

Determinants Of Financial Inclusion Among Women Self-Help Group Members: Evidence From Coastal Karnataka

Mrs. Chaithra. N ¹, Dr. S. Baskaran ²

¹Research Scholar, Department of MBA Dr. Ambedkar Institute of Technology, Bangalore, India

Email:ID: chaithraraju21@gmail.com

²Professor and Head, Department of MBA Dr. Ambedkar Institute of Technology, Bangalore, India

Email:ID: rsbkaran@gmail.com,

ABSTRACT

Financial inclusion contributes significantly to the economic empowerment of women, poverty reduction and overall wellbeing, especially those who come together in Self-Help Groups (SHG). There are financial inclusion level, factors influencing financial inclusion and negative factors influencing the utilization of formal financial service towards women members of SHG in Coastal Karnataka region that is covered in this study. Sometimes the financial literacy, education level, income level, awareness of digital banking, availability of banking infrastructure, participation in SHG activities, debt availability, habit of saving, and the financial inclusion programs implemented by the government are important determinants. The information has been collected among the female people of SHG members using the predefined questionnaire and analysis of the correlation between the identified variables and financial inclusion level is done by the use of suitable statistical method. Results demonstrate that financial means of communication, frequent involvement in SHG, financial awareness and availability of formal financial institutions (bank or other) have played a strong role in improving financial inclusion, whereas low level of education, financial illiteracy and geographical barriers are still perceived barriers in supporting people to actively access formal financial institutions. The study outputs have revealed that there is a significant scope for improving financial literacy; build digital banking infrastructure; positive policy interventions through SHGs can help achieve financial inclusion and sustainable socio-economic empowerment of women in the Coastal Karnataka context.

Keywords:: Financial Inclusion, Women Self-Help Groups (SHGs), Financial Literacy, Digital Financial Services, Banking Access, Women's Empowerment, Savings and Credit, Socio-economic Factors, Coastal Karnataka, Financial Inclusion Determinants.

INTRODUCTION:

Financial inclusion has emerged as a powerful contributor to solving problems of inclusive economic growth, poverty alleviation and social development in the global economy in recent years. Accessing formal financial institutions with timely, appropriate and reasonable access to financial products and services, for individuals and enterprises, particularly vulnerable and marginalized groups of individuals and enterprises. They comprise services like savings account, credit facilities, insurance, remittances, pension and digital payments. Financial inclusion has embraced vital position as key tool in reaching equity in economic development and closing the financial divide between various socio-economic groups, in developing economies such as India. Both the Government of India and the Reserve Bank of India (RBI) and financial institutions have initiated various initiatives to enhance financial access through the formal sector in rural and semi-urban places, such as the Pradhan Mantri Jan Dhan Yojana (PMJDY), Direct Benefit Transfer (DBT), Aadhaar-enabled Payment Systems, digital Banking services, and financial Literacy campaigns.

Although all these programmes there is lot of scope for using financial services effectively among poor family households and among rural women.

Women do a significant contribution to the community and household, apart from agriculture sector, in micro enterprises and household welfare and too they are a bulk portion of India's work force. However, these have been facing some obstacles to financial formal services due to financial illiteracy, low educational level, low asset ownership, social/cultural norms, and lack of digital literacy and geospatial barrier. Financial exclusion has an impact on women's capacities to save safely, access low-cost credit, invest in productive activities, respond to financial risks and on their overall economic situation. Improving gender financial inclusion is therefore critical to both uplift women's status and boost growth and development, poverty relief and household resilience. This has been realised and more and more policies have focused on financial inclusion approaches aimed at women that are active in formal financial systems.

In India, SHGs are one of the most effective financial inclusion models that are based on community. The SHGs are comprised of 10-20 women who join the group

regularly to save money, offer each other credit facilities, encourage financial discipline and run the groups together and go into entrepreneurship with the group. SHG-Bank Linkage Programme of the National Bank for Agriculture and Rural Development (NABARD) is a program which is facilitating the involvement of more women in SHG groups as well as helping them to link with the formal financial institutions such as Commercial Banks, Regional Rural Banks and Cooperative Banks. By adopting this regular saving, microcredit, capacity development and financial awareness creation activities, millions of the women have become financially independent and socially confident. It is not only the financial aspect but also the social, the women participation in local governance services, involvement of women in the decision making of their household, growth of the entrepreneur and social capital in the rural community that have experienced positive impact due to SHGs.

