards to SHGs, their income comprises of interest margin earned for the funds lent after deducting the cost of funds, penalty fee collected from members on account of default of repayment in time, membership fee, and fine on account of non-attendance in the meetings conveyed. Their expenditure mainly includes cost of stationary for bookkeeping, meeting expenditures and miscellaneous expenditures such as social empowering by way of visit to important places, attending conferences etc. The surplus fund is usually used as fund of the group for lending to members. Table 6 shows the average income earned, expenditures incurred and surplus generated by the sample SHGs in different command areas of the banks.

Table 6
Income and Expenditure Statement of SHGs
(Rupees)

Banks	No of SHGs	Income Earned	Expenditure Incurred	Surplus Generated
Commercial Banks	46	4325	477	3848
RRBs	117	9236	906	8330
Co-op. Banks	20	6837	3352	3485
All Banks	184	7734	1078	6656

Source: Field Survey Data

Out of 200 SHGs studied, 184 reported earning income and the remaining 16 are still in the initial stage of formation. Excluding cost of funds,

SHGs do not incur any financial intermediation costs. Transaction costs for lending is limited to only stationary costs and meeting expenditures.

In the case of commercial banks and Regional Rural Banks the expenditures incurred constitutes about 10 percent of the income earned. Surprisingly, in the case of cooperative banks, percentage share of expenditure in the income works out to 49 percent. For the sample, on an average, the income earned works out to Rs.7734 and surplus Rs.6656. The expenditures incurred constitutes 14 percent of the income.

Table 7 provides district-wise data on the income and expenditure earned by the sample SHGs.

From the Table it may be seen that inter-district variations in the income and expenditures incurred are very wide. Whereas, the SHGs in Hassan and Mysore districts earned the highest average income ranged from Rs.14885 to Rs.10354, SHGs in Udupi and Dakshina Kannada districts earned the lowest average income ranging from Rs. 4103 to Rs. 4312. Similarly, the expenditures incurred ranges from Rs. 353 in Dakshina Kannada district to Rs. 2741 in Uttar Kannada district. The percentage share of the expenditure in the income varies from eight percent to 31 percent.

Determinants of Economic Empowerment:

In the ultimate analysis, economic impact of the

SHGs program depends on the ability of the SHGs to serve continuously its members by giving repeat loans to enable its members to venture into self-employment and to expand on viable basis for their economic uplift. The successful performance of SHGs depends on their operational viability, which is reflected in the surplus generated by them. The economic empowerment of the SHG members is, on the other hand, reflected in the benefits derived by them from financial services rendered by the SHG in terms of incremental income earned. In this section, an attempt is made to determine the major factors, which contributed to successful performance of SHGs and economic empowerment of the members by carrying out correlation and regression analysis.

The regression models are constructed separately; one for the SHG performance and the other for the beneficiaries. In the case of SHG performance, the surplus or net income earned by the SHG is considered as dependent variable and independent variables considered are age of the SHG, number of members, saving deposits per member, loan amount disbursed per member and percentage of expenditure in gross income. For the sample of beneficiaries, the incremental income earned by the SHG members is considered as dependent variable,

Table 7
Income and Expenditure Incurred by SHGs
(Rupees)

Districts	No. of SHGs	Income	Expenditure	Surplus
Udupi	52	4103	459	3644
Dakshina Kannada	31	4312	353	3959
Uttara Kannada	27	8739	2741	5998
Shimoga	18	9677	1128	8549
Hassan	19	14885	2006	12879
Mysore	37	10354	839	9515
All Districts	184	7734	1078	6656

Source: Field Survey Data

and saving deposit per member, loan amount per borrower, age and qualification of SHG members are considered as independent variables.

Determinants of SHG Performance:

The correlation matrix of important variables, which contribute towards successful performance of the SHGs are presented in Table 8

Table 8
Correlation Matrix of Important Determinants of SHG Performance

Variables	Net income earned	Saving Deposit	Loan Amount	Age of SHG	Number of members	Percent of expenditure
Net income earned	1.00	-0.02	0.48**	0.29**	0.23	-0.32**
Saving deposit	-0.02	1.00	0.32**	0.03	0.02	0.02
Loan amount	0.48**	0.32**	1.00	0.12	0.03	0.21**
Age of SHG	0.29**	0.03	0.12	1.00	0.05	0.22**
Number of members	0.23**	0.02	0.03	0.05	1.00	0.12
Percent of expenditure	-0.32**	0.02	0.21**	0.22**	0.12	1.00

** Correlation significant at the 0.01 level (2-tailed)
Source: Field Survey Data

The correlation matrix shows that the important variables, which are significantly correlated with the net income earned by the SHG are loan amount disbursed to members, age of SHGs and size of SHGs in terms of members. All these variables are positively and closely correlated with the net income earned by the SHG. The percentage of expenditure incurred is also significantly and negatively correlated with the net income earned by the SHGs. Surprisingly the saving deposit per member has shown

negative correlation with the net income earned. This may be due to the fact that most of the SHGs are in the initial stage of saving mobilization and depend on the banks for loanable resources.

