

### Impact of Microfinance Through Self Help Group Bank Linkage Programme – A Study in Nalgonda District of Andhra Pradesh

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#### ABSTRACT

The present study entitled "Impact of Microfinance Through Self Help Group Bank Linkage Programme - A study In Nalgonda District of Andhra Pradesh" was undertaken mainly to assess the socioeconomic impact of micro finance through SHG bank linkage programme in Nalgonda district of Andhra Pradesh. The study covered two mandals, 8 SHGs and 80 member households. Both conventional and statistical tools were employed to analyze the data and arrive at valid results. The intervention of SHG has resulted in a shift in the saving amount to higher levels. The average value of assets registered an increase of about 81.25 per cent of the sample households. The lower Gini concentration ratio indicated that the net income was more evenly distributed in the member households during post-SHG period. Maximum income was generated from dairying (Rs.3041) followed by tea & tiffin centre (Rs.2083). The regression estimates of income due to SHG indicated significant impact of microfinance on SHG member households in terms of contributing a major share to the gross income of the member households. Though the performance of SHGs was outstanding, there were certain areas which need to be improved. There was lack of initiative in sharing the responsibilities of the leaders, when required. Therefore, it has to be ensured that leadership rotation or election of leaders is strictly to be practiced for future sustainability of the group. The study observed that a large number of SHGs have already been promoted. Therefore, presently all efforts should be concentrated on nurturing and strengthening of existing groups. There is a need for documentation, an effective Management Information System (MIS) and build up of database on SHGs at the district level.

Key words : Economic Activities, Microfinance, Self Help Group, SHG Bank Linkage.

Poverty and underemployment are the major problems of any underdeveloped country, to which India is no exception. Microfinance interventions are well recognized over the world as an effective tool for poverty alleviation and improving socioeconomic status of rural poor. In India too, microfinance is making headway in its effort for reducing poverty and empowering rural women. Grameena Bank of Bangladesh, founded by Mohammed Yunus is the basis for the origin of self help groups. Self help groups were started forming in 1975. In India NABARD the same were initiated in 1986-87. The most notable milestone in the self help group movement was when NABARD launched the pilot phase of the SHG-Bank linkage programme, an innovation in agricultural credit market in February 1992. However in 1996, NABARD launched a nationwide pilot project to link the self help groups to the bank.

Nalgonda district is one of the 23 districts of Andhra Pradesh state lying in the southern part of Telangana region. The district consists of 59 mandals with a total geographical area of 14,322.4 sq km. There are 1,161 revenue villages in the district. The total population of the district as per 2001 census is 32,47,982 of which 86.68 per cent being the rural population and 13.30 per cent urban population. Beneficiaries, largely women from the identified poor families, were organised into Self Help Groups (SHGs) consisting of 10-15 members.

There are around 24,375 SHGs linked to the banks in the district which had mobilised a thrift amount of Rs. 1962.50 lakhs and disbursed loans amounting to Rs.21181.91 lakhs. This background of the SHGs in the district prompted to conduct the present study mainly to assess the socio-economic impact of micro finance through SHG Bank Linkage Programme in Nalgonda district of Andhra Pradesh as major objective.

#### MATERIAL AND METHODS

Nalgonda district was purposively selected for the present study as there are 24,375 SHGs linked to banks are in successful operation. Stratified random sampling technique was adopted for selecting sample SHG members. In the first stage two mandals i.e., Bibinagar and Kodad were identified and selected purposively as they were having maximum number of linkages with the banks; in the second stage four villages i.e., Magdumpalli and Padamatisomavaram from Bibinagar mandal and Kapugallu and Tamarlabandapalem from Kodad mandal were selected; in the third stage 8 SHGs i.e., two from each village having completed more than five years of bank linkage were selected for the study assuming that the benefits from the SHG Bank Linkage Programme would have fairly stabilized; and in the final stage a total of 80 SHG member households (10 members from each selected SHG) were selected for the present study. The present study uses a comparison of the conditions of beneficiaries of the microfinance programme in pre-SHG (1998-99) and post-SHG (2008-09) periods. The difference in condition between pre and post-SHG periods is interpreted as the impact of the programme. The economic impact of the programme was studied with the help of the variables namely savings habit, household income, household assets, initiation of income generation activities. The social impact was studied by examining the member's control over household financial resources. In the present study, a combination of analytical tools like conventional analysis, multiple linear regression techniques were used to analyze the data and arrive at valid results. Also Gini concentration ratio is used to know the income inequalities of member households has been

#### RESULTS AND DISCUSSION Agency wise share of savings

employed.

