# Financial Performance and Sustainability Issues of Subsidized and Non- Subsidized Entities in North East India

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## Abstract

**Self help groups (SHGs) are important intermediaries between lending institutions and loan seekers who are poor. In the contemporary environment, subsidized lending through SHGs has been emphasized in India. This effort of the government has led to an increase in the number of subsidized SHGs across all the states. However, it has been claimed that SHGs are mainly formed to avail subsidy, and they erode their capital base over time. Furthermore, this has raised questions regarding their long-term sustainability. The present study, therefore, attempted to unveil the sustainability aspect of subsidized SHGs in North East India and compared the same with those of non-subsidized SHGs and found out the status of financial performance and sustainability of each of the entities. The study mainly focused on one of the eight sister states of North East India, that is, Meghalaya from which four districts were considered for the present study by considering a total sample of 150 subsidized and 50 non-subsidized SHGs. Besides, business and loan performance ratios, operational self sufficiency ratio (OSSR), and financial self sufficiency ratio (FSSR) were calculated to find the sustainability position of each of the entities. Among the statistical tools, regression analysis was used to examine the impact of subsidy on the sustainability of subsidized SHGs. The results at the end discovered that the non-subsidized SHGs are better entities in terms of financial performance and sustainability in the state.**

***Keywords:*** **microfinance, self help groups, subsidy, sustainability, north east India**

**JEL Classification: C21, C22, G21, H23**

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Efficient and effective rural credit has always been viewed as a competent mechanism for the development of an economy. Shah, Rao, and Vijay Shankar (2007) viewed rural credit as not only a commodity that is needed for the poor to make themselves free from usurious money lenders, but also to build up a good critical public for the development of the backward agrarian economy. Over the last few decades, the provision of microfinance has been accepted as a competent weapon to help the poor. It has changed the perception of the traditional banker of the 'poor being not bankable.' The self-help groups (SHGs) are considered as important agents in enhancing micro financial services and outreach of microfinance among the poor.

The real acceleration of the SHG movement in India started with the initiation of the pilot project of NABARD. This pilot project of linking 500 SHGs to banks, known as the 'SHG-Bank Linkage Programme' (SBLP) was started in 1992. Today, the SBLP is providing finance to both Swarnajayanti Gram Swarozgar Yojana (SGSY) and non-SGSY SHGs. It has enabled more than 97 million poor households to access sustainable financial services from the banking sectors. The institutional credit outstanding against the SHGs at the end of March 2011 exceeded ₹ 31, 200 crore, thereby recording the highest figure in the world (NABARD, 2011).

Microfinance services, though considered important for the poor, are not evenly spread in Indian states. A study conducted by the Indian Institute of Bank Management (IIBM), Guwahati, Assam, and commissioned by

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Sa-Dhan (Deshpande, 2014) revealed that the SHG movement has not proliferated in some of the states of the NER. Even the SBLP, because of uneven and thin spread of commercial banks, has not achieved its full potential growth in this part of the country. The hesitation of bankers to serve the rural poor, because of high transaction costs, is yet another plausible reason of non-development of the microfinance sector in the region, including Meghalaya.

Besides all these odd circumstances prevailing in the region, intervention of microfinance has been felt as one of the effective tools to alleviate poverty and to help the mass poor to increase their standard of life. In 1998-99, the Government of Assam conducted a survey on the rural non farm sector, and found that most of the small enterprises were serviced by the informal financial market. In fact, the informal financial market in the North-Eastern Region was widespread and diversely organized, reflecting the creativity of local communities to meet their specific needs. Under these circumstances, the services of MFIs (especially the microcredit MFIs) play an inevitable role to fulfill the small financial needs of these heterogeneous groups, in particular, and economic development of the region as a whole. The state of Meghalaya has been the most proactive in the formation of SHGs. The state has also earned its name as being first state in which banks directly started credit disbursement to SHGs.

