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Women entrepreneurship and empowerment in India: An analysis concerning (self-help groups) SHGs in Darjeeling

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Abstract
In recent decades, women's entrepreneurship and empowerment in India have experienced substantial progress, particularly through the development of Self-Help Groups (SHGs). This study examines the impact of SHG participation on women's empowerment via entrepreneurship in the Darjeeling District of West Bengal, India. Employing a mixed-methods approach, this study utilized both primary and secondary data. Primary data were gathered through structured questionnaires administered to 60 women SHG members engaged in entrepreneurship within the Rangit-II Gram Panchayat of the Darjeeling Pulbazar Block. These findings indicate that SHG participation significantly enhances women's income levels and overall empowerment across various dimensions. Before joining SHGs, 50% of the respondents reported a monthly income below Rs. 5000, whereas post-participation, 70% reported a monthly income ranging from Rs. 5000 to 10000. Additionally, 50% of the respondents experienced high levels of social empowerment, 40% reported substantial economic empowerment, 50% indicated significant entrepreneurial empowerment, and 40% experienced notable technological empowerment. Overall, 70% of the respondents felt highly empowered through their involvement in SHGs. Statistical analyses confirmed the significant positive effect of SHG participation on income levels, the association between income and overall empowerment, and a strong positive correlation among the various dimensions of empowerment. The study concludes that SHGs are an effective mechanism for promoting women's entrepreneurship and empowerment in the Darjeeling region while also emphasizing the need for further enhancements to benefit all participants.

Keyword: Women entrepreneurship**,** empowerment, self-help groups (SHGS), Darjeeling, mixed-methods approach, income levels, social empowerment, economic empowerment, entrepreneurial empowerment, technological empowerment, etc.

1. Introduction
The concept of women's entrepreneurship has experienced significant growth in India, particularly over the past few decades. Amidst various societal transformations, the emergence of women in entrepreneurial roles has not only contributed to economic growth but has also significantly empowered women across different regions of the country (Joseph, 2015) [7]. The empowerment of women through entrepreneurship is essential for the modern development of economies, as it leverages women's potential and creates avenues for enhanced socioeconomic participation. In India, self-help groups (SHGs) have been pivotal in advancing women's empowerment, providing them with platforms to engage in micro-enterprises and enhance their role in family and community decision-making. The SHG model, initially established as a mechanism for savings and credit, has evolved to address broader social issues, including gender- and caste-based discrimination, while also fostering economic independence and enhancing social capital among rural women (Kumar *et al*., 2021) [8]. SHGs help women negotiate social norms and significantly reduce intra household inequality by increasing women's control over income and improving decision-making capacities (Kumar *et al*., 2021) [8]. Specifically, empowerment and entrepreneurial engagement among women in regions like Darjeeling, facilitated by SHGs, provide critical insights into how localized economic models can contribute to broader policy frameworks aimed at gender equality. SHGs are not merely about financial transactions; they also involve social networking and group dynamics, which are crucial for increasing women's self-confidence, socio-economic well-being, and their roles within the household (Pandhare *et al*., 2024) [11]. Moreover, there is evidence suggesting that empowerment strategies

through SHGs are not only vital at the grassroots level but also challenge the notion that top-down empowerment is ineffective. Instead, they have successfully engendered bottom-up empowerment processes that demonstrate significant improvements in women's socioeconomic status and participation (Mathur & Agarwal, 2017) [10]. This contextualization is particularly important when analysing how SHGs in specific regions, such as Darjeeling, can be harnessed effectively to achieve empowerment results. Therefore, it is essential to examine the nuanced roles of SHGs in promoting women's entrepreneurship and empowerment in India, particularly focusing on unique regional dynamics, such as those present in Darjeeling. Understanding these dynamics may reveal pathways towards sustaining achievements in women's economic and social empowerment, while also addressing the remaining challenges that hinder the quest for gender equality in entrepreneurship across the country.

2. Literature Review

Numerous studies have been conducted in India by various scholars, academicians, and researchers, focusing on the impact of Self-Help Groups (SHGs) on women's entrepreneurship and empowerment. The following are some of the most relevant and notable studies in this area.

