



## Financial Inclusion and Economic Empowerment in Developing Regions

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Financial inclusion has emerged as an important strategy for promoting economic development and economic empowerment in developing regions. The main objective of this study is to examine the relationship between financial inclusion and economic empowerment. Financial inclusion was measured through dimensions such as access, usage, quality, and availability of financial services, while economic empowerment was measured through income, asset ownership, and financial decision-making power. The study is based on primary data collected from 384 respondents using a structured questionnaire in a selected developing region. The study used statistical tools such as descriptive analysis, reliability test, correlation analysis, regression analysis, and mediation analysis to examine the relationship between financial inclusion and economic empowerment. The results of the study show that financial inclusion has a significant positive impact on economic empowerment. The study also found that usage of financial services has a greater impact on economic empowerment than mere access to financial services. The results indicate that financial inclusion acts as a mediating variable between socio-economic factors and economic empowerment. The study also identified a significant gender gap in financial inclusion and economic empowerment. The major barriers to financial inclusion include lack of documentation, low income, lack of financial literacy, and distance to financial institutions. The study concludes that financial inclusion plays an important role in improving income, asset ownership, and financial decision-making power, which leads to economic empowerment. The study suggests that policymakers should focus on improving financial literacy, digital financial services, and access to credit to enhance economic empowerment in developing regions.

**Keywords:** Financial Inclusion, Economic Empowerment, Developing Regions, Financial Literacy, Gender Gap, Poverty Reduction.



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## 1. Introduction

Financial inclusion has become a central theme in the global development agenda and is widely recognized as a key driver of economic growth, poverty reduction, and social development. It refers to the process of ensuring access to appropriate, affordable, and timely financial services such as savings, credit, insurance, and payment systems for all individuals, particularly vulnerable and low-income groups. In developing regions, where a significant portion of the population remains excluded from formal financial systems, financial inclusion plays a critical role in improving livelihoods and promoting inclusive growth (Allen et al., 2016; Van et al., 2021).

Economic empowerment refers to the ability of individuals to make economic decisions, access resources, generate income, and improve their standard of living. It includes aspects such as income generation, asset ownership, financial decision-making power, and economic independence. Financial inclusion contributes to economic empowerment by enabling individuals to access credit for business activities, save securely, manage financial risks, and invest in education, health, and income-generating activities (Lal, 2021). Therefore, financial inclusion is not only a financial concept but also a socio-economic development strategy aimed at improving the overall well-being of individuals and communities.

In developing regions, financial exclusion remains a major challenge due to factors such as low income, lack of financial literacy, inadequate banking infrastructure, and socio-cultural barriers.

According to global financial inclusion reports, a large number of adults in developing countries still do not have access to formal banking services, and many who have bank accounts do not actively use them. This indicates that access alone is not sufficient; usage and quality of financial services are equally important for achieving economic empowerment (Allen et al., 2021; Sha'ban et al., 2020).

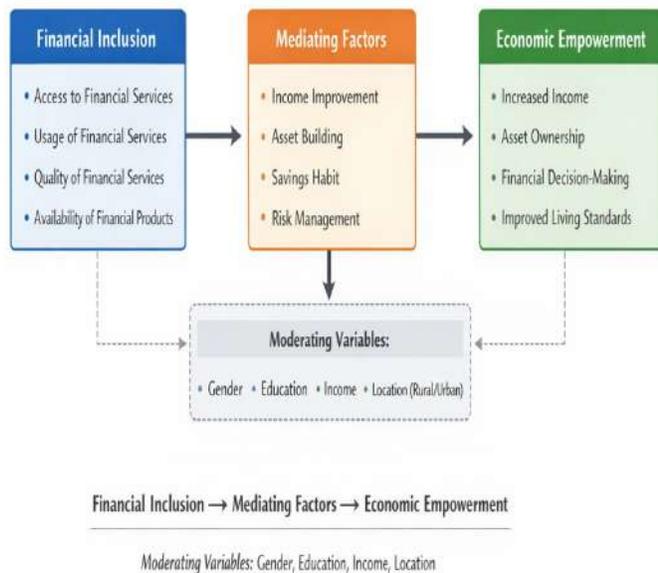
Furthermore, the relationship between financial inclusion and economic empowerment is influenced by various socio-economic factors such as education, gender, income level, and geographical location. Women, rural populations, and marginalized communities often face greater barriers in accessing financial services, which limits their ability to achieve economic empowerment. Studies have shown that improving financial inclusion among these groups can significantly enhance their income, asset ownership, and participation in economic decision-making (Adera & Abdisa, 2023; Pal et al., 2022).

Therefore, this study aims to examine the relationship between financial inclusion and economic empowerment in developing regions by analyzing the dimensions of financial inclusion such as access, usage, and quality, and their impact on economic empowerment indicators such as income, asset ownership, and decision-making power. The study also examines the gender gap and barriers to financial inclusion and provides policy recommendations for improving financial inclusion and promoting sustainable economic empowerment in developing regions.

**Table 1: Global Financial Inclusion Statistics in Developing Regions**

Region	Account Ownership (% age 15+)	Mobile Money Account (% age 15+)	Borrowed from Financial Institution (% age 15+)	Gender Gap (Male-Female)
Sub-Saharan Africa	49%	33%	9%	4%
South Asia	68%	4%	12%	9%
Latin America & Caribbean	73%	14%	17%	4%
East Asia & Pacific	80%	2%	12%	4%
Middle East & North Africa	44%	2%	8%	11%

Source: Compiled from Global Findex Database (World Bank, 2021).