Coastal Karnataka, comprising three districts Dakshina Kannada, Udupi and Uttara Kannada, is a quintuple socio-economic reality where there is a fair overall literacy rate, multiple livelihood options, agriculture, fisheries, tourism and small industries are thriving, and the digital infrastructure is booming. Women SHGs in this area have actively involved in all the income generating activities including food processing, handicrafts, dairy activity, fisheries, tailoring, retail activity, and micro-enterprises. The government and banks are encouraging and supporting the SHGs and co-operative societies, likewise NGOs for financial inclusion. There are differences still, however, in the level of access of women member group consumers to and their access to, formal financial services within SHG's. Financial inclusion of the region is measured by financial awareness, financial coverage in the digital banking sector, income situation, willingness to use financial services, support from the social institutions, social support and technological readiness of the members of the SHG.

Women SHG members' financial inclusion is explained by a number of determinants. Financial literacy allows women to handle their financial situations with understanding and confidence, such as saving money, taking loans, taking insurance, investing, managing online financial transactions and more. It is clear that finance options and a sense of skilful financial decision making relate to education levels; there is a positive relationship. They are better informed about financial products and investments due to their education. It influences people's potential to save, access to credit, and having mobile banking or any digital banking system like Unified Payments Interface (UPI) or internet banking. Access to the bank, formal banking facilities, and availability of credit, women working in the SHG groups and women's involvement in the SHG meetings, support from the banking system, government welfare schemes, and women's confidence in the formal banking system also affects women's financial behavior. However, a lack of financial literacy, digital skills, the complexity of procedures, weak financial services outreach in rural areas and socio-cultural barriers are still facing the way to the efficient use of formal financial services.

While a lot of research on financial inclusion along with financial inclusion determinants and the role of SHGs in women's empowerment has been conducted, there is scarcity of research specifically analysing the determinants that influence financial inclusion of women SHG members in Coastal Karnataka. In this particular socio-economic context and environment of rapid expansion of the digital financial landscape in the region, it is important to have empirical evidence to help shed light on what are the key drivers and/or barriers to financial inclusion. Some awareness of these factors will enable policy makers, financial institutions, development partners and SHG federations to undertake the appropriate interventions to facilitate the access of women to formal financial markets and enhance their financial capacity. Consequently the present study attempts to identify the determinants of women members of SSG with regard to financial inclusion in Coastal Karnataka in the backdrop discussed above. The anticipated result of the project will be additions to the current literature and concrete proposals to improve financial inclusion policies, to move women forward in the economy and sustainable rural and regional development.

LITERATURE REVIEW

Financial inclusion has become an important factor affecting sustainable economic development; in this sense, financial inclusion is understood especially in the context of women empowerment by delivering formal financial services. The success of the Women Self-Help Groups (SHGs) as an institutional mechanism for encouraging women to save, get credit, start financial activities and increase entrepreneurship among the economically weak women show that such an institutional mechanism is quite effective. A few recent analyses shed light on the key drivers of financial inclusion – technological innovation, financial management, customers and their usage patterns and SHG development.

Kalyan's et al (2023) discussed the introduction of machine learning (ML) and Internet of Things (IoT) in the supply chain financial risk management system. The report highlighted how advanced digital technologies can make financial decision making, risk management and operational efficiency easier through the use of real-time data analytics. Even though it has focused on the theme 'supply chain finance', the research showcases the capacity of digital technologies to enhance the resilience of financial ecosystems and boost and expand access to financial services. The knowledge acquired showed this technology-based financial systems, seeking transparency, efficiency and financial accessibility, could provide the otherwise-inclined financial services for rural women.

Sheshadri, P.K. et al., (2024) undertook a study on the role of Artificial Intelligence (AI) and marketing management in changing consumer engagement in Punjab National Bank & Canara Bank. The study revealed that AI-driven financial services bring great benefits to banking customers when it comes to customer satisfaction, financial personalization, digital banking adoption and customer engagement. The research shines a positive light on the opportunities for financial inclusion through

technology offered by banks, which would increase the accessibility, usability and reach of financial services, especially among women who are increasingly turning to digital financial platforms.

Joe (2024) talked about the importance of offering 'Curriculum Design' in the Indian HEI to boost the employability of Higher Education learners. The results of the research verified significant positive links between skill development, financial awareness, digital competence and lifelong learning, and the employment prospects and the long-term success in the career paths of learners. The focus is on higher education, but it is argued that the findings highlight that educational empowerment and digital skills work is an important in empowering access to formal financial products and services successfully, especially among women.

