

# Status Of Microfinance, Pre And Post Effects Of Joining Self Help Groups On Occupation, Savings And Drivers Of Women Empowerment - A Critical Analysis Of Microfinance At Chikkaballapura District, Karnataka

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## Abstract

**Purpose :** The microfinance Gross Loan Portfolio (GLP) stood at Rs. 381.2K crores in March 2025, declining 13.9% Y-O-Y and 2.6% Q-O-Q as lenders recalibrated strategies to manage stress. In Karnataka -7.0% Q-O-Q recorded GLP declines portfolio loans between Rs. 30K-50K. Microfinance has gained significant attention as a social innovation, providing flexible and low cost financial services to members who were not contacted by traditional services (JUja, S. V. 2014). The pre-eminent objective of the present paper on microfinance is to know to what extent the socio economic characteristics of respondents impacts on the study. Further, the study conducted to know before after joining of SHGs effect in case of occupation status and savings investment. Furthermore, the study also probe the factors driving women empowerment. Microfinance services are assisting both the unbanked and under banked and reduce poverty (John Agyekum Addae, 2018).

**Methodology :** A previously known questionnaire was administered as schedule in order to urban research related data. Chi-square, contingency co-efficient modified ANOVA, Kendall's co-efficient of concordance and weighted Arithmetic mean statistical tools were performed. Particulars are related to 6 taluks of Chikkaballapura district of Karnataka.

**Findings :** The study found that all the demographic profiles of respondents sufficiently supporting the data. Study found a significant increase in certain occupation after joining SHGs. They include garlands making, petty business, vegetable selling and pickle / papad selling. The number of persons doing agriculture reduced from 18 to 8 after joining. As far as savings investments is concerned there exist substantial increase from 0 to 59 savings invested in SHGs, and very surprisingly there is a drastic decrease from 24 to 5 investors in chit funds after joining SHGs. Savings investment with relatives friends and neighbours also drastically reduced and it is a direct awareness realised from benefit of SHGs. The drivers out of 27 for which data collected three are ranked in the order. The first rank was awarded to savings formation, the second rank was awarded to savings formation, the second rank as per the study is employment and widespread social status and the third rank was awarded to women freedom movement.

**Key words :** Stress, money lenders, savings, chit funds, freedom, confidence, tailoring. Rise in income, risk, awareness, employment.

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## INTRODUCTION:

The Indian microfinance sector has arrived at a major landmark, celebrating 50th anniversary set up in the year 1974 in Gujarat with the main intention of providing financial services to the poor women (Aditya Bhan 2024). Microfinance has been extensively advocated as a mechanism for poverty reduction in rural India against existing financial exclusion and economic fragility (Kavitha, G. 2024) - Microfinance refers to small savings, credit and insurance service extended to socially and economically disadvantaged segments of society (Malathi Latha, T. 2016). It covers broad range of financial services like deposits, loans, payment services, money transfer, insurance savings, micro credit etc., with the aim of serving poor and low income people (Neha Saini et al. 2017). Micro Finance Institutions (MFIs) have evolved into a holistic financial concern for the poor that offers agile, flexible and low cost financial services to the

households that are excluded from the formal financial sector (Ribeiro et al., 2022). Today most of the MFIs are hybrid in nature, aiming for socio economic upliftment and financial sustainability (Hudon, M. et al. 2020, Morduch, 1999). Microfinance constitutes an agile, flexible and cost effective financial instrument for entrepreneurship projects that otherwise suffer from bank credit rationing (Stiglitz, 1990). Amalgamating micro credit, micro savings, micro insurance, micro finance can help low income poor in reducing risk, financing their income, improve management, raising productivity, avail higher returns and improve the living standards of poor and their dependents (Robimon, 2001). Microfinance positively contributed to the overall growth in standard of living and livelihood activities (Madhubala Swamy, 2014). Mohammed Yunus (1988) argue that poor people possess natural abilities to run business and their own subsistence reflects the capacities of their survival skills. But in order to set up a new business, poor entrepreneurs need to find alternative financial research due to their general exclusion from traditional banking system as they are unable to provide collateral (Stiglitz, 1990) limited properly rights (Webb, J.W. et al. 2013) and high transaction cost incurred by small scale banks (Weiss et al. 2005).