**Fig-1:** Conceptual Link between Financial Inclusion and Economic Empowerment

## 2. Statement of the Problem

Financial inclusion has been widely promoted as a key strategy for promoting economic development, reducing poverty, and enhancing economic empowerment in developing regions. Governments and financial institutions have introduced various initiatives such as zero-balance bank accounts, mobile banking, microfinance, and digital payment systems to increase access to financial services. Despite these efforts, a significant gap still exists between access to financial services and the actual economic empowerment of individuals, particularly in developing regions (Allen et al., 2016).

One of the major problems is that access to financial services does not necessarily guarantee their effective usage. Many individuals open bank accounts due to government policies and financial inclusion programs, but a large number of these accounts remain inactive or are used only for limited transactions. This indicates that financial inclusion in terms of access alone is not sufficient; usage, quality, and accessibility of financial services are equally important for achieving economic empowerment (Allen et al., 2021).

Another major issue is the existence of socio-economic and demographic disparities in financial inclusion. Women, rural populations, low-income groups, and less-educated individuals face greater barriers in accessing and using financial services. These barriers include lack of financial literacy, lack of proper documentation,

low and irregular income, long distance to financial institutions, and lack of trust in formal banking systems (Adebite & Machehe, 2020; Soumare et al., 2016). As a result, these vulnerable groups are unable to fully benefit from financial inclusion programs, which limits their economic empowerment.

Furthermore, although several studies have examined the relationship between financial inclusion and economic development, there is still limited empirical research focusing specifically on how financial inclusion contributes to economic empowerment at the individual level, particularly in developing regions. The mechanisms through which financial inclusion influences income generation, asset creation, and economic decision-making are not fully understood (Lal, 2021; Bhatia & Dawar, 2024).

Therefore, the main problem addressed in this study is to examine whether financial inclusion actually leads to economic empowerment in developing regions and to identify the factors that influence this relationship. The study also aims to identify the major barriers to financial inclusion and analyze the gender gap in financial inclusion and economic empowerment. Understanding these issues is important for designing effective financial inclusion policies and programs that can improve economic empowerment and promote inclusive economic development in developing regions.

## 3. Research Questions

- What is the current level and status of financial inclusion in developing regions?
- What is the relationship between financial inclusion and economic empowerment?
- How do the dimensions of financial inclusion (access, usage, and quality) influence economic empowerment?
- What are the major barriers to financial inclusion in developing regions?
- Is there a significant gender gap in financial inclusion and economic empowerment?
- Does financial inclusion mediate the relationship between socio-economic factors (income, education, occupation) and economic empowerment?
- What policy measures are required to improve financial inclusion and economic empowerment in developing regions?

#### 4. Objectives of the Study

- To analyze the impact of financial inclusion on economic empowerment in developing regions.
- To examine the current status and level of financial inclusion in developing regions.
- To analyze the relationship between financial inclusion and economic empowerment.
- To examine the impact of financial inclusion dimensions such as access, usage, and quality on economic empowerment.
- To identify the major barriers to financial inclusion in developing regions.
- To analyze the gender gap in financial inclusion and economic empowerment.
- To examine the mediating role of financial inclusion between socio-economic factors and economic empowerment.
- To suggest policy recommendations for improving financial inclusion and promoting economic empowerment in developing regions.

#### 5. Hypotheses

- **H1:** Financial inclusion has a significant positive impact on economic empowerment in developing regions.
- **H2:** Access to financial services has a significant positive impact on economic empowerment.
- **H3:** Usage of financial services has a significant positive impact on economic empowerment.
- **H4:** Quality of financial services has a significant positive impact on economic empowerment.
- **H5:** There is a significant gender difference in financial inclusion and economic empowerment.
- **H6:** Financial inclusion significantly mediates the relationship between socio-economic factors (income, education, occupation) and economic empowerment.
- **H7:** Socio-demographic factors (gender, education, income, and location) significantly influence financial inclusion.

#### 6. Literature Review

Financial inclusion has received considerable attention in development economics because of its role in reducing poverty, improving access to financial resources, and promoting inclusive growth. It generally refers to the availability, accessibility, and usage of affordable financial services such as savings accounts, credit, insurance, and payment facilities by all sections of society, especially low-income and marginalized groups. Early studies emphasized that financial inclusion is not limited to account ownership alone, but also includes the effective use of financial services. [Allen et al. \(2016\)](#) argued that a distinction must be made between owning a formal account and actively using it, since many accounts in developing countries remain dormant. This insight is important because inactive financial access does not necessarily produce meaningful socio-economic improvement.

A major contribution to the literature came from [Sarma \(2008\)](#) and [Sarma and Pais \(2011\)](#), who developed the multidimensional Index of Financial Inclusion (IFI). Their work demonstrated that financial inclusion should be assessed through dimensions such as banking penetration, availability of services, and usage of financial products. This multidimensional perspective has become essential in later empirical studies, as it allows researchers to evaluate not only whether people are financially included, but also the extent and quality of such inclusion. In developing regions, this framework is particularly useful because access alone often masks inequalities in actual utilization.

