

MICROFINANCE LIVELIHOOD INITIATIVES AND WOMEN EMPOWERMENT IN SELECTED VILLAGES OF ANDHRA PRADESH

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ABSTRACT

Developing countries have large number of their population living below poverty line. Therefore, it becomes imperative to formulate situation-specific poverty alleviation policies and programmes to generate a minimum level of income for rural poor, who form a substantial percentage of national population in developing societies. In India, the Central and State governments initiated several programmes to eradicate poverty. Provision of microfinance is one such programme which gained importance in recent times. This programme has fully involved the SHGs (Self-Help Groups). Microfinance system can only supplement the role of banks and financial institutions to alleviate poverty and unemployment in the country. In this process, the Central and State governments introduced several women-specific schemes to empower them in general and rural women in particular. In this connection there is a need to study the impact of microfinance on rural women, whether the benefits of this developmental programme have percolated down or not, particularly at micro level. This paper is an attempt to assess the impact of microfinance on the changes in the level of income and employment of members after joining the SHGs at micro level. To fulfill the above objective, six villages in the three regions (Coastal Andhra, Rayalaseema and Telangana) of former united Andhra Pradesh were taken up for an in-depth study. The major findings of the study are: (i) microfinance activities have altered the living condition of the SHG members, (ii) these activities have also contributed to social empowerment of women.

Introduction

Poverty has been one of the most researched areas in social sciences. However, a lot of challenges lie in understanding poverty from the socio-political and social empowerment perspectives. This study has therefore, attempted to bring forth those socio-political questions of empowerment¹ and capacity building, while also attempting to examine the measurable economic outcomes.

One way of understanding poverty is to look at exclusion of the poor from access to

financial institutions, which were primarily meant to foster the socio-economic development of masses, especially in the developing economies. The panacea suggests that Bangladesh model of microfinance eradicates poverty through the adoption of financial inclusive policies. Microfinance is often considered as one of the most effective and flexible strategies in the fight against poverty. It is sustainable and can be implemented on a massive scale necessary to respond to the urgent needs of those subsisting on less than \$1 a day. The last twenty years have shown that

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microfinance is a proven development tool and capable of providing sustainable livelihoods to a vast number of the poor, particularly women (Ghate, 2007; David, 2004; Joy and Murthy, 2007; Karmakar, 2010). The 2005 State of the Micro Credit Summit Campaign reports that microfinance institutions reached over 92 million clients and benefited 333 million family members. The success of microfinance represents a paradigm shift in the development industry. The poor are no longer to be treated as mere recipients of charity-but as customers to be served. Women make up approximately 83 per cent, or 66 million, of reported microfinance clients. They not only make good clients but also they have a better track record than men in repayment of loans. They are also key drivers of development (Samuel *et al.* 2005; Sam Daley-Harris, 2005). Investing in women, literally, has proved to be the most effective way to increase individual family expenditure on health and education, improved nutrition and food security, protection against emergencies, and begin the slow process of tackling the gender inequalities that hinder development in many countries around the world. Funding for microfinance programmes is set to increase further in the years to come (Bali Swain *et al.* 2009; Yunus, 2004). Microfinance is being promoted as a key poverty alleviation strategy to enable poor women and men to cope with the adverse economic and social impacts of structural adjustment policies and globalisation (Shetty, 2002; Frances, 2005; Satish, 2005).

It has been a challenge for the Indian banking system to provide financial services to every strata of society. At present, more than 50 per cent of total population continues to be excluded from its ambit. Such exclusions are due to many direct and indirect reasons. Many studies have substantiated the argument that most of the loans disbursed by commercial and regional rural banks go to the economically well-off farmers or to those who have considerable amount of assets (mostly landholdings). Those

who do not possess land or any other collateral assets seem to lose out to access credit. Post-1990s, many developing countries have embarked on deregulating their financial systems and transforming their financial institutions into effective intermediaries to extend viable financial services to all segments of the population. These services all over the world are being provided through group-based delivery mechanisms, which have the twin advantages of low transaction costs and the use of joint liability as social collateral. Presently, self-help group bank linkage programmes (SHG-BLP) are playing a major role in poverty alleviation in rural India. SHGs are fast emerging as a powerful tool for socio-economic empowerment of the poor in the rural areas. In India, SHGs represent a unique approach to financial intermediation. The approach combines access to low-cost financial services with a process of self-management and development for the women who are SHG members. SHGs are seen to confer many benefits, both economic and social. It enables women to expand their savings and access to credit which banks are increasingly willing to lend. SHGs can also be community platforms from which women become active in village affairs, stand for local elections or take action to address social or community issues. The present study attempts to examine the socio-economic impact of the SHGs members. It examines how far the programme helped in raising the income and employment levels of the rural women. In the light of the above, the focus of the present study is to identify the impact of microfinance on income and employment levels of member borrowers in three different regions of Andhra Pradesh. With this broad issue in mind, the following objectives were set for the study, to explore socio-economic condition analysis of SHG members in selected villages, to assess the changes in the level of income and employment of members after joining the group and finally to search for the dynamics of women's participation in the decisions made in the households.