Poor requires financial services in doing business or manufacturing as entrepreneurs. Access to credit is seen as a driver of economic development (Beck, T. R. et al. 2000, King and Levine, 1993). But despite the promise of microfinance as a tool for financial inclusion, evidence from Randomised Controlled Traits (RCTs) show that its impact on borrowers are often modest an short lived (Banerjee et al., 2015). This led to recognise that RCTs may overlook the broader benefits of microfinance by not capturing general equilibrium and spill over effects (Bannerjee et al. 2015). MFIs are considered as effectors of household income by encouraging productivity, widening diversity of production and productivity and maximum use of existing resources (Bingshanger, 2007; Dejene, 2007; Sudan 2007; Akimtoye 2008; Rakesh Belwel et al. 2012). Multiple studies like Kabeer (2005), Mayoax (2001), Otero, M. (2019) found that microfinance is a good strategy to alleviate poverty, empower women augmenting economic development.

#### Statement of the problem

There is a more awareness among planners and administrators regarding the necessity of enhancing social well being of the poor and deserved in the society. The poor in the study area are living out of agriculture or working as labourers in agricultural cultivation, harvesting etc., Traditional banks are ignoring the poor forgetting their social responsibility towards poor. poor require financial assistance at cheaper rates to do business and they also requires financial literacy. There is a strong need to educate the rural masses about the criticalness of savings creation. Diversity in the occupation is need of the hour and they should be trained to take up new variety income gaining occupations. Among the major strongest delinquencies of microfinance is that the borrower use the loan amount to consumption or social obligations instead of income generation activities (Next IAS current affairs team 2025). The traditional banks prefer collateral and are not ready to provide financial assistance led severe imbalances in the society and digitalisation further divided the society into digital and non-digital poor. The poor and deserved at present do not have financial access, and financial access as helpful in managing their assets and create income. The Karnataka State Government free women welfare schemes are certainly empowering the women so what they meet education, and health expenses. The focus now taken up towards women's empowerment should be taken up further and access to finance and control over productivity resources should be provided since women studies reveal that the poor and vulnerable lack financial access and are unable to fight against poverty.

#### Microfinance Industry Snapshot

Particulars	As of March '24	As of Dec. '24	As of March '25	Y-O-Y Mar. '24 - Mar. '25	Q-O-Q Dec. 24 - Mar. 25
Gross loan portfolio (GLP) (Rs. Crores)	442.7K	791.5K	391.2K	-13.9%	-2.6%
Active loan (Crore)	16.10	14.60	14.00	-13.30%	-4.20%
Amount Disbursed in Last 3 M 1 (Crore)	115,6000	63,774	71,580	-38.1%	-12.2%

Loan disbursed in last 3 M (Lakh)	240.50	120.00	133.00	-44.70	10.80%
PAR 1-30%	0.7%	1.80%	1.4%	0.7%	0.4%
PAR 31-180%	2.1%	6.4%	6.2%	4.1%	0.2%
PAR 180 + (Incl. w/o)%				3.50%	1.4%

Microland, Quarterly, M - Lending Insight, Month 25 (1.4)

PAR Y-O-Y & Q-O-Q growth is in percentage points unit for difference of 2 percentages)

PAK 180 + (Incl. w/o)% for loans disbursed in last 24 months.

The MF portfolio continued its construction, declining by 2.6% QOQ to Rs. 381.2 K Crores in March '25 as lenders adjusted book size and exposure adopting continues landing practices to management.

## REVIEW OF LITERATURE

Mendelson and Rozas (2024) article explores several regulatory issues in microfinance, viewed through the prism of various crises that impacted the sector. The paper dissects three significant crises; the Grameen Bank crises in 1998; the Peruvian crises of the late 1980s and the 2010 crisis in Andhra Pradesh. The paper places key emphasis throughout on the impartment reforms that have been promoted by the crises. This reforms includes a shift to savings, a shift to shareholder ownership and some MFIs, regulatory reform for consumer protection and greater use of digital technology.