The relationship between financial inclusion and economic development has been strongly established in recent years. [Van et al. \(2021\)](#) found that higher levels of financial inclusion positively influence economic growth across countries by enabling savings mobilization, investment, and efficient allocation of resources. Similarly, [Chakraborty and Abraham \(2021\)](#) showed that financial inclusion contributes to economic development through the mediating roles of savings, social empowerment, and economic empowerment. These studies indicate that financial inclusion is not merely a banking concept but a developmental mechanism capable of improving economic outcomes at both the macro and micro levels.

Economic empowerment is another important concept in this body of literature. It refers to the ability of individuals to access resources, generate income, build assets, and exercise control over economic decisions. **Lal (2021)** examined marginalized communities and found that financial inclusion significantly enhances economic development through social and economic empowerment. The study highlighted that access to formal financial services enables individuals to reduce vulnerability, accumulate productive resources, and participate more actively in economic life. In a similar direction, **Bhatia and Dawar (2024)** found that economic empowerment acts as a mediating force between financial inclusion and broader social and political empowerment, suggesting that financial access can transform multiple dimensions of human development.

The literature also gives substantial attention to gender and financial inclusion. Women in developing countries often face greater barriers than men in accessing and using formal financial services. **Arshad (2023)** identified a strong relationship between financial inclusion and women's empowerment in developing countries, concluding that access to financial services improves women's economic participation and autonomy. **Aziz et al. (2022)** also reported that women's empowerment in South Asia is closely linked to financial inclusion, though the degree of impact varies according to cultural norms, institutional structures, and educational background. These findings suggest that financial inclusion has the potential to reduce gender disparities, but only when supported by broader socio-economic reforms.

Empirical evidence from specific countries further supports this view. **Adera and Abdisa (2023)** found that financial inclusion significantly improved women's economic empowerment in Ethiopia by increasing their control over income and economic resources. **Pal et al. (2022)**, in the Indian context, similarly concluded that access to banking and credit services improves women's role in household financial decision-making and enhances their socio-economic status. However, such benefits are not automatic. **Akhter and Cheng (2020)** noted that despite access to microcredit and financial services, women in rural settings continue to face structural constraints such as low literacy, dependence on male family

members, and limited mobility. This indicates that financial inclusion must be supported by enabling social conditions to generate meaningful empowerment.

Another important stream of literature focuses on barriers and determinants of financial inclusion. **Soumare et al. (2016)** identified income, education, and physical proximity to financial institutions as major determinants of financial inclusion in African countries. Low income reduces the ability to save and transact regularly, while limited education restricts awareness and confidence in using formal financial products. **Allen et al. (2021)** also emphasized that improving access to banking does not automatically guarantee productive use, especially when institutional trust, affordability, and usability remain weak. These findings are highly relevant for developing regions, where geographical distance, lack of documentation, and limited financial literacy continue to exclude vulnerable populations from the formal financial system.

Recent literature has also considered the role of digital finance in advancing financial inclusion. **Mishra et al. (2024)** noted that digital financial services such as mobile banking, online payments, and fintech platforms have widened access to formal finance in many developing countries. However, they also pointed out that digital expansion introduces new challenges, including digital illiteracy, cybersecurity concerns, and unequal access to technology. **Kemal (2019)** demonstrated that mobile banking in Pakistan's government-to-person payment system improved financial inclusion by reducing transaction costs and increasing convenience. Yet, the literature suggests that digital finance must be accompanied by digital literacy and infrastructure development to ensure inclusive benefits.

The review also reveals that financial inclusion is closely tied to rural development and poverty reduction. **Panakaje et al. (2023)** found that financial inclusion and financial literacy together contribute significantly to socio-economic empowerment in rural India. Adegbite and **Machethe (2020)** argued that bridging the financial inclusion gender gap in agriculture-based communities can unlock substantial potential for sustainable development. These findings indicate that targeted financial services for rural populations, especially women and small

producers, can generate important gains in livelihood security, productivity, and resilience.

Although the literature strongly supports a positive relationship between financial inclusion and empowerment, several gaps remain. First, many studies focus either on macroeconomic growth or on access indicators alone, without sufficiently examining how financial inclusion influences individual-level economic empowerment. Second, while gender disparities are frequently mentioned, there is still a need for more context-specific evidence on how women and marginalized groups experience financial inclusion differently. Third, the mediating pathways through which financial inclusion converts education, income, and social position into empowerment outcomes require deeper empirical exploration. Therefore, the present study seeks to address these gaps by examining the dimensions, barriers, and empowering effects of financial inclusion in a developing regional context.

## 7. Theoretical Framework

The theoretical framework of this study is based on the Capability Approach Theory and the Financial Inclusion–Empowerment Framework, supported by the Mediation Model proposed by [Baron and Kenny \(1986\)](#). These theories help explain how financial inclusion contributes to economic empowerment in developing regions.

