# Human Development Through Economic Empowerment Using Microfinance as a Fulcrum

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## Abstract

**Microfinance is the provision of financial services to low income clients, solidarity lending groups, and self employed, who traditionally lacked access to banking and related services. The human development framework sees 'income' as the "means" of development rather than as the "end" and includes all aspects of life, including political, economic, and cultural development. Income is the major determinant of economic empowerment. Women's economic empowerment is a multidimensional aspect and ,therefore, one factor does not satisfactorily provide its measurement. The other factors that are operationalized to measure economic empowerment of women are savings, accessibility to credit, and asset possession. Microfinance plays a significant role in improving the status of self help group families and their children in terms of improving their standards of living. The present study assesses the role of microfinance on the living conditions of the individual households in the pre-SHG and post-SHG scenario. The study suggests that microfinance significantly improved the poor respondents' access to financial services, and had a considerable positive impact on the human development of SHG members in the post-SHG period as compared to the pre-SHG period.**

***Keywords:*** **microfinance, self - help group (SHG), income, human development**
**JEL Classification Codes: G21, O15, O16**

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Microcredit is about much more than access to money. It is about women gaining control over the means to make a living. It is about women lifting themselves out of poverty and vulnerability. It is about women achieving economic and political empowerment within their homes, their villages, and their countries (Elumalai & Muthumurugan, 2011). Microcredit has been claimed to be a solution to integrate marginalized women into socioeconomic activities, decision-making, and poverty alleviation. Microfinance has been recognized as a development approach intended to benefit low-income women and men (Otero, 1999). In broader understanding, microfinance refers to the provision of financial services to low-income clients to eradicate poverty.

Financial services generally include savings and credit; however, some microfinance institutions also provide credit cards, payment services, money transfers, and insurance services. Besides, many MFIs undertake social intermediation services such as group formation, development of self-confidence, and training in financial literacy and management capabilities among members of a group (Ledgerwood, 1999). Micro finance programmes for women are promoted not only as a strategy for poverty alleviation, but for women's empowerment as well (Mayoux, 1997). Microfinance programmes are the leading strategy of poverty eradication through SHGs by raising small loans to poor people for self-employment projects that generate income and provide access to financial services for the poor, especially for women beneficiaries. Microfinance is considered as a development tool to alleviate poverty in Asian, African, and South American countries. Microfinance gives quick and tangible results to the poor people, especially women (Rajendran & Raya, 2011).

## Economic Empowerment of Women

Economic empowerment means the upliftment of women with economic well being associated with a changed status

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of women. This empowerment approach offered a special opportunity to change the lives of women, particularly poor women. Economic empowerment refers to the process of economic and the structural change which enables women to secure economic gain on a sustained basis. Nowadays, self-help groups are instrumental for enhancing the economic status of women in many states of our country. Batliwala (1994) (a developmental researcher) said that women empowerment is the process of challenging patriarchal relationships, distributing power in such a way that women gain greater equality than men. Economic empowerment is the capacity of women and men to participate in, contribute to, and benefit from growth processes in ways which recognize the value of their contributions, respect their dignity, and makes it possible to negotiate a fairer distribution of the benefits of growth. Economic empowerment increases women's access to economic resources and opportunities, including jobs, financial services, property, and other productive assets, skills development, and market information.

Women's economic participation and empowerment are fundamental to strengthening women's rights and enabling women to have control over their lives and exert influence in society. It is about creating just and equitable societies. Women often face discrimination and persistent gender inequalities, with some women experiencing multiple discrimination and exclusion because of factors such as ethnicity or caste. The economic empowerment of women is a prerequisite for sustainable development, pro-poor growth, and the achievement of all the millennium development goals (MDGs). Gender equality and empowered women are catalysts for multiplying development efforts. Investments in gender equality yield the highest returns of all development investments. Women usually invest a higher proportion of their earnings in their families and communities than men. A study in Brazil showed that the likelihood of a child's survival increased by 20% when the mother controlled household income (GENDERNET, 2011).

