



# Women's Empowerment through Self-Help Groups in Bihar: A Socio-Economic Analysis

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## ABSTRACT

Self-Help Groups (SHGs) have emerged as important grassroots institutions for promoting women's empowerment and reducing rural poverty in India. The present study examines the socio-economic impact of SHGs among rural women in Bihar, India. The study is based on primary data collected from 100 women SHG members through structured questionnaires and personal interviews, along with secondary data obtained from journals, books, and government reports. A descriptive and analytical research design was adopted, and the Chi-square ( $\chi^2$ ) test was applied to examine the relationship between SHG participation and socio-economic variables such as income level, savings behavior, and decision-making power. The findings indicate significant improvement in the socio-economic conditions of women after joining SHGs. The Chi-square results show statistically significant associations between SHG participation and income enhancement ( $\chi^2 = 25.04$ ), savings behavior ( $\chi^2 = 42.08$ ), and decision-making power ( $\chi^2 = 24.74$ ) at the 5% significance level. The study reveals that SHGs have strengthened financial inclusion, increased regular savings, and enhanced women's participation in household and community decisions. In addition, SHGs contribute to rural development by promoting awareness, collective action, and livelihood opportunities. However, challenges such as inadequate training, limited market access, and socio-cultural barriers continue to affect their long-term sustainability. The study contributes to the existing literature by providing empirical and region-specific evidence from Bihar using statistical analysis. The findings suggest that strengthening institutional support, digital literacy, skill development, and market linkages can further improve the effectiveness of SHGs in achieving inclusive rural development and women's empowerment.



## 1. Introduction

Self-Help Groups (SHGs) have become an important part of rural development in India. They help poor and rural women improve their economic condition through savings, small loans, and income-generating activities. SHGs are usually small groups in which women come together to save money regularly and support each other financially and socially. Over the years, these groups have helped many women become more confident, financially independent, and socially aware. In rural areas of India, women often face problems such as poverty, unemployment, low education, and lack of financial support. Many women do not have direct access to banks or formal credit systems. Because of this, they depend on local moneylenders or family members during financial difficulties. Social traditions and gender inequality also limit women's participation in economic and social activities. In such situations, SHGs provide an opportunity for women to improve their livelihood and become active participants in family and community life.

The SHG movement expanded rapidly in India after the National Bank for Agriculture and Rural Development (NABARD) introduced the SHG-Bank Linkage Programme in 1992. This programme connected SHGs with banks and helped rural women access loans and financial services more easily. Later, government programmes such as the National Rural Livelihoods Mission (NRLM) and Bihar Rural Livelihoods Project (JEEViKA) further promoted SHGs in rural areas. These programmes encouraged women to participate in activities such as animal husbandry, small businesses, handicrafts, agriculture-related work, and other self-employment opportunities. SHGs not only improve economic conditions but also increase women's confidence and social participation. Through regular meetings and group activities, women become more aware of education, health, sanitation, and legal rights. They also develop communication skills and leadership qualities. Participation in SHGs helps women take part in household decisions and community activities, which improves their social position and self-confidence.

The role of SHGs is very important in Bihar, where rural poverty and unemployment remain major challenges. A large population in Bihar depends on agriculture and daily wage work for livelihood. Women in many rural areas still face financial dependency and limited opportunities for employment.



In this context, SHGs have created new opportunities for women by encouraging savings, improving access to credit, and supporting income-generating activities. Programmes such as JEEViKA have played an important role in strengthening SHGs and improving the socio-economic condition of rural women in Bihar. Many studies have discussed the role of SHGs in women's empowerment and poverty reduction in different parts of India. However, limited studies are available on Bihar using recent field data and statistical analysis. Earlier studies mainly focused on descriptive information and did not properly examine the relationship between SHG participation and socio-economic improvement.

