

Financial Inclusion through SHGs: A Study of Women's Economic Participation in Ziro Valley

Lobsang, Pura Suniya



Abstract: Financial inclusion has emerged as a crucial aspect of economic development, providing individuals and businesses with access to valuable and affordable financial products and services. In India, financial inclusion has gained significant attention as a means to empower marginalized and low-income populations, particularly women. One key mechanism for promoting financial inclusion among women in rural areas has been the establishment of Self-Help Groups (SHGs). This study examines the role of Self-Help Groups (SHGs) in promoting financial inclusion and empowering Apatani women in Ziro Valley, Arunachal Pradesh. It explores how SHGs facilitate access to credit, enhance financial literacy, and influence household economic decision-making. Additionally, the research highlights the contribution of SHGs in fostering social cohesion, leadership skills, and community development. Through collective savings and microcredit facilities, these groups not only provide economic support but also strengthen women's financial independence and resilience. The study employs a mixed-methods approach, integrating both qualitative and quantitative techniques to assess the financial behaviour of SHG members. A purposive sampling method was used to select 70 SHG members, ensuring a focused analysis of their financial practices and socio-economic transformations. Furthermore, interviews with local community members were conducted to gain deeper insights into the informal financial system, revealing the widespread prevalence of traditional fund associations as alternative financial mechanisms in the absence of formal banking institutions. The findings of this study offer valuable insights into the effectiveness of SHGs in promoting financial inclusion and enhancing financial behaviour among Apatani women. By expanding access to financial resources and strengthening financial literacy, SHGs serve as critical instruments of empowerment, driving sustainable economic growth and socio-economic development in Ziro Valley.

Keywords: SHGs, Financial Inclusion, Apatani Women, Ziro Valley, Financial Literacy, Informal Finance, Traditional Fund Associations, Empowerment.

Abbreviations

SHGs: Self-Help Groups

MCLFs: Model Cluster Level Federations

1. INTRODUCTION

Arunachal Pradesh, located in the northeastern region of

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*Correspondence Author(s)

Lobsang*, Assistant Professor, Department of Economics, Saint Clare College, Ziro, Lower Subansiri (Arunachal Pradesh), India. Email ID: aacheelobsang7@gmail.com, ORCID ID: [0000-0001-8018-8266](https://orcid.org/0000-0001-8018-8266)

Pura Suniya, Assistant Professor, Department of Economics, Saint Clare College, Ziro, Lower Subansiri (Arunachal Pradesh), India. Email ID: nensu008@gmail.com

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India is characterised by its diverse ethnic groups, remote geographical location, and challenging terrain. These factors contribute to the unique socio-economic dynamics of the region, where financial exclusion remains a significant challenge, particularly for women [1]. Due to cultural norms, limited educational opportunities, and restricted economic avenues, women in Arunachal Pradesh often face barriers to accessing formal financial services [2]. In this context, Self-Help Groups (SHGs) have emerged as powerful instruments for financial inclusion and women's empowerment.

Among the various indigenous communities in Arunachal Pradesh, the Apatani tribe of Ziro Valley presents a compelling case for examining the impact of Self-Help Groups (SHGs). Inhabiting the small yet culturally rich Ziro Valley in the Lower Subansiri district, the Apatanis are known for their sustainable way of life, distinctive farming methods, and vibrant cultural traditions. Their renowned paddy-cum-fish farming technique, which maintains ecological balance, reflects their deep connection to nature. Additionally, the Apatanis express their rich cultural heritage through elaborate festivals, traditional face tattoos, and exceptional craftsmanship in handloom weaving and in cane and bamboo crafts.

While SHGs have seen increasing adoption recently, traditional fund associations remain prevalent within the Apatani community. These informal financial systems, typically organized along clan, lineage, or social ties, continue to serve as vital sources of financial support. They assist in emergencies, education, household needs, and socio-cultural obligations [3]. However, despite their accessibility, these associations have limitations, including high interest rates (3-5% per month), lack of formal regulation, and limited access to larger credit [4]. Some fund associations even prioritise lending to non-members for profit rather than serving their members, highlighting the need for more structured financial alternatives. As a result, SHGs have emerged as a sustainable, structured alternative, gradually shifting women toward the formal financial system while coexisting with traditional fund associations. By providing institutional credit at lower interest rates, promoting financial literacy, and encouraging disciplined savings, SHGs offer a more inclusive economic model. Beyond access to finance, SHGs empower women by enhancing their participation in household decision-making, promoting entrepreneurship, and facilitating leadership opportunities [5].