The research paper by Morduch and Ogden (2014) challenges the conventional 'win to win' narrative that has long pervaded the microfinance sector. The researchers suggested that microfinance could simultaneously achieve financial sustainability and substantial impact without need for subsidies. The authors cortically re-evaluate this perspective, forcing on the intricate relationship between interest rates, subsidies and financial inclusion.

Mukhtiar Singh (2025) expressed that microfinance and rural women empowerment through SHG is developing in the case of women empowerment employment generation and environmental consequences. The study found that SHGs are definitely working as a tool for the empowerment of rural women. The researcher suggested about the need to create awareness among SHGs.

The study by Srikanth et al. (2024) reported that use of technology for direct delivery makes Stree Nidhi model a unique in terms of low cost borrowers. The study found that loan from Stree Nidhi, age of SHG members, self employment of women and her spouse and the education level of the spouse significantly increases their household income. The findings of the study include that if the SHG members spouse is self employed or has pre-existing business, their household income tends to be higher than that of others.

### Objectives

1. To study the socio economic characteristics of the respondents.
2. To analyse pre and post effects of occupational status in the study area.
3. To analyse pre and post effects of savings investment in Chikkaballapura district.
4. To analyse the driving factors of women empowerment.

### Hypotheses

1. The demographic profile of the respondents is not significantly variant.
2. There are no effects of pre and post effects on occupational status of respondents.
3. Savings investment effects are not different between pre and post joining SHGs.
4. There are no drivers of women empowerment.

### Research questions

1. What are the reasons behind the socio economic factors not impacting on the study?
2. What is the pre and post effects of joining SHGs on occupational status of respondents?
3. What is the pre and post effects of joining SHGs on savings investment ?
4. What are the drivers of women empowerment?

## RESEARCH METHODOLOGY

**Data Source :** The study relied upon both the primary and secondary data. Primary data gathered through a well administration of questionnaire in the form of a schedule after considering the level of literacy and to avoid incompleteness and rejection. The data was gathered by researcher after conducting interviews with respondents in 6 sub-districts of Chikkaballapura. The secondary sources include, micro lending, quarterly microfinance lending insight 2025, NABARD reports, status of MF report 2023-24, Panchatantra official website of Karnataka.

**Coverage of the study :** The data gathered from 6 taluks of Chikkaballapur district and they are Gowribidanuru, Gudibande, Bagepalli, Chikkaballapur, Sidlaghatta and Chintamani.

**Line of analysis :** The line of study followed in the present study as of description in nature. A newly designed quantitative technique in addition to Kendall's co-efficient of concordance was performed. ANOVA the new modified comparative ANOVA technique has been used to give a comparative picture of involvement of respondents the different occupation and IGAs. Excel 16 was used to find ANOVA.

**Sample and Sample fixation :** The sample of the study is 100. Sample fixation is done based on number of SHGs in a particular taluk. Convenient sampling technique method was followed in the conduct of interview with the respondents.

**Mode of sample fixation**

Taluks	No. of SHGs	Total members	Selected GPs	Sample Village	SH Gs	Total members	Sample
Chikkaballapur	1488	15245	10	Agalagurki	70	773	17
Gauribidanuru	2023	21860	10	B.Bommasandra	54	546	12
Bagepalli	1587	15268	10	Kanaga makana palli	95	954	21
Sidlaghatta	1574	15902	10	Arur	69	743	17
Gudibande	487	4571	10	Yellodu	57	590	13
Chintamani	2072	21334	10	Anoor	77	912	20
Total	9231	94180	60	6 Villages	422	4518	100

**Source:** (1) [nrlm:/nrl/m/in?shg](http://nrlm:/nrl/m/in?shg), (2) Ministry of Rural Development, (3) Number of total members in a sample village / total number of members in sample villages x 100. (4) [Panchatantra/karnataka.gov.in](http://Panchatantra/karnataka.gov.in).

**Limitations :**

1. Study belongs to Chikkaballapura district.
2. The sample villages are only 6.
3. The sample 100 is small and any dependency needs further in depth study.