Review of Literature

The research works pertaining to the very theme of inter-dependence between microfinance and some socio-economic factors is very rich and it is imperative to sketch a brief narrative of this literature. Deshmukh (2004) in his study on the impact of SHGs in Andhra Pradesh showed that there has been an increase in the economic activity, savings, income, and financial assets of the group members after joining SHGs. Apart from economic progress, joining SHGs has made the members socially aware. National Commission for Women (2004) reveals that 30 per cent of the households reported increase in assets after joining SHG, mainly in Rajasthan and Tamil Nadu. Wadiniale (2004) reported that SHG programme led to an increase in monthly household income, 66 per cent women converted their houses into permanent structures. In addition, there was a positive impact in areas like health, social and cultural values. A survey of 29 districts (*Thanas*) in Bangladesh was undertaken by Khandker *et al.* (1998) for the World Bank and the Bangladesh Institute of Development Studies (BIDS). They concluded that microfinance, as delivered by Grameen Bank, Bangladesh Rural Advancement Committee (BRAC) and Rural Development-12 (RD-12), accelerated the shift from wage employment in the informal rural sector to self-employment among the poor participants. But they added that absence of technological development slowed down the overall increase in production and employment. Some other studies, for instance, Rahman, *et al.* (2010), also assessed the impact of microfinance of rural development schemes on the livelihoods of the rural poor in Bangladesh. The results show that household income, productivity of crops and livestock, expenditure, and employment increased significantly due to the productive use of the finance availed of by the beneficiaries. In this study, the logit-model showed that socio-economic factors like age, number of family members in farming, total land size and clients'

ethics and morals of the clients had a positive and significant influence on household income. They concluded that micro investment programme brought about significant and positive changes in the lives of the clients. Micro investment programmes helped in significantly reducing rural poverty. They recommended that the programme should be replicated in other rural areas of Bangladesh, in order to accelerate economic activities of the poor. Such a finding is also supported by Latif (2001), who measured the effects of microcredit on the household saving of Bangladeshi borrowers. He observed that land size and family size had influence on consumption and calorie intake of rural Bangladeshi households. The study found that saving-income ratio was significantly higher for the participants than for the non-participants. Akter, *et al.* (2010) surveyed the impact of community-based organisation (CBO) loans on livelihood improvement. The study found significant improvements in the socio-economic conditions of the beneficiaries. These included; greater awareness, increase in family income, assets, better clothing and food intake and improved sanitation. It was also found that the women participation in the household decision making increased.

Kumar *et al.* (2008) explored the impact of microfinance on employment, income and empowerment in Himachal Pradesh. They found that the first round loan impact is observed in the easy and timely availability of small amount of loans to rural poor women to meet their day-to-day urgent consumption requirements. This has been the single most remarkable accomplishment of the formation of SHGs. In addition, the womenfolk felt more empowered, in terms of decision making at the household level. The impact is that microfinance empowered people and improved their economic condition, improved skills, enhanced production skills and increased income and employment, and some people are educated and started petty businesses, small-scale industries, etc.

An attempt to analyse the SHGs with special reference to social and economic empowerment was made by Puhazhendhi and Satyasai (2001). They observed that the involvement of the rural poor in SHGs significantly contributed to their social empowerment, as measured by improvement in their confidence, their position within the family, improved communication skills and other behavioural changes. They found that SHG, as an institutional arrangement, could positively contribute to the economic and social empowerment of the rural poor and the impact on the latter was more pronounced than the former. Further, a few studies (Sharma 2001) focused on the role of SHG in women empowerment and found that significant changes in the living standard of SHG members have taken place, in terms of increase in income levels, assets, savings, borrowing capacity and income generating activities.

The socio-economic empowerment of women through SHGs was explored by Vijayalakshmi and Valarmathi (2008). They pointed out that poverty and empowerment are the major problems in India, and they suggested ways to overcome these two problems through microcredit, i.e., through SHG which is considered as a potential instrument for combating poverty in a sustainable manner. They also found that many expressed the desire of an improvement in their level of income, assets, wealth, and standard of living. The contribution made by the microfinance programme initiated by Sahyadri Grameen Bank in Thyagarthi village in Shimoga district of Karnataka was evaluated by Raghavendra (2001). The analyses revealed a significant change among the group members in diversifying income-generating economic activities. The researcher found that the microfinance programme was financially sustainable. The members reported that they no more borrowed from moneylenders. It was found that the members of the SHG formed by the forward community created their own capital base. It was observed that there was a great

potential for implementing various programmes for the rural poor through SHGs.

The impact of SHGs on women in Goa was examined by Gaonkar (2001). The study revealed that SHGs had a lasting impact on the lives of the poor and their quality of life improved in terms of increase in income, savings, consumption expenditure, self-confidence, productive use of free time, getting an opportunity to show hidden talents, and getting more importance in the family. He concluded that the SHG movement could significantly contribute towards the reduction of poverty and unemployment in the rural area. Accordingly, it had its impact on decision making in household matters as well. As argued by Bali Swain *et al.* (2009), improvement in nutrition of children lead to greater efficiency in woman's role in the household but it also falls within the existing role of women under the prevailing norms of the society. When a woman is better able to perform such activities, it leads to an increase in her self-confidence and feeling of well-being. This might create conditions leading to woman empowerment, but is not empowering on their own. In their research paper, Dahiya *et al.* (2001) conducted a socio-economic analysis of the SHGs in Solan district of Himachal Pradesh. The study found that there was a considerable increase in annual income in the post-SHG period. The social impact was considerable with regard to empowerment of women, educational development of children, and emancipation from social evils like drunkenness of male household members.