## Literature Review

The past few decades have witnessed and accepted the provision of microfinance mechanism as an effective and popular measure to fight against poverty, enabling those without access to lending institutions to borrow at bank rates and start small businesses. The micro financial services have been found to be more effective for the lending institutions in reducing their transaction costs and improving recovery rate when SHGs and NGOs are used as intermediaries. A study conducted in Indonesia (Panjaitan-Drioadisuryo & Cloud, 1999) suggested that when agencies, governments, and non-governments in a developing country make credit available to low income women, they can substantially reduce the cost of delivery, increase repayment rates, and greatly improve the well-being of the poor families. A study conducted by Puhazhendi (1995) for costs incurred by banks in India to lend to the rural poor directly and through NGOs and SHGs as intermediaries concluded that lending through NGOs and SHGs reduced transaction costs for the banks in screening, client selection, and contract enforcement. Furthermore, a study conducted in Assam (Purkaystha, 2004) concluded that the high recovery rate from SHGs encouraged many banks to provide microcredit through the SHG route, which ultimately led to the microcredit movement in the state.

In the recent past, the subsidized route of microfinance has been accepted widely in India. With the implementation of SGSY in 1999, many poor have been attracted towards the formation of SHGs just to avail subsidy from it. The growth rate of credit linked SHGs in Meghalaya in the last 5 years, that is, from 2006-07 to 2010-11 reflected the fact that the number of SGSY SHGs increased at the rate of around 11% as against 9% of non-SGSY SHGs (SLBC Annual Report, 2006-07 to 2010-11). This growth was also witnessed across Indian states. The study of seven Indian states (Sinha, 2005), including Assam and Manipur showed that micro credit helps in providing direct loans to the poor and microfinance as a whole has increased the borrowing options for the poor clients throughout the country.

Microfinance services have brought benefits to the poor ; albeit, questions have often been raised with regard to the sustainability of the MIFs/SHGs. Many microfinance organizations around the world are found to be sustainable because they are receiving concessional funds at regular intervals from donor agencies or from governments under various government run subsidized programmes like SGSY and others. However, once the subsidy stops, these organizations become less cost-effective in delivering credit to the poor. In Bangladesh, it was observed that most of the traditional/secular NGOs / MFIs are not able to operate even at break-even level without subsidies from outside sources. The interest rates on loans charged (20% - 35%) by the traditional NGOs including Grameen Bank are high by any standard (Rahman, 1999).

A financial institution is considered to be sustainable if it can cover all risks and transaction costs, loan losses,

and cost of capital through interest and other earnings without external subsidies. Based on these criteria, none of the rural, formal financial institutions in India can be considered sustainable as they are hassled with huge arrears and incur high transaction costs in providing financial services. Loan losses and transaction costs are invariably higher than earnings, such that they require constant refinancing and recapitalization by the apex institutions (Asian Development Bank, 2000). A study conducted on 10 important MFIs (NGOs) in India (Quinones, 1997) revealed that several of these are not sustainable. One survey showed that poverty-focused programmes with a "commitment" to achieve financial sustainability covered only 70% of their full costs (Christen & MacDonald, 1998). Morduch (1999) narrated about the speculation of a few observers and stated that if subsidies are withdrawn and costs cannot be reduced, 95% of the current programmes will eventually have to close down. In fact, it is estimated that only 5% of all programmes will ever become self-sufficient (Morduch, 2000). In India again, the Integrated Rural Development Programme (IRDP), introduced by the government to tackle the issue of poverty showed a loan recovery rate of 10-55% only and tended to benefit better segments of the rural population.

The North Eastern Region of India is at its nascent stage in the field of microfinance. The spread of microfinance in the region is still negligible as compared to other regions. The region shares only 1.96% percent of the nation's savings of SHGs and around 2% in terms of loan disbursement to them (NABARD, 2010). A few significant MFIs/ NGOs/societies/ and non-profit organizations providing microfinance services in the region are RGVN-Guwahati [1], Youth Volunteers Union-Manipur [2], and NERCORMP [3]-Assam, Manipur, and Meghalaya.

## Objectives of the Study and Methodology

As per the March (2011) report of the State Level Banking Committee, a total of 4615 credit linked SHGs were in operation under SGSYs and 4042 SHGs were operating under non-SGSYs in Meghalaya. The overall scenario of sustainability of subsidized SHGs across the globe is not satisfactory (Adams & Von Pischke, 1992 ; Aveh, Krah, & Dadzie, 2013 ; Chinomona & Tam, 2013 ; Kinde, 2012 ; Nawaz, 2010 ; Quinones, 1997; Rahman, 1999). In India, the launching of IRDP in the year 1980 proved to be futile as it benefited the non poor and subsidy was routed to the local elite who could have obtained loans from the commercial market at prevailing market interest rates (Adams & Von Pischke, 1992). The SGSY scheme was launched in India on April 1, 1999. Due to its recent intervention, not much literature about the financial performance and sustainability of the beneficiaries/*swarozgaries* could be found. Therefore, an attempt has been made in the present study to analyze and compare the financial performance and sustainability of the subsidized SHGs with those of the non subsidized SHGs to find out the better entity between these two.

