

Financial Inclusion and Economic Development: The Role of Credit Availability and Financial Literacy in Promoting Cottage Industry Growth in Uttar Pradesh.

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Abstract

Financial inclusion has emerged as a key strategy for promoting inclusive economic growth, reducing poverty, strengthening rural entrepreneurship, and improving financial resilience, particularly in developing economies (Demirgüç-Kunt et al., 2018; Ozili, 2021; World Bank, 2022). Despite various government initiatives to expand access to formal financial services, many cottage industries continue to face challenges related to financial literacy, credit accessibility, and the effective use of financial products, which continue to constrain enterprise growth and regional development (Lusardi & Mitchell, 2014; Beck et al., 2007). The present study examines the relationship between financial literacy, financial products and services, credit availability, financial inclusion, cottage industry growth, and economic development in Uttar Pradesh. The study adopted a descriptive research design based on primary data collected from 400 respondents associated with cottage industries through a structured questionnaire using a five-point Likert scale. Convenience sampling was employed to select the respondents. The collected data were analysed using IBM SPSS Statistics 26, and statistical techniques such as descriptive statistics, reliability analysis, and Spearman's rank correlation were applied to examine the proposed relationships among the study variables. The findings reveal significant positive relationships between financial literacy and financial products, credit availability and cottage industry growth, and financial inclusion and economic development. The results indicate that financially literate entrepreneurs are more likely to utilise formal financial products and services, while improved access to institutional credit enhances business expansion, productivity, and employment opportunities. These findings are consistent with earlier studies highlighting the role of financial capability and institutional finance in promoting enterprise development and inclusive growth (Ayyagari et al., 2011; OECD, 2023; Kumar & Ahuja, 2025). The study concludes that financial literacy, accessible credit, and effective financial inclusion are complementary factors that support the sustainable growth of cottage industries and local economic development. It recommends strengthening financial awareness programmes, improving access to affordable institutional finance, promoting digital financial services, and designing entrepreneur-friendly financial products to enhance the competitiveness of cottage industries....

Keywords: Financial Inclusion, Financial Literacy, Credit Availability, Cottage Industry, Economic Development..

Introduction

Financial inclusion has emerged as one of the most significant policy priorities for achieving inclusive and sustainable economic development across both developed and developing economies. It refers to the process of ensuring that individuals, households, and business enterprises have timely, affordable, and equitable access to a wide range of formal financial products and services, including savings, credit, insurance, pensions, remittance facilities, and digital payment systems. Initially, financial inclusion was viewed primarily as expanding banking outreach through branch networks and basic deposit accounts. However, contemporary research recognises financial inclusion as a multidimensional concept that encompasses accessibility, affordability, availability, quality, usage of financial services, financial capability, digital access, and consumer protection (Levine, 2005; Beck, Demirgüç-Kunt, & Levine, 2007; Sarma, 2008; Demirgüç-Kunt & Klapper, 2013; Demirgüç-Kunt et al., 2018; Ozili, 2021; OECD, 2023). This transformation reflects the growing understanding that financial access alone cannot improve economic welfare unless individuals actively utilise formal financial services to support productive and informed financial decisions.

The increasing importance of financial inclusion is closely associated with its contribution to poverty reduction, income generation, entrepreneurship development, and sustainable economic growth. Financial systems perform an essential role in mobilising savings, allocating financial resources efficiently, reducing transaction costs, and supporting productive investments. Earlier theoretical and empirical studies established that countries with more

developed financial systems generally experience higher levels of economic growth, stronger entrepreneurial activity, greater employment opportunities, and improved living standards (King & Levine, 1993; Levine, 2005; Beck et al., 2007). Similarly, evidence from the Global Findex Database demonstrates that greater financial inclusion strengthens household resilience by encouraging savings, facilitating access to institutional credit, and reducing dependence on informal financial sources (Demirgüç-Kunt et al., 2018). Consequently, financial inclusion is now regarded not merely as a banking initiative but as an essential instrument for achieving inclusive development and reducing socioeconomic inequality.

Over the last decade, rapid technological advancements have fundamentally transformed the financial inclusion landscape. The emergence of financial technology (FinTech), digital banking, mobile banking, Unified Payments Interface (UPI), Aadhaar-enabled Payment Systems (AePS), internet banking, QR-code payments, and electronic wallets has significantly expanded access to financial services. These technological innovations have reduced geographical barriers, transaction costs, and information asymmetry while improving the efficiency and accessibility of formal financial systems. Nevertheless, recent studies argue that technological expansion alone cannot guarantee meaningful financial inclusion because effective utilisation of digital financial services depends on financial literacy, digital capability, institutional trust, and consumer awareness (Ozili, 2021; OECD, 2023; Ha, Le, & Nguyen, 2025; Kumar & Ahuja, 2025). Accordingly, recent literature increasingly emphasises the integration of financial inclusion with financial education and digital literacy to maximise developmental outcomes.

In developing countries such as India, financial inclusion has become a strategic component of national economic policy because a substantial proportion of the population continues to depend on agriculture, informal employment, micro-enterprises, and cottage industries. Historically, limited banking infrastructure, inadequate financial awareness, collateral requirements, geographical isolation, and dependence on informal moneylenders have constrained access to institutional finance, particularly in rural areas. These challenges have restricted entrepreneurial investment, reduced productivity, and increased financial vulnerability among economically weaker households. To address these issues, the Government of India has introduced several initiatives, including the Pradhan Mantri Jan Dhan Yojana (PMJDY), Pradhan Mantri Mudra Yojana (PMMY), Stand-Up India, Direct Benefit Transfer (DBT), Digital India, Jan Dhan–Aadhaar–Mobile (JAM) Trinity, and the expansion of digital payment infrastructure. These programmes have substantially increased financial outreach and digital transactions across the country (Reserve Bank of India, 2024; NABARD, 2023). However, contemporary studies suggest that expanding account ownership alone is insufficient because many beneficiaries continue to face challenges related to financial literacy, digital competence, and effective utilisation of financial services (Rehman & Mia, 2024; Ha et al., 2025).