This study aims to assess the role of Self-Help Groups (SHGs) in empowering Apatani women and promoting financial inclusion in Ziro Valley. By evaluating the impact of SHG initiatives, the research aims to highlight their effectiveness in improving financial behaviour, enhancing economic

opportunities, and promoting sustainable development among Apatani women.

A. Objectives

- To analyse the prevalence and functioning of informal financial systems, such as traditional fund associations.
- To examine the role of SHGs in improving access to financial services and literacy among Apatani women.
- To assess the contribution of SHGs to women's socio-economic empowerment
- To identify the challenges faced by SHGs and suggest policy recommendations for improvement.

II. METHODOLOGY

The study is conducted in the Ziro Valley of Lower Subansiri District, Arunachal Pradesh. Ziro Valley, located at 27.63°N 93.83°E, is included on UNESCO's tentative list of World Heritage Sites for its rich Apatani cultural landscape. It serves as the district headquarters and is one of the oldest towns in Arunachal Pradesh.

This study is based on both primary and secondary data. The primary data were collected through field surveys conducted in the villages of Bulla, Hari, Bamin Michi, and Hija. Data were collected through personal interviews, and a purposive sampling technique was used to select SHG members for the study. A total of 70 SHG members were interviewed to assess their financial practices and socio-economic transformations. Additionally, interviews with local community members provided more profound insights into the informal economy, highlighting the widespread use of traditional fund associations as alternative financial mechanisms in the absence of formal banking institutions.

The secondary data were obtained from the Office of Arunachal Pradesh State Livelihood Mission (ArSLM) to supplement the field findings and provide a broader understanding of the financial inclusion landscape in the region. The collected data were systematically tabulated and analyzed using descriptive and inferential statistical methods, ensuring a comprehensive assessment of financial inclusion and socio-economic empowerment through SHGs.

III. RESULTS AND DISCUSSION

A. SHGs: An Alternative to Informal Financial Systems

A significant portion of the rural population in Arunachal Pradesh has limited access to formal banking services. In response to this financial gap, indigenous tribal communities have developed informal financial systems to meet their socio-economic needs. These informal financial organisations have played a crucial role in supporting rural livelihoods, not only during times of distress but also by facilitating employment generation, children's education, healthcare, and the creation of social assets.

Among the Apatani, informal microfinance systems — primarily in the form of fund associations — are highly prevalent. These associations are organised based on clan, lineage, gender (such as brother-sister groups), or shared interests, with membership ranging from as few as five to as many as one hundred individuals [4]. The primary objective of these associations is to provide financial assistance to

members during times of need, such as covering educational expenses, medical costs, and expenditures related to customs and rituals. Additionally, they also function as lending bodies that extend loans to non-members at high interest rates. Interestingly, some associations refrain from lending to their members due to concerns about defaults; instead, they exclusively offer loans to non-members to generate interest income. The interest charged typically ranges from 3% to 5% per month, which is significantly higher than the rates offered by formal financial institutions.

Table-I: Classification of Informal Finance Associations among Apatani Tribe

Category	Fund Association
Agriculture	Patang (Reciprocal Labour/Labour Sharing)
	Bogo (Common Bund)
	Lutu Sulu (Common Fence/boundary)
Socio-Culture	Builyang (Village Council)
	Nyibu (Priest)
	Lapang Babo (Sacred Platform and Pole)
Relationship	Anu –Amii (Sisters)
	Anu-Abang (Brothers)
	Diinii-Banii (Daughter-in-Laws)
	Ajing (Friends)
Other	Subu Luth (Mithun/ Bos Frontalis)
	Moreh (Forest)

Source: Data collected through field surveys in Ziro Valley, Lower Subansiri District, Arunachal Pradesh (2024)[7]

Despite the expansion of SHGs, many households continue to rely on these informal associations for quick and flexible financial support. However, SHGs provide a more sustainable alternative, integrating rural communities into the formal financial system. SHGs provide members, particularly women, with access to institutional credit at lower interest rates, financial literacy programs, and opportunities for economic self-sufficiency. By linking rural populations with formal banking services, SHGs not only reduce dependence on high-interest informal lending but also foster long-term socio-economic empowerment within the Apatani community.

The coexistence of SHGs and traditional fund associations in Ziro Valley suggests that while SHGs offer structured financial services, traditional associations continue to meet specific community-based financial needs. This highlights the need for a gradual transition in which SHGs can incorporate the strengths of informal financial systems, such as strong social networks and trust-based lending, into a more formalised, regulated financial model.