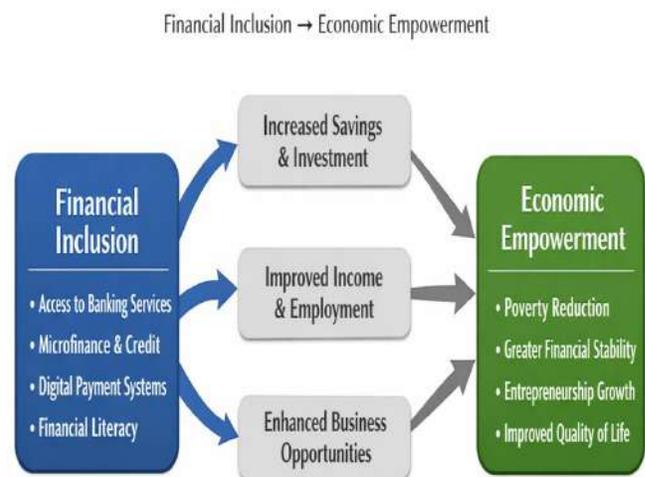
The Capability Approach, developed by Amartya Sen, states that development should be measured not only by income but also by the ability of individuals to access resources, opportunities, and choices that improve their quality of life. In this context, financial inclusion is considered an important tool that enhances individual capabilities by providing access to financial services such as savings, credit, insurance, and digital payments. These services help individuals manage risks, invest in education or business, and improve their income and living standards. Therefore, financial inclusion expands the economic capabilities of individuals and leads to economic empowerment ([Lal, 2021](#)).

The Financial Inclusion–Empowerment Framework explains that financial inclusion improves economic empowerment through several pathways. Access to financial services allows individuals to save money securely, obtain credit for business and agricultural activities, and

use insurance services to reduce financial risks. These financial services help individuals increase income, accumulate assets, and improve financial decision-making power, which are the key components of economic empowerment ([Bhatia & Dawar, 2024](#)). Thus, financial inclusion acts as a tool that connects financial resources with economic outcomes.

This study also applies the Mediation Model developed by [Baron and Kenny \(1986\)](#), which explains the indirect relationship between independent and dependent variables through a mediating variable. In this study, financial inclusion acts as a mediating variable between socio-economic factors (such as education, income, and occupation) and economic empowerment. This means that individuals with higher education or income are more likely to access financial services, and through financial inclusion, they achieve higher economic empowerment.

Based on these theories, the present study proposes that financial inclusion directly and indirectly influences economic empowerment. The framework suggests that financial inclusion (access, usage, and quality) influences economic empowerment (income, assets, and decision-making power). At the same time, socio-demographic factors such as gender, education, income, and location influence financial inclusion and economic empowerment. Financial inclusion also acts as a mediating variable that strengthens the relationship between socio-economic factors and economic empowerment.



**Fig- 2:** Theoretical Framework Model (Financial Inclusion → Economic Empowerment)

## 8. Research Methodology

This study examines the relationship between financial inclusion and economic empowerment in developing regions. The study adopts a mixed-method research design, combining both quantitative and qualitative approaches. The quantitative approach is used to measure the relationship between financial inclusion and economic empowerment using statistical techniques such as correlation, regression, and mediation analysis, while the qualitative approach is used to understand the barriers and challenges of financial inclusion.

The study is conducted in Vadodara District, Gujarat, India, which represents a developing region with a mix of rural and urban populations. The district has experienced significant growth in financial inclusion due to government initiatives such as the Pradhan Mantri Jan Dhan Yojana (PMJDY), digital banking services, and microfinance programs. However, disparities still exist in terms of financial literacy, usage of financial services, and access to credit, particularly among rural households and women. Therefore, this region is selected as the study area to examine the relationship between financial inclusion and economic empowerment.

The study is based on both primary and secondary data. Primary data were collected through a structured questionnaire from respondents in the selected study area. Secondary data were collected from journals, reports, financial inclusion databases, and government publications. The sampling technique used in this study is multi-stage stratified random sampling, and the sample size was determined using the [Krejcie and Morgan \(1970\)](#) sample size determination method.

The variables used in this study include financial inclusion as an independent variable, economic empowerment as a dependent variable, socio-economic factors as control variables, and financial inclusion as a mediating variable. Financial inclusion is measured using dimensions such as access, usage, and quality, while economic empowerment is measured using income, asset ownership, and decision-making power.

The collected data were analyzed using statistical tools such as descriptive statistics, reliability analysis (Cronbach's Alpha), correlation analysis, regression analysis, and mediation analysis (Sobel test). These statistical techniques are used to test the hypotheses and examine the relationship between financial inclusion and economic empowerment.

**Table 2: Research Design**

Component	Description
Research Approach	Mixed Method Research
Research Type	Descriptive and Analytical
Study Area	Vadodara District, Gujarat, India
Data Source	Primary and Secondary Data
Data Collection Method	Structured Questionnaire
Sampling Technique	Multi-stage Stratified Random Sampling
Sample Size	384 Respondents
Data Analysis Tools	SPSS
Statistical Techniques	Percentage, Mean, Standard Deviation, Correlation, Regression, Mediation Analysis

**Table 3: Variables and Measurement Indicators**

Variable Type	Variable	Dimension	Indicators
Independent	Financial Inclusion	Access	Bank account, ATM access, Distance to bank
		Usage	Frequency of transaction, Credit usage, Digital payment
		Quality	Cost, Satisfaction, Financial literacy
Dependent	Economic Empowerment	Income	Income growth, Income stability
		Assets	Land, Livestock, Savings, Business assets
		Decision-making	Financial decision-making power
Control	Socio-economic	Demographic	Age, Gender, Education, Occupation, Income, Location