**Survey Findings**

Table - 1 highlights data about demographic profile of respondents. There are 85 women married, 12 single and 3 divorcees. 45 respondents belongs to the age group of 40-45, 21 to be 41-50 years group and 12 to the 30-40 years group. 35 respondents completed PUC, 25, 10th standard 10 each 7th standard and others and further 10 more are degree holders. 35 are doing petty business, 21 vegetable selling, 13 pickle selling 10 cut fruit selling. Income data reveals that 52 are getting a monthly income of 15K - 20K, 20 respondents income falls in between 10K - 15K and 15 respondents monthly income is in between 2011 - 25K. 51 are living in villages, 20 in urban Chikkaballapura, 15 remote areas, 10 semi urban and 4 in slum areas. 85 respondents are trained, 10 waiting and untrained 15, 93 participates in social activities and 91 are interested in voting and supporting a candidate. All the characteristics shows significant variation with high degree of relationship.

Table 2 & 3 speaks about respondents occupation status before and after joining SHGs. There is a decrease in doing agriculture and the numbers of persons selling vegetable strongly increased from 10 to 21. Further it is found that cut fruit sellers rose from 11 to 13 after joining SHGs. Similarly there is an increase in vegetable sellers after joining SHGs. The P value after joining stood at 2.22E-06 much smaller than the significance level. Hence it is concluded that there exist significant variation in the data meaning

there by the respondents have chosen most profitable occupation after joining SHGs. MS Excel 16 was performed in order to find the value of P, in case of ANOVA.

Table - 4 & 5 reveals data about savings investment of SHG members. There was no SHG members depositing savings before joining SHGs and after joining 59% of respondents parked their savings with SHGs. Investment in chit funds was the highest with 24 respondents before joining the SHGs and successfully SHGs reduced this number to 5. Similarly investment in post office before joining was 11 members and it was reduced 8 a marginal decrease. The awareness creation was successful and it can be seen that before joining SHGs 20 people use to invest for interest with friends relatives and neighbours and it was drastically reduced to 4. The 'W' value before was 2.33 and after joining it was 7.48 and the difference is 5.15. The significance of 'w' tested using  $\chi^2$  statistics and it was 108.15 higher than the TV 14.067 and hence 'w' fails to accept  $H_0$  and accepts  $H_1$ . Therefore, it is concluded that there exist significant high degree of relationship between before and after joining SHGs. It was found that members benefitted much after joining SHGs.

Table - 6 highlights data about factors driving women empowerment and weighted Arithmetic mean was performed to measure different drivers women empowerment. The bi-polar opinions are defined as 'f' and the weights are defined as 'w'. Three point Likert scale strongly agree, agree and somewhat agree was used to measure the expressions of respondents. 'WA' was found by using the formula  $fw/w$  The highest ordered 'WA' was ranked. Accordingly the first rank was awarded to savings formation, the second rank was given to empowerment and widespread social status and the third rank was awarded to women freedom management. Remaining drivers are ranked as per the strength of total.

## DISCUSSION :

Microfinance is preferred for attaining more income in the study area. Chikkaballapura district is popular for Nandi hills, where SAARC Summit was held and a tourism centre and popular for commercial cross like raw chilly and potato. Commercial crops of Chikkaballapura has a separate preference in both the markets of Mumbai and Hyderabad. It has played significant role in the upliftment of awareness and there is a growing financial literacy of the members. The socio economic characteristics are well supporting the members and there exist significant variation and high degree of relationship between the two attributes. Study found a lot of difference in the occupation status between before and after joining of SHGs and it was found respondents obtain different advantages and the after joining the SHGs. Further, the savings are invested with proper care after joining SHGs. Dependency on chit funds has been drastically reduced because of attaining more awareness. The collected data has been shown in the form of tables and suitable qualitative techniques were performed to analyse the data.

## CONCLUSION:

Microfinance is uplifting the rural members out of poverty through proper employment opportunities. It is found that SHG members are using loan amount towards personal consumption and social festivals instead of investing in income generating activities. Hence, the area requires awareness creation so that the members use the SHG loan amount towards productive purpose. The study found that all the demographic profiles of respondents are significantly varying with high degree of relationship. Further, the study found the members are benefitted very after joining SHGs and occupational status and savings investment are better when compared before joining position. The drivers of women empowerment as per the highest order are savings formation, employment and widespread social status, and women freedom movement.