IV. FINANCIAL INCLUSION THROUGH SHGS

Financial inclusion is a crucial driver of economic development [6], particularly in rural areas where access to formal financial services remains limited. Among the Apatani community in Ziro Valley, Self-Help Groups (SHGs) have emerged as a significant mechanism for integrating marginalized groups, especially women, into the formal financial system. According to data from the Office of the Arunachal Pradesh State Livelihood Mission (ArSLM), Ziro has 184 Self-Help Groups (SHGs), 23 Primary Level Federations (PLFs), and 2 Model Cluster Level Federations (MCLFs) collectively work to



enhance financial accessibility and socio-economic empowerment.

A. Banking Linkage and Digital Financial Inclusion

To assess the extent of financial inclusion, this study interviewed 70 SHG members from 18 SHGs, representing 10% of the total SHGs in Ziro. The findings reveal that most SHG members have accounts with Rural Bank (34.2%), followed by State Bank of India (28.8%), Apex Bank (25.4%), Canara Bank (8.1%), and other banks (3.1%). Additionally, 10.25% of members hold accounts in more than one bank. While many SHG members already had bank accounts before joining, their participation in SHGs has significantly enhanced their financial engagement, access to credit, and financial literacy. Notably, 78% of the members use debit cards. In comparison, 63% actively engage in mobile banking, including UPI transactions for daily transactions, highlighting a shift toward digital financial inclusion and a reduced dependence on cash.

B. Savings Mobilization and Microcredit Access

SHGs play a vital role in savings mobilization. It is found that the weekly savings per member range from ₹20 to ₹100. Regular savings help members build financial discipline, create an emergency buffer, and reduce dependence on high-interest informal lending. By pooling their savings, SHGs establish internal funds that enhance financial security and provide members with accessible credit.

According to official data from ArSRLM, Ziro, SHGs in the region have collectively accumulated a corpus of ₹99,17,707 through savings, interest, and other income sources. Additionally, Community Investment Funds (CIF) worth ₹2,02,92,500 have been disbursed, providing crucial financial assistance for SHG-led enterprises and livelihood activities. Additionally, of the 184 SHGs in Ziro, 158 have been linked to banks, facilitating access to loans totalling ₹1,65,34,048. Furthermore, 57 SHGs have received support under the Arun Shree Rinn Yojana, amounting to ₹57,00,000, and 41 SHGs have availed bank loans worth ₹64,00,000. These figures demonstrate a significant shift toward institutionalised financial support, reducing reliance on informal lenders.

The study also examined the utilization of credit provided by SHGs, which is distributed among various economic and personal needs, as shown in the table below:

Table-II: Credit Utilization by SHG Members in Ziro

Sl. No.	Category of Loan	Percentage
1.	Household Needs	32.31%
2.	Small Business	32.31%
3.	Agriculture	10.77%
4.	Emergencies	6.15%
5.	Animal Husbandry	4.62%
6.	Miscellaneous (e.g., socio-cultural activities- rituals, festivals, education)	13.85%

Source: Data collected through field surveys in Ziro Valley, Lower Subansiri District, Arunachal Pradesh (2024) [7]

The findings indicate that the highest proportion of SHG loans is utilized for household needs (32.31%) and small business ventures (32.31%), reflecting the dual role of SHG credit in supporting both daily expenses and entrepreneurial activities. A significant portion of credit is also allocated to agriculture (10.77%), which is used for purchasing seeds,

fertilisers, and farming equipment, thereby contributing to rural productivity. Additionally, 4.62% of loans were used for animal husbandry, supporting livestock maintenance and expansion. Sixteen per cent of the loans were used for emergencies, such as medical expenses and urgent financial crises, demonstrating SHGs' role as a financial safety net. The remaining 13.85% of loans were categorised as Miscellaneous, covering socio-cultural activities such as rituals, festivals, and educational expenses. These findings highlight that SHGs serve as an essential financial institution for their members, helping them meet both economic and social obligations.

C. Statistical Evidence Supporting Financial Inclusion

To further validate the impact of SHGs on financial inclusion, a Chi-Square test was conducted to assess the association between key financial inclusion factors and improved financial access. The results confirm statistically significant relationships between SHG participation and economic empowerment.

