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## Scale to measure socio-economic impact of microfinance on the SHGS members as perceived by them in Marathwada region

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### Abstract

The present study was conducted purposively in Nanded and Parbhani districts of the Marathwada region of Maharashtra state during the year 2019-20 in jurisdiction of Mahila Arthik Vikas Mahamandal Organization (MAVIM) and District Rural Development Agency (DRDA) in Marathwada region of Maharashtra state as significant work done by both MAVIM and DRDA in the formation of SHGs. The main aim is to study the scale to measure socio-economic impact of microfinance on the SHGs members. An attempt has been made in the present investigation to develop a scale to measure the socio-economic impact of microfinance on the members of self help groups, in the present investigation socio-economic impact of microfinance is operationally defined as the change in socio-economic condition of SHG members due to their active participation in SHG. The method of Summated Rating suggested by Likert (1932) and Edwards (1969) were followed in the construction of scale. This method was followed through six stages *viz.*, identification of dimensions, collections of items/statements, relevancy test, item analysis, selection of statements and administration of final scale, reliability and validity.

**Keywords:** Self help groups (SHGs), SHGs members and socio-economic impact of micro-finance

### Introduction

Microfinance in India Loans to poor people by banks have many limitations including lack of security and high operating cost and so Microfinance was developed as an alternative to provide loans to poor people with the goal of creating financial inclusion and equality. Muhammad Yunus a Nobel Prize winner introduced the concept of Microfinance in Bangladesh in the form of the "Grameen Bank". NABARD took this idea and started concept of Microfinance in India. Microfinance is defined as, financial services such as Saving A/c, Insurance Fund & credit provided to poor & low income clients so as to help them to raise their income & there by improve their standard of living. From this definition it is clear that main features of Micro Financing: 1) Loan are given without security 2) Loans to those people who live BPL (Below Poverty Line) 3) Even members of SHG enjoy Microfinance 4) Maximum limit of loan under microfinance 25,000/- 5) The terms and conditions given to poor people are decided by NGOs 6) Microfinance is different from Micro Credit- under Micro Credit, small amount of loans given to the borrower but under Microfinance besides loans many other financial services are provided such as Savings A/c, Insurance etc. Therefore Microfinance has wider concept as compared to Micro Credit. (M.Kannan and A. Panneerselvam, 2013) [3].

Microfinance is argued to have economic, social and humanitarian advantages. This study tends to focus on the economic implications of microfinance, but also outlines social and humanitarian aspects of microfinance in order to better understand the topic. Many researchers argue that microfinance creates access to three types of capital. First, it gives access to productive capital through microcredit. Second, it gives access to human capital through vocational training and education. And third, social capital built through creating local organization building, promoting democratic systems and fortifying human rights. These endowments together are argued to enable people to move out of poverty. Although it is nearly impossible to measure, increasing material capital strengthens the sense of dignity of poor people and contributes to motivating poor people to participate in the society. With a loan and a source of income people are argued to be able to improve the socio economic position of their family and to make plans beyond only the survival of the day. The existence of these conditions stimulates people to be actively involved in society.

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Participation in microfinance programs leads to a greater diversification of labour supply across seasons. On the contrary, access to these programs goes along with a reduction in the variability of consumption across seasons. Apparently, although the programs might not increase consumption on average, they might offer households opportunities to smooth consumption through smoothing income. For this reason, poor households are argued to become less vulnerable due to microfinance. In many cultures and countries, the subordination of women still exists. In many cases, men take care of income and money and women take care of basic needs such as health care of their children, education and nutrition and in addition also try to improve the development of those basic needs. Microfinance creates the opportunity for women to get access to capital. (Pitt and Khandker, 1998) [5] argued that money spent by women leads to an increase of children's participation in education, better nutrition and health care. Microfinance for women thus is argued to lead to positive external effects on the one hand and to the reduction of gender inequality and dependency on the other hand.