Table 9 contains the estimates of the regression analysis carried out by taking into consideration the net income earned by the SHGs as dependent variable and others as independent variables.

Table 9
Regression Estimates of Determinants of SHG Net Income

Variables	Estimates	t-value
Constant	-6514.857	2.309
Saving deposit	-0.014	-0.236
Loan Amount	0.446	7.562**
Age of SHGs	0.169	2.777*
No. of Members	0.145	2.466*
Expenditures	-0.493	8.464**

Adjusted R-square = 0.48, No. of Observations = 200, * indicates significant at 5 percent level, ** indicates significant at 1 percent level. Source: Field Survey Data

The regression analysis shows that the percentage of expenditure incurred and the loan amount disbursed are the major determinants of the net income earned by the SHGs. An increase in the percentage share of expenditure of SHGs in their total income leads to a significant decrease in the net income. Similarly loan provided to members has contributed significantly to the net income of the SHGs. Other important variables, which contributed positively, are the age of the SHGs and size of

memberships. It is reasonable to expect that more years of existence of SHGs would contribute positively to their successful performance.

Determinants of

Economic Benefits to Members:

The correlation matrixes of important variables, which contribute to economic empowerment of the SHG members, are presented in Table 10.

Table 10
Correlation Matrix of Variables Determining Economic Empowerment

Variables	Net Income	Savings Deposit	Loan Amount	Age	Qualification
Net Income	1.000	0.119 **	0.140**	0.005	-0.001
Savings Deposit	0.119**	1.000	0.221**	0.038	-0.067*
Loan Amount	0.140**	0.221 **	1.000	-0.008	0.064*
Age	0.005	0.038	-0.008	1.000	-0.288**
Qualification	-0.001	-0.067	0.064*	-0.288**	1.000

** Correlation significant at the 0.01 level, * Correlation significant at 0.05 level

Source: Field Survey Data

The correlation matrix shows that only saving deposit and loan amount have statistically significant correlation with the net income earned. It should be also noted that the correlation between the savings deposit and loan amount also found statistically significant. This shows that the saving deposit determines the borrowing capacity of the SHG member. An increase in loan amount leads to higher employment and increase in the income levels of the members. Contrary to the general perception, age and qualification have very weak

correlation with the net income of the SHG members. As far as the educational qualification is concerned, the correlation is found to be rather negative. This may be due to the fact that the most of the members belong to the age group of below 45 years and have studied mostly upto the primary level.

The regression analysis estimates of determinants of the net income of the SHG members are presented in Table 11.

Table 11
Regression Estimates of Determinants of Net Income of SHG Members

Independent Variables	Estimates	t-value
Constant	5836.781	2.141
Saving Deposit	0.906	3.163
Loan Amount	0.182	4.061
Age	2.769	0.052
Qualification	-38.014	-0.059

Adjusted R square= 0.24, Number of observations 1200

Source: Field Survey Data

The estimated results are statistically not significant and the contribution of these variables to the economic empowerment of SHG members is rather marginal. The value of R square is only 0.24. This may be due to the fact that most of the SHGs studied are still in the initial stages and the fuller benefits of membership are yet to accrue to their advantage.

Strategies to ensure smooth and sustainable transition of the SHGs into Micro Enterprises:

The sustainability of SHGs is dependent to a very large extent on the role played by different actors in the SHG movement. The development purposes of microfinancing through SHGs go well beyond integrating a range of microfinancial services for poverty alleviation to include livelihood promotion, development of local economy, empowerment, building people's democratic organization and changing wider systems or institutions within the society. Therefore, the concerns of sustainability have to be appreciated in a wider perspective, evaluating the role of all the actors in the process. The different actors functioning in the rural financial system may be identified as the members of the SHG themselves, non-governmental organizations, the Government, the banking system and the National Bank for Agriculture

and Rural Development (NABARD). Sustainability of the self-employment ventures assisted through microfinance is the crucial issue in the success of the SHG movement. In a labour surplus economy like that of India, where disguised unemployment is a common feature, self-employment ventures may be able to scratch the surface only, not making a deeper impact on the unemployment situation. The additional employment generated may not be visible, considering the enormous size of the problem. It is however imperative that employment opportunities have to be created, both the non-white collar jobs and the off-farm jobs. The self-employment ventures are a right step in this direction. Finding gainful employment for women is thus an important plank of the employment generation strategy. But how to make them effective and sustainable is a formidable question.