Reddy and Ranganathan analysed the perceived value by the shoppers for organised retail before and during COVID-19. The results of the research in this regard have revealed that the expectation of consumers has changed, the use of digital payment and its convenience and trust of consumers had a high impact on the purchase behavior. The ongoing acceleration in the momentum of digitalisation of transactions – an ongoing trend before the pandemic – also add weight to or provide indirect evidence on the uptake of formal financial systems, thereby impacting a broader financial inclusion agenda in times of COVID-19.

In another study, Reddy & Ranganathan have dealt with the factors impacting customers' shopping decisions in the Mumbai malls in pre and post-COVID-19 era. The findings illustrated that the aspects of service quality, safety measures, convenient service, electronic payment system and customer satisfaction had significant effects on customer satisfaction. The increasing importance of cashless payments highlighted the increasing relevance of electronic payment services and digital financial services' contribution to financial inclusion of women through digital banking and electronic payment.

In an automotive industry competency management (CM) study in the year 2023, Venkat and his group explored the impact of competency management on the retention rate of the firm. They discovered that continuous skill development, organizational support, competency development and employee engagement are all positive factors that affect employees' longevity. The study indirectly helps in Financial inclusion: An effective financial capacity development with the skill enhancement is the crucial factor to enhance the financial literacy level of the women members of the SHG and make them as an entrepreneur.

Reddy (2020) highlighted the importance of risk management and agricultural insurance as a strategy to protect the farmers from the various uncertainties associated with production and incomes. The study emphasized the financial protection that is in the form of financial instruments such as insurance, institutional credit and risk mitigating strategy; which can help improve financial security and resilience of the rural households. The results drawn from the above are applicable to the women members of SHGs who are

engaged in agricultural activities and allied activities which further expands the financial inclusion by providing insurance facilities or formal financial services.

Reddy, Reddy, Lokesh and Ashalatha (2023) investigated influencing factors of the purchase intention towards organic food among the information technology majors. The core factors influencing purchase were consumer awareness, income, health consciousness, product availability and perceived value identified in the study. While focusing on consumer behaviour, it also highlights the role of education, income and awareness level in financial decision making in terms of financial inclusion of women.

Lokesh & Geethanjali (2023) have conducted literature survey pertaining to the Self-Help Groups and special reference to the rural women of Karnataka. They mentioned that SHGs significantly contribute to women's economic empowerment by creating awareness of savings culture, application for institutional credit, building entrepreneurship, inclusion of women in society and providing economic independence to women. This study also revealed the problems of financial illiteracy, low information technology awareness, lack of proper training and poor market access, which has to be upgraded to the rural women so that they could be financially included.

According to Lokesh, Harish, Geethanjali (2023) titled 'Using Customer Relationship Management (CRM) in private commercial bank: The benefits, challenges and factors influencing, Bengaluru', customer relationship management (CRM) has a number of benefits with its many challenges and various factors influencing the banks while using it. However, "service quality," "trust," "responsiveness," "technological support," "communication with customer" and "relationship management" are the factors that have been found to have significant influence on customer satisfaction and loyalty in the study. Opens opportunities for more people to use banking services, and increases customer confidence to use a bank, leading to financial inclusion of those less engaged in banking services.

Through the literature review, it was found that several inter-related factors like financial literacy, financial infrastructure, financial technology innovation, institutional arrangements, Customer trust and participation in SHG impact on women's financial inclusion. The key findings of the research have already been emphasized the success of financial access through community financial institutions, CRM, AI and digital banking. But not many of the empirical studies have specifically focussed on the factors that influence financial inclusion among the women members of SHG in Coastal Karnataka. The gap is the rationale of the present study that aims at identifying the socio-economic, technological and institutional factors determining financial inclusion in the area and to give a policy suggestion to enhance the financial inclusion of women by strengthening their financial empowerment through SHG.

Objectives of the Study

1. To examine the level of financial inclusion among women Self-Help Group (SHG) members in Coastal Karnataka.
2. To identify and analyze the socio-economic, institutional, and technological determinants influencing financial inclusion among women SHG members.
3. To evaluate the impact of financial literacy, digital banking awareness, and SHG participation on the financial inclusion of women SHG members in Coastal Karnataka.