Scope of the Study: The basis of the concept of microfinance is self-organisation of the poor at the community level driven by a desire and an inherent capacity to improve their living conditions by themselves. Microfinance revolution in recent times played a pivotal role in women empowerment and poverty alleviation, through SHGs increasing the income and employment. In this paper, some important related literature on microfinance and its impact

on income and employment generation is reviewed. A number of studies have so far been undertaken to examine the SHGs and their performance in various parts of India and abroad. Several authors demonstrated how SHGs are playing an important role in extending microfinance to the rural poor. The functioning of SHGs is based on participatory mechanism and the impact of SHGs on its members, in terms of empowerment, accessibility to credit, socio-economic change, etc., has been found to be positive. A few studies have been undertaken, to assess the impact of microfinance on the socio-economic empowerment. Several studies discussed in this section systematically analysed the various aspects of microfinance. While answering the various aspects of microfinance, the borrower's viewpoint is frequently missing. There is hardly any study which deals with the various forms of microfinancing or SHGs and their sustainability aspects, except a study conducted by NABARD and a few others. It is true that the concept of SHG itself is a very recent one and hence it is quite possible that in future many studies might emerge. This is a testable proposition for the State of Andhra Pradesh in India since it has been witnessing a massive growth in SHGs in last few years. This study is undertaken to analyse the structure, conduct and performance of self-help groups and their impact on women in six villages of Andhra Pradesh. This paper will seek to bridge the gaps in the empirical literature about the seemingly little or no evidence on the effectiveness and the impact of microfinance on income and employment levels of member borrowers in three different regions of the erstwhile State of Andhra Pradesh. This paper will, therefore, contribute to the empirical literature on how far the programme helped in raising the income and employment levels of rural women and examine the process of women empowerment and changes in the economic status of SHG members, in particular, and rural women, in general.

Data and Methodology

Geographically Andhra Pradesh² is divided into three distinct regions, namely, Coastal Andhra consisting of nine districts, Rayalaseema four districts and Telangana ten districts. The coastal Andhra is socio-economically more advanced than the other two regions. The study is based on primary data and used multi-stage stratified proportionate random sampling technique for selection of representative districts, mandals, villages and households. At the first instance, three districts, namely, East Godavari, Chittoor and Karimnagar were chosen on the basis of one district from each region, i.e., Coastal Andhra, Rayalaseema and Telangana on the existence of highest number of SHGs respectively. In the second stage, from each district, one mandal was selected on the basis of highest number of SHGs. These are Rajahmundry (Rural) from East Godavari district, Madanapalle from Chittoor and Peddapally from Karimnagar. In the third stage, from each mandal, two villages were selected on the basis of highest and lowest size of existing SHG. A total of six villages, namely, Torredu and Rajavolu from Rajahmundry Mandal, Chinnathippasamudram (CTM) and Ankisetipalli from Madanapalle Mandal, and Raghavapoor and Brahmanpalle from Peddapalle Mandal were selected. In the fourth stage, SHGs were selected in consultation with VOs³. SHGs linked to the banks for the past two years were selected for the study, assuming that the benefits from the SHG-bank linkage programme would have been fairly well-stabilised by then. In addition, 33 per cent of total members were covered from each selected village (covering not less than 40 members from each village). At the fifth stage, SHG members were randomly selected from each of the selected SHGs. Members were stratified by random sampling, based on the group and caste from selected villages. The total sample size is 582, out of which 176 are Scheduled Castes/Scheduled Tribes (SC/STs), 242 are Backward Castes (BCs) and 164 belong to the Other Castes (OCs) community. The primary

data pertain to the year 2010-11. The study is based on a field survey which was conducted during the period May 1 to August 31, 2011.

Empirical Analysis : In the following section, a brief note on logit model is given. Since two dependent variables, namely, income/employment generation activity and women decision making are qualitative variables, logistic regression model has been employed for analysis of impact of some socio-economic factors such as self-help group members' age, education, marital status, annual income, type of family, spouse education, spouse income, household income, frequently borrowing, borrowed loan amount and participating in training programme by members, size of land and household assets which play pivotal role in empowering women members and promoting employment/income generation activities.

The Logit Model : Logistic regression was proposed in the year 1970 as an extension of traditional ordinary least square method and to overcome its limitation in incorporating dichotomous or binary variables as dependent variables. The logit models became extremely popular in the fields of social sciences because a large number of variables like gender, caste, marital or educational status, etc., coming under its domain are qualitative in nature. Social scientists (Afifi and Clerk, 1990; Ryan, 1997; and Tabachnick and Fidell, 2001) recognised and acknowledged the importance of logit model as an useful alternative to linear regression modeling technique. A brief note on logit model is given below.

Let us consider a binary response variable Y and an explanatory factor, say, X_i . A logit model predicts the log of odd ratio of Y from predetermined variable X_i . A simple logit model can be represented as:

$$\ln \frac{e}{1-e} = \alpha + \beta x = \log(\text{odds}) \quad \text{---(1)}$$

Where e = probability (Y= outcome of interest| $X=x$) = $\frac{e^{\alpha+\beta x}}{1+e^{\alpha+\beta x}}$

Extending the logit model for multiple predictors, a complex logistic model can be constructed as follows-

$$\ln \frac{e}{1-e} = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k \quad \text{---(2)}$$

Where e is the probability of occurrence of the event and all β_i are slope coefficients capturing marginal effect of each explanatory variable and α is intercept term. All the parameters are estimated by maximum likelihood (ML) method. (e/1-e) is called odd ratio in favour of the event under consideration. Interpretations of all β_i coefficients are a little tricky in logit models. For example, interpretation of coefficient β_2 in equation 2 is as follows- a unit change in x_2 will cause $(e^{\beta_2} - 1) * 100$ percentage change in odd ratio in favour of the event under consideration and the next of the slope coefficients can be interpreted in the similar way.

An attempt is made to examine the impact of microfinance on income/employment generation activity and women decision making in household matters. More specifically, this section explores the proximate determinants of the two dimensions mentioned above. Logistic regression model has been employed for analysis of impact of some socio-economic variables. Since income/employment generation and women decision making have been defined by the dummy variables, the study employed the logit regression analysis as the Ordinary Least Squares (OLS) (multiple regression) is not appropriate to the present context.