**Table 1. Details of the Samples and Data Sources**

| Types of SHGs | Total samples | Data collection | | Types of SHGs | |
|---|---|---|---|---|---|
| | | Schedule | Audited financial statements | Partly subsidized (Share of SGSY & IFAD) | Fully subsidized (Share of IFAD) |
| Subsidized | 150 | 84 | 66 | 123 | 27 |
| Non-subsidized | 50 | 50 | - | - | - |

[1] Rashtriya Grameen Vikas Nidhi (RGVN) was founded as an autonomous, non-profit organization in April 1990 in the State of Assam, with headquarters in Guwahati. It operates in 14 states of our country.

[2] Youth Volunteers Union is providing microfinance services to the rural and urban poor in six districts of Manipur.

[3] NERCORMP (North Eastern Region Community Resource Management Project) is a joint project of IFAD and Government of India, to improve the livelihoods of vulnerable people in the North Eastern Region through building SHGs and natural resource management groups. Presently, it is working in two districts each of Assam, Meghalaya, and Manipur.

Primary and secondary data were used for the present study. The secondary sources consist of data from NABARD, RBI, Government of Meghalaya, State Level Bankers' Committee Report (SLBC), and other published studies. The primary data was collected from 150 subsidized SHGs from the SGSY scheme and IFAD programme and 50 non-subsidized SHGs from the non-subsidized group. All the data of non-subsidized SHGs were collected in the form of structured schedule (Table 1), whereas the data from 150 subsidized SHGs (84 from SGSY and 66 from IFAD) were collected by using a structured schedule as well as in the form of audited financial statements. Out of 66 samples of IFAD, 27 consisted of fully subsidized SHGs. The financial data of the SHGs were collected covering the financial period of 5 years, that is, from 2006-07 to 2010-11.

Different financial variables such as loan taken by SHGs, deployment of acquired loans in micro businesses as well as disbursement as loan to members, repayment of loan either by members to SHGs or by SHGs to linked banks, net surplus, savings, and other financial parameters were considered as core financial variables for data collection.

**Table 2. Progress of Subsidized Microfinance (SGSY and Other Sponsored Schemes) in NER Vis-à-Vis Meghalaya**

₹ In Lakhs

| Sl. No. | Name of the States | Particulars | 2007-08 | 2010-11 | Growth Rate (%) |
|---|---|---|---|---|---|
| | | Savings | 95.54 | 96.83 | 12 |
| 1 | Arunachal Pradesh | Loan disbursed | 87.41 | 395.66 | 45.98 |
| | | Loan o/s | 289.84 | 862.44 | 43.53 |
| | | Savings | 2930.269 | 5130.25 | 14.81 |
| 2 | Assam | Loan disbursed | 6207.57 | 15573.54 | 28.26 |
| | | Loan o/s | 16321.46 | 39036.91 | 27.78 |
| | | Savings | 94.22 | 65.4 | -9.57 |
| 3 | Manipur | Loan disbursed | 182.55 | 91.94 | -23.61 |
| | | Loan o/s | 946.8 | 300.93 | -37.9 |
| | | Savings | 219.44 | 180.72 | -5.61 |
| 4 | Meghalaya | Loan disbursed | 178.98 | 431.69 | 31.26 |
| | | Loan o/s | 1050.73 | 806.93 | -5.24 |
| | | Savings | 106.98 | 137 | 14.3 |
| 5 | Mizoram | Loan disbursed | 115.86 | 78.27 | -12.05 |
| | | Loan o/s | 619.02 | 63.49 | -51.4 |
| | | Savings | 33.13 | 75.74 | 32.35 |
| 6 | Nagaland | Loan disbursed | 97.04 | 49.37 | -23.86 |
| | | Loan o/s | 610.37 | 549.42 | -3.15 |
| | | Savings | 43.24 | 119.46 | 41.94 |
| 7 | Sikkim | Loan disbursed | 39.92 | 109.5 | 30.31 |
| | | Loan o/s | 147.9 | 495.11 | 46.45 |
| | | Savings | 114.93 | 1069.91 | 104.93 |
| 8 | Tripura | Loan disbursed | 1378.06 | 4904.77 | 48.13 |
| | | Loan o/s | 2194.95 | 7989.72 | 53.42 |
| | | Savings | 3637.75 | 6875.31 | 19.92 |
| 9 | NER | Loan disbursed | 8287.39 | 21634.74 | 31.55 |
| | | Loan o/s | 22181.07 | 50104.95 | 27.15 |