SWOT Analysis of SHGs:

The future potential and prospects of SHGs could be broadly examined based on their strengths, weaknesses, opportunities and threats (SWOT analysis). The analysis of field data, though not very comprehensive, provides an insight into the weaknesses identified and threats perceived by the respondents.

Strengths: The basic strengths of SHGs are community group spirit, simple and informal organization, democratic set up and the unity of members. It is interesting to note that 100 percent of the respondents emphasized that mutual cooperation, understanding and unity as the strength of their SHGs. In all the SHGs studied, the members are united and cooperating. They have come together with a common objective of developing access to bank credit for their economic uplift. Regular meetings of the members of the group enable participatory approach, long lasting group relationship and comraderie. The social cohesion in the group and election of Management Committee in rotation give a sense

of responsibility to each member of the group. The linkage with the NGOs and banks enable them to get the required skills not only to administer the SHGs efficiently but also to venture into income generating micro-enterprises. The group dynamics in terms of group guarantee and group pressure facilitates SHGs as low cost credit delivery system. All these could not have been possible without group formation.

Weaknesses:

The office bearers of the selected SHGs were asked to identify their major weaknesses based on their experiences over the years. The details of their responses are given in Table 12.

Table 12
Weaknesses of SHGs Identified

Weaknesses	SHGs Responding	
	Number	%age
Lack of training	69	34.5
Lack of Marketing facilities	42	21.0
Poverty/lack of resources	38	19.0
Lack of investment opportunities	26	13.0
Illiteracy	16	8.0
Not owning office	6	3.0
Others	3	1.5
Total	200	100.0

Source: Field Survey Data

The major weaknesses identified by the SHGs are lack of training and absence of marketing arrangements for their products, followed by limited opportunities to invest. Since most of the SHG members are semi-literates and housewives, they need training not merely in the management of SHGs and banking transactions but also in skills and capability development to undertake income-generating activities. The

marketing of the products is another area of weakness of SHGs.

The local demand for any product is limited and they would not be in a position to compete with the organized sector. Other weaknesses identified are illiteracy and not owning an office. These are some of the serious problems faced by the SHGs, which may adversely affect their performance in future.

Opportunities:

There is a general consensus among the sample SHGs that SHGs provide great opportunities for members to improve both economic and social empowerment through access to bank credit. For the first time SHG route provides them an easy access to bank credit. Access to bank credit for consumption purposes and any contingency without any collateral is considered as one of the great opportunities, particularly for women. Through the assured access to credit on

a continuous basis, SHGs provide challenging opportunities for their members for undertaking income generating self-employment ventures. The discussion with the banks also proved that for them, SHGs provide a low cost financial intermediary and potential source of deposits.

Threats:

Despite the innumerable opportunities thrown open by the SHG movement, the members have perceived the following threats.

Table 13
Perceived Threats

Threats	SHGs Responding	
	Number	%age
Political interference	108	74.0
Threat from Stri Shakthi (State Scheme)	23	11.5
Non-cooperation at domestic front	18	9.0
Others	11	5.5
Total	200	100.0

Source: Field Survey Data

The main threat identified by the sample SHGs is the political interference. Politicians consider the SHGs as another vote bank and make all efforts to control them. The government agencies consider the SHG movement as another populist program and provide subsidies to promote *Stri-shakti* groups (SHGs promoted by the Government departments), which may threaten the performance of the SHGs, sponsored by NGOs and banks. Government of Karnataka has even recently announced its intension to set up a bank exclusively for Stri-shakti groups. These developments create uncertainty and dependence on government subsidies, which will threaten the very spirit of the Self-Help Groups aiming at self-reliance.

About nine percent of the respondents have conceded that the non-cooperation from the

domestic front does not permit them to actively and fully participated in the activities of the SHGs.