Microfinance Impact on Income/Employment Generation Activity : Microfinance helps the poor in financial distress to become self-employed through rural non-farm sector activities of their choice. Moreover, microfinance

is not limited to rural society or developing countries only. But also it is equally applicable to semi-urban areas and of developing and developed countries. Unemployment and poverty pose major challenges for any developing country and India is no exception to this phenomenon. This is because of the gap between demand for and supply of credit for the poor to start economic activities. The rural non-farm employment has acquired greater importance in economic development in recent times. It plays a positive role to alleviate poverty and generation of employment. The growth of the rural non-farm sector had a positive impact on poverty alleviation and benefited many sections of the rural society. The growth of rural non-farm sector can provide assets, employment and income to the rural poor. It also provides an opportunity for rural women to take up remunerative work beyond casual labour and household labour.

The income/employment generation activity has undergone changes after the SHG respondents were exposed to the microfinance activities. It is observed that factors such as age, education, marital status, annual income, spouse education, household income, borrowed loan amount, training programme participation, household size of land and household assets exert considerable influence on the members generating income/employment. Accordingly, it is hypothesised that the income/employment generation by the SHG members is influenced by their age, marital status, spouse's age, frequent borrowing, borrowed loan amount and training programme participation.

In the light of this background, the following logit model is formulated:

$$\begin{aligned} \text{ACTIVITY}_i = & \beta_0 + \beta_1 \text{SMAGE} + \beta_2 \text{SMEDCN} \\ & + \beta_3 \text{MSTATUS} + \beta_4 \text{SMINCOME} + \beta_5 \text{HEDCN} \\ & + \beta_6 \text{HINCOME} + \beta_7 \text{LOANAMT} + \beta_8 \text{TRAINING} \\ & + \beta_9 \text{SIZEOFLAND} + \beta_{10} \text{HHASSETS} + U_t \quad \text{--- (3)} \end{aligned}$$

In the above model, the variables are defined as follows:

ACTIVITY= 1 if SHG members started income and employment activity.

0 = otherwise

SMAGE= SHG members' age (in years)

SMEDCN= SHG members' education (in years)

MSTATUS= 1 if SHG member married

0 = otherwise (widows)

SMINCOME = SHG members' yearly income (in ₹)

HEDCN= SHG member's spouse education (in years)

HINCOME= SHG member's household income (in ₹)

LOANAMT= SHG member borrowed loan amount (in ₹)

TRAINING= 1= if SHG member participating training programme

0 = otherwise

SIZEOFLAND = Size of land

HHASSETS = Household assets

U_t = Error term

Microfinance Impact on Women Decision Making Proximate Determinants:

The decision making behaviour has undergone changes after the SHG respondents were exposed to microfinance activities. It is observed that factors such as age, marital status, spouse education and training exert considerable influence on the decision making. Accordingly, it is hypothesised that the decision making by the SHG members is influenced by factors such as, age, education, marital status, yearly income, type of family, spouse education, spouse income, household income, frequently borrowing, borrowed loan amount, participating in training programme etc. Accordingly, the following logit model is formulated:

$$\begin{aligned} \text{DESMAX}_i = & \beta_0 + \beta_1 \text{SMAGE} + \beta_2 \text{SMEDCN} \\ & + \beta_3 \text{MSTATUS} + \beta_4 \text{SMINCOME} + \beta_5 \text{FTYPE} \\ & + \beta_6 \text{HEDCN} + \beta_7 \text{HINCOME} + \beta_8 \text{HHINCOME} \\ & + \beta_9 \text{NOOFTIMES} + \beta_{10} \text{LOANAMT} + \beta_{11} \text{TRAINING} + U_t \quad \text{--- (4)} \end{aligned}$$

In the above model, the variables are defined as follows:

DESIONMAK= 1 if decision taken by SHG member in household matters

0 = otherwise

SMAGE= SHG members' age (in years)

SMEDCN= SHG members' education (in years)

MSTATUS = 1 if SHG member married

0 =otherwise

SMINCM= SHG members' yearly income (in ₹)

FTYPE = 1 if size of family is more than 3.

=0, otherwise

HEDCN= SHG member's spouse education (in years)

HINCOME= SHG member's spouse income (in ₹)

HHINCOME = SHG member household income (₹)

NOOFTIMES= frequency of taking loan (in times)

LOANAMT= Loan amount (in ₹)

TRAINING= 1 if SHG member participating in training programme

0 = otherwise

U_t = Error term

The above model is estimated through a step-wise procedure.

The following are the results obtained from the estimated logit regression model.

Socio-economic Profile of the Sample Members

An important aspect of the study is the socio-economic profile of the members of the SHGs. For this study, total 582 members were interviewed with the help of comprehensively structured schedules. The socio-economic profile of the members include their age, marital status,

education, type of household, access status of ration cards, source of drinking water, source of energy, family size, husband's education, landholdings of the members and their husbands. The study reports that majority of the members of groups in all the selected villages are in the age groups between 26-35 and 36-45 years. It shows that middle aged women join the groups, which are more productive age groups. The study found that nearly 88 per cent of members were married and are the important bread winners in their families. The number was more in Raghavapur and less in Ankisettipalle village. It was the highest in the SC community and lowest in the ST community in all the selected villages. Similarly, the education level of the members shows that nearly 68 per cent are literate and rest of the members are illiterate. It is observed that the number of members having primary education is quite large in the ST community, while none have acquired intermediate level education in the ST community. Also, due to being married at a relatively younger age and weak financial conditions, many of them were unable to continue with their education. The study observed that, in all selected villages, majority of the member families are nuclear and the percentage was highest in Raghavapur. Similarly, about 86 per cent of the members reported that their spouses are the heads of the household and only 11 per cent of the members reported that they are managing the households themselves. Interestingly, the study observes that all the members own ration cards in all the selected villages. Out of them, about 99 per cent of the members have white cards, while only one per cent of the members have pink (Sugar card) card. Similarly, it is observed that nearly 70 per cent of the members live in pucca houses, followed by 27 per cent in semi-pucca and only 3 per cent live in kutcha houses. The study also finds that about 45 per cent of the members have toilet facilities in their houses. Accessing toilet facility is more common in Ankisettipalle, while it is less frequent in Raghavapur village. Non-availability of sanitary facilities is reported