Source: Compiled from "Status of Microfinance in India"- NABARD Annual Report 2007-08 to 2010-11

The collected data were tabulated, analyzed, and interpreted with the help of ratio analysis, subsidy dependence index (SDI), and regression analysis. All the absolute values of different variables were calculated on per SHG per year basis. To examine the overall sustainability of SHGs, the operating cost ratio (OCR), return on assets (ROA), operating self sufficiency ratio (OSSR), and financial self sufficiency ratio (FSSR) (Small Enterprise Education and Promotion (SEEP), 1995) were given due importance. The SDI (Yaron, 1992), which is one of the most accepted techniques to assess the dependence of financial institutions on government-supported funds was also extended to SHGs as a tool of analysis for the study. Factor analysis was also conducted to select the appropriate number of independent variables.

## Hypotheses

The following are the two hypotheses that were drawn for the study:

**(1)** Subsidized microfinance has a negative impact on the financial performance and sustainability of SHGs in Meghalaya and;

**(2)** Non subsidized SHGs are better entities than their subsidized counterparts in terms of financial performance and sustainability.

## Analysis and Results

➲ **Status of Subsidized SHGs in NER :** Since the inception of the SGSY, the region has been witnessing a growth in the number of SHGs, but the number is still far below the national figure. The Table 2 highlights the performance of prominent subsidized microfinance schemes (SGSY scheme, including other sponsored schemes) in the North Eastern Region. The growth rate of subsidized SHGs, under the given components, is not found to be much impressive. The overall growth of savings and loan disbursement was recorded at 20% and 31% respectively. Among the eight states of the region, the state of Tripura registered impressive growth in the programme followed by Sikkim, Arunachal Pradesh, and Assam. Manipur, on the other hand, was the worst performer among all the states in savings (-9.57%), loan disbursement (-23.61%), and loan outstanding (-37.90 %).

➲ **Status of Subsidized SHGs in Meghalaya :** Subsidized microfinance in the name of SGSY is a new phenomenon in the state of Meghalaya. Apart from continuous efforts by the state government, the programme had a slow start in the state but accelerated as the time progressed. It is also evident that there are many non-SGSY

**Table 3. Financing of SHGs in Meghalaya (Cumulative)**

| Sl. No. | Years | SGSY SHGs | | Non-SGSY SHGs | | Total | |
|---|---|---|---|---|---|---|---|
| | | No. of credit linked SHGs | Loan disbursed (₹ in lakhs) | No. of credit linked SHGs | Loan disbursed (₹ in lakhs) | No. of credit linked SHGs | Loan disbursed (₹ in lakhs) |
| 1 | 2006-07 | 3433 | 1410.64 | 4017 | 1876.14 | 7450 | 3286.78 |
| 2 | 2007-08 | 2473 | 1317.51 | 1574 | 647.82 | 4047 | 1965.33 |
| 3 | 2008-09 | 3332 | 1666.01 | 1917 | 773.06 | 5249 | 2439.07 |
| 4 | 2009-10 | 3712 | 1902.87 | 3708 | 1304.29 | 7420 | 3207.16 |
| 5 | 2010-11 | 4615 | 2439.52 | 4042 | 1597.14 | 8657 | 4036.66 |
| | **Growth Rate (%)** | **10.49** | **15.76** | **9.08** | **3.85** | **9.49** | **9.43** |

Source: Compiled from SLBC Report, SBI, March, 2007-08 to 2010-11

SHGs operating in the state (Table 3). A slow growth rate of 9.49% was observed in the total number of credit linked SHGs, with 9.43% growth in loan disbursement in 5 years. This reveals and raises questions towards the concentrated efforts of the state government to implement the SGSY on a larger scale. Though there is no impressive growth for both SGSY and non-SGSY SHGs in the state, a close comparison between these two suggests that SGSY SHGs are growing faster (10.49%) than the non-SGSY SHGs (9.08 %). The subsidy component of the SGSY scheme is one of the main reasons attracting the poor to form into groups. Along with the number, the SGSY SHGs have also exceeded the non-SGSY SHGs in borrowing loans from the banks. A growth of around 16% was observed in loan disbursement to SGSY-SHGs as against only 4% to non-SGSY SHGs.