Therefore, the present study attempts to examine the impact of SHGs on income, savings behaviour, and decision-making power among rural women in Bihar. The study is based on both primary and secondary data. It aims to understand how SHGs contribute to women's empowerment and poverty reduction in rural Bihar. The findings of the study may be useful for policymakers, rural development agencies, and financial institutions working for women's development and inclusive rural growth.

## **2. Review of Literature**

SHGs have become an important area of research in India because of their contribution to women's empowerment, poverty reduction, and rural development. Different studies conducted in various parts of the country show that SHGs have improved women's economic condition, increased social awareness, and strengthened financial inclusion among rural households.

NABARD (2022) reported that the SHG-Bank Linkage Programme has played a major role in connecting rural women with formal banking institutions. The report highlighted that SHGs encouraged regular savings habits, increased access to credit, and supported small-scale income-generating activities among women in rural areas. The programme also contributed to financial inclusion and reduction in dependence on informal moneylenders.

Prasad (2023) studied the Kudumbashree programme in Kerala and observed that SHGs significantly improved women's participation in economic and social activities. The study found that women associated with SHGs experienced higher self-confidence, better income opportunities, and greater involvement in local governance and community development programmes.



Chauhan (2026) examined the relationship between microfinance, SHGs, and women's empowerment. The study reported that access to microcredit improved women's financial independence and reduced economic vulnerability. It also highlighted that SHGs created awareness regarding savings, education, and social participation among women members.

Kumar (2025) conducted a mixed-method study in rural Bihar and found that SHG participation positively influenced women's income, savings behavior, and decision-making power. The study also showed that women became more confident in handling household financial matters after joining SHGs. However, lack of advanced training and market support remained major challenges for sustainable development.

Arora and Chawla (2023) focused on the role of SHGs and women cooperatives in sustainable rural development. Their study observed that SHGs promoted entrepreneurship and self-employment among rural women. The authors further noted that collective participation strengthened group unity and encouraged women to participate more actively in social and economic activities.

Santhosh Kumar and Aithal (2024) analyzed the empowerment dynamics of women participating in SHGs. The study revealed that SHGs improved communication skills, leadership qualities, and social confidence among women members. It further emphasized that regular training and institutional support are necessary for improving the efficiency and sustainability of SHGs.

Ghosh et al. (2024) examined the contribution of SHGs toward achieving Sustainable Development Goals (SDGs), especially gender equality and poverty reduction. The study found that SHGs increased women's participation in economic activities and improved awareness regarding education, health, and social rights. The authors concluded that SHGs are effective instruments for inclusive and sustainable rural development.

Ramalingaiah and Muninarayanappa (2023) studied the impact of SHGs on women's socio-economic conditions in rural areas. Their findings indicated significant improvement in savings habits, access to credit, and collective decision-making among SHG members. The study also highlighted that SHGs helped women overcome social restrictions and become more active in community activities.



Varalakshmi and Yoganandham (2024) examined the role of SHGs in Tamil Nadu and found that SHGs contributed to income generation, literacy improvement, and better health awareness among rural women. The study emphasized that government support and proper implementation of development programmes are important for strengthening SHGs.

Basak and Chowdhury (2024) analyzed the role of SHGs in socio-economic development and achievement of Sustainable Development Goals among rural women in India. Their findings showed that SHGs improved women's financial management skills, increased social participation, and supported livelihood opportunities in rural areas.

Mahato et al. (2023) conducted a bibliometric and systematic review on women's empowerment through SHGs. The study highlighted that SHGs positively contribute to financial inclusion, entrepreneurship, and social development. However, the authors also identified challenges such as limited market access, inadequate training, and dependency on external financial support.

Geetha and Babu (2016) observed that SHGs are an effective approach for empowering rural women socially and economically. Their study found that women associated with SHGs developed confidence, leadership ability, and awareness regarding education and health. The study further suggested that SHGs improve the overall quality of life in rural households.

Patel and Mistry (2024) reviewed the role of SHGs in women's empowerment across different states of India. The study concluded that SHGs significantly improve women's participation in economic activities and increase their ability to contribute to household decisions. The authors emphasized the importance of skill development and digital literacy for strengthening SHG activities.