Silambarasi and Shameem (2021) [14] studied women entrepreneurs in self-help groups (SHGs) in Chennai. They examined women's backgrounds, reasons for starting businesses, and the problems they faced. They collected data from 100 SHG members and used the percentage and chi-square methods to analyse the data. The study shows that SHGs help women find jobs, obtain financial help, and feel more empowered. However, women face challenges such as stress from business activities and solving problems. This study finds that SHGs help women become financially independent and socially empowered. It also provides suggestions to improve business activities and solve the problems faced by women in these groups.

Roley *et al*. (2024) [13] studied how Self-Help Groups (SHGs) affect women's empowerment and sustainable development in the Lower Siang District of Arunachal Pradesh. They used the data from 30 SHG members. The study shows that joining SHGs helps women overcome monetary problems, gives them more say in family decisions, and become involved in social issues. SHGs help to improve the economy, create jobs, and support eco-friendly projects. This research highlights the need for government and local banks to support women's empowerment and sustainable development, especially in rural and male-dominated areas. Overall, this study shows that SHGs have a significant positive impact on women's empowerment and community development in the area.

Basera and Bhatt (2025) [1] studied the impact of self-help groups (SHGs) on women in rural Haldwani, India. They surveyed 100 participants using questionnaires and analysed data using tables and a Likert scale. Members were mostly 21-40 years old, 12th-grade educated, and from general Hindu families. Economic empowerment manifests itself through increased income and banking knowledge. Social empowerment was improved through training and self-confidence. Family attitudes toward members improved. Members earning less than 4000 rupees monthly decreased from 52% to 24% after joining the SHGs, demonstrating economic growth.

Chakraborty and Dasgupta (2024) [2] examined how Self-Help Group (SHG) activities empower women socially and economically. Since the 1990s, women's empowerment has been discussed as a means to address discrimination. Microfinance through SHGs has become a key factor in women's empowerment in India. SHGs are groups of rural women who collectively save and manage their loans. Studies have shown that SHGs improve decision-making, income, and confidence. However, their success depends on location, management, market access, and cultural norms. Although SHGs show positive effects, concerns remain about women's control and decision-making power, requiring further research.

Vanaja (2022) [15] studied how Self-Help Groups (SHGs) affect women's empowerment and reduce poverty in Telangana, India. SHGs are small financial groups in villages with 10-20 local women. Telangana has over 195,585 SHGs, mostly for women that help fight poverty and support women's businesses. These groups build trust and unity and improve life in rural India. This paper examines the challenges women face in obtaining education, technology, and money, and highlights the efforts of big companies, the government, microcredit programs, and NGOs. The study used data from 290 SHG members collected through surveys and interviews. The results showed that SHGs helped women by increasing income, improving living conditions, and boosting self-esteem, with more jobs for members. This paper suggests expanding SHG programs, focusing on education, and promoting SHG products, concluding that SHGs successfully empower rural women both economically and socially.

Fazalbhoy and Gochhait (2022) [5] investigated the role of Self-Help Groups (SHGs) in supporting women entrepreneurs' business growth in India during the COVID-19 pandemic. The study surveyed 220 SHG women entrepreneurs using twelve variables to examine 'role' and 'business growth.' Quantitative methodology and descriptive statistics were used for the analysis. The findings revealed that, while the pandemic created challenges and opportunities, SHGs' support was inadequate. This study recommends that SHGs adopt technology-driven roles, provide online marketing training, and facilitate financial access. This research provides implications for SHGs and policymakers, highlighting the need for revised strategies to support Indian women entrepreneurs during the pandemic.

Pandhare *et al*. (2024) [11] investigated microfinance and entrepreneurial engagement through Self-Help Groups (SHGs) on women's empowerment in rural Maharashtra, India. Using mixed-methods analysis, this study found that microfinance positively impacted the social, economic, and psychological dimensions of women's empowerment. SHG participation enhances financial independence, decision-making power, and self-confidence. Women engaged in entrepreneurial activities such as dairy farming and grocery shops. Microfinance provides resources to help women overcome barriers, demonstrating its potential in promoting gender equality and contributing to sustainable development.