A study by the United Kingdom's Department for International Development on Women's Economic Empowerment (2010) revealed that:

**1)** Higher female earnings and bargaining power translate into greater investment in children's education, health, and nutrition, which leads to economic growth in the long-term. The share of women in waged and salaried work grew from 42% in 1997 to 46% in 2007.

**2)** In India, GDP could rise by 8% if the female/male ratio of workers went up by 10% .

**3)** The total agricultural output increased by up to 20% if women's access to agricultural inputs was equal to men's.

**4)** Women-owned businesses comprised of up to 38% of all registered small businesses worldwide. The number of women-owned businesses in Africa, Asia, Eastern Europe, and Latin America is growing rapidly, and this type of growth directly impacts job creation and poverty reduction (UKDFID, 2010).

SHG is a group of poor women who have volunteered to organize themselves for their development. A SHG is a registered or unregistered group of entrepreneurs having heterogeneous social and economic background; voluntarily coming together to save small amounts regularly. They mutually agree to contribute to common funds to meet their emergency needs.

## Determinants of Economic Empowerment

The human development framework sees 'income' as the “means” of development rather than as the “end” and includes all aspects of life, including political, economic, and cultural development (Fakuda-Parr & Kumar, 2003). The major determinant of economic empowerment is income. Women's economic empowerment is a multidimensional aspect and ,therefore, one factor does not satisfactorily provide its measurement. The other factors that are operationalized to measure women economic empowerment in this study are accessibility to credit and asset possession.

## Research Objective of the Study

The study aimed at finding the role of microfinance in human development, taking income as an indicator.

## Research Methodology

The research methodology adopted for the sample selection, data collection, and data analysis are explained below:

➯ **Sampling Design and Sample Selection:** The study is a sample study. It is based on Self Help Groups. Warangal District in Andhra Pradesh was selected as the sample for the study based on purposive sampling. Warangal district has 50 mandals. Out of 50 mandals, 5 mandals, which represented 10% of the total mandals, were randomly selected. The selected mandals are Dharma Sagar, Station Ghanpur, Bhoopalpally, Hasanparthi, and Kesamudram. From each mandal, 4 villages were selected and from each village, 5 SHGs were selected. Furthermore, from each SHG, 5 members were randomly selected. Thus, 5 mandals, 100 SHGs, and 500 members were selected for the study.

➯ **Time Period of the Study:** The study followed a four-year time period as a criterion for the selection of the sample. SHG members engaged in group activities, at least for a period of four years, were selected. Thus, members who joined the SHGs in or before January 2008 were selected as the sample. The research study was conducted from late July 2012 to mid February 2013. The questionnaire was administered to the respondents over a six months period of time to gather information on the sample at a single point of time. In the study, the pre-SHG time period indicates the situation of the respondents before they joined the SHG and the post-SHG time period indicates the situation after they joined the SHG.

➯ **Sources and Techniques of Data Collection:** The study is based on both primary and secondary data. Primary data is information on select indicators gathered from sample respondents. Primary data was collected through a structured schedule by holding interviews with various respondents in the local dialect. Secondary data was collected by personal visits to the select village gram panchayats, mandal offices, district office, and libraries.

## Results and Discussion

➯ **Income:** The concept of empowerment is power; but the power beyond, regarded as 'power over' (Willis, 2011) helps give power to the powerless due to its ability to impact control. It is through the individual control over economic resources, herein seen as human capital, earned income, or liquid assets that will determine the power they have. It is widely recognized that the more power women have, the more empowered they become. Empowered women have more capabilities and more capable women can improve the well being of their family, village, and country (Narayan, 2005).

Economic growth is supposed to improve the well being of people by increasing the disposable income and purchasing power of all people. This trickle down theory of economic development assumes that the benefits of high economic growth in terms of incomes at the macro level would automatically percolate down to individuals. But this ignores the inherent problems of distribution and poverty, which have raised questions as to whether economic growth alone is sufficient for ensuring the well being of the population. However, while higher economic growth is not a sufficient condition, it is a necessary condition for improving human development for several reasons, because it creates greater opportunities for employment and rising incomes. More importantly, higher growth would generate more resources, which may be available for further investments in social development (Andhra Pradesh Human Development Report, Government of Andhra Pradesh, 2007).