➲ **A Comparative Study Between Subsidized and Non-Subsidized SHGs :** A comparative study of subsidized (SG) and non-subsidized (NSG) SHGs reveals that NSGs are better entities in almost every aspect. The business performance ratios as reflected in the Table 4 show that NSGs performed better in respect of IIR (18 %), IEIER (25%), and ISR (13 %). The OEIR is small in both the cases, but a comparative performance between these two favours NSGs (12 %) as compared to their counterparts (13%). The comparative performance of loan business of NSGs either with the members or with financial institutions looks much better than the SGs (Table 5). The intra-SHG LPLOR of 37% of SG stands far below than 55% of NSGs. On the other hand, loan recovery by linked banks from SGs (13%) also looks smaller than it was for NSGs (27%).

In terms of profitability, the NSTR of 26% (Table 6) for the entire sample of NSGs stands far ahead of SGs, which is just 5%. This shows an efficient utilization of scarce capital by the NSGs. The controlled operating costs along with lesser cost of purchase expenses of NSGs as compared to their counterparts provided good leverage to the net earnings for these groups. The lower OETLP as a part of the total loan consumed in the form of operating expenses (1%) for NSGs also provided them an opportunity to invest a larger amount of capital in the business. The ROC is not very attractive for both the groups, but the net comparative differences between these two advocates the efficiency of NSGs in earnings better return from the deployed capital. This ratio of 4% of NSGs stands well above of less than 1% of SGs. Along with the ROC, the ROA also tilts in favour of the NSGs. The sustainability ratio of OSSR of more than 1 on both the fronts depicts their operational sustainability, but the ultimate financial sustainability of the entity as adjudged by more than 1 ratio of FSSR support NSGs. All these findings indicate that the financial performance and sustainability of non-subsidized SHGs (NSGs) was better than that of the subsidized SHGs in the state and supports the second hypothesis that non subsidized SHGs are better entities than their subsidized counterparts in terms of financial performance and sustainability.

➲ **Subsidy Impact on Sustainability of SHGs Through SDIs :** The Subsidy Dependence Index (Yaron, 1992) was used to study the dependence of SHGs on subsidized finance. The analysis of the entire 150 samples revealed

**Table 4. General Performance of SHGs (Business Parameters) (Figures in %)**

| Particulars | Subsidized SHGs | | | | | | Non-subsidized SHGs | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Type wise | | | Education wise | | Total | Type wise | | | Education wise | | Total |
| | A | B | C | D | E | F | A | B | C | D | E | F |
| IIR | 16.36 | 16.31 | 13.47 | 15.74 | 16.14 | **15.87** | 17.93 | 14.64 | 21.78 | 17.41 | 18.76 | **17.85** |
| IEIR | 5.02 | 8.98 | 9.49 | 5.77 | 6.21 | **5.91** | 3.97 | 3.97 | 6.13 | 4.93 | 3.34 | **4.41** |
| OEIR | 14.40 | 7.84 | 6.83 | 15.46 | 7.25 | **12.90** | 11.13 | 13.99 | 9.99 | 12.02 | 10.87 | **11.64** |
| IEIER | 30.70 | 55.06 | 70.42 | 36.68 | 38.51 | **37.26** | 22.15 | 27.10 | 28.13 | 28.28 | 17.82 | **24.69** |
| ISR | 11.34 | 7.33 | 3.98 | 9.97 | 9.92 | **9.95** | 13.96 | 10.67 | 15.65 | 12.49 | 15.42 | **13.44** |

Note: IIR = Interest earned to income ratio; IEIR= Interest expenses to income ratio; OEIR = Operating expenses to income ratio; IEIER = Interest expenses to interest earned ratio; ISR = Interest spread ratio. A = Female; B = Male; C = Mixed; D = All members of below metric status; E = Mixed members of below and above metric status.