### Methodology

For the present study out of eight districts of Marathwada region of Maharashtra state two districts were purposively selected i.e. Nanded and Parbhani based on maximum number of self help groups during the years 2019-20 in jurisdiction of Mahila Arthik Vikas Mahamandal Organization (MAVIM) and District Rural Development Agency (DRDA) in Marathwada region of Maharashtra state as significant work done by both MAVIM and DRDA in the formation of SHGs. Three talukas were purposively selected from each district for the present study on the basis of maximum numbers of self help groups. The selected talukas from Parbhani district were Parbhani, Purna and Gangakhed as well as from Nanded district the selected talukas were Kinwat, Nanded and Aardhapur these all talukas were selected on the basis of the maximum numbers of self help groups. From each selected village 07 women members of self help group were selected randomly to make a sample of 35 women members of self help group from each selected talukas and the total 105 women members of self help groups from each district. Thus, total to the tune of 210 women members of self help group were selected for present study from both the districts. Ex-post facto research design was adopted in this study. The data were collected with the help of pretested interview schedule. The statistical methods and tests such as frequency, percentage, mean, standard deviation, co-efficient of correlation, multiple regressions, Z test and path analysis were used for the analysis of data.

### Development of a scale to measure socio-economic impact of microfinance on the members of self help groups in Marathwada region.

An attempt has been made in the present investigation to develop a scale to measure the socio-economic impact of microfinance on the members of self help groups, in the present investigation socio-economic impact of microfinance is operationally defined as the change in socio-economic condition of SHG members due to their active participation in SHG. The method of Summated Rating suggested by Likert (1932) [4] and Edwards (1969) [1] were followed in the construction of scale. This method was followed through six stages viz., identification of dimensions, collection of items/statements, relevancy test, item analysis, selection of statements and administration of final scale, reliability and validity.

### Identification of Dimensions

Self help group is the dimension related to socio-economic impact of microfinance on the members of it, in this investigation which is identified based on review of literature and discussion with the experts in the field of extension education.

### Collection and editing of Items / Statements

A list of 84 statements reflecting the stress of extension personnel while doing their job in state agriculture department. The items/statements so identified were carefully edited in the light of 14 criteria suggested by Edwards (1969) [1], and Thurstone and Chave (1929) [27].

### Relevancy Test

The selected 84 statements were so worded so as to express varying degrees of socio-economic impact of microfinance on the members of self help group. These statements were then subjected to scrutiny by an expert panel of judges to determine their relevancy and subsequent screening of items for their inclusion in the final scale. A questionnaire consisting of all the items was posted with enclosed self addressed and statement envelop also e-mailed and handed over to 100 judges comprising of Assistant Professors, Associate Professors, Professors, scientists, extension personnel of State Agricultural Universities, Deemed universities, National institutes such as NIRD and Manage and ICAR institutes with appropriate instructions to critically judge the items for their relevancy in measuring the socio-economic impact of microfinance on the SHGs members. They were asked to check each of the statements carefully for being relevant or not relevant using three point continuum viz., "Strongly Agree" (SA), "Partially Agree" (PA) and "Strongly Disagree" (SD) with scores of 3, 2, and 1, respectively. The judges were also requested to make necessary modifications and additions or deletion of statements, if they desire so. The relevancy score for each item was found out by adding the relevancy scores of the rating given by 70 judges, who replied in time. These were considered for further processing.

**Table 1:** Judges contacted and responses received

S. No.	Particulars	Number of judges contacted	Number of appropriate responses received
1	Dean, Head of Extension Education discipline	15	11 (73.33)
2	Professor/equivalent	25	14 (56.00)
3	Associate Professor/equivalent	25	21 (84.00)
4	Assistant Professor/equivalent	35	24 (68.57)
	Total number of judges =	100	70 (70.00)

\* Figures in the parentheses indicate percentages to the total

### Selection of Items

The responses of the judges were tabulated and data were analyzed to work out Relevancy Percentage (RP), Relevancy Weightage (RW) and Mean Relevancy Score (MRS) for all the statements as follows.

#### i. Relevancy weightage

It was obtained by the standard formula which is given below.

$$RW = \frac{MRRX3 + RRX2 + NRRX1}{MOS (3 \times 70 = 210)}$$

Where,

RW	=	Relevancy Weightage
MRR	=	Most Relevant Response
RR	=	Relevant Response
NRR	=	Not Relevant Response
MOS	=	Maximum Obtainable Score

#### ii. Relevancy Percentage (RP)

It was obtained by the standard formula which is given below.

$$RP = \frac{OS}{MOS (3 \times 70 = 210)} \times 100$$

Where,

RP	=	Relevancy Percentage
OS	=	Obtained Score
MOS	=	Maximum Obtainable Score.