Income refers to the financial gains obtained or generated, especially after paid employment, participation in an income generating activity, or from a sold property. The ability to borrow a small amount of money to take advantage of a business opportunity and to bridge a cash-flow gap can be a first step in breaking the cycle of poverty and develop an ability to earn income. Microfinance has been used widely to promote access of income to poor and low-income women in the rural areas. Women spend more income on household well-being than men, and they even spend more income on their husbands' activities rather than activities which might benefit them to ensure their share of income is maximized. Income also empowers women in decision-making within the household level in terms of children's education, choice of use of loan, for instance, insuring their economic activities, marketing their activities as well as for any expansion opportunities. Income is a gateway to increased well-being (Mayoux, 2001). In the rural areas, poverty is highly connected with failure to reach certain levels of basic capabilities due to inadequate income and low utility value. Poverty can ,therefore, be referred to as the inability to achieve well-being due to lack of income.

Microfinance allows poor people to protect, diversify, and increase their sources of income, the essential path to come out of poverty and hunger. Poor households use a safe and convenient savings account to accumulate enough cash to buy assets such as inventory for a small business enterprise, to fix a leaky roof, to pay for consumption, health and children's education (Chowdhury & Bhuiya, 2001). Savings and credit, income along with household expenditure and possessions reveals the livelihood of people (Desai, Dubey, Joshi, Sen, Shariff, and Vanneman, 2010).

➯ **Sources of Income:** In India, as in most developing economies, households derive income from a wider range of sources than is typically true in advanced industrial economies. Besides wages and salaries, farms and other businesses are important for more families in India than in developed countries. Although much of the discussion on income sources tends to assume that households rely predominantly on one source of income, the Indian Human Development Survey (IHDS) data suggests that more than 50% of the Indian households receive income from multiple sources. Some of these sources of income are highly interconnected. It is quite common for farmers to work on other people's fields when their own fields do not require attention (Desai et al., 2010).

Lakshmi (a respondent), a non-agricultural labourer told us that she used her first loan to buy a sewing machine. She also told us that two years ago, she and her neighbor Rani, also a member of a SHG, got together to make snacks during weekends and sold them in the village. As her partner backed out in a few months, it was too much work for her to carry out individually. Lakshmi had been running a petty shop for the last one year, and Rani was running a sari sales business for the last six months. Likewise, in the same manner, most of the respondents increased their sources of income. An attempt was made to find out the impact of the post-SHG period on diversifying sources of income of the respondents. The Table 1 presents the number of sources of income of the respondents in the pre and post-SHG periods.

**Table 1. Number of Sources of Income**

| Sources | Pre-SHG | Post-SHG |
|---|---|---|
| 1 | 305 (61.0) | 11 (2.2) |
| 2 | 184 (36.8) | 269 (53.8) |
| 3 | 11 (2.2) | 188 (37.6) |
| >3 | 0 | 32 (6.4) |
| **Total** | **500 (100)** | **500 (100)** |
| **Pearson Chi-square** | **261.674** | |
| ***p*- value** | **0.000** | |

Note: Figures in parentheses indicate percentage share to the respective total.
Source: Field Survey

The Table 1 reveals that in the pre-SHG period, 61% of the respondents had only a single source of income, whereas, this figure came down to 2.2% in the post-SHG period. Furthermore, 36.8% of the respondents replied that they had two sources of income, and this figure increased to 53.8% in the post-SHG period. Moreover, in the pre-SHG period, only 2.2% of the respondents had three sources of income, but 37.6% of the respondents had three sources of income in the post-SHG period. It is very interesting to note that there were no respondents who had more than three sources of income in the pre-SHG period, but 6.4% of the respondents had more than three sources of income in the post-SHG period. This difference ($\chi^2 = 261.674$, $p < .01$) between sources of income of the respondents in the pre and post-SHG periods is significant (Table-1).