Mundra et al. (2023) studied the impact of women's SHGs on health literacy and empowerment in rural India. The study reported that SHG participation increased awareness regarding healthcare, nutrition, and sanitation practices among rural women. It also highlighted that collective learning through SHGs improved social awareness and community participation.

Mondal et al. (2025) examined the effectiveness of SHGs in promoting health and nutrition behavior in Bihar. The findings showed that technical support programmes linked with SHGs improved awareness regarding nutrition, maternal health, and child care practices among women in rural areas.



Al-Kubati and Selvaratnam (2023) analyzed the SHG-Bank Linkage Programme as a tool for sustainable development in India. The study found that SHGs enhanced women's financial inclusion and encouraged entrepreneurship among economically weaker sections. The authors also emphasized the need for policy support and institutional coordination for improving SHG sustainability.

**Table 1: Review of Literature**

Author(s) & Year	Study Area /	Major Findings
NABARD (2022)	SHG-Bank Linkage Programme in India	SHGs improved financial inclusion, savings habits, and access to institutional credit among rural women.
Prasad (2023)	Kudumbashree Programme, Kerala	SHGs enhanced women's income, self-confidence, and participation in local governance and development activities.
Chauhan (2026)	Microfinance and women empowerment	Access to microcredit through SHGs improved financial independence and reduced economic vulnerability.
Kumar (2025)	Rural Bihar	SHG participation positively influenced income, savings behavior, and decision-making power among women.
Arora and Chawla (2023)	Women cooperatives and SHGs	SHGs promoted entrepreneurship, self-employment, and sustainable rural development.
Santhosh Kumar and Aithal (2024)	Rural women empowerment	SHGs strengthened communication skills, leadership qualities, and social confidence among women.
Ghosh et al. (2024)	SHGs and Sustainable Goals	SHGs supported gender equality, poverty reduction, and social inclusion in rural communities.
Ramalingaiah and Muninarayanappa (2023)	Rural women and SHGs	SHGs improved savings habits, access to credit, and collective decision-making among women.
Varalakshmi and Yoganandham (2024)	Tamil Nadu	SHGs contributed to income generation, literacy improvement, and health awareness among rural women.
Basak and Chowdhury (2024)	Rural India and SDGs	SHGs enhanced socio-economic development and supported Sustainable Development Goals.
Mahato et al. (2023)	Bibliometric and systematic review	SHGs positively influenced financial inclusion and entrepreneurship, but market challenges remained.



Geetha and Babu (2016)	Women empowerment	SHGs improved confidence, leadership ability, and awareness regarding education and health.
Patel and Mistry (2024)	Literature review on SHGs in India	SHGs strengthened women's economic participation and household decision-making ability.
Mundra et al. (2023)	Rural India	SHGs improved health literacy, sanitation awareness, and social participation among women.
Mondal et al. (2025)	Bihar	SHGs improved nutrition awareness, maternal health knowledge, and community participation among women.
Al-Kubati and Selvaratnam (2023)	SHG-Bank Linkage Programme	SHGs promoted financial inclusion and entrepreneurship among economically weaker women.

**Source:** Compiled by the researcher from various published studies and reports.

### 3. Research Gap

Many studies have explained the role of Self-Help Groups (SHGs) in women's empowerment and poverty reduction in different parts of India. However, limited studies are available on rural Bihar using recent field-based data and statistical analysis. Earlier studies are descriptive and mainly focus on general observations rather than examining the direct relationship between SHG participation and socio-economic improvement. Therefore, the present study attempts to provide a simple empirical analysis of how SHGs influence income, savings behavior, and decision-making power among rural women in Bihar.