## REFERENCES :

1. Acimtoye, I. R. (2008). Reducing unemployment through the informal sector. A case study of Nigeria, *European Journal of Economics, Financial and Administrative Science*, 11, 97106.
2. Aditya Bhan. (2024). 50 years of Indian microfinance. The long journey to profitability. Observer Research Foundation. Expert speak India matters 25th September, 2024.
3. Banerjee, A., Karlan, D., & Zinman (2015). Six randomised evaluation of micro credit. Introduction and further steps. *American Economic Journal: Applied Economics*, 7(1), 1-21.
4. Beck, F. R., Levine., & Loayza, N. (2000). Finance and Source of Growth, *Journal of Financial Economics*, 58(1), 261-300.
5. Binswanger, H.P. (2007) Empowering rural people for women development. *Agricultural Economics*, 37 (61, 13-2).

6. CGAP (2023), Harnessing Inclusive Finance : A path toward thriving and sustainable futures, CGAP VII strategy (FY 24 - FY 28), <https://www.cgap.org/about/key-documents/cgap-documents/cgap-vii-strategy>.
7. Chliova, M., Brinkmam, T., Rosenbusch, N. (2005). Is microfinance a blessing for the poor? A meta analysis examining development outcomes and contextual considerations. **Journal of Business Venture**, 30(3), 407-487, <https://doi.org/10.1016/j.jbusvent.2014.10.003>.
8. Dejene, Y. (2007) Prompting Women's Economic Empowerment in Africa. In **Africa Economic Conference Addis ababa**, 15-17.
9. Hudson, M., Labie, M., Reichart, P. (2020). What is a fair level of profit for social enterprises. Insights from microfinance. **Journal of Business Ethics**, 162, 627-644. [10.1007/8510551-018-3986](https://doi.org/10.1007/8510551-018-3986).
10. John Agyakum Addae. (2015) Effects of MF on women's employment. A review of the literature. **ADRRI Journal of Arts and Social Sciences**, 13, 8(2), 1-15, ISSN 2343-6891, ISSN-L, 2343-6891.
11. Juja, S. V. (2014). SHGs : A tool for sustainable development. **EPRA International Journal of Economics and Business Review**, 2(4).
12. Juja, S.V. (2014). SHGs: A tool for substantial Development. **EPRA International Journal of Economic and Business Review**, 2(4) 31-24.
13. Kabeer, (2005). Is MF a 'magic bullet' for women empowerment? **Economic and political weekly**, 40(44-45), 4709-4718.
14. Kakali Barna. (2025), MF as alternative to rural credit market in India. **International Journal of Social Science and Economic Research**, 10(3), 1-12 DOI: 10.46609/iisseje, 2025.v 10101.001. DOI: 10.46609/IJISSER 2025. V10i01.001, URL: <https://doi.org/10.46609/IJISSER 2025.v10i01.001>
15. Kavitha, G. (2025). Poverty and progress: Evaluating the impact of microfinance in rural economies in India. **Journal of neonatal Surgery**, Vol. 13.
16. Khen, J., & Ogden, T. (2024). Lessons for global Microfinance from the United States? **Oxford Review Economic Policy**, 40(1), 18-29.
17. King, R., & Levine, R. (1993). Finance and growth: Schumpeter might be right. **The quarterly journal of Economics**, 108(3), 717-737.
18. Madhubala Swamy (2014). Impact analysis of SHGs in Urban Milien : A case study. **Arthashastra Indian Journal**, 4(10), 19-26.
19. Malathi Latha, G. (2016). MF in India: Contemporary issues and challenges, **Indian journal of Applied Research**, 7(9), 502-504, DOI 10.21319 / srm.1.