Varghese and Menon (2021) [16] examine women's entrepreneurship through self-help groups (SHGs) and sustainable livelihood schemes in Kerala. This study investigates women's workforce participation and the role of SHGs in the Kottayam and Pathanamthitta districts. The findings revealed that 47% preferred animal husbandry, 35% preferred small-scale industry, and 18% preferred agriculture. The study found moderate overall

empowerment (45%), with economic empowerment being the highest. The SHGs successfully empowered rural women by improving their income, savings, and decision-making. This study recommends financial support and entrepreneurship education.

3. Research Gap

The literature has extensively examined the influence of Self-Help Groups (SHGs) on women's entrepreneurship and empowerment in India. However, there is a notable absence of seminal research specifically addressing the impact of SHGs on women's entrepreneurship and empowerment within the district of Darjeeling in West Bengal. This study aims to investigate this unexplored area of research.

4. Significance of the Study

This study investigated the role of Self-Help Groups (SHGs) in empowering economically disadvantaged women in India. Existing research indicates that participation in SHGs significantly influences women's control over income and financial decision-making (Islam & Brahamachary, 2025) [6]. Micro-entrepreneurship facilitated by SHGs is identified as a sustainable approach to women's empowerment and socioeconomic development. Empirical studies reveal a positive correlation between SHG empowerment and the emergence of small businesses in rural areas (Chatterjee *et al*. 2018) [3]. India's substantial contribution to SHG research underscores the importance of structural support for women's empowerment through collective actions (Mahato *et al*. 2022) [9]. In rural India, SHGs enhance women's involvement in savings, non-agricultural labour, and household decision-making, despite ongoing socioeconomic challenges (Desai & Joshi, 2013) [4]. This study is crucial for understanding how SHGs can promote entrepreneurship in regions such as Darjeeling, with significant implications for policymaking and development initiatives.

5. Objective of the Study

This study examines the impact of participation in Self-Help Groups (SHGs) on women's empowerment through entrepreneurship in the Darjeeling district.

6. Research Methodology

6.1 Data Source: This study adopts an empirical approach that utilizes both primary and secondary data. The theoretical framework is derived from secondary sources, including research articles, publications, books, journals, newspapers, committee reports, and online resources, focusing on the impact of self-help group (SHG) participation on women's empowerment through entrepreneurship.

The empirical component is based on primary data collected via field surveys employing structured questionnaires in selected gram panchayats of Rangit-II in the Darjeeling Pulbazar Block, Darjeeling District, West Bengal (1089473 SHGs), India (8427696 SHGs), during June and July 2025. The Darjeeling district (7676 SHGs) was chosen because of the researcher's familiarity with the area. From the district's five blocks, the Darjeeling Pulbazar Block (2353 SHGs) was selected for its highest concentration of SHGs. This block comprised 23 Gram panchayats, with Rangit-II having the highest concentration of SHGs (185 SHGs), making it the focus of the field survey.

6.2 Methodology

The questionnaire was administered to members of various Self-Help Groups (SHGs) involved in women's entrepreneurship within the designated gram panchayat, Rangit II. Sixty female members from these SHGs, all engaged in entrepreneurial activities, completed the questionnaire. Participant selection was based on convenience sampling. Analytical tools, such as cross-tabulation, frequency tables, percentages, charts, and statistical tests, including paired t-tests, chi-square tests, and correlation tests, were used to examine the primary data. The reliability of the questionnaire was assessed using Cronbach's alpha, which yielded a score of 0.955, indicating satisfactory reliability. This score suggests that conclusions drawn from the questionnaire are highly reliable, as a score above 0.60 is generally deemed acceptable in social science research. Consequently, the methods employed in this study are both valid and reliable. Data analysis was conducted using SPSS software, version 26.0.