The results of Table 1 revealed that during pre-SHG situation members were keeping a major amount of their savings with themselves (Rs.290), followed by banks (Rs.110) and other agencies (Rs.68). But during post-SHG situation, majority of their savings were kept in SHGs (Rs.1650) followed by banks (Rs.300) and other agencies (Rs.250) making a total average savings of Rs.2200 per member as against Rs.468 in pre-SHG situation. These results were in conformity with the results of Snehalatha (1994).

## Distribution of SHG member households according to net income

The net income obtained by member households was categorized into six groups. In pre-SHG period the maximum percentage (51.25) of the member households were under the group earning a net income between Rs.2000-3000. The share of this group in the aggregate income was about 41.33 per cent. The net income of groups earning less than Rs.2000, Rs.3000-4000, Rs.4000-5000 and more than Rs.6000 had a share of 10, 26.25, 10 and 2.5 per cent respectively. While none of the members were in the group of Rs.5000-6000 in the pre-SHG period.

However, in post–SHG period none of the member households were in low income earning group i.e., less than Rs.2000. While maximum (37.5) percentage of households were in the group of Rs.3000-4000 followed by 36.35 per cent of the member households in the group of Rs.4000-5000 contributing 36.70 per cent to the total net income. Only 8.75 per cent of the member households were in the income earning group i.e., Rs.5000-6000. About 10 per cent of the member households were in the group of Rs.5000-6000 and 7.5 per cent of them had fallen under the group Rs.2000-3000. (Puhazhendi and Satyasai, 2001).

## Quantification Measures of Distribution of Net Incomes of SHG members

The Lorenz curve (Fig.1) for the member households in the pre and post SHG periods was drawn from the data. Since the Lorenz curve of the member households in the post-SHG period lie above that in the pre-SHG period, has clearly indicated that the net income in the post-SHG period was more equitably distributed than that in the pre-SHG period. The difference in income inequality was worked out by using Gini concentration ratio, standard deviation of logarithms of net income and coefficient of variation.

It may be observed from Table 2 that the net income inequality appeared to have decreased in case of member households in the post-SHG period. In the case of post-SHG period the Gini concentration ratio was 0.1481 while it was 0.2124 during the pre-SHG period. The lower Gini concentration ratio for post-SHG period revealed that the SHG-Bank linkage programme has helped in reducing the income inequalities among the households in the study area. Similarly, the other two measures of net income inequality, i.e., coefficient of variation and standard deviation of logarithms of net income also indicated a similar decreasing trend in the post-SHG period.

#### Acquisition of Household Assets

It is significant to note from Table 3 that a considerable number of respondents acquired assets in the post–SHG period. About 22.5 per cent of the sample households purchased sewing machines which was a source of income for them, while 18.75 per cent of the sample member households were

| Category       | Pre-SHG | Post-SHG | Incremental savings |  |
|----------------|---------|----------|---------------------|--|
| Self / SHG     | 300     | 1650     | 1350 (450)          |  |
| Banks          | 100     | 300      | 200 (200)           |  |
| Other agencies | 68      | 250      | 182 (267.64)        |  |
| Total          | 468     | 2200     | 1732 (370)          |  |

Table 1. Agency wise mean annual savings by SHG members (in Rupees).

Table 2. Concentration of net incomes among member households during pre and post SHG periods

| Particulars                                    | Pre-SHG | Post-SHG |
|--|---------|----------|
| Gini concentration ratio                       | 0.2124  | 0.1481   |
| Coefficient of variation                       | 6.8218  | 4.8302   |
| Standard deviation of logarithms of net income | 0.3913  | 0.2764   |

#### Fig 1. Lorenz curve of SHG member households.



| SI. No. | Assets           | Number of respondents | Percent to total |
|---------|------------------|-----------------------|------------------|
| 1.      | Electronic goods | 15                    | 18.75            |
| 2.      | Sewing machines  | 18                    | 22.50            |
| 3.      | Livestock        | 14                    | 17.50            |
| 4.      | Household goods  | 6                     | 7.50             |
| 5.      | Land             | 11                    | 13.75            |

Table 3. Acquisition of new assets by SHG member households .