**Table 5. Loan Business of SHGs**

| Category | Loan parameters | Subsidized SHGs | | | | | | Non-subsidized SHGs | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Type wise | | | Education wise | | Total | Type wise | | | Education wise | | Total |
| | | A | B | C | D | E | F | A | B | C | D | E | F |
| Loan business among SHG members | LPLOR (%) | 34.69 | 51.33 | 50.36 | 34.11 | 44.84 | **36.84** | 55.42 | 51.91 | 55.29 | 54.70 | 54.45 | **54.63** |
| | ALOE (Rs) | 18326 | 12548 | 11166 | 18154 | 14718 | **17283** | 10195 | 7861 | 12042 | 9992 | 9444 | **9828** |
| Loan business with financial Institutions | LPLOR (%) | 10.91 | 9.77 | 22.26 | 11.65 | 15.40 | **12.76** | 27.49 | 29.00 | 25.38 | 26.39 | 29.91 | **27.44** |
| | ALOE (Rs) | 63528 | 85625 | 70130 | 65535 | 65479 | **65518** | 63892 | 57049 | 77457 | 66011 | 60244 | **64280** |

LPLOR = Loan paid to average loan outstanding ratio; ALOE = Average loan outstanding at the end

**Table 6. Profitability and Self - Sufficiency Ratios**

| Ratios | Particulars | Subsidized SHGs | | | | | | Non-subsidized SHGs | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Type wise | | | Education wise | | Total | Type wise | | | Education wise | | Total |
| | | A | B | C | D | E | F | A | B | C | D | E | F |
| Profitability | NSTR (%) | 1.58 | 21.30 | 17.92 | -1.53 | 19.38 | **5.01** | 28.02 | 22.30 | 26.70 | 25.23 | 28.39 | **26.26** |
| | ROC (%) | 0.22 | 1.82 | 3.18 | -0.20 | 3.20 | **0.71** | 4.57 | 3.59 | 3.99 | 3.84 | 5.03 | **4.19** |
| | OETLP (%) | 1.97 | 0.70 | 1.32 | 2.01 | 1.27 | **1.82** | 1.46 | 1.73 | 1.19 | 1.46 | 1.51 | **1.47** |
| Sustainability | OCR (%) | 7.18 | 4.59 | 8.13 | 7.63 | 5.59 | **7.17** | 9.45 | 15.79 | 7.58 | 10.18 | 10.59 | **10.30** |
| | ROA (%) | 0.79 | 12.46 | 21.31 | -0.75 | 14.92 | **2.78** | 23.80 | 25.16 | 20.27 | 21.38 | 27.68 | **23.24** |
| | OSSR | 1.08 | 2.27 | 2.10 | 0.93 | 2.44 | **1.27** | 2.86 | 2.24 | 2.66 | 2.49 | 3.00 | **2.64** |
| | FSSR | 0.29 | 0.72 | 1.00 | 0.26 | 0.75 | **0.36** | 1.08 | 1.08 | 0.99 | 1.01 | 1.20 | **1.06** |

Note: NSTR = net surplus to total revenue ratio; ROC = return on capital; OETLP = operating expenses to total loan portfolio ratio; OCR = operating cost ratio; ROA = return on asset ratio; OSSR = operating self sufficiency ratio; FSSR = financial self sufficiency ratio

**Table 7. The SDI Model for All SHGs**

| Sl. No. | Variables | Average figure per SHG per year. |
|---|---|---|
| 1 | **LP:** Loan disbursed to members | ₹ 25223 |
| 2 | **M:** Lending rate of SHG to its members per annum | 24% |
| 3 | **A:** Subsidy to SHG | ₹ 15248 |
| 4 | SDI: A/(LP*M) **251.89%** | |

poor sustainability position of SHGs (Table 7). The impact of subsidy is very high in these samples. The SDI of 252% suggests the fact that the present on-lending interest rate of 24% (discovered from primary data) by SHGs to its members should stand at 84% so as to be at par with market without any subsidy. The on-lending rate of 84% is substantially high, on which no rational borrower would borrow any loan.