highest in ST families, followed by SC, BC, OC and minority communities. Same is the position regarding the source of energy for cooking, where it is found that only 43.3 per cent of the members have gas for cooking. It is also observed that most of the SC and ST members are dependent on firewood for cooking. The family size of the household is less than four members (76 per cent) in the selected villages and it was registered highest in Rajavolu and lowest in Ankisettipalle village. The study finds that 80 per cent of the members' husbands are literates. It had been observed that the members and their husbands have different levels of education in selected households and on an aggregate level, the SCs and BCs are more illiterate when compared to OCs, STs and minority community members' husbands. The field observation also shows that husbands of ST members have in general studied up to intermediate level, but in other community, they

have completed up to graduation, post-graduation or technical education. The landholding size of respondents' families had been reported that 43.3 per cent of the members are landless and the remaining are marginal, small and semi-medium farmers. The landholding size of respondent's families has been reported that majority of land owning families belong to marginal, small and semi-medium and almost one-third of members are landless. The members who do not have lands are more in Torredu and CTM villages, and lesser in Brahmanpalle, and Ankisettipalle villages. It is important to note that among all social group members, minority members are at highest number followed by SCs, STs, BCs and OCs in selected villages.

Results and Discussion

The study formulated two equations [equation (3) and (4)] and estimated with logistic

Table 1: Estimates of Impact of Social and Economic Factors on Income/ Employment Generation Activity

Variables	Coefficient	Std.Err	P>Z
smage	0.0644	0.1455	0.658
smedcn	-0.8505	0.2969	0.004
mstatus	-1.8906	0.7208	0.009
smincome	0.0018	0.0001	0.000
hedcn	-0.6965	0.3535	0.049
hincome	-0.0000	0.0000	0.000
loanamt	0.0003	0.0000	0.001
training	0.0261	0.3020	0.931
sizeofland	-0.1304	0.0956	0.172
hhassets	4.7100	0.0000	0.013
Cons	0.7597	1.3310	0.568
Number of observations	582		
LR chi2 (10)	332.6900		
Prob> chi2	0.0000		
Pseudo R2	0.4210		
Log likelihood	228.7764		

regression technique since in both cases the dependent variables are qualitative in nature. When standard logistic regression technique is employed for both equations, log of odd ratio in favour of the event under consideration becomes the dependent variable in both equations. For example, in the third equation, dependent variable is the log of odd ratio in favour of starting employment/income creation activity against non-generation is the dependent variable. Similarly, in the fourth equation, log of odd ratio in favour of taking decision by the member in respect of household activities against non-taking decision. Estimates of equation (3) are given in Table 1.

The data in Table 1 show that out of ten socio-economic factors, seven are statistically significant as the p values are less than 0.05 thus indicating impact income/employment generating activity of the SHG member. From our estimated logit model, the results of which are presented in Table 1 analysis, the study found that seven socio-economic factors namely, SHG member's education (smedcn), marital status (mstatus), income (smincome), spouse education (hedcn), household income (hincome), borrowed loan amount (loanamt) and household assets (hhasset) out of ten explanatory variables have shown statistically significant impact on income and employment generating activity of the SHG member. From the Table it can be inferred that log of odd ratio in favour of income/employment generation goes up by 0.0644 units and 0.0018 units if age of SHG member increases by one year and income of member goes up by one rupee, respectively. Age is one of the important variables which determines the exercise of authority among men and women. It implies that middle-aged women, those who are in the more productive age groups join the SHGs and get engaged in micro-enterprises. They are more matured in decision making, and want to take up income-generating activities to increase the income of their families. Age can be an important factor in the decision taking ability of

women. An unmarried or newly married woman may not have much maturity to confidently manage domestic issues, especially financial ones. However, as she grows older and gains experience on her own, as well as by observing others she can become an important player in the decision-making process. For instance, a middle aged woman can play an important role in, say, selecting her daughter-in-law. On the other hand, once she becomes fairly aged, there is every possibility that her married children may not give her the same importance which she enjoyed when they were still unmarried. Increase in members' household income has detrimental impact on log of odd ratio in favour of employment/income generation by 0.0000 units whereas one unit increase in household asset has small positive effect of 4.7100 units on log of odd ratio. Apart from these, educational status of husband (hedn) of the SHG member has near-significant impact on income/employment generation. Similarly, if the concerned SHG member is married, then log of odd ratio in favour of the employment activity would be insignificant. If a member takes loan, there is a high probability of income/employment activity going up. Any programme dispensing credit normally will aim at 'credit widening' by increasing the clientele base and 'credit deepening' by enhancing the quantum of loans per borrower. It shows that microfinance approach to financing rural poor helped in both 'credit widening' and also 'credit deepening'. It is also observed that among the social group members who took loans more often, their saving is more and they repay more amount through higher monthly instalments. If the member participates in training programme, then the log of odd ratio in favour of member to start income/employment generation activity will go up by 0.0261 units. Training programme (as in the participating training programme) also influences the income and employment generation activity. The microfinance programme has made a positive impact on the generation of employment and income and it

generated more employment for the member's households (Table 1).