Hypothesis

Null Hypothesis (H₀₁): There is no significant level of financial inclusion among women Self-Help Group (SHG) members in Coastal Karnataka.

Alternative Hypothesis (H₁₁): There is a significant level of financial inclusion among women Self-Help Group (SHG) members in Coastal Karnataka.

Research Methodology

The present study adopts a descriptive and analytical research design with goal of analyzing the determinants of Financial inclusion in the women of SHG members in the Coastal Karnataka. The research method in this study is a quantitative method because it allows the data obtained in a study to be acquired and processed in a systematic way, and this is necessary to respond to the questions of the determinants of financial inclusion. The study area includes 3 districts namely Dakshina Kannada, Udupi and Uttara Kannada where women have participated for their socio-economic development through SHG. Target population: This includes working women in registered SHG groups registered by various government departments, banks, Co-Operative Society and NGOs. To get a representative sample, the sample size is determined as 400 women members of SHGs and multi-stage sampling technique is adopted which involves purposive sampling of districts and then random sampling of the SHGs and women respondents. Primary data is gathered in a structured questionnaire that has both demographical and financial inclusion based questions. The questionnaire captures a number of the key variables such as financial literacy, access to banking services, financial saving behaviour, credit access, digital banking usage, financial inclusion, awareness of government schemes and activities in SHGs using a 5 point likert scale. Secondary data are obtained from articles, book, journals etc. published by Reserve bank of India (RBI), National bank for agriculture and rural development (NABARD), Ministry of Finance, Government of India etc. These data are collected, coded and analysed using SPSS. To summarize respondents' characteristics and financial inclusion status, descriptive statistical tools, including frequencies, percentages, mean and standard deviation are used. Inferential Statistical Analysis like Chi-square test, Independent Sample t-test, One way ANOVA, Pearson's correlation analysis and Multiple Linear Regression analysis applied to explore the relationships between variables and identify significant determinants of financial inclusion. Data quality of the research instrument is judged based on Cronbach Alpha results and the research

instrument by means of expert review is confirmed the validity of the research construct. The study complies with intention to ethics as an approach in conducting a study which involves only persons that come voluntarily to the study, informed consent to the study, privacy of all respondents's information and that the information is only used in academic context. The results will be helpful for Gender Inclusion and Financial Inclusion policy makers, financial institutions, SHG promoting institutions and development practitioners in developing effective policies for improving financial inclusion and socio-economic empowerment of member women of SHGs in the Coastal Karnataka.

Descriptive Statistics

Statistic	Value
Sample Size (N)	400
Mean	3.39
Standard Deviation	1.06
Minimum	1
Maximum	5

In financial inclusion level of women Self-Help Group (SHG) from descriptive statistics, it was found that financial inclusion level of women members of SHG was high (3.39 ± 1.06). Most of the respondents (50.5%) mentioned very high or high level of financial inclusion while at moderate level 29.5% is there. Of the respondents only 20.0% were rated as low and very low. The results indicate that involvement in SHGs has helped to improve access to formal financial services like savings accounts, institutional credit, digital banking, insurance and government financial schemes. Therefore, the descriptive analysis provisionally accepts the alternative hypothesis (H₁₁) which is the level of financial inclusion among the members of the SHG is high among the women in Coastal Karnataka. This conclusion can then be tested statistically through additional inferential statistical testing which would determine if the finding can be statistically regarded as significant.

Chi-Square Goodness-of-Fit Test

Test Statistics

Test Statistics	Financial Inclusion Level
Chi-Square	138.420
df	4
Asymp. Sig. (p-value)	0.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 80.0.	

Chi-Square Goodness-of-Fit Test was used to test the significance of the distribution of Women's financial

inclusion the level of women members of SHG group when compared to what is expected across Coastal Karnataka. The Chi-Square = 138.420 on 4 degree(s) of freedom and the Asymptotic Significance (p-value) = 0.000 which is less than 0.05. As the p-value is less than the given significance level, the null hypothesis is rejected and the alternative hypothesis is accepted. This means that the distribution of financial inclusion which is observed is statistically significant and is not due to random variation. In addition, the items are suitable for application of the Chi-Square analysis, with no item having an expected frequency below 5 and the lowest expected frequency was 80.0, which means that the outcomes of the test were valid and reliable. The findings indicated that the women in the SHGs are far less financially excluded when compared to bank accounts, institutional credit access, digital banking, insurance products and any government backed financial instrument access in the Coastal Karnataka. As might be anticipated, the incorporation of women in the SHGs has raised their awareness of women's financial issues, their savings rate, their reach of money, and their access to banking services, thereby enhancing their financial empowerment. Analysis of the overall statistical data revealed in favor of the alternative hypothesis (H_{11}) "There is high level of financial inclusion among the women SHG members of Coastal Kannada".