6.3 Hypothesis

Three hypotheses were formulated to achieve the research objectives. They are as follows:

- **H1:** There is no effect of participation in SHGs on the income level of members.
- **H2:** There is no association between the income level and the overall women's empowerment of SHGs members.
- **H3:** There is no correlation among the various dimensions of women's empowerment of SHG members.

7. Analysis and Discussion

This section presents an analysis of the primary data collected through a structured questionnaire during a field survey in Rangit-II Gram Panchayat of the Darjeeling Pulbazar blocks located in the Darjeeling district of West Bengal. Additionally, it discusses the testing of the three significant hypotheses using paired-sample t-tests, chi-square tests, and correlation tests.

7.1 Age of Respondents

Table 1: 30% of the respondents fell within each of the following age groups: below 20 years, 21-30 years, and 31-50 years.

Age		
Age	**Frequency**	**Percent**
Below 20 Yrs	18	30
21Yrs-30Yrs	18	30
31Yrs-50Yrs	18	30
Above 50Yrs	6	10
Total	60	100

(Source: Primary Data)

Observation: Table 1 indicates that 30% of the respondents fell within each of the following age groups: below 20 years, 21-30 years, and 31-50 years. In contrast, 10% of the respondents were over 50 years of age.

7.2 Education of Respondents

Table 2: The first three age groups (below 20, 21-30, and 31-50 years) each had 18 people, comprising 30% of the total, showing an equal representation of younger and middle-aged people

Education		
Education	**Frequency**	**Percent**
Illiterate	6	10
School	18	30
MP	12	20
HS	18	30
UG	6	10
Total	60	100

(Source: Primary Data)

Observation

The first three age groups (below 20, 21-30, and 31-50 years) each had 18 people, comprising 30% of the total, showing an equal representation of younger and middle-aged people. Only six people (10%) were over 50 years old, potentially limiting insights into older adults. The first three groups constituted 90% of the respondents, indicating that the results may not adequately represent the older population.

7.3 Material Status of Respondents

Table 3: 80% (48 out of 60) of the respondents were married, whereas 20% (12 out of 60) were unmarried

Marital Status		
Marital Status	**Frequency**	**Percent**
Married	48	80
Unmarried	12	20
Total	60	100

(**Source:** Primary Data)

Observation

The data showed that 80% (48 out of 60) of the respondents were married, whereas 20% (12 out of 60) were unmarried. This high marriage rate may have influenced the results and may indicate sampling from family-oriented communities or demographic factors. The limited unmarried sample restricts group comparisons and may not be generalizable to the unmarried population. Breaking down the "unmarried" category into single, divorced, and widowed groups could provide additional insights, especially given that the 80% marriage rate exceeded the global average.

7.4 Family Structure of Respondents

Table 4: 70% (42 of 60) of the respondents belonged to joint families, indicating the predominance of this structure in the sample

Family Structure		
Family Structure	**Frequency**	**Percent**
Nuclear	18	30
Joint	42	70
Total	60	100

(Source: Primary Data)

Observation

The table shows that 70% (42 of 60) of the respondents belonged to joint families, indicating the predominance of this structure in the sample. This reflects cultural norms in regions where multi-generational households are common. Only 30% (18 of 60) lived in nuclear families, suggesting that these arrangements are less prevalent, possibly due to economic and cultural factors.

7.5 Monthly Income Level of Respondents

Table 5: Before joining the Self-Help Groups (SHGs), 50% of the respondents had a monthly income level below Rs. 5000, while 10% had a monthly income level between Rs. 10001 and Rs. 15000

Monthly Income Level	Before Joining SHGs		After Joining SHGs	
	Frequency	Percent	Frequency	Percent
Less than Rs. 5000	30	50	0	0
Rs. 5000 to Rs.10000	24	40	42	70
Rs.10001 to Rs.15000	6	10	18	30
Above Rs. 15000	0	0	0	0
Total	100	0	100	0

(Source: Primary Data)

Observation: The table indicates that before joining the Self-Help Groups (SHGs), 50% of the respondents had a monthly income level below Rs. 5000, while 10% had a monthly income level between Rs. 10001 and Rs. 15000. Following their participation in SHGs, 70% of the respondents reported a monthly income level between Rs. 5000 and Rs. 10000, and 30% reported a monthly income level between Rs. 10001 and Rs. 15000. This suggests that the average monthly income level of women members increased after joining SHGs.