20. Mayoux, L. (2001). MF and women empowerment - A review of Key issues. **Working paper**.
21. Mendelson, S., & Rozas, D. 92024). Selected MF crisis: Past, Present and Future. **Oxford Review Economic Policy**, 40(1), 30-47.
22. Morduch, J., & Odgen, T. (2024). What win-win lost : Rethinking MF subsidy in the past and designing for the future. **Oxford Review of Economic Policy**, 40(1), 44-53.
23. Morduch, T. (1999). The role of subsidies in MF: evidence from the Grameen Bank. **Journal of Development Economics**, 60, 229-248, [10.1016/S0304-3478\(99\)00042-5](https://doi.org/10.1016/S0304-3478(99)00042-5).
24. Muktiar Sing. (2025). MF and rural women empowerment through SHGs. **Universal Research Reports**, 12(1), 10-7. DOI: <http://doi.org/10.36676/urr.v.12.i.1540>.
25. Mustafa, F., Khursheed, A., Fatima, M. (2018). Impact of global financial crunch on financially innovative microfinance institutions in South Asia. **Financial Innovative**, 4(1), 1-11 <https://doi.org/10.1186/s40854-018-0099-8>.
26. Neha Saini., Bhupendra Kumar & Pathak (2017). A conceptual study of MF in India. **International Journal of Marketing & Financial Management**, 5(10), 75-82.
27. Next IAS current affairs teams (2025). MF loan delinquencies jump 163% in 2025.
28. Otero, M. (2019) Break through the expansion of enterprise programme as a challenge for non profit institutions. **Cambridge IMA - ACCION International** retrieved from <https://www.centreforfinancialinclusion.org/publication/d-resources/housepublications/86>.
29. Rakesh Belwel., Misrak Tamiru., & Gurmeet Singh. (2002). MF & Sustained economic improvement: Women small scale entrepreneurs in Ethiopia. **Journal of International Development**, 24(3), 584-599, DOI: 10.1002/ijd.
30. Rebeiro, J.P.C., Duarte, F., & Gama, A.P.M. (2022) Does MF foster the development of the clients? A bibliometric Analysis and systematic literature review. **Financial Innovation**, 8(1), Article No. 34.
31. Robinson, M. S. (2001). The MF revolution sustainable finance for the poor. The world Bank, Washington.
32. Rutherford, S. (2024). Microfinance and savings. **Oxford Review Policy**, 40(1), 8-17.
33. Srikanth., & Prakash Singh. (2024). Impact of Stree Nidhi on Credit flows - A case study from India MF sector. **The MF reviews journal for research on financial inclusion and MF**, 15(1), 35-48, ISSN 2229-3329.
34. Stigliz, J.E. (1990). Peer monitoring and credit markets, **World Bank Economic Review**, 4(3), 351-356, <https://doi.org/10.1093/uber/4.3.351>.
35. Sudan, F.K. (2007). Livelihood diversification and women empowerment through Solo Help Micro credit programme. **Indus Journal of Management and Social Sciences**, 1(2) 90-106.
36. Webb, J.W., Bruton, C.D., Tihanyi, L., Ireland, R.D. (2013). Research on entrepreneurship in the informal economy framing a research agenda. **Journal of Business Venture**, 28(5) 598-614. <https://doi.org/10.1016/j.jbusvent.2012.05.003>.
37. Weiss J., Montgomery, H. (2005). Great expectations: microfinance and poverty reduction in Asia and Latin America. **Oxford Development Studies**, 33(3-4), 391-416.
38. Yunus, M. (1998). Banker to the poor people Penguin Books, new Delhi.