Imponderables and the Future: There remain many imponderables about the future of the SHG movement. Most of the members are blissfully unaware or unconcerned about the future. Their pre-occupation is with the current problems and the available solutions for the same. Solutions to the problems of rural unemployment and poverty cannot be interim relief measures, which give them the solace of a marginal improvement in employment and income. A long term perspective is necessary to evolve a system, which can be relied upon to obtain a more permanent solution. The Integrated Rural Development Program, which was propagated as a major poverty-alleviation program though conceptually very thoughtful,

was not able to make a dent on rural poverty. Huge amount of subsidy and bank loans were channelised for this nation-wide program. It attracted mostly the subsidy-seekers and perhaps not those genuinely interested in using the funds available - the sumptuous subsidies and the cheaper bank credit for generating employment opportunities. Degenerating into a subsidy-distribution program, it did not serve the intended purpose. It is therefore necessary to ensure that the SHG movement does not commit the same mistake: offering subsidies to attract the-would be beneficiaries, who forget conveniently the objective and enjoy the subsidies.

Institutionalization and Improvement:

Institutionalization of the efforts of the SHGs, specially in marketing and guidance is very important for improving the sustainability of the SHG movement. Some concrete steps are being taken by a few NGOs and banks for guiding the members of SHGs for marketing their products. An NGO in Bhatkal has helped an SHG to tie up with a marriage hall, creating thereby a ready market for the *pappads*, pickles and sweets during the marriage season. The *kumkum* prepared by an SHG in Sirsi has a ready market created by the Maarikamba temple. In Kagal, the SHG sponsored by the Varada Grameena Bank has built up a business relationship with a garment dealer for supplying uniforms to school children. The arrangement developed by the SHG in Kagal with Hindustan Lever Ltd for selling their soaps and other cosmetics on a commission basis is another institutionalized arrangement.

Shri Kshethra Dharmasthala Rural Development Project in Dakshina Kannada district has made an excellent arrangement in institutionalizing the marketing of the various products, eatables, soaps, detergents and soft drinks prepared by the SHGs promoted by them. All the products are marketed under the umbrella of a brand name *SIRI*. These products packed in very attractive packages elegantly printed are in a position to compete with

the similar products sold by the multi-national FMCG companies. There is well-organized distribution network, with sales vans carrying the products to different parts of the district.

A similar scheme is in operation in Kolar district in Karnataka (outside the area selected for the study). The Bangalore based, Initiatives for Development Foundation has facilitated the bulk marketing of similar products of a large number of SHGs promoted on a pilot basis by Swashakthi, rural women empowerment project of the Government of Karnataka, under the brand name of *ASWAD* (Association of Swashakthi Women Action for Development). This has become a very successful institutional arrangement in sustaining the efforts of SHGs.

Conclusion:

In a labour surplus country like India, the SHG movement need move up in the learning curve, so as to generate results beyond social and political empowerments. For enabling the SHGs to play their assigned role efficiently, there is an imperative need for *avoiding* target fixation, subsidy distribution and political intervention. There is also the urgent necessity of *providing* vocational training, general guidance and organizational support for ensuring that they mature as micro enterprises.

Capacity building measures should be based on solid ground level planning. Village-wise credit mapping, matched with the local needs and aspirations, has to be the starting point. NABARD has to redefine the contours of Service Area Credit Plans and to monitor their formulation, consolidation and implementation in all stages. The ground-work has to be done by Lead District Managers of public sector banks and the District Development Managers of NABARD. At the corporate level, the RPCD and NABARD have to ensure the incorporation of the micro-credit plans into the business plans of all banks, commercial

and cooperative, having a stake in rural development.

Among the financial agencies, the Regional Rural Banks are the most suitable agency for extending micro-credit, organizationally and temperamentally. Its core competence in this area needs to be encouraged. NABARD may have to device suitable means to enable these banks to play the pivotal role. Where necessary, they may be allowed to open *special branches* (single man) for promoting and assisting the SHGs in the districts, where they operate.

The supportive role of others like NGOs, should not be expected to remain as permanent fixtures. They have to be considered as scaffoldings, which

could be dismantled, when the building is completed. Permanent arrangements are necessary only for training the members of the new SHGs and for the marketing of their products.

The small commonwealth of Self-Help Groups has to be protected from political interference and excessive State munificence. It is an experiment in attaining self-reliance, with little outside help. If we can ensure that the SHGs as micro finance clients graduate slowly as micro enterprises with help from the State, NGOs, Banks and the strong commitment of the members themselves, the experiment can bring in revolutionary changes in countries like India.