7.6 Social Empowerment of Respondents

Table 6: 50% of the respondents (30 of 60) reported high social empowerment, indicating substantial confidence in their social status and community influence

Social Empowerment		
Attribute	**Frequency**	**Percent**
High	30	50
Moderate	18	30
Low	12	20
Total	60	100

(Source: Primary Data)

Observation: The table shows that 50% of the respondents (30 of 60) reported high social empowerment, indicating substantial confidence in their social status and community influence. Another 30% (18 respondents) showed moderate empowerment with some autonomy constraints, while 20% (12 respondents) reported low empowerment, suggesting a limited social influence.

7.7 Economic Empowerment of Respondents

Table 7: 40% (24/60) of respondents reported high economic empowerment with financial independence

Economic Empowerment		
Attribute	**Frequency**	**Percent**
High	24	40
Moderate	24	40
Low	12	20
Total	60	100

(**Source:** Primary Data)

Observation: The table shows that 40% (24/60) of respondents reported high economic empowerment with financial independence. Another 40% (24/60) of respondents had moderate and partial financial autonomy. The remaining 20% (12/60) of respondents experienced low economic empowerment and financial dependence.

7.8 Entrepreneurial Empowerment of Respondents

Table 8: 50% of the respondents (30 out of 60) reported high entrepreneurial empowerment, indicating confidence in their business capabilities

Entrepreneurial Empowerment		
Attribute	**Frequency**	Percent
High	30	50
Moderate	18	30
Low	12	20
Total	60	100

(**Source:** Primary Data)

Observation: The table shows that 50% of the respondents (30 out of 60) reported high entrepreneurial empowerment, indicating confidence in their business capabilities. Another 30% (18 respondents) showed moderate empowerment with some business skills, whereas 20% (12) experienced low empowerment because of insufficient resources or skills.

7.9 Technological Empowerment of Respondents

Table 9: 24 respondents (40%) reported high technological empowerment with strong digital tool proficiency

Technological Empowerment		
Attribute	**Frequency**	**Percent**
High	24	40
Moderate	18	30
Low	18	30
Total	60	100

(**Source:** Primary Data)

Observation: The table shows 24 respondents (40%) reported high technological empowerment with strong digital tool proficiency. Eighteen respondents (30%) showed moderate technological empowerment with basic digital skills, while another 18 (30%) exhibited low empowerment because of limited access and digital literacy challenges.

7.10 Overall Empowerment of Respondents

Table 10: 42 out of 60 respondents (70%) experienced high overall empowerment through Self-Help Groups (SHGs), indicating effective participation across the social, economic, technological, and entrepreneurial dimensions

Overall Empowerment		
Attribute	**Frequency**	**Percent**
High	42	70
Moderate	12	20
Low	6	10
Total	60	100

(**Source:** Primary Data)

Observation: The table shows that 42 out of 60 respondents (70%) experienced high overall empowerment through Self-Help Groups (SHGs), indicating effective participation across the social, economic, technological, and entrepreneurial dimensions. Another 12 members (20%) reported partial empowerment, while 6 respondents showed low empowerment, possibly due to recent joining or limited engagement.

7.11 Hypothesis Testing

7.11.1 Paired Sample t-test: The paired sample t-test was employed to examine differences in perceptions of the same cohort at two distinct time points. This study assessed the income levels of women Self-Help Group (SHG) members before and after their participation in SHGs. The primary objective was to ascertain whether the monthly income levels of these women experienced a statistically significant improvement following their involvement in SHGs. The t-test results offered valuable insights into the efficacy of SHGs in enhancing the monthly income levels of women participants.

7.11.1.1 Hypothesi-1

- **H_0:** There is no effect of participation in SHGs on the income level of members.
- **H_1:** There is an effect of participation in SHGs on the income level of members.