### 4. Objectives of the Study

The present study is undertaken with the following objectives:

1. To analyze the role of Self-Help Groups (SHGs) in promoting women's empowerment in rural areas.
2. To examine the impact of SHGs on poverty reduction among their members.
3. To assess the socio-economic changes (income, savings, decision-making, and social participation) among women after joining SHGs.
4. To identify the major challenges and constraints faced by SHGs in their functioning and sustainability.



- To suggest policy measures and strategies for strengthening SHGs and enhancing their effectiveness in Bihar.

## 5. Research Methodology

The present study is based on both primary and secondary data to examine the role of SHGs in women's empowerment and poverty reduction in rural Bihar. Primary data were collected from 100 women SHG members through structured questionnaires and personal interviews using simple random sampling. Secondary data were collected from books, journals, government reports, and research articles related to SHGs and rural development. The study mainly focuses on income level, savings behavior, and decision-making power among women after joining SHGs. Data were analyzed using percentage method, tables, and the Chi-square ( $\chi^2$ ) test to examine the relationship between SHG participation and socio-economic improvement.

## 6. Data Analysis and Interpretation

The present section provides a comprehensive analysis of the primary data collected from 100 Self-Help Group (SHG) members in rural Bihar. The objective is to examine the impact of SHGs on key socio-economic indicators such as income level, savings behavior, and decision-making power. In addition to descriptive analysis, the Chi-square ( $\chi^2$ ) test is applied to determine whether the observed changes are statistically significant.

### 6.1 Income Level Before and After Joining SHGs

#### Observed Data (O)

Income Level	Before SHG	After SHG	Row Total
Low	65	30	95
Medium	25	45	70
High	10	25	35
<b>Column Total</b>	<b>100</b>	<b>100</b>	<b>200</b>

#### Expected Frequency (E)

Formula used:

$$E = \frac{(\text{Row Total} \times \text{Column Total})}{\text{Grand Total}}$$

Calculation:



- Low-Before =  $(95 \times 100) / 200 = 47.5$
- Low-After = 47.5
- Medium-Before = 35
- Medium-After = 35
- High-Before = 17.5
- High-After = 17.5

### Chi-Square Formula

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

### Chi-Square Calculation Table

Category	O	E	(O-E) <sup>2</sup> /E
Low-Before	65	47.5	6.45
Low-After	30	47.5	6.45
Medium-Before	25	35	2.86
Medium-After	45	35	2.86
High-Before	10	17.5	3.21
High-After	25	17.5	3.21

**Total  $\chi^2$  Value = 25.04**

### Degree of Freedom (df)

$$[df = (r-1)(c-1) = (3-1)(2-1) = 2]$$

**Critical Value (5% level) = 5.99**

Since  $\chi^2$  (25.04) > 5.99, the result is **statistically significant**.

There is a strong association between SHG participation and income improvement. SHGs significantly increase income levels among members.



## 6.2 Savings Behavior Analysis

### Observed Data

Savings Status	Before	After	Total
No Savings	50	15	65
Irregular	35	30	65
Regular	15	55	70
<b>Total</b>	100	100	200

### Expected Values

- No Savings = 32.5
- Irregular = 32.5
- Regular = 35

### Chi-Square Calculation

Category	O	E	(O-E) <sup>2</sup> /E
No Savings-Before	50	32.5	9.42
No Savings-After	15	32.5	9.42
Irregular-Before	35	32.5	0.19
Irregular-After	30	32.5	0.19
Regular-Before	15	35	11.43
Regular-After	55	35	11.43

**Total  $\chi^2 = 42.08$**

### Result

Since  $\chi^2 (42.08) > 5.99$ , the result is **highly significant**.

SHGs significantly improve savings habits and promote financial discipline among women.



### 6.3 Decision-Making Power

#### Observed Data

Participation Level	Before	After	Total
Low	70	35	105
Medium	20	40	60
High	10	25	35
<b>Total</b>	100	100	200

#### Expected Values

- Low = 52.5
- Medium = 30
- High = 17.5

#### Chi-Square Calculation

Category	O	E	(O-E) <sup>2</sup> /E
Low-Before	70	52.5	5.83
Low-After	35	52.5	5.83
Medium-Before	20	30	3.33
Medium-After	40	30	3.33
High-Before	10	17.5	3.21
High-After	25	17.5	3.21

**Total  $\chi^2 = 24.74$**

Since  $\chi^2 (24.74) > 5.99$ , the result is **statistically significant**.