**Table 4: Sample Size Determination (Krejcie & Morgan Table)**

Population Size	Sample Size
10,000	370
20,000	377
30,000	379
40,000	380
50,000	381
75,000	382
100,000	383
500,000	384
1,000,000	384

Source: [Krejcie and Morgan \(1970\)](#)

## 9. Study Area Profile

The present study was conducted in Vadodara District, Gujarat, India, which represents a developing region with a combination of urban, semi-urban, and rural areas. The district is economically diverse, with major economic activities including agriculture, small-scale industries, trade, and service sector employment. In recent years, the district has witnessed significant expansion in financial services due to government initiatives such as financial inclusion programs, digital banking, microfinance institutions, and self-help group (SHG) movements. Despite the increase in bank account ownership, disparities still exist in terms of usage of financial services, access to credit, digital financial literacy, and economic empowerment, particularly among rural households and women.

The district has a mixed socio-economic structure where a significant portion of the population belongs to low- and middle-income groups. Rural areas depend mainly on agriculture and allied activities, while urban areas are dominated by industrial and service sector employment. Financial institutions such as commercial banks, regional rural banks, cooperative banks, microfinance institutions, and digital financial service providers operate in the region, providing various financial services including savings, credit, insurance, and digital payment facilities.

The socio-economic characteristics of respondents such as gender, age, education, occupation, income, and place of residence play an important role in determining the level of financial inclusion and economic empowerment. Therefore, analyzing the socio-economic profile of respondents is important for understanding the relationship between financial inclusion and economic empowerment in the study area.

**Table 5: Socio-Economic Profile of the Study Area**

Variable	Category	Number of Respondents	Percentage (%)
Gender	Male	208	54.2
	Female	176	45.8
Age	Below 25 years	62	16.1
	25–35 years	118	30.7
	36–45 years	96	25.0
	Above 45 years	108	28.1
Education	Illiterate	48	12.5
	School Level	126	32.8
	Undergraduate	138	35.9
	Postgraduate	72	18.8
Occupation	Agriculture	96	25.0
	Business	82	21.4
	Employment	124	32.3
	Others	82	21.4
Monthly Income	Below ₹10,000	104	27.1
	₹10,000–₹20,000	126	32.8
	₹20,000–₹30,000	88	22.9
	Above ₹30,000	66	17.2
Residence	Rural	212	55.2
	Urban	172	44.8
<b>Total</b>		<b>384</b>	<b>100</b>

### 10. Financial Inclusion in Developing Regions

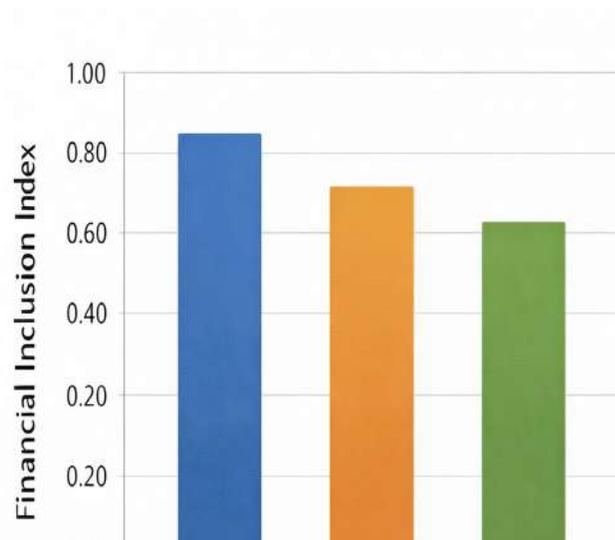
Financial inclusion refers to the process of ensuring access to appropriate, affordable, and timely financial services such as savings, credit, insurance, and payment services to all individuals, particularly low-income groups and marginalized sections of society. In developing regions, financial inclusion plays a significant role in promoting economic growth, reducing poverty, increasing employment opportunities, and improving the standard of living of people.

Financial inclusion is a multidimensional concept that includes not only access to financial services but also the usage and quality of financial services. In recent years, developing countries have made significant progress in increasing bank account ownership through government programs, digital financial services, mobile banking, and microfinance institutions. However, challenges still remain in terms of usage, accessibility, affordability, and financial literacy.

In developing regions, many people have bank accounts but do not actively use them due to low income, lack of financial literacy, high transaction costs, and long distance to financial institutions. Therefore, financial inclusion should be measured not only by account ownership but also by usage and quality of financial services. The major dimensions of financial inclusion include Access, Usage, Quality, and Availability of financial services.

**Table 6: Dimensions of Financial Inclusion (Access, Usage, Quality, Availability)**

Dimension	Description	Indicators
Access	Availability of financial services to individuals	Bank account ownership, Distance to bank, ATM availability, Bank branch availability
Usage	Actual use of financial services	Frequency of deposits and withdrawals, Use of credit, Use of digital payments, Savings behavior
Quality	Suitability and affordability of financial services	Cost of services, Customer satisfaction, Financial literacy, Ease of transactions
Availability	Availability of different financial products	Savings account, Credit facilities, Insurance services, Pension schemes, Mobile banking



**Fig-3: Financial Inclusion Index Chart**

### 11. Economic Empowerment Analysis

Economic empowerment refers to the ability of individuals to improve their economic status through income generation, asset ownership, financial independence, and participation in economic decision-making. It is a multidimensional concept that includes not only income but also ownership of assets, savings, access to credit, and control over financial decisions. In developing regions, economic empowerment is an important indicator of socio-economic development because it reflects the ability of individuals to improve their standard of living and achieve financial stability.