In recent times, government and voluntary organisations have been endeavouring to tap the latent entrepreneurial talents of women. To that end, a number of training capsules on subjects like agricultural practices, fisheries, poultry, weaving, candle-making, pickle-making, and basket-weaving etc., are being organised for women. The intention behind such initiatives is to empower women so that they can gain a greater degree of financial independence. It should be logical to expect that with enhanced self-confidence and own income, women would be more articulate in expressing their views in household matters.

Other socio-economic factors are found to be statistically significant. The members in the initial stages normally borrow for consumption purpose. The members then slowly shift their

focus to income and employment generation purpose, which require higher amount of loans. There is significant variation in level of employment of the member households after availing of microfinance and joining self-help group-bank Linkage programmes. In short, the data in Table 1 imply that the level of employment of the member households increased after receiving benefits from the microfinance programme. It concluded that microfinance programme helped the women participants to increase their contribution to the household income. There is a substantial increase in income of the participant women due to adoption of the programme. The contribution to the family income helps women to become economically independent and a decision making in the household expenditure. Similarly, estimates of equation (4) are given in Table 2.

Table 2: Estimates of Impact of Social and Economic Factors on Decision Making

Variables	Coefficient	Std. Err	P>Z
smemage	-0.1826	0.1087	0.093
smemedcn	-0.0485	0.2212	0.826
mstatus	0.8757	0.5230	0.094
smincome	0.0005	0.0001	0.000
ftype	0.5720	0.2257	0.011
hedcn	-0.0200	0.2586	0.938
hincome	0.0004	0.0000	0.002
hhincome	-0.0000	0.0000	0.000
nooftimes	0.0250	0.0896	0.779
loanamt	0.0010	0.0000	0.199
training	0.1858	0.2268	0.413
Cons	0.9307	0.9339	0.319
Number of observations	582		
LR chi2 (11)	43.0000		
Prob> chi2	0.0000		
Pseudo R2	0.0561		
Log likelihood	-361.8331		

A woman is an important player in household matters. It is she who primarily runs the kitchen and looks after the family members—her husband, children, younger siblings and elders (in case it is a joint family). Since she has the basic responsibility of running the household, she can logically expect to have a reasonable say in matters concerning the family. The issues may include: food, clothing, education of children, saving and expenditure to meet social obligations. Furthermore, according to the SHG members, the subordinated role of women and unbalanced gender power relations in the study area are fast becoming things of the past, thanks to microfinance. In other words, access to microfinance brought substantial changes to gender power relations at the household and community levels. Indeed, the study finds that the gender power relations gaps are being bridged because women who benefited from microfinance improved contribution to household incomes and this earned them respect among their male counterparts. Thus, their male counterparts now see women as partners in decision making at all levels.

Microfinance through SHGs can contribute to women empowerment. Empowerment is a slow and continuous process and the mere joining of SHG does not lead to empowerment. It takes some time to get the full benefits of the programme. This study shows that microfinance programme helped women in increasing their economic empowerment and as a result, they started taking some household firm decisions independently. Table 2 presents estimates of impact of social and economic factors on decision-making. The results show that out of eleven socio-economic factors, six have statistically significant impact on decision making of SHG members. Reported coefficients signify change in log of odd ratio in favour of the decision of members to participate in SHG due to one unit change in each explanatory variable. The results show that if the concerned SHG members are married, then log of odd ratio in

favour of taking decision by the women will go up by 0.8750 units. Hence, marital status also plays an important role for the SHG members' decision making. Usually, married women depend on their spouse's income for meeting the household expenses. A rural woman normally does not have a scope to earn money without the permission of her in-laws. Now, with rapidly increasing cost of living both in rural and urban areas, it is becoming increasingly difficult to run a household with a single person's income. In addition, when the family size is large, a woman may not be able to manage the family expenditure with her spouse's income alone. Hence, after marriage, out of necessity, women tend to undertake some income-generating activities to enhance their family income.

The regression estimates in Table 2 show that when SHG member's income goes up by one unit (rupee), log of odd ratio in favour of taking the decision by women will go up marginally by 0.0005 units. In a family where the male is the sole earner, he may assert that he alone is 'empowered' to decide on family issues (especially the financial ones). Today, financial stringency is forcing many women to start earning money. There is every possibility that such women would feel that they should have a reasonable say in household issues. Their argument may be that since they too are earning money and are not solely dependent on the male members of the family, they should be allowed to have an important role in household matters. Similarly, log of odd ratio goes up by 0.5720 units if family size under consideration is large. Family is usually of two types, joint family and nuclear family. Similarly, the study observes that most of the nuclear families have been having more monthly saving than joint families. Log of odd ratio also increases marginally by 0.0004 units if husbands' income of the SHG members increases by one rupee. The level of income of a family can have an important bearing on its quality of life. When the income level is low, the expenditure pattern should logically be

expected to be low as well (granted that the family does not take loans to meet its expenses and fall into further financial stringency). However, a high level of income does not always guarantee a high quality of life. There is always the risk of the family indulging in wasteful expenditure-at the cost of meeting the more pressing needs. A possible scenario is that in low income families, most of the decisions are 'enforced' ones- to primarily meet the pressing needs. On the other hand, in a high income family, women could enjoy a greater say in household matters.

Further, if a member takes loan frequently, then log of odd ratio in favour of taking decision making will go up by 0.0250 units. If the member's borrowed loan amount goes up by one rupee, then the log of odd ratio in favour of taking decision by the woman will inch up by 0.0010 units. The SHGs provide loans to their members for investing and to get access to income-generating opportunities. As employment opportunities increase, automatically purchasing power will increase which in turn will lead to economic growth. An amazing fact noticed in the recent decades is that Financial Institutions are finding women borrowers to be more diligent than their male counterparts. No wonder, the success of Bangladesh's Grameen Bank is largely attributed to the sincerity of its women clients. An increasing number of SHGs are reporting that women in general tend to utilise the borrowed amounts for income generating activities.