Table-III: Chi-Square Test Results

Financial Inclusion Factor	Chi-Square Value	p-value
Adoption of Digital Transactions	16.38	0.0005
Access to Credit through SHG	18.81	0.00014
Banking Confidence	31.91	0.00000161
Financial Literacy and Awareness	15.15	0.00169

Source: Data collected through field surveys in Ziro Valley, Lower Subansiri District, Arunachal Pradesh (2024) [7]

The Chi-Square test findings provide strong statistical evidence of SHGs' role in enhancing financial inclusion among members. The adoption of digital transactions ($\chi^2 = 16.38$, $p = 0.00005$) is significantly associated with improved financial access, highlighting the growing reliance on mobile banking and UPI in rural areas. This shift aligns with national financial inclusion policies aimed at reducing dependence on cash-based transactions. Similarly, access to credit through SHGs ($\chi^2 = 18.81$, $p = 0.000014$) is associated with greater financial inclusion, as members who have taken loans experience improved financial security and economic opportunities. By enabling investments in small businesses, agriculture, and livestock, SHG-provided microcredit plays a crucial role in promoting rural entrepreneurship and income stability.

The strongest association was observed in banking confidence and engagement ($\chi^2 = 31.91$, $p = 0.00000161$), demonstrating that SHG participation enhances members' familiarity with banking procedures. Finally, financial literacy and awareness ($\chi^2 = 15.15$, $p = 0.00169$) show a significant correlation with financial inclusion. Members with higher financial literacy levels are more likely to engage with formal financial services, leading to better economic decision-making and long-term financial security. These findings underscore the need for ongoing financial education initiatives to strengthen SHG members' financial capabilities further.

V. SHGS AND WOMEN'S SOCIO-ECONOMIC EMPOWERMENT

Self-Help Groups (SHGs) have emerged as a transformative force in enhancing the socio-economic empowerment of women in Ziro Valley. Through income-generating activities, access to credit, financial independence, and investment in productive assets, SHGs provide women with the necessary tools to improve their livelihoods, decision-making capabilities, and overall social standing. Additionally, SHG participation has significantly influenced women's financial autonomy, leadership roles, and community engagement.

A. Income-Generating Activities of SHGs

SHGs in Ziro Valley are engaged in a diverse range of economic activities, including agriculture, food processing, traditional crafts, and businesses related to festivals and celebrations. These activities provide members with financial independence and business opportunities, enabling them to contribute to their household income and community development.

Table- IV: Income-Generating Activities of SHG Members in Ziro Valley

Economic Activities	Total Members	Average Profit (₹ per Member)
Vegetable & Mushroom Gardening	35	1375
Weaving & Knitting Clothes	15	750
Pickle Making	14	750
Cane and Bamboo Products	27	933
Candy (Pecha, Plum) & Rice Chanta Production	24	1500
Festival Stalls (Dree Festival, Ziro Festival of Music - ZFM)	26	6000

Source: Data collected through field surveys in Ziro Valley, Lower Subansiri District, Arunachal Pradesh (2024) [7]

The data highlights significant variations in income across different activities. Festival-based businesses (₹6,000 per member) generate the highest profits, suggesting that seasonal markets provide lucrative opportunities. Food-related companies, such as Candy & Rice Chanta production (₹1,500 per member) and vegetable or mushroom gardening (₹1,375 per member), offer stable earnings throughout the year. In contrast, weaving, knitting, and cane & bamboo crafts yield moderate but consistent incomes (₹750-₹933 per member), ensuring long-term employment and the preservation of traditional skills.

Beyond financial gains, SHG membership has had a positive impact on household financial management. The study found that after joining SHGs, women's role in household budgeting improved significantly. Many members reported feeling more financially independent, contributing actively to household financial decisions, and experiencing an overall improvement in their quality of life.

B. Investment in Productive Assets and Community Initiatives

In addition to income generation, SHGs have also made strategic investments in productive assets that enhance their long-term economic sustainability. Acquisitions such as vehicles, rice mills, power tillers, and commercial kitchen

utensils indicate a move toward business expansion and value-added production. These investments support a wide range of activities, including improving agricultural productivity and food processing, as well as facilitating market access for SHG products. By reinvesting their earnings into essential assets, SHGs not only strengthen their financial security but also expand opportunities for economic growth and self-reliance.

SHGs have also played a key role in community development through various social initiatives. Many groups actively participate in campaigns against alcoholism and drug abuse, promote women's rights awareness, and educate neighbouring households about government welfare schemes. They also engage in public welfare activities such as maintaining village wells and drains, organizing awareness drives on government insurance and pension schemes, and conducting cleanliness campaigns. These initiatives demonstrate that SHGs are not just financial entities but also vital contributors to social change, fostering leadership and collective action among women. By taking on leadership and representative roles in their communities, SHG members are becoming active agents of change, reinforcing their position as both economic and social contributors.

VI. CHALLENGES AND POLICY RECOMMENDATIONS

Despite the positive impact of SHGs on financial inclusion and women's empowerment, several challenges hinder their full potential. Based on the study's findings, the following key challenges were identified:

A. Time Management Constraints: SHG members reported difficulties in managing their time effectively due to the numerous social responsibilities they face as women in the Apatani society. Balancing household duties, community obligations, and SHG commitments often leads to delays in meetings and economic activities, which can sometimes cause misunderstandings among members.