## Impact of Subsidy on Sustainability of SHGs : Regression Analysis

Regression analysis was conducted to find the impact of subsidy on the financial performance of subsidized SHGs. With the help of factor analysis, the numbers of independent variables were reduced to six variables. The determinant value of R-matrix and Kaiser-Meyer-Olkin (KMO) and Bartlett's sample adequacy tests were applied to check the existence of multicollinearity, singularity, and sample adequacy. The determinant value of more than .00001 and KMO and Bartlett's sample adequacy test of more than .5 with 1% level of significance in the present study proved the non-existence of multicollinearity and singularity. Also, it justifies the inclusion of adequate number of samples for the analysis. A regression model was also developed and run with the help of

**Table 8. Summary of Multiple Regression Analysis**

| | NS (Dependent variable) | | | |
|---|---|---|---|---|
| **Independent Variables** | **B** | **Beta** | ***t* - values** | **Significance** |
| Constant ($\beta_0$) | -473.85 | - | -1.663 | .098 |
| TI ($\beta_1$) | 0.877 | 0.852 | 44.288 | .000*** |
| OE ($\beta_2$) | -1.093 | -0.308 | -16.433 | .000*** |
| AvS($\beta_3$) | -0.01 | -0.023 | -1.219 | 0.225 |
| TWC1($\beta_4$) | 505.734 | 0.047 | 2.223 | .028** |
| TWC2($\beta_5$) | 363.5 | 0.018 | 0.924 | 0.357 |
| EDU($\beta_6$) | 74.053 | 0.008 | 0.454 | 0.651 |
| $R$ = .979, $R^2$ = .958 | | | | |
| Adjusted $R^2$ = .956, $F$ = 537.514 | | | | |
| (Sig .000) | | | | |

***Significant at 1% level of error probability, **Significant at 5% level of error probability Note: NS = Net Surplus, TI = Total Income; OE = Operating Expenses; AvS = Average Subsidy; TWC1 = Type-Wise Classification 1; TWC2 = Type-wise Classification 2; EDU = Education.

SPSS. The model stands as follows:

$$(1)\ NS_i = \beta_0 + \beta_1 (TI_i) + \beta_2 (OE_i) + \beta_3 (AS_i) + \beta_4 (TWCI_i) + \beta_5 (TWC2_i) + \beta_6 (EDU_i) + e_i$$

The analysis of the entire sample (Table 8) shows that many of the independent variables had a significant impact on the dependent variable, that is, on NS. Among the financial indicators, the beta coefficient of TI (.852) and OE (-.308) are found to have a significant impact on the NS. The negative beta value of AvS (-.023) suggests that subsidy has a negative impact on the net earnings of the SHGs and supports the first hypothesis of the study, that is, subsidized microfinance has a negative impact on the financial performance and sustainability of SHGs in Meghalaya. The negative impact of subsidy on the net earnings of the subsidy based SHGs has always been a case of concern for their long term survival. Many of the subsidy based programmes run by the government have not achieved their objectives in terms of long term survival (Das, 2004). Among the non-financial variables, the TWC1 has a low impact on NS (5 %). The beta coefficient of .047 is almost negligible, but the scrutiny of the same reveals that female SHGs are comparatively better than their counterparts - male and mixed SHGs. The TWC2 and EDU do not have any significant contribution on NS.

## Major Findings

➲ The SBLP model of financing SHGs is prominent in the NER, where SGSY is getting popular due to its subsidy component. A sizeable number of non-subsidized credit linked SHGs are also operating in the state.

➲ The business practices of the SHGs vary from various farm activities to non-farm activities. The common businesses of the sample SHGs that they run for income generation activities (IGAs) are piggery, poultry, goatery, handloom, arecanut-betelvine plantation, grocery outlets, and transportation. In addition, fishery, tailoring and knitting, ginger and vegetable plantation are also found to be practiced widely among the SHGs.

➲ The IIR and IEIR of 16% and 6% are found not sufficient for providing good leverage to the net surplus of the SHGs. On the other hand, the IEIER of 37% reveals the fact that almost two-fifth of the interest income is being taken away by interest expenditure, indicating less amount of surplus being left in the hands of the SHGs.

However, these statistics do not provide much support to the long term sustainability of the subsidized SHGs, and the non-subsidized SHGs are proved to be better-off in all these fronts.

➲ The LPLOR as a ratio of ALP (average loan paid) to ATLO (average total loan outstanding) shows poor recovery of loans by the subsidized SHGs. The recovery rate of 37% and 13% respectively in the hands of SHGs and in the hands of linked banks indicates inefficient utilization of loan capital by both the parties. The poor economic conditions of the members, lack of proper knowledge in handling micro businesses, and insufficient flow of funds in the businesses could be the major factors responsible for the same. However, comparatively, the non-subsidized SHGs were found to be better than their counterparts.