The training of SHG members plays a crucial role because it is training which makes them financially literate. In detail, undoubtedly, training plays an important role in sharing information, carrying out financial transactions, decision making and enhancing the bargaining power of the SHG members. Compulsory attendance of members in the training is one of the prerequisites for smooth functioning of the group. It is one of the indicators to ensure the active participation of members in the business

of the group in a democratic manner. The results show that the log of odd ratio in favour of taking decision by the women will go up by 0.1858 units when member is trained. Therefore, participation in training programme is an important indicator of being practically empowered, especially when the SHG member is sufficiently aware of the basic banking operations and is able to handle her savings account on her own. The guideline of the government is that members of the group should visit the bank at least once in a month and minimum of two women members should go together to the bank. The rationale for such policy is that the women should not confine themselves within the four walls of the house and at the same time should get some exposure to financial matters. By this, they improve contacts, can voice their views and get some idea of financial transactions.

SHG member household income and SHG member annual income are found to affect log of odd ratio adversely. This finding is in consonance with economic intuition, since a member of any well-off family will have lesser chance to join the SHG. Increase in loan amount affects odd ratio adversely. Other variables like SHG member education as well as spouse education status, frequency of taking loan, etc., have no considerable impact on decision making of SHG membership.

The Decision Maker of the Family: To understand who is the decision maker in the family, data were collected on purchase/sale of household assets, family savings, children's education and marriage, using a 4-point scale, i.e., (i) SHG Member, (ii) Husband, (iii) Both (Wife and Husband) and (iv) Joint Family Members. It is commonly observed that in a family some decisions are exclusively taken by the spouse i.e., head of the family, while some are exclusively taken by the housewife, and the other decisions are taken jointly by both spouse and wife. There are some other decisions, which are exclusively taken by other members in the family, like the

children, parents-in-law, married sons, etc. Of the 582 members, at the time of joining the group, majority reported that household decisions were taken by their husbands. Now, majority of the members report that household decisions are taken by them jointly with their husbands.

It reveals that women's role in household decisions increased after joining the SHGs. This is because of the experience gained by the members by attending trainings and meetings. Undoubtedly, training and meeting plays an important role in sharing information, carrying out financial transactions, decision making and enhancing the bargaining power of the SHG members. Compulsory attendance of members in the training and meetings are one of the prerequisites for smooth functioning of the group. It is one of the indicators to ensure the active participation of members in the business of the group in a democratic manner. Table 3 shows that out of 582 selected sample members, nearly 49 per cent have reported that household decisions are taken jointly with their husbands, followed by 32 per cent who reported that their husbands generally take decisions in their family, 12 per cent reported that household decisions are taken by themselves (SHG members), and 7 per cent of the members reported that usually all family members take the decisions together. According to the norms of the patriarchal society, it is usually the head or the male members of the household who take certain key decisions. It was found that the increased participation of women in the decision-making processes empowers them in the true sense. Joint decision making in the purchase of business items is observed among all the members belonging to all the villages under study. Thus, it can be concluded that the involvement of spouse is more common for all types of decisions among all the group members.

It is further observed from Table 3 that among all selected villages, the percentage of members who reported that household decisions are taken jointly with their husbands, is found to

be highest in Rajavolu (53 per cent) and lowest in Ankisettipalle village (38 per cent), while in Raghavapur, Brahmanpalle, CTM, and Torredu villages they are 45.9, 45.2, 49.7 and 51 per cent, respectively. The joint decision making by women improved significantly in all aspects investigated. The study found that in all the selected villages, majority of all social group members reported that they make household decisions jointly with their husbands in their families. The percentage is found to be highest among the OCs, followed by the BCs. The OC and BC community members are relatively literate and economically sound in comparison to the others. Further, it was observed that among minority community members, majority of them reported that their household decisions are taken by their husbands. It was also observed that among all the selected villages, in Raghavapur, members playing a greater and independent role in decision making regarding all matters related to their family is highest.

Analysis of Table 3 also reveals that highest percentage of members whose husbands generally take decisions in their family is in Ankisettipalle and lowest in Brahmanpalle village. However, a decreasing role of husbands is observed in the process of decision making as compared to earlier times. This is a positive trend in the process of women empowerment through income generation through SHG-bank linkage. It is also observed that in Ankisettipalle village, the husbands of SC and minority community members played a major role in decision making as compared to other communities. Notably, among all the selected villages, highest joint family decisions are found in Brahmanpalle village.

Overall, the participation of women in decision-making process increased after joining the SHGs. Further, it is informed that the social indicators have been assumed to play an important role in successful implementation of various microfinance programmes. It is observed that the impact of microfinance is relatively more

pronounced on the social aspects than on the value of the economic aspects. Thus, it can be ratified that social indicators have made a significant impact on members' decision making

by bringing a positive shift in their social conditions. Further, the social indicators have been assumed to play an important role for successful implementation of various

Table 3: Village-wise and Community-wise Frequency of Decision Making by SHG Members