#### iii. Mean Relevancy Score (MRS)

The mean relevancy score was obtained by the following standard formula.

$$MRS = \frac{MRRX3 + RRX2 + NRRX1}{\text{No. of judges}(70)}$$

Where,

MRS	=	Mean Relevancy Score
MRR	=	Most Relevant Response
RR	=	Relevant Response

Using these three criteria, the items were screened for their relevancy. Taking into consideration the overall values, the items having more than 0.66 relevancy weightage, relevancy percentage of more than 66.00 per cent and mean relevancy score of more than 2.00 were considered for the inclusion in item analysis. Thus, 63 statements were retained out of 100 statements.

#### Calculation of 't' value (Item Analysis)

These 63 statements were subjected to item analysis to delineate the items based on the extent to which they relevant to analyze the socio-economic impact of microfinance on the SHGs members of Marathwada region. For this purpose 40 SHGs members were selected from non sampling area. The respondents were asked to give their responses about each of the statements on three- point continuum ranging from "strongly agree" to "strongly disagree". The scoring pattern adopted was 3 to 1 in which, 3 weighs to strongly agree, 2 to partially agree and 1 to strongly disagree response for positive statement and for negative statement, the scoring pattern was reversed. Based upon the total scores, the respondents were arranged in descending order. The top 25 per cent of the

respondents with their total scores were considered as the high group and the bottom 25 per cent as the low group, so as these two groups provide criterion groups in terms of evaluating the individual statements as suggested by *Edwards (1957)* [2]. Thus out of 40 SHGs members to whom the items were administered for the item analysis, 15 SHGs members with lowest, 15 with highest scores were used as criterion groups to evaluate individual items.

The critical ratio, that is the 't' value which is a measure of the extent to which a given statement differentiates between the high and low groups of the respondents for each statements was calculated by using the formula suggested by Edward (1957) [2].

$$t = \frac{X_H - X_L}{\sqrt{\frac{\sum(X_H - X_H)^2 + (X_L - X_L)^2}{N(n-1)}}$$

Where,

$$\sum(X_H - X_H)^2 = \sum X_H^2 - (\sum X_H)^2$$

$$\sum(X_L - X_L)^2 = \sum X_L^2 - (\sum X_L)^2$$

X<sub>H</sub> = the mean score on given statement of the high group

X<sub>L</sub> = the mean score on given statement of the low group

X<sub>H</sub><sup>2</sup> = Sum of the squares of the individual score on a given statement for high group

X<sub>L</sub><sup>2</sup> = Sum of squares of the individual score on a given statement for low group

X<sub>H</sub> = Summation of scores on given statement for high group

X<sub>L</sub> = Summation of scores on given statement for low group

n = Number of respondents in each group

∑ = Summation

#### Selection of Statements for final scale

After computing the 't' value for all the 63 items, statements with greater than 1.75 and highest 't' value were finally selected for inclusion in scale.

#### Reliability and Validity of the scale

##### Reliability

Reliability refers to the precision or accuracy of the measurement or score. A well made scientific instrument should yield accurate results both at present as well as over time (Ray and Mondal, 2011) [6].

##### Test-retest method

The final set of the 58 statements, which represent the socio-economic impact of microfinance on the SHGs members of Marathwada region, was administered on three-point continuum to a fresh group of 40 SHGs members, which were not included in the actual sample.

After a period of 15 days the scale was again administered to the same respondents and thus two sets of scores were obtained.

The 'r' value (0.782) was significant at 0.01 level of probability indicating the socio-economic impact scale was suitable for administration to the SHGs members as the scale was stable and dependable in its measurement.

##### Validity of the scale

Validity of the test is the accuracy with which it measures that which is intended to measure.

The validity of the present scale was measured by content validity test.

### Content validity

The content validity of the scale was established in two ways, firstly the various main and sub items for inclusion in the scale were based on extensive literature review from various studies. Secondly, the opinion of the panel of 70 judges who were expert in field of Extension Education and Agricultural Economics was obtained to find whether the items suggested were relevant for inclusion in the scale.