REFERENCES

- Adams, Dale W. & Fitchett, D.A. (1992): *Informal Finance in Low-Income Countries*, West view Press, Oxford.
- Adams D.W.; Graham D.H. & Von Pischke J.D. (1984): *Undermining Rural Development with Cheap Credit*, West View Press, Oxford.
- Alex Counts (1996): *Give Us Credit-How Small Loans Today Can Shape Our Tomorrow*, Research Press, New Delhi.
- Banerjee, G D: (2002) "Evaluation Study of Self-Help Group", *Financing Agriculture*, April-June, 2002, Mumbai.
- Basu, Kishanjit & Jindal K. (2000): *Microfinance-Emerging Challenges*, Tata McGraw Hill Publishing, New Delhi.
- Bauman, F.J.A. (1989): *Small, Short, and Unsecured Informal Rural Finance in India*, Oxford University Press, New Delhi.
- Dadhich C L: (2002). "Microfinance Movement for Poverty Alleviation in India" *Financing Agriculture*, April-June 2002, Mumbai.
- Dinker Rao K, (2002): *Taking Banking to the People: NIBM's Role*, published by National Institute of Bank Management, Pune.
- Fernandez, A.P. (1998): *The MYRADA Experience: Alternative Management Systems for Savings and Credit of the Rural Poor*, MYRADA, Mysore.
- Fisher, Thomas & Sriram M.S. (2002): *Beyond Micro-credit: Putting Development Back into Microfinance*, Vistaar Publications, New Delhi.
- Government of India: *Economic Survey 1999-2000*, New Delhi, 2000
- Gupta, Anju *et al*, (2003): "Self-Help Group- A Friend of Poor", *Political Economy Journal of India*, Jan-June 2003, Chandigarh.

- Hans Dieter Seibel and Harishkumar R. Dave.(2002): *Commercial Aspects of Self-Help Group Linkage Program in India*, published by NABARD.
- Indira Misra (2003): *Micro-Credit for Macro-Impact*, published by National Publishing House, New Delhi.
- Joshi, Deepali Pant: (2002) "Microfinance: Need of the Hour", *Financing Agriculture*, April-June 2002, Mumbai.
- Karmakar, K G: (1999): *Rural Credit and Self-Help Groups*, Sage Publications, New Delhi.
- Karmakar, K G.(2002) "Microfinance Revisited", *Financing Agriculture*, April-June, 2002, Mumbai.
- Kropp, Erhard & Quinones Jr. B.R. (1992): *Financial System Development in Support of People's Economy*, APRACA Publications, Bangkok, Thailand.
- Mujumdar, N A.(2002); "Micro-credit Institutions, Grain Loans and Rural Development", *Financing Agriculture*, April-June, 2002, Mumbai.
- NABARD (1995): *Report of the RBI's Working Group on Non-Governmental Organizations and Self-Help Groups*, NABARD, Mumbai.
- NABARD (1999): *Report of the Task Force on Supportive Policy and Regulatory Framework for Microfinance*, NABARD, Mumbai.
- NABARD; *NABARD and Microfinance-2001-2002*. Mumbai, 2003.
- NABARD: *Progress of SHG- Bank Linkage in India-2005-2006*, Mumbai, 2006
- Puhazhendhi, V. (2000): *Evaluation Study of Self-Help Groups in Tamilnadu*, NABARD, Mumbai.
- Reserve Bank of India: *Annual Report-2002-03*, Mumbai, 2003.
- Reserve Bank of India: *Report on Trend and Progress of Banking in India: 2002-03*, Mumbai, 2003.
- Thingalaya N K. (2000) *The Other Side of Rural Banking*, published by Bankers' Institute of Rural Development, Lucknow.
- Thingalaya N.K: (2001) *Grameena Banks in India: A Reassessment*, published by Justice K. S. Hegde Institute of Management, Nitte.
- Thingalaya, N K. (2002) "Microfinance and Poverty Alleviation: Some Issues", *Financing Agriculture*, April-June 2002, Mumbai.
- Von Pischke, J.D.; Adams D.W. & Donald G. (1983): *Rural Financial Markets in Developing Countries: Their Use and Abuse*, The John Hopkins University Press, Baltimore.
- Wadhwa, S C;(2002): "Bank- NGOs Collaboration for Better Rural Lending to the Poor", *Financing Agriculture*, April-June 2002, Mumbai.