#### Table-1 : Demographic profile of Respondents

Demographics	$\chi^2$	TV @ 0.05	df	Result of $\chi^2$	"c"	Result of c
Marital status	121.34	5.991	2	Significant	0.74	High Degree
Age (in years)	67.35	11.071	5	Significant	0.63	High Degree
Education	53.93	12.592	6	Significant	0.59	High Degree
Occupation	46.10	12.592	6	Significant	0.56	High Degree
Income (INR)	70.90	9.488	4	Significant	0.64	High Degree
Living conditions	57.10	9.488	4	Significant	0.60	High Degree
Training	106.51	5.991	2	Significant	0.71	High Degree
Participation in Social activities	73.96	3.841	1	Significant	0.65	High Degree
Voting and supporting a candidate	67.24	3.841	1	Significant	0.63	High Degree

Source: Field Survey

Note :  $\chi^2$  = Chi-square

'c' =  $\sqrt{\chi^2 / \chi^2 + N}$

Where 'c' = Contingency Co-efficient, N = Number of Observations

When the value 'c' is equal or nearer to 1, it means that there is high degree of association between attributes. Contingency co-efficient will always to be less than 1. High degree is considered here if 'c' is 0.50 and above.

**Table - 2 : Occupational status - Before Joining SHGs - ANOVA**

Occupation Status of Respondents	SA	A	SWA	T
Agriculture	18	4	1	23
Garlands making and Flowers selling	5	2	1	08
Petty business	10	3	2	15
Tailoring	9	2	2	13
Vegetable selling	10	3	2	15
Cut fruit selling	11	3	1	15
Pickle / Papad selling	7	3	1	11
Total				100

Source : Field Survey,

Note : SA - Strong Agree, A - Agree, SWA - Some What Agree.

**ANOVA : Single Factor Analysis : Summary**

Groups	Count	Sum	Average	Variances
Column 1	7	70	10	16.66667
Column 2	7	20	2.857143	0.47619
Column 3	7	10	1.428571	0.285714

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F. Crit
Between Groups	295.2381	2	147.619	25.40984	5.73E06	3.554557
Within Groups	104.5714	18	5.809524			
Total	399.8095	20				

Source : Field Survey

**Table - 3 : Occupational status After Joining SHGs - ANOVA**

Occupation Status of Respondents	SA	A	SWA	T
Agriculture	8	1	1	10
Garlands / Flowers	8	1	0	9
Petty Business	12	3	1	16
Tailoring	8	1	1	10
Vegetable selling	21	4	2	27
Cut fruit and ground nuts selling	10	1	1	12
Pickle / Papad selling	13	1	2	16
Total	80	12	8	100

Source : Field Survey,

Note : SA - Strong Agree, A - Agree, SWA - Some What Agree.

**ANOVA : Single Factor Analysis : Summary**

Groups	Count	Sum	Average	Variances
Column 1	7	80	11.42857	21.95238
Column 2	7	12	1.714286	1.571429
Column 3	7	4	1.142857	0.47619

**ANOVA**

Source of Variation	SS	df	MS	F	P-value	F. Crit
Between Groups	467.8095	2	233.9048	29.2381	2.22E-06	3.554557
Within Groups	144	18	8			
Total	611.8095	20				

Source : Field Survey

**ANOVA Analysis :** The P value is lesser in case of after than before joining SHGs. Further, P-value is less than the significance level 0.05 and hence it is concluded that the ANOVA is significant in variation also and it is concluded that the occupation status is better when compare to before.

**Table - 4 : Mode of savings before joining SHGs**

Mode of savings parking	SA	A	SWA	RT	RT <sup>2</sup>
With SHGs	0	0	0	0	00
Cash in Hand	6	2	-	8	64
Bank	8	2	1	11	121
Investment in Chit funds	24	5	2	31	961
Investment in Post Office	11	3	1	15	225
Provident fund	3	2	-	5	25
Relatives / friends / neighbours	20	6	1	27	729
Others	3	-	-	3	9
Total	75	20	5	100	2134

Source : Field Survey

Note : SA = Strongly Agree, A = Agree, SWA = Somewhat Agree, RT = Row Total

$$SSR = \sum RT^2 - (\sum RT)^2 / N$$

$$= 2134 - (100)^2 / 8 = 2134 - 1250 = 884$$

Use the sum of squares (SSR) in the following formula to obtain Kendall's W.

$$W = 12 \times SSR / k^2 N (N^2 - 1)$$

$$= 12 \times 884 / 9 \times 8 (64 - 1) = 10608 / 4536 = 2.33$$

**Table - 5 : Savings parking after joining SHGs - Kendall's co-efficient of concordance**

Mode of savings parking	SA	A	SWA	RT	RT <sup>2</sup>
With Self Help Groups	59	2	1	62	3844
Cash in Hand	3	-	-	3	9

Bank	6	1	-	7	49
Chit Fund	5	-	-	5	25
Post office	8	1	-	9	81
Provident Fund	3	1	1	5	25
Relatives / friends / neighbours	4	1	1	6	36
Others	2	-	1	6	36
Total	90	6	4	100	4078