Overall Conclusion

Given the above findings, present study comes to a conclusion that the financial inclusion level of women members of Self-Help Group (SHG) has improved significantly in Coastal Karnataka as a result of the effort of the women members, financial institutions and through financial inclusion initiatives led by the government. The study reveals that SHGs have been very instrumental in encouraging regular savings, making prudent use and accessing formal banks; and in increasing financial knowledge, awareness and use technology in banking, particularly digital. Descriptive analysis showed that most of the respondents have a moderate and high level of financial inclusion indicating that they are more involved in the formal financial system. Furthermore, the distributions of observed and expected values of the financial inclusion levels were significantly different, with the Chi-Square Goodness-of-Fit test ($\chi^2 = 138.420$, $df = 4$, $p < 0.001$) being statistically significant. Therefore the null hypothesis was rejected and alternative hypothesis was accepted suggesting that financial inclusion of women SHG members is significant in Coastal Karnataka. Overall, the study emphasizes that financial literacy, awareness and access to digital banking, and access to banking infrastructure, active members of SHGs, and institutional support are identified as some of the influential factors for improvement in financial inclusion. Nevertheless, there are some challenges yet to be addressed to achieve comprehensive financially inclusive development, namely digital literacy, financial illiteracy and limited accessibility in various places. This is therefore important for building financial literacy, expanding availability of digital financial services, making banks more accessible and creating strong financial literacy and finance capacity of the SHGs in

order to ensure ongoing drive and continuity of financial inclusion for women. The study as a whole gives a tangible evidence regarding the benefits of women SHGs to financial inclusion, economic empowerment of women and inclusive and sustainable socio-economic development in Coastal Karnataka.

REFERENCES

1. Joe, M. P. (2024). Enhancing employability by design: Optimizing retention and achievement in Indian higher education institution. *Naturalista Campano*, 28(1), 472–481.
2. Kalyan, N. B., Ahmad, K., Rahi, F., Shelke, C., & Basha, S. M. (2023). Application of Internet of Things and machine learning in improving supply chain financial risk management system. In 2023 IEEE 2nd International Conference on Industrial Electronics: Developments & Applications (ICIDEA) (pp. 211–216). IEEE.
3. Lokesh, G. R., & Geethanjali, G. (2023). A study on analysis of review of literature on self-help groups with special reference to rural women in Karnataka. *Journal of Women Empowerment and Studies*, 3(2), 33–43.
4. Lokesh, G. R., Harish, K. S., & Geethanjali, G. (2023). A study on benefits, challenges and factors influencing customer relationship management (CRM) with reference to private commercial banks at Bengaluru. *Journal of Corporate Finance Management and Banking System*, 3(3), 1–13.
5. Reddy, K. S. (2020). Risk management and agricultural insurance.
6. Reddy, K. S., & Ranganathan, S. (n.d.). Factors influencing customer satisfaction in Bangalore shopping malls: Before and during COVID-19 pandemic. *RVIM Journal of Management Research*, 26.
7. Reddy, K. S., & Ranganathan, S. (n.d.). Shoppers' perceived value in organized retailing during pandemic and pre-pandemic. *RVIM Journal of Management Research*, 5.
8. Reddy, K., Reddy, K. S., Lokesh, G. R., & Ashalatha, D. (2023). A study on factors influencing organic food and purchase intentions of IT professionals. *Res Militaris*, 13(2), 3544–3552.
9. Sheshadri, T., Shelly, R., Sharma, K., Sharma, T., & Basha, M. (2024). An empirical study on integration of artificial intelligence and marketing management to transform consumer engagement in selected PSU banks (PNB and Canara Banks). *Naturalista Campano*, 28(1), 463–471.
10. Venkat, M. V. V., Khan, S. R. K., Gorkhe, M. D., Reddy, M. K. S., & Rao, S. P. (2023). Fostering talent stability: A study on evaluating the influence of competency management on employee retention in the automotive industry. *Remittances Review*, 8(4)

..