### Administration of Scale

The scale was administered on three point continuum i.e. degree of Relevant or not relevant with each statement on the three-point continuum ranging from “strongly agree” to “strongly disagree”. The scoring pattern adopted was 3 to 1, in which, 3 weighs to Strongly Agree response, 2 to Partially Agree, 1 to Strongly Disagree response for positive statement and negative statement, the scoring pattern was reversed.

### Objective

- To develop a scale to measure socio-economic impact of microfinance on the SHGs members

### Results and Discussion

#### Development of a scale to measure socio-economic impact of microfinance on the members of self help groups as perceived by them in Marathwada region

A scale was specially developed to measure socio-economic impact of microfinance on the members of self help groups as perceived by them. The method of Summated Rating suggested by Likert (1932) [4] and Edwards (1969) [1] were followed in the construction of scale.

#### Collection and editing of Items

Hundred (100) statements, expressing the socio-economic impact of microfinance on the members of self help groups

have been collected from available literature, websites and in consultation with the specialists in the field of extension and they were edited on the basis of criteria suggested by Thurstone (1946) [8], Likert (1932) [4] and Edward (1957) [2]. Out of 100 statements, 84 statements were retained after editing. These statements were found to be non ambiguous and non-factual.

### Relevancy test

The selected 84 statements, so selected, were sent to 100 judges who are Assistant Professors, Associate Professors, Professors, Scientists, Extension personnel of State Agricultural Universities, Deemed universities, National Institutes such as NIRD and MANAGE and ICAR institutes with appropriate instructions to critically judge the items for their relevancy in measuring measure socio-economic impact of microfinance on the members of self help groups. They were asked to check each of the statements carefully for being relevant or not relevant using three point continuum viz., “Strongly Agree” (SA), “Partially Agree” (PA) and “Strongly Disagree” (SD) with sources of 3, 2 and 1 respectively. So also, their opinion about inclusion of the statements in the final scale was sought. A total of 70 judges responded to the appeal and returned the duly filled n schedules. On the basis of responses received, the relevancy weightage, relevancy percentage and mean relevancy score for each statement were worked out by using the formulae and the computed values are presented in Table 2.

Using these three criteria, the items were screened for their relevancy. Taking into consideration the overall values, the items having more than 0.66 relevancy weightage, relevancy percentage of more than 66.00 per cent and mean relevancy score of more than 2.00 were considered for the inclusion in item analysis. Thus, 63 statements were retained out of 84 statements.

**Table 2:** List of total statements/items considered for scale construction to measure the socio-economic impact of micro finance on the members of self help groups

Sr. No.	Statements	Relevancy		
		RW	RP	MRS
<b>A) Behavioural changes:</b>				
1.	It helps to enhance the risk taking ability	0.8952	89.52	2.68
2.	It develops the ability for seeking knowledge regarding financial aspects	0.8476	84.76	2.54
3.	It develops the ability to solve the own problems	0.8952	89.52	2.68
4.	It enhance the social decision making ability of the members	0.8857	88.57	2.65
5.	It helps to build up the trust on SHG members	0.8381	83.80	2.51
6.	It helps to encourage skills for self sufficiency and awareness	0.8666	86.66	2.6
7.	Members are able to control their own lives through personal decision making of life choices	0.8238	82.38	2.47
8.	It establishes leadership qualities among the members	0.8666	86.66	2.6
9.	It promotes to increase in self confidence, courage and self esteem	0.9523	95.23	2.85
10.	It develops the positive attitude towards working independently	0.9238	92.38	2.77
11.	It develops the application of marketing strategies for the productive items	0.6523	65.23	1.95
12.	It creates the awareness about banking operation	0.6571	65.71	1.97
13.	Failure of small enterprises due to lack of planning and poor management	0.6238	62.38	1.87
<b>B) Change in social status:</b>				
1.	It enhance the development of network	0.8333	83.33	2.5
2.	It helps to build up their sense of dignity	0.8095	80.95	2.42
3.	It helps to alleviate poverty in rural community	0.6428	64.28	1.92
4.	It helps to supply need based products especially designed for poverty reduction	0.6	60	1.8
5.	It accelerates the interaction with officials as well as among the members	0.8571	85.71	2.57
6.	It helps to establish sustainability and cohesiveness among the members	0.8571	85.71	2.57
7.	Increase in awareness of basic legal rights of members	0.8095	80.95	2.42
8.	Access to credit helps to increase the livelihood and welfare of members	0.8666	86.66	2.6
9.	It promotes provision of financial literacy to the SHG members to enable to be better placed in managing their finance	0.6523	65.23	1.95
10.	Due to economical empowerment of the members leads to personal selfishness	0.6381	63.80	1.91