The foregoing analysis indicates that there was a significant difference between the sources of income in the pre and post-SHG periods for the respondents. It was found that microfinance provided a platform to the respondents to improve their saving habits, and enabled a greater access to the formal credit system. Availability of credit plays an important role in the acquisition of assets. The possession of assets such as cows, goats, sewing machines, land, refrigerators, autos, and other vehicles leads to an increase in their sources of income. The importance of buying a refrigerator, for example, is that it could be used to sell cold water and soft drinks. Furthermore, it was observed that the respondents had been participating in various income-generating activities such as tailoring, running a snack shop or a petty shop, leasing, sale of dry fish, sale of fruits, and cultivating agricultural land. Thus, they increased their sources of income as they gained confidence in their abilities after joining SHGs.

↳ **Monthly Income:** Monthly household income of the respondents also showed an increase in the post-SHG period as their sources of income increased. The Table 2 shows a comparative analysis of the monthly income pattern of respondents before and after becoming a SHG member . The data presented in the Table 2 reveals that the majority of the respondents (42.2%) had a monthly income in between ₹ 2001-4000 followed by < ₹ 2000 (33.8%) in the pre-SHG period. Furthermore, 24% of the respondents had their monthly income in between ₹ 4001-6000. It is quite interesting to note that none of the respondents had a monthly income greater than ₹ 6000. Thus, it can be interpreted from the Table 2 that the respondents' income was very low before they joined the SHGs. Contrarily, in the post-SHG period, the number of respondents who belonged to the income class of ₹ 2001-4000 declined from 42.2% to 34.2% . On the other hand, the number of respondents who belonged to the income class of ₹ 4001-6000 increased from 24% to 41.4 %. There were no respondents whose income was less than ₹ 2000, but the number of respondents whose income levels were > ₹ 6000 increased to 24.4% from 0%. The difference ($\chi^2 = 976.610$, $p < .01$) between monthly income of the respondents between the pre and post-SHG periods is statistically significant (Table 2). It is indicated that the

**Table 2. Monthly Income (Amount in ₹)**

| Amount | Pre-SHG | Post-SHG |
|---|---|---|
| < 2000 | 169 (33.8) | 0 |
| 2001-4000 | 211 (42.2) | 171 (34.2) |
| 4001-6000 | 120 (24.0) | 207 (41.4) |
| > 6000 | 0 | 122 (24.4) |
| **Total** | **500 (100)** | **500 (100)** |
| **Pearson Chi-square** | **976.610** | |
| ***p*- value** | **0.000** | |

Note: Figures in parentheses indicate percentage share to the respective total.
Source: Field Survey

**Table 3. Average Monthly Expenditure (Amount in ₹)**

| Expenditure | Pre-SHG | | Post-SHG |
|---|---|---|---|
| **Consumption** | 1135.10 | | 1578.20 |
| *z* -test | | 31.859 | |
| *p*- value | | 0.000 | |
| **Children's Education** | 410.96 | | 1271.50 |
| *z* -test | | 43.841 | |
| *p*- value | | 0.000 | |
| **Health & Nutrition** | 523.58 | | 1227.44 |
| *z* -test | | 43.309 | |
| *p*- value | | 0.000 | |
| **Asset Creation** | 96.70 | | 725.90 |
| *z* -test | | 45.742 | |
| *p*- value | | 0.000 | |
| **Entrepreneurship Activities** | 8.20 | | 1428.69 |
| *z* -test | | 45.781 | |
| *p*- value | | 0.000 | |
| **Farm Activities** | 942.60 | | 664.24 |
| *z* -test | | 9.168 | |
| *p*- value | | 0.000 | |

Source: Field Survey

awareness created among the SHG members made them think about alternative sources of income. As the number of sources of income increased, the monthly income of the SHG members also increased.