Table 11: p-value of the test is 0.000, which is below the 0.05 threshold at the 5% level of significance

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Monthly Income Before Joining SHG - Monthly Income After Joining SHG	-0.7	0.64572	0.08336	-0.86681	-0.53319	-8.397	59	0.000

(**Source:** Compiled by researcher)

Interpretation: The table above indicates that the p-value of the test is 0.000, which is below the 0.05 threshold at the 5% level of significance. Consequently, the null hypothesis is rejected, and the alternative hypothesis is accepted. This finding suggests that the average monthly income of women significantly increased after joining Self-Help Groups (SHGs) compared with their income before joining. Thus, participation in SHGs substantially enhances women's

capacity to earn an income.

7.11.2 Chi-square Test: The chi-square test is employed to assess the associations between the means of the categorical variables. In this study, chi-square testing was used to investigate the relationships between the income levels of SHG members after joining SHGs and the overall empowerment of women within these groups to achieve the research objectives.

7.11.2.1 Hypothesi-2

- **H_0:** There is no association between the income level and the overall women's empowerment of SHGs members.
- **H_1:** There is an association between the income level and the overall women's empowerment of SHGs members.

Table 12: Cross tabulation between Monthly Income after Joining SHG and Overall Women's Empowerment

			Overall Women Empowerment			Total
			High	Moderate	Low	
Monthly Income After Joining SHG	Below Rs. 5000	Number	0	0	0	0
		% of Total	0%	0%	0%	0%
	Rs. 5000 to Rs. 10000	Number	30	12	0	42
		% of Total	50.00%	20.00%	0.00%	70.00%
	Rs. 10001 to Rs. 15000	Number	12	0	6	18
		% of Total	20.00%	0.00%	10.00%	30.00%
	Above Rs. 15000	Number	0	0	0	0
		% of Total	0%	0%	0%	0%
Total		Number	42	12	6	60
		% of Total	70.00%	20.00%	10.00%	100.00%

(**Source:** Compiled by researcher)

Table 13: Pearson Chi-Square test produced a p-value of 0.000 at the 5% significance level, which is below the threshold of 0.05

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	19.184	2	0.000
Likelihood Ratio	23.049	2	0.000
Linear-by-Linear Association	4.087	1	0.043
No of Valid Cases	60		

(**Source:** Compiled by researcher)

Interpretation

According to the data presented in the table, the Pearson Chi-Square test produced a p-value of 0.000 at the 5% significance level, which is below the threshold of 0.05. As a result, the null hypothesis is rejected, and the alternative hypothesis is accepted. This finding indicates a significant association between the income level of women SHG members after joining the group and overall women's empowerment. The cross-tabulation analysis further revealed that 70% of the respondents reported an increase in monthly income levels between Rs. 5000 and Rs. 10000 as a consequence of SHG participation.

7.11.3 Correlation Test: Correlation is a statistical measure that indicates the extent to which two variables are related. When variations in the magnitude of one variable are consistently associated with variations in the magnitude of another variable, the variables are considered correlated. A positive correlation occurs when an increase in one variable is associated with an increase in another variable. Conversely, a negative correlation is observed when an increase in one variable corresponds to a decrease in another. If changes in one variable do not affect the other, the variables are deemed uncorrelated. This study examined the correlation among four variables representing different dimensions of women's empowerment: social empowerment, economic empowerment, entrepreneurial empowerment, and technological empowerment.

7.11.3.1 Hypothesi-3

- **H_0:** There is no correlation among the various dimensions of women's empowerment of SHG members.
- **H_1:** There is a correlation among the various dimensions of women's empowerment of SHG members.