11.	Increase in the percent ratio of members in social, political, educational institutes	0.7523	75.23	2.25
12.	Increase the participation of members in social activities	0.8761	87.61	2.62
<b>C) Change in annual expenditure pattern:</b>				
1.	Improvement in health of members and their family members by approaching to facilities	0.8428	84.28	2.52
2.	Helps to gain better education for children of members	0.8666	86.66	2.6
3.	It helps to fulfill the basic needs of the family	0.9285	92.85	2.78
4.	It promotes to expend more on consumption	0.7523	75.23	2.25
5.	It helps to increase in intake of nutritious food	0.8047	80.47	2.41
6.	Households can use the loans for food, children's education, minor house repairs, farming ,trading, processing ,health matters and other emergencies	0.8333	83.33	2.5
7.	It encourages members through provision of credit to invest in purchasing new technology and farm inputs for bringing to a higher productivity	0.7952	79.52	2.38
8.	It promotes percent share in family budget on recreational items	0.7714	77.14	2.31
9.	It encourages members to purchase modern technology for agricultural allied activities	0.7523	75.23	2.25
10.	It helps to make the capital for farm expenditure	0.7523	75.23	2.25
11.	It helps to make proper budget for profitable enterprise	0.7904	79.04	2.37
12.	Members make use of loan to build up the toilet and bathrooms also purchasing a water purifier as guidance given under awareness campaign	0.5476	54.7	1.64
13.	Increase in expenditure on unnecessary things (-)	0.5285	52.85	1.58
<b>D) Change in assets:</b>				
1.	It helps to promote ownership of productive assets	0.7904	79.04	2.37
2.	It promotes members to have access to productive resources	0.8333	83.33	2.5
3.	Members are able to develop the infrastructure of their house	0.8142	81.42	2.44
4.	It helps to purchase the needful modern technology and implements	0.7952	79.52	2.38
5.	It promotes for purchasing of machineries like processing machine, sewing machine, packaging machine etc.	0.8428	84.28	2.52
6.	It helps to possess improved storage capacity and processing unit	0.7476	74.76	2.24
7.	It promotes possession ability of communication -al aids like mobile, TV, internet, radio	0.8714	87.14	2.61
8.	It expands possession of household aids like LPG gas, mixer, refrigerator, cupboard, cooler etc.	0.8714	87.14	2.61
9.	Access to credit helps to increase participation of members in entrepreneurial activities	0.6142	61.42	1.84
<b>E) Change in annual income:</b>				
1.	Improvement in living standard by raising their income levels	0.9238	92.38	2.77
2.	It establishes economic improvement of the members	0.9381	93.80	2.81
3.	Educational standards of children improved due to benefits derived through microfinance	0.8238	82.38	2.47
4.	It helps to improve the personal and socio-economic status of the members	0.9047	90.47	2.71
5.	Improved scope for capital formation in the household	0.6666	66.66	2
6.	It helps to develop the entrepreneurship	0.6476	64.76	1.94
7.	Increased production generates better profitability and more output	0.8142	81.42	2.44
8.	Increase in purchasing capacity for household	0.7952	79.52	2.38
9.	Improvement in managing financial crisis	0.8142	81.42	2.44
10.	Lack of market accessibility may hinder members engaged in agricultural allied activities	0.6	60	1.8
11.	Due to high cost for transportation members are forced to sell their produce at local market	0.6190	61.90	1.85
<b>F) Change in borrowing pattern:</b>				
1.	It helps to increase in income generating activities	0.9047	90.47	2.71
2.	Increase in number of sources to get loan from other banks	0.8095	80.95	2.42
3.	It develops ability to exercise their bargaining power	0.5952	59.52	1.78
4.	It creates tension when they feel unable to repay the loan	0.7571	75.71	2.27
5.	Easy to facilitate loan availability to SHG groups	0.8619	86.19	2.58
6.	Increase in external borrowings by the members for their investment in business	0.7857	78.57	2.35
7.	It promotes borrowing from banks through linkage programme for rapid installment	0.6333	63.33	1.9
<b>G) Change in employment status</b>				
1.	Wish to stand on their own feet to earn their livelihood in the rural areas	0.8714	87.14	2.61
2.	Increase in self employment opportunities	0.9476	94.76	2.84
3.	It helps to generate income and start their own small business	0.9476	94.76	2.84
4.	It gives opportunity for employment to survive in adverse condition	0.9190	91.90	2.75
5.	Enhancing positive self image of members towards employment generation for inspiring others in the society	0.8619	86.19	2.58
6.	Members enhance the agricultural allied activities in rural areas	0.8571	85.71	2.57
7.	Promotes the search for new strategies of credit dispensation	0.7095	70.95	2.12
8.	Participation in access to credit programme increases employment rate among clients households	0.6428	64.28	1.92
9.	Lack of training and skills (-)	0.5047	50.47	1.51
<b>H) Change in monthly thrift habit</b>				
1.	It helps in increased monthly savings	0.9047	90.47	2.71
2.	Promotes the financial activities mainly saving and credit in community	0.8952	89.52	2.68
3.	It reduces the levels of indebtedness	0.8142	81.42	2.44
4.	It promotes to develop self radiance among the other rural people	0.6476	64.76	1.94
5.	Helps in sustaining the development activities	0.8476	84.76	2.54
6.	It gives opportunity to use allotted money for household purpose	0.6381	63.80	1.91