➭ **Average Monthly Expenditure :** Due to the high consumption rate of poor households, increase in income normally translates into expenditure changes. It was intended to examine changes in respondents' expenditure patterns related to their access to microfinance. It helped the respondents in realizing the importance of children's education, health and nutrition, asset creation, and entrepreneurship activities. They got awareness by participating in the meetings organized by group leaders ; NABARD made them cut down their expenditure on consumption and spend more on children's education, health and nutrition, asset creation, and entrepreneurship activities. It is quite interesting to observe the differences in the average monthly expenditure of the respondents in the pre and post-SHG periods. The Table 3 reveals the average monthly expenditure pattern of the respondents in the pre and post-SHG periods. The analysis in the Table 3 reveals the following results:

**1)** Consumption was ₹ 1135.10 in the pre-SHG period, and this increased to ₹ 1578.20 in the post-SHG period. This difference is significant ($z$ - test = 31.859, $p < .01$).

**2)** Expenditure on children's education was ₹ 410.96 in the pre-SHG period, and this increased to ₹ 1271.50 in the post-SHG period. This difference is significant ($z$ - test = 43.841, $p < .01$).

**3)** Expenditure on health and nutrition was ₹ 523.58 in the pre-SHG period, and this increased to ₹ 1227.44 in the post-SHG period. This difference is significant ($z$ -test = 43.309, $p < .01$).

**4)** Expenditure on asset creation was ₹ 96.70 in the pre-SHG period, and this increased to ₹ 725.90 in the post-SHG period. This difference is significant ($z$ -test = 45.742, $p < .01$).

**5)** Expenditure on entrepreneurship activities was ₹ 8.20 in the pre-SHG period. This increased to ₹ 1428.69 in the post-SHG period. This difference is significant ($z$ -test = 45.781, $p < .01$).

**6)** Expenditure on farm activities was ₹ 942.60 in the pre-SHG period, and this decreased to ₹ 664.24 in the post-SHG period. This difference is significant ($z$ -test = 9.168, $p < .01$).

The foregoing analysis reveals that the microfinance program has had a positive impact on improving the economic status of the SHG members. Increased income levels and control over income enables greater levels of economic independence. Thus, increased income enabled the respondents to spend more on children's education, health, nutrition, asset creation, and so forth. It is an indication of increased well being.

➭ **Accessibility to Credit:** When income levels did not meet the level of expenditure, different credit sources were available to the respondents in the pre and post-SHG periods. First of all, it is important to highlight that most of the respondents had a very clear idea as to why they took a loan. The most common reason they gave for their initial participation in a microfinance program was the intention to start a new business or for expanding their existing business(es). This is because in the pre-SHG period, they used to go to the money lenders, who charged high rates of interest on loans. However, after joining the SHGs, they used to get loans (at lesser rates of interest than what were charged by the money lenders) from the banks.

**Table 4. Source of Credit**

| Source | Pre-SHG | | Post-SHG |
|---|---|---|---|
| Money Lenders | 420 (84.0) | | 59 (11.8) |
| Bank | 80 (16.0) | | 48 (9.6) |
| SHG | 0 | | 393 (78.6) |
| **Total** | **500 (100)** | | **500 (100)** |
| **Pearson Chi-square** | | **6.904** | |
| ***p*- value** | | **0.032** | |

Note: Figures in parentheses indicate percentage share to the respective total.

Source: Field Survey

The respondents' accessibility to credit was examined with the help of source of credit and cumulative amount of credit. The analysis is presented in the Table 4. From the Table 4, it is observed that 84% of the respondents availed credit from money lenders, followed by 16% of the respondents, who took credit from banks in the pre-SHG period. In the post-SHG period, most of the respondents (78.6%) availed loans from their SHG groups. Nearly 9.6% of the respondents received loans from the bank. The number of respondents who received loans from money lenders decreased to 11.8% in the post-SHG period from 84% in the pre-SHG period. This difference ($\chi^2 = 6.904$, $p <.05$) - between source of credit for the respondents in the pre and post-SHG periods - is significant (Table 4). Hence, it can be observed that the respondents' dependency on the money lenders was reduced substantially after they joined the SHGs. The respondents revealed that they experienced an immense sense of relief as they were no longer dependent on money lenders for credit (who harassed them by charging high rates of interest), and this gave them a sense of confidence.