Table 4. Average monthly income generated per member due to SHG.

| Activity            | Number of members | Income per month per number (Rs) |         |  |  |  |
|---------------------|-------------------|----------------------------------|---------|--|--|--|
|                     |                   | Range                            | Average |  |  |  |
| Dairying            | 14                | 2000 to 6500                     | 3041.66 |  |  |  |
| Tailoring           | 18                | 1000 to 2500                     | 1438.88 |  |  |  |
| Embroidery work     | 6                 | 1000 to 3000                     | 1611.11 |  |  |  |
| Kiranam store       | 12                | 800 to 3166.66                   | 1680.55 |  |  |  |
| Vegetables vending  | 3                 | 1000 to 1100                     | 1033.33 |  |  |  |
| Flour grinding mill | 1                 | 1250                             | 1250    |  |  |  |
| Beedi making        | 1                 | 666                              | 666     |  |  |  |
| Tea & Tiffin centre | 4                 | 1333 to 3000                     | 2083.33 |  |  |  |
| Sheep rearing       | 1                 | 1800                             | 1800    |  |  |  |
| Clothes business    | 1                 | 1166                             | 1166    |  |  |  |

able to acquire electronic goods like television and radio. Interestingly, 13.75 per cent reported an increase in the area of land owned by them in the post-SHG period, while 17.5 per cent of the households were able to acquire livestock and 7.5 per cent of the households acquired household assets like utensils. (Singh *etal*, 2001)

The reasons for acquisition of assets by the member households might be mainly due to the incremental income generated from various income generation activities taken up by borrowing from the Self Help Group and another reason may be due to the habit of saving inculcated through the SHG (Jain *etal*, 2001).

#### Monthly income generated due to SHG

The mean values of the household income of SHG members from different income generation

activities in post-SHG situation are presented in Table 4.

It is evident from Table 4 that maximum income was generated from dairying (Rs.3041) followed by tea & tiffin centre (Rs.2083), sheep rearing (Rs.1800), Kiranam store (Rs.1680) and embroidery work (Rs.1611). Based on the income obtained from different activities, the activities were categorized into low, medium, and high income generating activities as indicated in Table 5.

From the data, it could be inferred that dairying could be considered as high income activity (Rs.2233), while tea & tiffin centre, sheep rearing, Kiranam store, embroidery work, clothes business, vegetables vending, flour grinding mill and tailoring were considered as medium income activities (Rs.1577) and beedi making as low income activity (Rs.920).

# Factors influencing gross income of SHG member households

The multiple linear regression analysis was used to assess the factors influencing the changes in gross income of SHG member households. The independent variables viz., income due to SHG, income from other sources, consumption expenditure, loan taken by the SHG members, savings of the SHG members, and additional employment generated were selected for analyzing factors influencing the gross income of SHG member households. The regression analysis was fitted for SHG member households.

It can be seen from Table 6 that all the variables influenced significantly the gross income except the average value of assets of the SHG members, which was non significant. The regression estimates of income due to SHG shows positive contribution to the gross income. On an average, one rupee increase of this variable leads to an increase of Rs.1.78 in the gross income of the households. The income from other sources also influences the gross income positively. An increase of Rs.1.16 in the gross income of the households. Also

the loan amount taken influences the gross income positively. On an average one rupee increase of loan amount leads to an increase of Rs.1.21 in the gross income of the households. An increase in one unit of additional employment leads to an increase of about Rs.39 in the gross income. On the other hand consumption expenditure contributes negatively to the gross income with a decrease of Re.0.50 for every one rupee increase on consumption. The elasticity of income with respect to age of the SHG members is inelastic i.e., it has no significant relationship with the income of the SHG member households in the study area.