SHG participation significantly enhances women's involvement in decision-making processes.



## 6.4 Overall Findings from Chi-Square Analysis

The application of the Chi-square ( $\chi^2$ ) test across the key variable income level, savings behavior, and decision-making power provides strong statistical evidence regarding the impact of Self-Help Groups (SHGs) on the socio-economic status of rural women in Bihar. The results clearly indicate that there is a significant association between SHG participation and improvements in these variables.

Firstly, the Chi-square analysis for income levels shows that the calculated  $\chi^2$  value is much higher than the critical value at the 5% level of significance. This confirms that the observed improvement in income after joining SHGs is not due to chance, but is directly associated with SHG participation. Women engaged in SHGs are more likely to move from low-income categories to medium and high-income groups due to access to credit and income-generating activities.

Secondly, the analysis of savings behavior reveals an even stronger association. The significant  $\chi^2$  value indicates that SHGs play a crucial role in promoting regular savings habits and financial discipline. Members develop a consistent saving pattern, which enhances their financial security and reduces dependency on external borrowing sources.

Thirdly, the Chi-square test for decision-making power demonstrates a statistically significant improvement in women's participation in household and community decisions. This suggests that SHGs contribute not only to economic empowerment but also to social and psychological empowerment, enabling women to assert their opinions and take active roles in family and societal matters.

Overall, the Chi-square results across all variables consistently reject the null hypothesis and support the alternative hypothesis that SHG participation has a significant positive impact on socio-economic development. The findings validate that SHGs are effective instruments for empowerment, financial inclusion, and poverty reduction.

## 7. Conclusion and Suggestions

### 7.1 Conclusion

The present study highlights the significant role of Self-Help Groups (SHGs) in promoting women's empowerment and reducing poverty, particularly in rural Bihar. The findings clearly indicate that SHGs have brought noticeable improvements in the socio-economic conditions of women members. Participation in SHGs has enhanced income levels, encouraged regular savings, and improved access to credit facilities. Women who were previously financially dependent have now become economically active and self-reliant.



The study also reveals that SHGs contribute to social empowerment by increasing women's participation in household and community decision-making. Members exhibit higher confidence, better communication skills, and greater awareness regarding health, education, and social issues. This transformation reflects a shift in traditional gender roles and highlights the importance of SHGs as platforms for inclusive development.

The application of the Chi-square test further validates that the observed improvements in income, savings behavior, and decision-making power are statistically significant and directly associated with SHG participation. Thus, SHGs are not only financial support systems but also agents of social change.

In addition, SHGs play an important role in rural development by promoting literacy, improving health awareness, and encouraging collective action. However, challenges such as limited market access, lack of advanced skills, financial dependency, and socio-cultural barriers continue to affect their performance.

Overall, the study concludes that SHGs are effective instruments for achieving sustainable development, women's empowerment, and poverty reduction. Strengthening these groups can lead to long-term socio-economic transformation in rural areas.

## 7.2 Suggestions / Recommendations

Based on the findings of the study, the following suggestions are proposed:

- 1. Skill Development and Training:** Regular training programs should be organized to enhance entrepreneurial, technical, and managerial skills of SHG members.
- 2. Improved Market Linkages:** Government and private sector support should be provided to connect SHG products with wider markets, including online platforms.
- 3. Promotion of Digital Literacy:** SHG members should be trained in digital tools such as mobile banking, online transactions, and e-commerce to improve efficiency.
- 4. Access to Easy Credit:** Financial institutions should provide low-interest loans and simplify procedures to ensure timely credit availability.
- 5. Strengthening SHG-Bank Linkage:** The linkage between SHGs and banks should be further strengthened to promote financial inclusion and sustainability.
- 6. Policy Support and Monitoring:** Government policies should focus on regular monitoring, evaluation, and region-specific strategies, especially for states like Bihar.
- 7. Awareness and Social Support:** Awareness campaigns should be conducted to reduce social and cultural barriers and encourage family and community support.
- 8. Institutional Collaboration:** Greater coordination between government agencies, NGOs, and private organizations is required for training, funding, and capacity building.