7.	It reduces dependence upon informal finance	0.8333	83.33	2.5
8.	It helps to reduce the unnecessary expenditure	0.7523	75.23	2.25
9.	Lack of family support (-)	0.5523	55.23	1.65
10.	Dominance by male members in family (-)	0.5238	52.38	1.57

### 3 Calculation of 't' value (Item Analysis)

The critical ratio, that is the 't' value which is a measure of the extent to which a given statement differentiates between the high and low groups of the members of SHGs for each statements was calculated by using the formula suggested by

Edward (1957) [2].

After computing the 't' value for all the 63 items / statements with greater than 1.75 and highest 't' value were finally selected for inclusion in scale. The list of statements and their 't' values are presented in Table 3.

**Table 3:** List of total statements of scale with their 't' values to measure the socio-economic impact of micro finance on the members of self help groups

Sr. No.	Statements	't' value
<b>A)</b>	<b>Behavioural changes:</b>	
1.	It helps to enhance the risk taking ability	4.29
2.	It develops the ability for seeking knowledge regarding financial aspects	4.68
3.	It develops the ability to solve the own problems	4.16
4.	It enhance the social decision making ability of the members	6.09
5.	It helps to build up the trust on SHG members	4.29
6.	It helps to encourage skills for self sufficiency and awareness	6.75
7.	Members are able to control their own lives through personal decision making of life choices	5.47
8.	It establishes leadership qualities among the members	5.24
9.	It promotes to increase in self confidence, courage and self esteem	6.86
10.	It develops the positive attitude towards working independently	4.29
<b>B)</b>	<b>Change in social status:</b>	
1.	It enhance the development of network	4.05
2.	It helps to build up their sense of dignity	5.47
3.	It accelerates the interaction with officials as well as among the members	1.68
4.	It helps to establish sustainability and cohesiveness among the members	5.02
5.	Increase in awareness of basic legal rights of members	1.49
6.	Access to credit helps to increase the livelihood and welfare of members	4.14
7.	Increase in the percent ratio of members in social, political, educational institutes	5.43
8.	Increase the participation of members in social activities	3.52
<b>C)</b>	<b>Change in annual expenditure pattern:</b>	
1.	Improvement in health of members and their family members by approaching to facilities	3.88
2.	Helps to gain better education for children of members	4.79
3.	It helps to fulfill the basic needs of the family	5.19
4.	It promotes to expend more on consumption	4.94
5.	It helps to increase in intake of nutritious food	5.88
6.	Households can use the loans for food, children's education, minor house repairs, farming ,trading, processing ,health matters and other emergencies	5.82
7.	It encourages members through provision of credit to invest in purchasing new technology and farm inputs for bringing to a higher productivity	4.94
8.	It promotes percent share in family budget on recreational items	6.93
9.	It encourages members to purchase modern technology for agricultural allied activities	5.68
10.	It helps to make the capital for farm expenditure	5.87