Going further, the Table 5 presents the details of the cumulative amount of loan received by the respondents in the pre and post-SHG periods. From the Table 5, it is observed that 74.4% of the respondents availed a loan amount of less than ₹ 10000 cumulative amount of credit. Furthermore, 8% of the respondents availed a loan in the range of ₹ 10001-20000, 17.4% of the respondents availed a loan in the range of ₹ 20001-30000, and negligible percentage of the respondents availed a loan of more than ₹ 30000. In the post-SHG period, 36.8% of the respondents availed a loan of more than ₹ 30000 followed by 35.4% of the respondents, who availed a loan ranging between ₹ 10001-20000. Furthermore, 26.2 % of the respondents availed a loan in the range of ₹ 20001-30000. 0.8% of the respondents did not avail any credit and only 0.8% of the respondents availed credit amounting to less than ₹ 10000. This difference is significant ($\chi^2 = 133.667$, $p <.01$) (Table 5), and this indicates that in the pre-SHG period, availing a loan from the bank was very difficult for the respondents as they did not have enough awareness of credit services offered by the banks, thus they used to go to the money lenders, who used to charge exorbitant rates of interest from them. However, after joining the SHGs, the respondents learned about banking and credit services, and their access to credit services improved drastically.

**Table 5. Cumulative Amount of Credit (Amount in ₹)**

| Amount | Pre-SHG | Post-SHG |
|---|---|---|
| No Loans | 0 | 4 (0.8) |
| <10000 | 372 (74.4) | 4 (0.8) |
| 10001-20000 | 40 (8.0) | 177 (35.4) |
| 20001-30000 | 87 (17.4) | 131 (26.2) |
| >30000 | 1 (0.2) | 184 (36.8) |
| **Total** | **500 (100)** | **500 (100)** |
| **Pearson's Chi-square** | **133.667** | |
| ***p*- value** | **0.000** | |

Note: Figures in parentheses indicate percentage share to the respective total.

Source: Field Survey

➯ **Asset Possession:** Household assets reflect a household's quality of life. New fuels and improved stoves provide a cleaner environment and better health. Use of kerosene or LPG for cooking reduces the time women spend in fuel collection, thereby reducing domestic drudgery and increasing time devoted to other activities. In modern life, household possessions are both - a sign of social status and instruments for a better life. Acquisition of assets involves expenditure, and it is determined primarily by household income. These asset possessions are also a sign of the family's economic success such as owning a television, gas stove, refrigerator, and so forth (Desai et al., 2010). In order to determine the impact of the microfinance program on asset possession, some selected durable assets, animal husbandry, and agricultural assets acquired by the respondents in the pre and post-SHG periods are presented in the Tables 6, 7, and 8 respectively. During the discussions, the respondents explained that they purchased assets with funds generated from the 'loan-financed business activities'. Accordingly, the Table 6 reveals the average number of durable assets owned by the respondents. The analysis of the Table 6 shows that :

**1)** The average number of radios owned by the respondents was 1.01 in the pre-SHG period, and this figure decreased to 0.79 in the post-SHG period. This difference is significant ($z$- test = 11.589, $p$ <.01).

**2)** The average number of televisions owned by the respondents was 0.66 in the pre-SHG period, and this figure increased to 0.85 in the post-SHG period. This difference is significant ($z$ -test = 10.819, $p$ <.01).

**3)** The average number of gas stoves owned by the respondents was 0.66 in the pre-SHG period, and this figure increased to 0.88 in the post-SHG period. The difference is significant ($z$ -test = 11.725, $p$ <.01).

**4)** The average number of kerosene stoves owned by the respondents was 0.75 in the pre-SHG period, and this figure increased to 1.0 in the post-SHG period. The difference is significant ($z$ -test = 12.759, $p$ <.01).

**5)** The average number of fans owned by the respondents was 1.0 in the pre-SHG period, and this figure increased to 2.31 in the post-SHG period. The difference is significant ($z$ -test = 41.577, $p$ <.01).

**6)** The average number of air coolers owned by the respondents was 0 in the pre-SHG period, and this figure increased to 0.66 in the post-SHG period. The difference is significant ($z$ -test = 31.125, $p$ <.01).