#### **Control over Household Financial Resources**

Member's involvement in decisions with respect to savings, credit and income generating activities etc., are indicators of their control over household financial resources. The results presented in Table 7 revealed that only 15 per cent of the households jointly took decision to save and in about 85 per cent of households only husbands took the decision during the pre-SHG period, where as this percentage was considerably reduced in the post-SHG period, i.e., about 82.5 per cent took the

Table 5. Categorization of activities undertaken by SHG members based on their income.

| Category               | Range (Rs)            |  |  |  |
|------------------------|-----------------------|--|--|--|
| Low income activity    | < Mean – SD (920.19)  |  |  |  |
| Medium income activity | Mean ± SD (1577.08)   |  |  |  |
| High income activity   | > Mean + SD (2233.97) |  |  |  |

Table 6. Regression coefficients of factors influencing gross income of SHG member households.

| SI. No. | Variable  | Regression | Standard error | t-value  |
|---------|---|------------|----------------|----------|
| 1.      | Average value of assets $(X_i)$                               | 0.241      | 0.259          | 0.930 NS |
| 2.      | Income generated due to SHG (X)                               | 1.782      | 0.342          | 5.210**  |
| 3.      | Income from other sources (X <sub>2</sub> )                   | 1.162      | 0.248          | 4.685**  |
| 4.      | Consumption expenditure of $\dot{SHG}$ member households (X,) | -0.508     | 0.118          | 3.968**  |
| 5.      | Loan taken by the SHG members $(X_{\epsilon})$                | 1.213      | 0.319          | 3.802**  |
| 6.      | Additional employment generated due to SHG ( $X_6$ )          | 39.486     | 14.122         | 2.796**  |

Number of observations = 80

Table 7. Role of respondents in household Financial Decision making.

| SI No    | SI. No. Particulars                      |      | Decisions Taken by |          |            |            |            |  |
|----------|--|------|--------------------|----------|------------|------------|------------|--|
| 01. 140. |  |      | Pre-SHG            | ì        | Post-SHG   |            |            |  |
|          |  | Self | Husband            | Joint    | Self       | Husband    | Joint      |  |
| 1.       | Savings related decisions                |      |                    |          |            |            |            |  |
| a.       | Decision to save.                        | -    | 68 (85)            | 12 (15)  | 66 (82.5)  | -          | 14 (17.5)  |  |
| b.       | Decision to withdraw savings.            | -    | 80 (100)           | -        | 46 (57.5)  | 10 (12.5)  | 24 (30)    |  |
| 2        | Credit related decisions                 |      |                    |          |            |            |            |  |
| a.       | Decision to avail first loan             | -    | 80 (100)           | -        | 42 (52.5)  | 26 (32.5)  | 12 (15)    |  |
| b.       | Decision on first loan utilisation.      | -    | 80 (100)           | -        | 28 (35)    | 34 (42.5)  | 18 (22.5)  |  |
| С.       | Decision to avail subsequent loan.       | -    | 80 (100)           | -        | 48 (60)    | 8 (10)     | 24 (30)    |  |
| d.       | Decision on subsequent loan utilisation. | -    | 80 (100)           | -        | 32 (40)    | 11 (13.75) | 37 (46.25) |  |
| 3.       | Income generation decision               |      |                    |          |            |            |            |  |
| a.       | Selection of enterprises.                | -    | 72 (90)            | 8 (10)   | 39 (48.75) | 6 (7.5)    | 16 (20)    |  |
| b.       | Ownership of enterprise.                 | -    | 80 (100)           | -        | 24 (30)    | -          | 37 (46.25) |  |
| С.       | Management of enterprise.                | -    | 77 (96.25)         | 3 (3.75) | 25 (31.25) | 10 (12.5)  | 26 (32.5)  |  |

Note: Figures in parenthesis indicate percentage to totals.

self decision to save, while remaining 17.5 per cent jointly took the decision to save. Regarding the decision to withdraw savings, 57.5 per cent has taken self decision, 12.5 per cent decisions were taken by husband and 30 per cent of households jointly took the decision.

All the credit related decisions were taken by husbands in all the households in the pre-SHG period, while in the post-SHG period regarding various decisions like decision to avail first loan, decision regarding first loan utilization and decision to avail subsequent loan majority of the decisions were taken by the SHG member households. Majority of the income generation decisions in pre-SHG period were taken by husbands itself, while in post-SHG period self decision regarding selection of enterprises, joint ownership of enterprises, management of the enterprises were mostly taken by the SHG member households and some decisions were taken jointly. These results are also in conformity with the results of Reji (2009).

#### CONCLUSION

The overall study indicated that the intervention of SHG has resulted in a shift in the saving amount to higher levels. The average value of assets registered an increase of about 81.25 per cent of the sample households. The regression estimates of income due to SHG indicated significant impact of microfinance on SHG member

households in terms of contributing a major share to the gross income of the member households. The study observed that presently all efforts should be concentrated on nurturing and strengthening of existing groups.

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