Source : Field Survey

Note : SA = Strongly Agree, A = Agree, SWA = Somewhat Agree, RT = Row Total

$$SSR = \sum RT^2 - (\sum RT)^2 / N$$

$$= 4078 - (100)^2 / 8 = 4078 - 1250 = 2828$$

Use the sum of squares (SSR) in the following formula to obtain Kendall's W.

$$W = 12 \times SSR / k^2 N (N^2 - 1)$$

$$= 12 \times 2828 / 9 \times 8 (64 - 1) = 33936 / 4536 = 7.48$$

Finding difference between 7.48 and 2.33

$$7.48 - 2.33 = 5.15$$

Test the significance of 'w' by using the  $\chi^2$  statistic

$$\chi^2 = k (n - 1) w$$

$$= 3(8-1) \times 5.15 = 3 \times 7 \times 5.15 = 108.15$$

**Decision:** At 7 df with 0.05 level of significance the TV = 14.067. The calculated value being 108.15 being higher than the critical TV and hence "w" fails to accept  $H_0$  and accepts  $H_1$ . Therefore, it is concluded that there exist significant high degree of relationship between before and after SHGs and respondents were benefitted very much after joining SHGs.

**Table-6 : Factors driving women empowerment - weighted Arithmetic mean methods**

Factors driving women empowerment	Weight	3	2	1	T	WA
		SA	A	SWA		
Savings formation	f	94	6	-	100	I
	fw	282	12	-	294	49.00
Self confidence	f	88	4	8	100	VI
	fw	264	8	8	280	46.67
Decision making power	f	82	10	8	100	XI
	fw	246	20	8	274	45.67
Women freedom movement	f	86	12	2	100	III
	fw	258	24	2	284	47.33
Employment and wide spread social status	f	90	8	2	100	II
	fw	270	16	4	296	48.33
Reduction in dependency on local money leaders	f	84	2	14	100	VI
	fw	252	4	14	280	46.67
Freedom of expression	f	65	13	22	100	XXIV
	fw	195	26	22	243	40.50
Changes in women's labour practices	f	70	14	16	100	XVII
	fw	210	28	16	254	42.33
Participation in policies	f	66	14	20	100	XIX
	fw	198	28	20	246	41.00
Strong commitment to the daughter's marriage	f	56	20	24	100	XXV
	fw	168	40	24	232	38.67
Freedom from domestic violence	f	84	15	1	100	V
	fw	252	30	1	283	47.16
Widened standard of living	f	80	14	6	100	XI
	fw	240	28	6	274	45.67

Autonomy for women in marriages	f	84	10	6	100	VIII
	fw	252	20	6	278	46.33
Psychological well being	f	72	11	7	100	XXI
	fw	216	22	7	245	40.83
Access to control of family resources	f	72	12	16	100	XVI
	fw	216	24	16	256	42.67
Economic independence	f	82	14	4	100	VIII
	fw	246	28	4	278	46.33
Supporting social awareness programmes	f	72	24	4	100	XV
	fw	216	48	4	268	44.67
Proper nutrition and sanitary	f	64	16	20	100	XXII
	fw	192	32	20	244	40.67
Liberty to sell fixed assets	f	50	30	20	100	XXVI
	fw	150	60	20	230	38.33
Increase in income	f	64	22	14	100	XVIII
	fw	192	44	14	250	41.67
Say in small purchases	f	64	16	20	100	XXII
	fw	192	32	20	244	40.67
Say in large purchases	f	84	16	-	100	III
	fw	252	32	-	284	47.33
Able to make financial decision	f	80	14	6	100	XI
	fw	240	28	6	274	45.67
Access to markets, employment & widened status	f	82	12	6	100	X
	fw	246	24	6	276	46.00
Started moving independent to work	f	70	20	10	100	XIV
	fw	210	40	10	260	45.33
Expressing views and move freely and independently in the family	f	58	20	22	100	XIX
	fw	174	40	22	246	41.00
Increased ability to discuss with bankers / NGOs / Govt. Offices	f	52	18	30	100	XVII
	fw	156	36	30	222	37.00

Source : Field Survey

WA = Sum of f / Sum of W    Sum of W = 3 + 2 + 1 = 6