**Table 6. Average Number of Durable Assets Owned by the Respondents**

| Asset | Pre-SHG | | Post-SHG |
|---|---|---|---|
| **Radio** | 1.01 | | 0.79 |
| *z* -test | | 11.589 | |
| *p*- value | | 0.000 | |
| **Television** | 0.66 | | 0.85 |
| *z* -test | | 10.819 | |
| *p*- value | | 0.000 | |
| **Stove (Gas)** | 0.66 | | 0.88 |
| *z* -test | | 11.725 | |
| *p*- value | | 0.000 | |
| **Stove (Kerosene)** | 0.75 | | 1.0 |
| *z* -test | | 12.759 | |
| *p*- value | | 0.000 | |
| **Fan** | 1.0 | | 2.31 |
| *z* -test | | 41.577 | |
| *p*- value | | 0.000 | |
| **Air cooler** | 0 | | 0.66 |
| *z* -test | | 31.125 | |
| *p*- value | | 0.000 | |
| **Cell phone** | 0 | | 0.97 |
| *z* -test | | 31.918 | |
| *p*- value | | 0.000 | |
| **Refrigerator** | 0 | | 0.87 |
| *z* -test | | 58.305 | |
| *p*- value | | 0.000 | |
| **Washing Machine** | 0 | | 0.18 |
| *z* -test | | 10.608 | |
| *p*- value | | 0.000 | |

Source: Field Survey Note: The above-mentioned durable assets shall be in units, but for statistical significance, the average number of durable assets is shown in decimal figures in tables and analysis.

**7)** The average number of cell phones owned by the respondents was 0 in the pre-SHG period, and this figure increased to 0.97 in the post-SHG period. The difference is significant ($z$ -test = 31.918, $p$ <.01).

**8)** The average number of refrigerators owned by the respondents was 0 in the pre-SHG period, and this figure increased to 0.87 in the post-SHG period. The difference is significant ($z$ - test = 58.305, $p$ <.01).

**9)** The average number of washing machines owned by the respondents was 0 in the pre-SHG period, and this figure increased to 0.18 in the post-SHG period. The difference is significant ($z$ -test = 10.608, $p$ <.01).

Most rural farming households (80%) owned animals. A quarter (24%) of the rural households did not cultivate any land, and kept livestock for earning an income. Milch cows and buffaloes dominated the animal ownership (Desai et al., 2010). The following are the observations of the Table 8:

**1)** The average number of cows owned by the respondents was 0.91 in the pre-SHG period, and this figure increased to 1.59 in the post-SHG period. The difference is significant ($z$ -test = 24.852, $p$ <.01).

**Table 7. Average Number of Animal Husbandry Owned by the Respondents**

| Asset | Pre-SHG | | Post-SHG |
|---|---|---|---|
| **Cows** | 0.91 | | 1.59 |
| *z* - test | | 24.852 | |
| *p*- value | | 0.000 | |
| **Bullocks** | 1.97 | | 1.72 |
| *z* - test | | 6.384 | |
| *p*- value | | 0.000 | |
| **Buffaloes** | 0.90 | | 1.46 |
| *z* - test | | 17.723 | |
| *p*- value | | 0.000 | |
| **Goats** | 1.69 | | 3.46 |
| *z* - test | | 22.210 | |
| *p*- value | | 0.000 | |
| **Sheep** | 0.21 | | 1.77 |
| *z* - test | | 23.523 | |
| *p*- value | | 0.000 | |

Source: Field Survey

Note: The above-mentioned animal husbandry shall be in units, but for statistical significance, the average number of animals is shown in decimal figures in tables and analysis.

**Table 8. Average Number of Agricultural Assets Owned by the Respondents**

| Asset | Pre-SHG | | Post-SHG |
|---|---|---|---|
| **Bullock cart** | 0.42 | | 0.63 |
| *z* -test | | 11.448 | |
| *p* - value | | 0.000 | |
| **Tractor** | 0 | | 0.19 |
| *z* -test | | 10.822 | |
| *p* - value | | 0.000 | |
| **Current Motor** | 0.42 | | 0.70 |
| *z*- test | | 14.069 | |
| *p* - value | | 0.000 | |

Source: Field Survey

Note: The above-mentioned agricultural assets shall be in units, but for statistical significance, the average number of agricultural assets is shown in decimal figures in tables and analysis.