## Reference

- Al-Kubati, N. A. A., & Selvaratnam, D. P. (2023). Empowering women through SHG-bank linkage programme as a tool for sustainable development: Lessons from India. *Community Development Journal*, *58*(2), 283–308.
- Arora, N., & Chawla, R. A. (2023). Empowering women through self-help groups and women cooperatives: A tool for sustainable development. *DME Journal of Management*, *4*(1), 25–30.
- Basak, D., & Chowdhury, I. R. (2024). Role of self-help groups on socio-economic development and achievement of SDGs among rural women in India. *Regional Sustainability*, *5*(2), 100140. <https://doi.org/10.1016/j.regsus.2024.100140>
- Chauhan, K. (2026). The impact of microfinance and self-help groups on women's empowerment and social inclusion. *Discover Economics and Finance*.
- Geetha, S., & Babu, S. (2016). Self-help group: An effective approach to women empowerment in India. *Asian Journal of Innovative Research*, *1*(2), 22–28.
- Ghosh, S., Mahapatra, M. S., Tandon, N., & Tandon, D. (2024). Achieving sustainable development goal of women empowerment: A study among self-help groups in India. *FIIB Business Review*, *13*(4), 477–491.
- Kumar, R. (2025). Empowering rural women through shgs: evidence from bihar. *Ijnrd*. DOI: <https://doi.org/10.56975/ijnrd.v10i5.307128>
- Kumar, R. (2025). Impact of self-help groups on women's empowerment in rural Bihar, India: Evidence from a mixed methods study. *Journal of Multidisciplinary Social Research*, *2*(3).
- Mahato, T., Jha, M. K., Nayak, A. K., & Kaushal, N. (2023). Empowerment of women through participation in self-help groups: A bibliometric analysis and systematic review. *Journal of Enterprising Communities*, *17*(6), 1511–1538.
- Mondal, S., Bisht, I., Akhauri, S., Chaudhuri, I., Pradhan, N., Kumari, S., & Mahapatra, T. (2025). Effectiveness of a technical support program with women's self-help groups in catalyzing health and nutrition behaviors in Bihar. *Frontiers in Public Health*, *12*, 1389706.
- Mundra, A., Kolhe, R., Raut, A., Jakasania, A., & Dhattrak, A. (2023). Impact of women's self-help groups on health literacy and empowerment in rural India. *Journal of Health Literacy*.



- NABARD. (2022). *Status of microfinance in India 2021–22*. National Bank for Agriculture and Rural Development.
- Patel, M. R., & Mistry, S. (2024). Women empowerment through self-help groups in India: A comprehensive literature review. *Journal of Informatics Education and Research*, 4(1).
- Prasad, A. R. (2023). Self-help groups as a tool for empowerment of women and poverty eradication: An analysis of the Kudumbashree programme in Kerala. *Human Rights & State Obligations*, 113.
- Ramalingaiah, A., & Muninarayanappa, M. (2023). Women empowerment through self-help groups. *Ashok Yakkaldevi Publications*.
- Santhosh Kumar, K., & Aithal, P. S. (2024). Empowerment dynamics: Exploring the impact of self-help groups on rural women. *International Journal of Case Studies in Business, IT and Education*, 8(2), 311–322.
- Varalakshmi, D., & Yoganandham, G. (2024). Empowering women through self-help groups: A catalyst for socio-economic development in Tamil Nadu. *Mukt Shabd Journal*, 369–386.