11.	It helps to make proper budget for profitable enterprise	9.55
<b>D)</b>	<b>Change in assets:</b>	
1.	It helps to promote ownership of productive assets	5.43
2.	It promotes members to have access to productive resources	6.29
3.	Members are able to develop the infrastructure of their house	4.54
4.	It helps to purchase the needful modern technology and implements	4.16
5.	It promotes for purchasing of machineries like processing machine, sewing machine, packaging machine etc.	1.25
6.	It helps to possess improved storage capacity and processing unit	4.83
7.	It promotes possession ability of communication -al aids like mobile, TV, internet, radio	5.47
8.	It expands possession of household aids like LPG gas, mixer, refrigerator, cupboard, cooler etc.	5.19
<b>E)</b>	<b>Change in annual income:</b>	
1.	Improvement in living standard by raising their income levels	6.76
2.	It establishes economic improvement of the members	5.05
3.	Educational standards of children improved due to benefits derived through microfinance	10.28
4.	It helps to improve the personal and socio-economic status of the members	5.11
5.	Improved scope for capital formation in the household	6.32
6.	Increased production generates better profitability and more output	10.28
7.	Increase in purchasing capacity for household	4.64
8.	Improvement in managing financial crisis	6.4
<b>F)</b>	<b>Change in borrowing pattern:</b>	

1.	It helps to increase in income generating activities	11.77
<b>2.</b>	<b>Increase in number of sources to get loan from other banks</b>	<b>1.25</b>
3.	It creates tension when they feel unable to repay the loan	4.28
4.	Easy to facilitate loan availability to SHG groups	8.77
5.	Increase in external borrowings by the members for their investment in business	6.02
<b>G)</b>	<b>Change in employment status</b>	
1.	Wish to stand on their own feet to earn their livelihood in the rural areas	5.56
2.	Increase in self employment opportunities	6.35
3.	It helps to generate income and start their own small business	7.09
4.	It gives opportunity for employment to survive in adverse condition	9.17
5.	Enhancing positive self image of members towards employment generation for inspiring others in the society	7.22
6.	Members enhance the agricultural allied activities in rural areas	4.75
7.	Promotes the search for new strategies of credit dispensation	1.29
<b>H)</b>	<b>Change in monthly thrift habit</b>	
1.	It helps in increased monthly savings	6.03
2.	Promotes the financial activities mainly saving and credit in community	5.56
3.	It reduces the levels of indebtedness	5.85
4.	Helps in sustaining the development activities	7.22
5.	It reduces dependence upon informal finance	5.88
6.	It helps to reduce the unnecessary expenditure	7.81

Thus, total 58 statements with highest 't' values were selected for the construction of final scale as they differentiate between highest and lowest groups. The statements with

lower 't' value were deleted. The lists of finally selected statements are presented in Table 4.

**Table 4:** List of total selected statements for final scale construction to measure the socio-economic impact of micro finance on the members of self help groups