**2)** The average number of bullocks owned by the respondents was 1.97 in the pre-SHG period, and this figure decreased to 1.72 in the post-SHG period. The difference is significant ($z$ -test = 6.384, $p$ <.01).

**3)** The average number of buffaloes owned by the respondents was 0.90 in the pre-SHG period, and this figure increased to 1.46 in the post-SHG period. The difference is significant ($z$ -test = 17.723, $p$ <.01).

**4)** The average number of goats owned by the respondents was 1.69 in the pre-SHG period, and this figure increased to 3.46 in the post-SHG period. The difference is significant ($z$ -test = 22.210, $p$ <.01).

**5)** The average number of sheep owned by the respondents was 0.21 in the pre-SHG period, and this figure increased to 1.77 in the post-SHG period. The difference is significant ($z$ -test = 23.523, $p$ <.01).

One of the respondents, Rajitha, who was married at the age of sixteen was thirty years old (at the time of conducting the study), and was a mother of three children. She had never worked as an agricultural labourer before marriage. Once married, she started to work in agriculture besides doing the routine household chores. Her family had three cows. The youngest of their three cows was bought one year ago through a SHG loan. The respondents indicated that a higher proportion of this asset possession in the post-SHG period was covered by the income generated from loan financed business activities. The reason given by the respondents for having less asset possessions in the pre-SHG period was simply the lack of money.

The study also inquired about the average number of agricultural assets owned by the respondents in the pre and post-SHG periods. The Table 8 presents the average number of agricultural assets owned by the respondents. The analysis of the Table 8 is as follows :

**1)** The average number of bullock carts owned by the respondents was 0.42 in the pre-SHG period, and this figure increased to 0.63 in the post-SHG period. The difference is significant ($z$ -test = 11.448, $p$ <.01).

**2)** The average number of tractors owned by the respondents was 0 in the pre-SHG period, and this figure increased to 0.19 in the post-SHG period. The difference is significant ($z$ -test = 10.822, $p$ <.01).

**3)** The average number of current motors owned by the respondents was 0.42 in the pre-SHG period, and this figure increased to 0.70 in the post-SHG period. The difference is significant ($z$ -test = 14.069, $p$ <.01).

Thus, it can be seen that the participation of women in the microfinance program substantially contributed to an improvement in their asset possession as compared to the same in the pre-SHG period. By providing them with an independent source of income outside the home, the program tends to reduce the economic dependency of women on the household. In addition to the loan fund, income from 'business activities financed by the loan' helped them to purchase certain assets, thus assisting them to enhance their financial independence. Increased control over asset ownership was made possible by the microfinance loan program, which should also translate into raising the self esteem and prestige of these women in their house and community.

## Conclusion

The analysis showed that microfinance helps the poor to increase their income, build viable businesses, and reduce their vulnerability to external shocks. While low income is inevitably associated with deprivation in other areas of human welfare, some countries have achieved better levels of human development than others that have higher average incomes (Morduch, 2002). Access to credit allows poor people to take advantage of economic opportunities for their homes, their domestic environments, and their communities. For instance, income generation from a business helps not only the business expansion, but also contributes to household income, and its attendants enjoy benefits related to food security, asset creation, health and children's education. Thus, microfinance plays a significant role in augmenting income as an indicator of human development, and hence, has an important role to play in the human development process.

## Research Implications

The current study was based on a small sample size taken from only a few villages located in the Warangal district in the South Indian state of Andhra Pradesh. Therefore, the results cannot be generalized for other districts in India, especially in analytical terms. A research conducted on a bigger scale with a large sample size could shed light on how microfinance activities affect human development in India. The current study did not consider all indicators of human development index such as life expectancy and education. These areas deserve to be studied by future research studies in this field. Future studies could also examine the supply gap of microfinance institutions - to what extent the MFIs are capable of delivering their services to the poor people. Further research could be conducted in this area for finding out the reasons for the gap between demand and supply in terms of microfinance services.

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