B. Age Diversity: In some SHG groups, a significant age gap exists among members, which can impact group cohesion. In some groups, the age difference between the oldest and youngest members is 32 years, leading to differences in work styles, priorities, and adaptability to modern financial practices. This can occasionally create communication barriers and affect group coordination.

C. Training Effectiveness and Implementation: Although SHGs receive various skill development trainings from ASRLM and other government departments, covering areas such as agro-cultivation, fish breeding, piggy rearing, bamboo handicrafts, soap and candle making, and cake baking, their on-ground implementation remains limited. While multiple factors may contribute to this gap, the short duration of training programs limits hands-on experience and practical application.

D. Marketing Issues: Many SHGs engage in income-generating activities like



weaving, handicrafts, and Food processing, but limited access to broader markets restricts their earnings.

E. Dependence on Traditional Fund Associations:

Although SHGs have gained popularity, informal financial systems persist, leading some members to continue borrowing from high-interest fund associations rather than institutional loans. This slows the transition to formal financial inclusion.

To address the challenges faced by SHGs in Ziro Valley, targeted interventions are necessary to enhance their effectiveness. Time management constraints can be mitigated by introducing flexible meeting schedules, shared leadership roles, and time management training to help members balance household duties and SHG commitments. The duration of skill development training should be extended to ensure hands-on experience, with follow-up support and on-site demonstrations to enhance implementation.

Strengthening market linkages is crucial for SHGs engaged in income-generating activities. This can be achieved by creating exclusive SHG sales platforms, forming partnerships with businesses and online marketplaces, and providing branding and digital marketing training. Additionally, the continued presence of informal financial systems underscores the need to raise awareness of SHG-based credit, simplify loan application processes, and strengthen SHG-bank linkages. These measures will not only reduce dependency on high-interest fund associations but also promote sustainable financial inclusion and long-term economic empowerment of SHG members.

VII. CONCLUSION

The study highlights the coexistence of informal financial systems and SHGs in Ziro Valley, demonstrating how SHGs are gradually bridging the gap between traditional finance and formal financial inclusion. While traditional fund associations continue to provide financial support for socio-cultural activities, emergencies, and household needs, their high interest rates, lack of regulatory oversight, and limited credit availability pose challenges for long-term financial stability.

In contrast, SHGs have emerged as a structured and sustainable alternative, offering institutional credit at lower interest rates, promoting disciplined savings, and expanding access to formal banking services. The findings suggest that participation in SHGs significantly enhances women's financial literacy, confidence in banking interactions, digital financial engagement, and entrepreneurial skills. Beyond financial access, SHGs foster leadership, social empowerment, and economic independence, contributing to broader rural development.

While the transition from informal finance to formal inclusion is ongoing, SHGs have proven to be a key driver in reducing dependence on high-interest lending and strengthening women's financial autonomy. To maximize their impact, targeted policy interventions should focus on expanding financial education, strengthening SHG-bank linkages, improving market access, and integrating digital

financial services. These measures will enhance the effectiveness of SHGs as a financial inclusion tool, support sustainable livelihoods, and foster long-term socio-economic empowerment among Apatani women in Ziro Valley.

DECLARATION STATEMENT

After aggregating input from all authors, I must verify the accuracy of the following information as the article's author.

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AUTHOR'S PROFILE



Lobsang, Assistant Professor, Department of Economics, Saint Clare College (Autonomous), Ziro, M.A. (Economics), NET Qualified (Twice), Gold Medallist - 2017 Batch, Rajiv Gandhi University. Lobsang is a highly dedicated and inspiring academic with 5 years of teaching experience. A Gold Medallist from Rajiv Gandhi University, he has consistently demonstrated academic excellence and a strong commitment to student development. He has qualified for the National Eligibility Test (NET) twice and has authored two research publications. Known for his research-oriented approach, disciplined work ethic, and friendly interaction with students, Lobsang strives to create a meaningful and engaging learning experience.





Pura Suniya, Assistant Professor, Department of Economics, M.A. (Economics), NET Qualified. Pura Suniya is a passionate, emerging educator in Economics with 2 years of teaching experience. She holds a Master's degree in Economics and has successfully qualified for the National Eligibility Test (NET). With a student-focused teaching style and a genuine enthusiasm for the subject, she fosters an environment that supports intellectual curiosity and academic discipline. Her approachable personality and commitment to excellence make her a valuable mentor for students.

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