Sr. No	Statements	SA	PA	SD
		3	2	1
<b>A)</b>	<b>Behavioural changes:</b>			
1.	It helps to enhance the risk-taking ability			
2.	It develops the ability for seeking knowledge regarding financial aspects			
3.	It develops the ability to solve their own problems			
4.	It enhances the social decision-making ability of the members			
5.	It helps to build up the trust of SHG members			
6.	It helps to encourage skills for self-sufficiency and awareness			
7.	SHGs Members are able to control own lives through personal decision making of life choices			
8.	It establishes leadership qualities among the members			
9.	It promotes to increase self-confidence, courage and self-esteem			
10.	It develops a positive attitude towards working independently			
<b>B)</b>	<b>Change in social status:</b>			
1.	It enhances the development of social network			
2.	It helps to build up their sense of dignity			
3.	It helps to establish sustainability and cohesiveness among the members			
4.	Access to credit helps to increase the livelihood security and welfare of members			
5.	Increased proportion of members in social, political and educational institutes			
6.	Increase the participation of members in social activities			
<b>C)</b>	<b>Change in annual expenditure pattern:</b>			
1.	Improvement in the health of members and their family members through better access to health facilities			
2.	Helps to gain better education for children of members			
3.	It helps to fulfill the basic needs of the family			
4.	It promotes to expend more on consumption			
5.	It helps to increase the intake of nutritious food			
6.	Households can use the loans for food, education, minor house repairs, farming, trading, processing, health and other emergencies			
7.	It encourages members to invest in new technology and farm inputs for higher productivity			
8.	It increases the share of the family budget on recreational items			
9.	It encourages members to purchase modern technology for agricultural and allied activities			
10.	It helps to raise capital for farm expenditure			
11.	It helps to make a proper budget for profitable enterprise			
<b>D)</b>	<b>Change in assets:</b>			
1.	It promotes ownership of productive assets			
2.	It promotes members to have access to productive resources			
3.	Members are able to develop the infrastructure of their residences			
4.	It helps to purchase needful modern technology and implements			
5.	It helps to possess improved storage capacity and processing units			
6.	It promotes possession of communicational aids like mobile, TV, internet, radio			
7.	It increases possession of household aids like LPG gas, mixer, refrigerator, cupboard, cooler etc.			

<b>E) Change in annual income:</b>				
1.	Improvement in standard of living through increased income levels			
2.	It enables economic improvement of the members			
3.	Improved educational status due to benefits derived through microfinance			
4.	It helps to improve the personal and socio-economic status of the members			
5.	Improved scope for capital formation within the household			
6.	Increased production generates more marketable surplus			
7.	Increase in the purchasing capacity of household			
8.	Improvement in managing financial crisis			
<b>F) Change in borrowing pattern:</b>				
1.	It increases in income-generating activities			
2.	Creates mental tension when unable to repay the loans			
3.	Easy loan availability to SHG groups			
4.	Increased credit utilization for business			
<b>G) Change in employment status</b>				
1.	Wish to stand on their own feet to earn their livelihood in the rural areas			
2.	Increase in self-employment opportunities			
3.	It helps to start a small business and generate income			
4.	It provides employment opportunity for survival in adverse conditions			
5.	Portraying positive self-image of members as employment creators for inspiring others in the society			
6.	SHGs Members enhance the agricultural and allied activities in rural areas			
<b>H) Change in monthly thrift habit</b>				
1.	It helps in increased monthly savings			
2.	Promotes the financial activities for saving and credit in the community			
3.	It reduces indebtedness			
4.	Sustains the development activities			
5.	It reduces dependence upon informal finance/ money lenders			
6.	It helps to reduce the unnecessary expenditure			

#### 4. Reliability

##### 4.1 Test-retest method

For reliability of the scale test-retest was used. The final set of the 58 statements, which represent the socio-economic impact of microfinance on the members of self help groups, was administered on three-point continuum to a fresh group of 40, which were not included in the actual sample. After a period of 15 days the scale was again administered to the same members of SHGs and thus two sets of scores were obtained. The correlation coefficient for the both the sets were worked out. The 'r' value (0.782) was significant at 0.01 level of probability indicating the socio-economic impact scale was highly suitable for administration to as the scale was stable and dependable in its measurement.

##### 5. Content validity

The content validity of the scale was tested. The content validity is the representative or sampling adequacy of the content, the substance, the matter and the topics of a measuring instrument. This method was used in the present scale to determine the content validity of the scale. As the content was thoroughly covered the socio-economic impact of microfinance on the members of self-help groups. The responses of the members of SHGs were obtained on three continuums i.e. "Strongly Agree", "Partially Agree" and "Strongly Disagree" with numerical score of 3, 2, 1 respectively for positive statements and 1, 2, 3 for negative statements.

#### 6. Conclusion

The reliability and validity of the scale indicated the precision and consistency of the result obtained from the research study. The scale can be used to measure the socio-economic impact of microfinance on the SHGs members beyond the study area with suitable modifications.

#### 7. References

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