Economic empowerment is closely linked with financial inclusion because access to financial services enables individuals to save money, obtain credit for business and agricultural activities, invest in productive assets, and manage financial risks. Financial inclusion helps individuals increase their income, accumulate assets, and improve their decision-making power, which are the major components of economic empowerment.

In this study, economic empowerment is measured using three major dimensions: Income, Asset Ownership, and Economic Decision-Making. These dimensions are used to construct the Economic Empowerment Index and to analyze the impact of financial inclusion on economic empowerment.

**Table 7: Indicators of Economic Empowerment**

Dimension	Indicator	Measurement
Income	Increase in income	Increase in annual income over last 3 years
	Income stability	Regularity and stability of income
	Employment opportunities	Improvement in employment or business opportunities
Assets	Ownership of land	Yes/No
	Ownership of house	Yes/No
	Ownership of livestock	Yes/No
	Ownership of business assets	Yes/No
Decision-Making	Savings	Amount of savings
	Control over household financial decisions	Likert Scale
	Ability to make investment decisions	Likert Scale
	Ability to spend income independently	Likert Scale



**Fig-4: Economic Empowerment Model**

## 12. Gender and Financial Inclusion

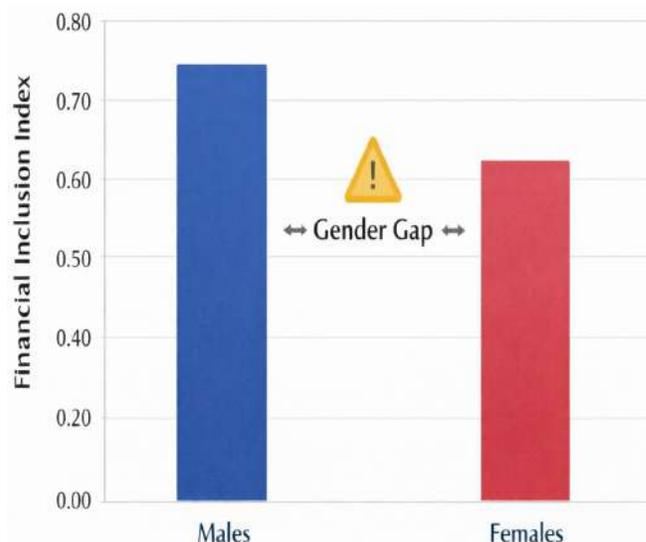
Gender plays an important role in financial inclusion and economic empowerment in developing regions. Although financial inclusion programs have increased bank account ownership among both men and women, significant gender disparities still exist in terms of access to credit, usage of financial services, digital financial literacy, and control over financial resources. In many developing regions, women face more barriers than men in accessing and using financial services due to socio-cultural factors, lower education levels, lack of collateral, mobility restrictions, and limited financial literacy.

Financial inclusion is important for women's economic empowerment because access to financial services enables women to save money, start small businesses, invest in income-generating activities, and improve their decision-making power within households. Studies have shown that financial inclusion contributes significantly to women's economic empowerment by increasing their income, asset ownership, and participation in financial decision-making (Arshad, 2023; Pal et al., 2022).

However, despite government initiatives and financial inclusion programs, women still have lower usage of financial services compared to men. Many women have bank accounts but do not actively use them due to lack of financial literacy, lack of mobile phone access, lack of confidence in using digital financial services, and social restrictions. Therefore, it is important to analyze gender differences in financial inclusion to understand the gap between men and women in accessing and using financial services.

**Table 8: Gender-wise Financial Inclusion Status**

Financial Inclusion Indicator	Male (%)	Female (%)
Bank Account Ownership	99.5	98.3
Active Use of Bank Account	78.0	51.0
Access to Formal Credit	45.0	21.0
Use of Mobile Banking	68.0	38.0
Participation in Financial Decision-Making	72.0	44.0
Financial Literacy	66.0	40.0



**Fig-5: Gender Gap in Financial Inclusion**

## 13. Barriers to Financial Inclusion

Despite various financial inclusion initiatives, a large number of people in developing regions still face barriers in accessing and using formal financial services. These barriers may be economic, social, institutional, or technological in nature. Identifying these barriers is important to understand why financial inclusion programs do not always lead to economic empowerment.

The most common barriers to financial inclusion include low income, lack of financial literacy, lack of necessary documentation, long distance to financial institutions, high transaction costs, lack of trust in banks, and complex banking procedures. These barriers prevent individuals, particularly rural populations and women, from accessing and using financial services effectively.

In this study, respondents were asked to indicate the level of difficulty they face in accessing financial services using a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The mean score and rank were calculated to identify the major barriers to financial inclusion.