➲ The operational efficiency of the subsidized SHGs, judged through NSTR (5%) does not support sound earnings from IGAs. The condition becomes more deteriorated when ROC of only 1% is considered.

➲ The sustainability and self sufficiency of SHGs tested through OCR, ROA, OSSR, and FSSR do not support their long term sustainability. The low ROA of 3% indicates lower earnings from the loan assets. The OSSR looks fine as it is more than 1 (1.27) but less than 1. The ratio of FSSR (0.36) completely goes against the long term sustainability of subsidized SHGs as compared to the non-subsidized ones.

➲ The SDI of 252% of the SG suggests that in case the subsidy is withdrawn to sustain the operations, the present on-lending interest rate of SHGs to its members should reach as high as 84%, in which no rational borrower would borrow any loan.

➲ The regression result of SG shows that subsidy has a negative impact on the sustainability of these SHGs.

➲ The overall comparative analysis of SGs and NSGs favours NSGs in almost every aspect of the financial operations of the SHGs. The NSGs are found to be more profitable and sustainable entities than the SGs.

## Suggestions

Considering the negative impact of subsidy on sustainability and the comparatively poor performance of subsidized SHGs with that of their non-subsidized counterparts, the following suggestions are advocated :

➲ Proper identification of the needy and genuine borrowers for the programme should be the primary objective of all the authorities who implement and run such programmes. The non-government organizations (NGOs), block development officers (BDOs), panchayats, district rural development agencies (DRDAs), and banks should work in a coordinated fashion to identify the poor, help them to form groups, nurture them, and support them to get credit linked with the banks. All these will facilitate SHGs to avail revolving funds at the initial stage and to avail schematic loans in the future.

➲ The operating expenses of the SHGs need to be curtailed further to have a positive impact on their net earnings.

➲ Regular training programmes should be designed to provide overall capacity building for the SHGs, and all the stakeholders concerned should work collectively and actively in this regard.

➲ Absence of minimum educational background of the members is one of the prime obstacles in the growth of SHGs. Full fledged education of the members is, however, not possible, but an informal education module, especially in account keeping and micro/small business management should be imparted to the members. This will not only inculcate account keeping practices among SHG members, but will also facilitate future researchers to have better access to financial data.

➲ Subsidy has had a negative impact on the financial performance of the SHGs. Therefore, a gradual decrease in the amount of subsidies given to the SHGs is recommended. At the same time, financing of SHGs through the

non-subsidized route should be encouraged by the promoter/donor agencies to strengthen a sense of financial responsibility among them.

➲ Along with small finances, insurance cover through micro insurance should be provided in the SHGs's loan agreement to cover future contingencies. This is expected to boost their overall sustainability in the state.

## Conclusion

Impact of subsidy on the financial performance and sustainability of the SHGs has been given prime importance in this study. The study has revealed that subsidized finance is not extending any significant help to the poor in the state of Meghalaya, especially in generating sustainable income. Comparatively, non-subsidized SHGs have been doing better in almost all the aspects such as availing and repayment of loan among members and also with financial institutions, earning profit from IGAs, operational and financial sustenance, and so forth.

## Research Implications

The Government of India (GoI) in its attempt to help poor and eradicate poverty has been intervening with different subsidized schemes. Many a time, SHGs have been injected with subsidy to lift them out of poverty and help them by raising their standards of living. However, empirical evidence casts a doubt on the element of subsidy and raises a question towards their long term survival. The subsidized SHGs are found making profit because of subsidy, and once it is withdrawn, their survival becomes doubtful. The present study also found that non- subsidized SHGs are better entities in terms of their performance and survival as compared to their counterparts in the state of Meghalaya. Hence, gradual decrease of subsidy to subsidized SHGs is recommended. However, the inferences of the study may not be applicable to other states of India and ,therefore, they may not be generalized.

## Limitations of the Study and Scope for Further Research

The primary data for the present study were collected with the help of interview schedules from SHGs. The information provided by them may not be accurate, which can impact the results of the present study. The research were conducted for the SHGs of Meghalaya by considering a limited number of samples. The inferences of the study may not be generalized for the SHGs of other parts of India and the globe. Therefore, there is a wide scope for future researchers to carry out research by considering more number of states and samples to arrive at more comprehensive results.

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