Table 14: Results of a bivariate correlation analysis conducted to examine the relationships among four variables: social empowerment, economic empowerment, entrepreneurial empowerment, and technological empowerment

Correlations					
		Social Empowerment	**Economic Empowerment**	**Entrepreneurial Empowerment**	**Technological Empowerment**
Social Empowerment	Pearson Correlation	1	0.924	1	0.879
	Sig. (2-tailed)		0.000	0.000	0.000
	N	60	60	60	60
Economic Empowerment	Pearson Correlation	0.924	1	0.924	0.933
	Sig. (2-tailed)	0.000		0.000	0.000
	N	60	60	60	60
Entrepreneurial Empowerment	Pearson Correlation	1	0.924	1	0.879
	Sig. (2-tailed)	0.000	0.000		0.000
	N	60	60	60	60
Technological Empowerment	Pearson Correlation	0.879	0.933	0.879	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	60	60	60	60

(**Source:** Compiled by researcher)

Interpretation: The table above presents the results of a bivariate correlation analysis conducted to examine the relationships among four variables: social empowerment, economic empowerment, entrepreneurial empowerment, and technological empowerment. The correlation matrix indicated Pearson's correlation coefficients of 1, 0.924, 1, and 0.879 for these variables. The P-value for the two-tailed test is 0.000, which is below the threshold of 0.05, at the 5% level of significance in all instances. Consequently, it can be inferred that there is a strong and positive correlation among the

8. Findings of the Study

The study of women's entrepreneurship and empowerment through Self-Help Groups (SHGs) in Darjeeling yielded several significant findings, which are outlined below.

8.1 Demographic Profile

- 90% of the respondents were under 50 years old, with equal representation (30% each) in the age groups below 20, 21-30, and 31-50 years.
- 80% of respondents were married.
- 70% belonged to joint families.

8.2 Income Levels

- Before joining the SHGs, 50% of respondents had a monthly income below Rs. 5000.
- After joining the SHGs, 70% reported monthly income between Rs. 5000-10000, and 30% between Rs. 10001-15000.
- Statistical analysis confirmed a significant increase in average monthly income after joining the SHGs.

8.3 Empowerment Dimensions

- Social empowerment: 50% reported high levels, 30% moderate levels, and 20% low levels.
- Economic empowerment: 40% high, 40% moderate, and 20% low.
- Entrepreneurial empowerment: 50% high, 30% moderate, and 20% low.
- Technological empowerment: 40% high, 30% moderate, and 30% low.

8.4 Overall Empowerment

- 70% of respondents experienced high overall empowerment through SHGs.
- 20% of the respondents reported partial empowerment.
- 10% of the respondents showed a low level of empowerment.

8.5 Statistical Analysis

- Significant positive effects of SHG participation on members' income levels.
- Significant association between income level and overall empowerment of women
- Strong positive correlations among the social, economic, entrepreneurial, and technological dimensions of empowerment.

In summary, this study determined that participation in Self-Help Groups (SHGs) significantly enhanced women's income levels and overall empowerment across various dimensions in the Darjeeling region. The SHG model has been demonstrated to be an effective mechanism for fostering women's entrepreneurship and empowerment in this context.

9. Conclusion

This study examined the impact of Self-Help Groups (SHGs) on women in Darjeeling, revealing that participation in SHGs led to an increase in women's income. Before joining, 50% of women earned less than Rs. 5000 per month, whereas 70% reported earnings between Rs. 5000-10000. Additionally, SHGs contributed to enhanced feelings of empowerment among women. Specifically, 50% of participants reported increased social empowerment, 40% experienced greater economic empowerment, 50% felt more entrepreneurial, and 40% noted improved technological empowerment. Overall, 70% of the women felt more empowered after joining SHGs. The study demonstrated that SHGs had a positive effect on both income and empowerment and identified strong correlations between various forms of empowerment. SHGs facilitate income generation, skill acquisition, and collaborative efforts among women. However, 20-30% of the participants still felt less empowered, indicating areas for improvement

within the SHGs. This study recommends the expansion of SHGs to support more women in Darjeeling and other regions. Further research is needed to identify strategies to enhance the effectiveness of SHGs for all participants.