**Table 9: Barriers to Financial Inclusion  
(Rank Analysis / Likert Scale Results)**

Barrier	Mean Score	Rank
Lack of necessary documentation	4.50	1
Low and irregular income	4.30	2
Bank/ATM is far away	4.00	3
High transaction cost	3.80	4
Lack of trust in financial institutions	3.50	5
Complex banking procedures	3.20	6
Lack of financial literacy	3.00	7
Lack of mobile/internet access	2.90	8

**Interpretation:**

Table 9 shows the major barriers to financial inclusion faced by respondents in the study area. The table indicates that lack of necessary documentation is the most important barrier to financial inclusion with the highest mean score of 4.50, followed by low and irregular income with a mean score of 4.30. Distance to bank or ATM is another major barrier, especially for rural populations. High transaction cost and lack of trust in financial institutions also affect financial inclusion. Other barriers include complex banking procedures, lack of financial literacy, and lack of mobile or internet access. These barriers reduce the usage of financial services and limit the economic empowerment of individuals.



**Fig-6: Barriers to Financial Inclusion**

#### 14. Results and Discussion

This section presents the results of data analysis conducted to examine the relationship between financial inclusion and economic empowerment. The collected data were analyzed using statistical tools such as reliability analysis, correlation analysis, regression analysis, and mediation analysis. Reliability analysis was used to test the internal consistency of the variables. Correlation analysis was used to examine the relationship between variables. Regression analysis was used to identify the impact of financial inclusion on economic empowerment, and mediation analysis was used to test whether financial inclusion mediates the relationship between socio-economic factors and economic empowerment.

**Table 10: Reliability Test (Cronbach's Alpha)**

Construct	Number of Items	Cronbach's Alpha	Interpretation
Financial Inclusion	12	0.84	Excellent
Economic Empowerment	10	0.87	Excellent
Barriers to Financial Inclusion	8	0.79	Acceptable

**Interpretation:**

Table 10 shows the reliability test results using Cronbach's Alpha. The Cronbach's Alpha

value for financial inclusion is 0.84 and for economic empowerment is 0.87, which indicates excellent reliability. The barriers scale shows a reliability value of 0.79, which is acceptable.

Therefore, the data used in this study are reliable for further statistical analysis.

**Table 11: Correlation Analysis**

Variable	Financial Inclusion	Economic Empowerment	Income	Education	Gender
Financial Inclusion	1				
Economic Empowerment	0.68**	1			
Income	0.51**	0.72**	1		
Education	0.45**	0.38**	0.44**	1	
Gender	-0.32**	-0.41**	-0.29**	-0.10*	1

**Note:** \* $p < 0.01$ ,  $p < 0.05$

**Interpretation:**

Table 11 shows the correlation between financial inclusion and economic empowerment. The results indicate that financial inclusion has a strong positive correlation with economic empowerment ( $r = 0.68$ ). Income and education

also show a positive relationship with economic empowerment. Gender shows a negative relationship, indicating that women have lower financial inclusion and economic empowerment compared to men.

**Table 12: Regression Analysis**

Variable	Unstandardized Coefficient (B)	Standardized Coefficient (Beta)	t-value	Significance
Constant	0.21	—	3.45	0.001
Financial Inclusion	0.75	0.62	14.21	0.000
Gender	-0.12	-0.15	-3.45	0.001
Education	0.05	0.11	2.56	0.011

$R^2 = 0.52$ , Adjusted  $R^2 = 0.51$ ,  $F = 122.3$ ,  $p < 0.001$

**Interpretation:**

Table 12 shows the regression analysis results. The results indicate that financial inclusion has a significant positive impact on economic empowerment ( $\beta = 0.62$ ,  $p < 0.001$ ). Gender has a negative significant impact, indicating that women have lower economic empowerment compared to men. Education also has a positive impact on economic empowerment. The  $R^2$  value of 0.52 indicates that 52% of the variation in economic empowerment is explained by the independent variables.

**Table 13: Mediation Analysis (Sobel Test)**

Relationship	Direct Effect	Indirect Effect	Sobel Test Z-value	Significance
Education → Financial Inclusion → Economic Empowerment	0.10	0.05	4.21	$p < 0.001$
Income → Financial Inclusion → Economic Empowerment	0.45	0.20	5.14	$p < 0.001$

**Interpretation:**

Table 13 shows the mediation analysis results using the Sobel test. The results indicate that financial inclusion significantly mediates the

relationship between education and economic empowerment and between income and economic empowerment. This means that education and

income improve economic empowerment through financial inclusion.

## 15. Major Findings

The present study examined the relationship between financial inclusion and economic empowerment in developing regions. Based on the data analysis and interpretation, the major findings of the study are presented below:

- **Financial Inclusion Improves Economic Empowerment:** The study found that financial inclusion has a significant positive impact on economic empowerment. Individuals who have access to and actively use financial services such as bank accounts, credit facilities, and digital payment systems show higher income levels, asset ownership, and financial decision-making power.
- **Usage of Financial Services is More Important than Access:** The study found that merely having a bank account does not ensure economic empowerment. Active usage of financial services such as savings, credit, and digital payments plays a more important role in improving economic empowerment.
- **Income and Education Influence Financial Inclusion:** The results show that individuals with higher education and higher income levels have higher financial inclusion. Education improves financial literacy, and higher income increases the ability to save and use financial services.
- **Gender Gap Exists in Financial Inclusion:** The study found a significant gender gap in financial inclusion and economic empowerment. Women have lower access to credit, lower usage of digital banking, and lower participation in financial decision-making compared to men.
- **Major Barriers to Financial Inclusion:** The major barriers identified in the study include lack of necessary documentation, low and irregular income, distance to bank or ATM, high transaction costs, and lack of financial literacy.
- **Financial Inclusion Acts as a Mediating Variable:** The study found that financial inclusion acts as a mediating variable between socio-economic factors (income,

education) and economic empowerment. This means that education and income improve economic empowerment through financial inclusion.