Social Groups	Decision Making	Name of the Village						Total
		Raghavapur	Brahmanpalle	CTM	Ankisetipalle	Torredu	Rajavolu	
SC	Self	5 (29.4)	2 (28.6)	3(12.5)	3(25.0)	12(16)	2(9.5)	27(17.3)
	Husband	6(35.3)	0 (0)	9(37.5)	5(41.6)	25(33.33)	8(38.1)	53(34.0)
	Jointly with husband	5(29.4)	3(42.8)	10(41.7)	2(16.7)	36(48)	10(47.6)	66(42.3)
	Jointly family	1(6.0)	2(28.6)	2(8.3)	2(16.7)	2(2.66)	1(4.8)	10(6.4)
	Total	17 (100)	7 (100)	24 (100)	12 (100)	75 (100)	21 (100)	156 (100)
ST	Self	0 (0)	0 (0)	1(11.1)	1(16.7)	0 (0)	0 (0)	2(10.0)
	Husband	1(100)	1(100)	5(55.6)	2(33.3)	2(100)	1(100)	12(60.0)
	Jointly with husband	0 (0)	0 (0)	3(33.3)	3(50.0)	0 (0)	0 (0)	6(30.0)
	Total	1 (100)	1 (100)	9 (100)	6 (100)	2 (100)	1 (100)	20 (100)
BC	Self	12(15.5)	4(12.9)	9(13.0)	2(11.8)	2(8.7)	3(12.0)	32(13.2)
	Husband	19(24.7)	8(25.8)	20(29.0)	5(29.4)	3(13.1)	4(16.0)	59(24.4)
	Jointly with husband	39(50.7)	15(48.4)	36(52.2)	8(47.0)	15(65.2)	16(64.0)	129(53.3)
	Jointly family	7 (9.1)	4(12.9)	4(5.8)	2(11.8)	3(13.0)	2(8.0)	22(9.1)
	Total	77 (100)	31 (100)	69 (100)	17 (100)	23 (100)	25 (100)	242 (100)
OC	Self	0 (0)	0 (0)	4(5.7)	1(8.3)	4(10.5)	2(11.1)	11(7.8)
	Husband	0 (0)	1(50)	20(28.7)	3(25.0)	12(31.6)	6(33.4)	42(29.8)
	Jointly with husband	1(100)	1(50)	44(62.8)	6(50.0)	20(52.6)	9(50)	81(57.4)
	Jointly family	0 (0)	0 (0)	2(2.8)	2(16.7)	2(5.3)	1(5.5)	7(5.0)
	Total	1 (100)	2 (100)	70 (100)	12 (100)	38 (100)	18 (100)	141 (100)
Minority	Husband	2(100)	0(0)	12(80)	3(100)	1(100)	1(100)	19(82.6)
	Jointly family	0(0)	1(100)	3(20)	0(0)	0(0)	0(0)	4(17.4)
	Total	2 (100)	1 (100)	15 (100)	3 (100)	1 (100)	1 (100)	23 (100)
All	Self	17(17.3)	6(14.3)	17(9.1)	7(17.0)	18(13.0)	7(10.6)	72(12.4)
	Husband	28(28.6)	10(23.8)	66(35.3)	18(36.0)	43(31.0)	20(30.3)	185(31.8)
	Jointly with husband	45(45.9)	19(45.2)	93(49.7)	19(38.0)	71(51.0)	35(53.0)	282(48.5)
	Jointly family	8(8.2)	7(16.7)	11(5.9)	6(12.0)	7(5.0)	4(6.1)	43(7.3)
	Total	98 (100)	42 (100)	187 (100)	50 (100)	139 (100)	66 (100)	582 (100)

Note: Figures in parentheses are percentages.

microfinance programmes. As virtually all those who participated in microfinance programme were women, use of social indicators enabled them to move ahead in their economic status on a sustained basis.

Summary and Conclusion

The microfinance system brought about an unprecedented change in the lifestyles of women in rural areas. The streamlining and effective operation of credit system will entirely transform rural lives. The empowerment through SHGs would impact rural women by giving them immense confidence to mould their lives and that of their families. In this light, the present study examined the financial status of women in pre-and post-SHG scenarios and also investigated the impact of microfinancing on women. For the purpose, the study examined various economic benefits to SHG members in terms of increased asset creation, enhanced saving and borrowing habits, increased income, higher degree of empowerment and improved social lives. The empirical examination shows that the SHG-bank linkage programme has a positive impact on decision making by women in household matters. In addition, it brought about changes in their attitudes against social evils such

as gender discrimination and the dowry system, and it enabled them to advocate for equal property rights, education, the fair treatment of girls and widow remarriage. Empirical findings suggest that income/employment generating activities, SHG member's education, marital status, income, as well as their husbands' education, household income, whereas the amount of loan granted, and total household assets are found to affect the statistically significant impact on income/employment generating activity. In case of participation and decision making by women members is positively influenced by SHG members' age, marital status, income, family type, along with economic factors, have statistically significant impact on decision making. The major findings of the study are that microfinance activities altered the living condition of the SHG members, and these activities also contributed to social empowerment of women. In the light of these evidences, policy measures such as increase in frequency of SHG meeting, SHG training programme, increase in loan amount and ensuring effective utilisation of the loan, may be the useful initiatives to enhance women empowerment, income and employment opportunities.

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Notes

1. Empowerment is a process of change by which individuals or groups gain power and ability to take control over their lives. It involves access to resources, resulting in increased participation in decision making and increased bargaining power, control over benefits, resources and own life, self-confidence, self-esteem, self-respect and well-being. Thus, 'empowerment' is a multi-fold concept that includes economic, social and political empowerment.
2. Andhra Pradesh State is bifurcated into two States as Telangana and Andhra Pradesh in 2014.
3. For this purpose, the lists of SHGs were collected from VOs of each of the sampled villages. Separate lists of total SHGs, SHGs with two years of bank linkage and caste-wise SHGs were considered. Out of these lists, those SHGs which existed for two years as on March 31, 2009 were separated out to form the lists of SHGs as eligible for this study.