10. References

1. Basera S, Bhatt C. A study on empowerment of women through SHGs (an empirical study conducted in Haldwani rural area SHGs). Int J Eng Res Technol (IJERT). 2025;13(2):1-11.
2. Chakraborty S, Dasgupta B. Understanding the effectiveness of self-help group activity on women's socio-economic empowerment: an analysis based on existing literature. J Humanit Soc Sci (IOSR-JHSS). 2024;29(4)(6):46-51.
3. Chatterjee S, Dutta Gupta S, Upadhyay P. Empowering women and stimulating development at the bottom of the pyramid through micro-entrepreneurship. Manag Decis. 2018;56(1):160-174. https://doi.org/10.1108/md-04-2017-0296
4. Desai RM, Joshi S. Collective action and community development: evidence from self-help groups in rural India. World Bank Econ Rev. 2013;28(3):492-524. https://doi.org/10.1093/wber/lht024
5. Fazalbhoy S, Gochhait S. The role of self-help groups (SHGs) in business growth of Indian nascent women entrepreneurs: during the pandemic period. J Women's Entrep Educ. 2022;1(2):19-38.
6. Islam MA, Brahamachary DP. Women empowerment through self-help groups: evidence from Bodoland Territorial Region (BTR), Assam, India. South East Eur J Public Health. 2025;1494-1511. https://doi.org/10.70135/seejph.vi.3959
7. Joseph DA. Entrepreneurship a new female frontier. SSRN Electron J. 2015. https://doi.org/10.2139/ssrn.2684511
8. Kumar N, Jilani A, Raghunathan K, Pandey S, Arrieta A. The power of the collective empowers women: evidence from self-help groups in India. World Dev. 2021;146(4):105579. https://doi.org/10.1016/j.worlddev.2021.105579
9. Mahato T, Jha MK, Nayak AK, Kaushal N. Empowerment of women through participation in self-help groups: a bibliometric analysis and systematic review. J Enterp Communities People Places Glob Econ. 2022;17(6):1511-1538. https://doi.org/10.1108/jec-08-2022-0114
10. Mathur P, Agarwal P. Self-help groups: a seed for intrinsic empowerment of Indian rural women. Equal Divers Incl. 2017;36(2):182-196. https://doi.org/10.1108/edi-05-2016-0039
11. Pandhare A, Bellampalli PN, Yadava N. Transforming rural women's lives in India: the impact of microfinance and entrepreneurship on empowerment in self-help groups. J Innov Entrep. 2024;13(1):1-16. https://doi.org/10.1186/s13731-024-00419-y
12. Pandhare A, Bellampalli PN, Yadava N. Transforming rural women's lives in India: the impact of microfinance and entrepreneurship on empowerment in self-help groups. J Innov Entrep. 2024;13(62):1-16. https://doi.org/10.1186/s13731-024-00419-y
13. Roley J, Toko H, Tamuli R. The role of self-help groups (SHGs) in women empowerment and sustainable development: a case of Lower Siang District, Arunachal Pradesh. In: Gupta S, *et al*., editors. Proceedings of the 5th International Conference on the Role of Innovation, Entrepreneurship and Management for Sustainable Development (ICRIEMSD 2024). Adv Econ Bus Manag Res. 2024;310:242-248. https://doi.org/10.2991/978-94-6463-612-3_34
14. Silambarasi S, Shameem A. Women entrepreneurship in self-help groups with reference to Chennai. ICTACT J Manag Stud. 2021;7(3):1456-1459. https://doi.org/10.21917/ijms.2021.0210
15. Vanaja M. Self-help group (SHGs) is a tool to remove poverty and improve the women entrepreneurship and financial support in India. A study in Telangana State. Int J Creative Res Thoughts (IJCRT). 2022;10(4):711-717.
16. Varghese R, Menon SD. Women entrepreneurship through self-help groups - a study with special reference to sustainable livelihood schemes. Amity Manag Analyst. 2021;1(2):10-15.
17. Ministry of Rural Development. SHG report: Gram Panchayat level SHG count [Internet]. National Rural Livelihoods Mission. Available from:
18. https://nrlm.gov.in/shgReport.do?methodName=showGramPanchayatShgCount&encd=3219001&stateName=WEST%20BENGAL&districtName=DARJEELING%20GTA%20&blockName=DARJEELING%20PULBAZAR&reqtrack=c366yVginkt0IbCIbkg0mvNgq