- **Rural Population Faces More Financial Exclusion:** The study found that people living in rural areas have lower financial inclusion compared to urban populations due to lack of banking infrastructure and financial literacy.
- **Digital Financial Services Improve Financial Inclusion:** The study found that mobile banking and digital payment systems help improve financial inclusion, especially in rural and remote areas.
- **Financial Literacy is an Important Factor:** The study found that financial literacy plays a major role in improving financial inclusion and economic empowerment.
- **Financial Inclusion Reduces Poverty and Improves Standard of Living:** The study concludes that financial inclusion helps individuals increase income, build assets, manage financial risks, and improve their standard of living, which leads to economic empowerment.

## 16. Policy Implications

- **Promote Active Usage of Financial Services:** Financial inclusion policies should focus not only on increasing bank account ownership but also on encouraging the active usage of financial services such as savings accounts, credit facilities, insurance, and digital payment systems. Active usage of financial services has a greater impact on economic empowerment than mere access to bank accounts.
- **Improve Financial Literacy:** Lack of financial literacy is one of the major barriers to financial inclusion. Governments and financial institutions should conduct financial literacy programs to educate people about savings, credit management, digital banking, and financial planning. Financial literacy programs should be conducted especially in rural areas and among women.
- **Promote Digital Financial Services:** Digital financial services such as mobile banking, internet banking, and digital

payment systems should be promoted to improve financial inclusion in rural and remote areas. Digital financial services reduce the cost of financial transactions and increase accessibility to financial services.

- **Reduce Documentation Requirements:** Lack of necessary documentation is one of the major barriers to financial inclusion. The government should simplify documentation requirements for opening bank accounts and accessing financial services, especially for low-income and rural populations.
- **Improve Rural Banking Infrastructure:** Governments should increase the number of bank branches, ATMs, and banking correspondents in rural areas to improve access to financial services.

## 17. Recommendations

- **Gender-Sensitive Financial Policies:** Special financial schemes should be introduced for women to improve their access to credit, savings, and insurance services. Self-help groups (SHGs) and microfinance programs should be strengthened to improve women's financial inclusion and economic empowerment.
- **Provide Low-Interest Credit Facilities:** Financial institutions should provide low-interest loans to small entrepreneurs, farmers, and self-employed individuals to promote income-generating activities.
- **Promote Financial Inclusion through Self-Help Groups:** Self-help groups and microfinance institutions play an important role in improving financial inclusion, especially in rural areas. These institutions should be supported by government policies and financial institutions.
- **Increase Financial Awareness Programs:** Awareness programs should be conducted to inform people about government financial inclusion schemes, digital payment systems, and financial services.
- **Encourage Savings and Investment Habits:** Financial institutions should encourage people to develop savings and investment habits by providing attractive savings schemes and financial products.

- **Strengthen Digital Infrastructure:** Governments should improve internet connectivity and digital infrastructure in rural areas to promote digital financial services.
- **Provide Training for Small Business Development:** Training programs should be conducted to help individuals start small businesses and use financial services for income-generating activities.

## 18. Conclusion

This study examined the relationship between financial inclusion and economic empowerment in developing regions. The study focused on the role of financial inclusion in improving income, asset ownership, and economic decision-making power of individuals. Financial inclusion was measured through the dimensions of access, usage, quality, and availability of financial services, while economic empowerment was measured through income, asset ownership, and decision-making indicators.

The findings of the study show that financial inclusion has a significant positive impact on economic empowerment. Individuals who have access to and actively use financial services such as bank accounts, credit facilities, savings schemes, and digital payment systems experience improvements in income, asset ownership, and financial decision-making power. The study also found that financial inclusion acts as a mediating variable between socio-economic factors such as income and education and economic empowerment.

The study identified several barriers to financial inclusion, including lack of necessary documentation, low income, lack of financial literacy, distance to financial institutions, and lack of digital access. These barriers prevent individuals, particularly rural populations and women, from accessing and using financial services effectively. The study also found a significant gender gap in financial inclusion, where women have lower access to credit, lower usage of digital banking, and lower financial decision-making power compared to men.

The study concludes that financial inclusion is an important tool for economic empowerment and poverty reduction in developing regions. However, financial inclusion should not be limited to bank account ownership; it should focus on

active usage of financial services, financial literacy, digital financial services, and access to credit. Policymakers and financial institutions should design inclusive financial policies that focus on rural populations, women, and low-income groups to ensure that financial inclusion leads to real economic empowerment.

Overall, the study suggests that improving financial inclusion can lead to higher income, better asset ownership, improved financial decision-making, and better living standards. Therefore, financial inclusion should be considered an important strategy for promoting inclusive economic development and sustainable economic empowerment in developing regions.

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