Financial literacy has therefore emerged as a critical determinant of financial inclusion and economic empowerment. It enables individuals to understand financial concepts, evaluate financial products, manage credit responsibly, and make informed financial decisions regarding savings, investments, insurance, and retirement planning. Previous studies consistently report that financially literate individuals are more likely to participate in formal financial markets, utilise banking services efficiently, and demonstrate stronger financial resilience during economic uncertainty (Lusardi & Mitchell, 2014; OECD, 2023; Rehman & Mia, 2024). More importantly, financial literacy strengthens entrepreneurial capability by improving budgeting, cash-flow management, investment planning, and credit utilisation. Consequently, recent researchers increasingly view financial literacy as the behavioural foundation upon which successful financial inclusion policies are built.

Among the various sectors contributing to India's rural economy, cottage industries occupy a distinctive position because of their role in employment generation, poverty reduction, income diversification, and preservation of traditional skills. These enterprises are generally characterised by small-scale production, family ownership, labour-intensive operations, and limited capital investment. Cottage industries not only provide livelihood opportunities in rural and semi-urban areas but also contribute significantly to balanced regional development by utilising local resources and indigenous knowledge. Despite their socioeconomic importance, the growth of cottage industries remains constrained by inadequate access to institutional finance, limited financial literacy, insufficient awareness of financial products, poor technological adoption, and weak market integration (Ayyagari et al., 2011; IFC, 2018; Beck, 2020; Bakhtiari et al., 2020). These challenges highlight the need for strengthening financial inclusion as a means of improving enterprise productivity and long-term sustainability.

Among the various dimensions of financial inclusion, credit availability is considered one of the most important determinants of enterprise growth. Access to timely and affordable institutional credit enables entrepreneurs to purchase raw materials, adopt improved technologies, modernise production processes, expand business operations, and respond effectively to changing market conditions. Previous studies consistently report that enterprises with greater access to formal finance demonstrate higher productivity, innovation, profitability, and employment generation than financially constrained firms (Berger & Udell, 1998; Beck et al., 2005; Beck, 2020; Ayyagari et al., 2011). However, empirical evidence also indicates that collateral requirements, procedural complexities, inadequate financial documentation, and information asymmetry continue to restrict credit accessibility for micro and cottage enterprises, particularly in developing economies (World Bank, 2022; IFC,

2018). Consequently, recent literature recommends integrating credit expansion with financial literacy, entrepreneurship development, and institutional support to maximise enterprise performance.

The effective utilisation of financial products and services represents another critical component of financial inclusion. Modern financial systems provide a wide range of products, including savings accounts, fixed deposits, insurance, pension schemes, overdraft facilities, business loans, digital payment platforms, and investment instruments. These products improve financial security, encourage savings, facilitate investment, reduce vulnerability to economic shocks, and support business expansion. Nevertheless, several studies argue that the mere availability of financial products does not ensure their adoption. Individuals with limited financial capability often underutilise available financial services because of inadequate awareness, low financial confidence, and limited understanding of financial benefits (Lusardi & Mitchell, 2014; OECD, 2023; Rehman & Mia, 2024). Therefore, recent research increasingly emphasises the integration of customer-oriented financial products with financial education to improve financial participation and inclusive development.

The growing digitalisation of financial services has further accelerated financial inclusion by improving the accessibility, efficiency, and transparency of financial transactions. FinTech innovations, mobile banking, internet banking, digital lending platforms, QR-code payments, and Unified Payments Interface (UPI) have significantly expanded financial outreach across rural and urban areas. These technological developments have reduced transaction costs, minimised geographical barriers, and strengthened financial connectivity. However, researchers also caution that digital financial inclusion depends on digital literacy, institutional trust, internet accessibility, cybersecurity awareness, and supportive regulatory frameworks (Ozili, 2021; Demirgüç-Kunt et al., 2018; Ha et al., 2025; Kumar & Ahuja, 2025). Consequently, financial inclusion policies are increasingly shifting from expanding physical banking infrastructure to strengthening digital capability and financial resilience among consumers and entrepreneurs.

Financial inclusion also plays a vital role in promoting inclusive economic development. Well-functioning financial systems improve resource allocation, stimulate entrepreneurship, encourage investment, increase employment opportunities, and enhance household income. Access to institutional finance enables enterprises to adopt modern technologies, improve production efficiency, and compete in wider markets, thereby contributing to sustainable regional development. Earlier theoretical studies established a strong relationship between financial development and long-term economic growth (King & Levine, 1993; Levine, 2005), while subsequent empirical investigations confirmed that financial inclusion reduces poverty, strengthens household resilience, and promotes social and economic development (Beck et al., 2007; Demirgüç-Kunt et al., 2018; World Bank, 2022). Recent systematic reviews further argue that financial inclusion contributes to the achievement of several Sustainable Development Goals (SDGs), particularly those related to poverty alleviation, decent work, gender equality, and inclusive economic growth (Ozili, 2021; Kumar & Ahuja, 2025).

Although financial inclusion has received considerable scholarly attention, several research gaps remain. Most previous studies have concentrated on national-level financial inclusion indicators or the broader MSME sector, whereas relatively limited evidence is available on district-level cottage industries. Existing research has generally examined financial literacy, credit availability, financial products, or enterprise growth independently, with fewer studies adopting an integrated framework that simultaneously analyses these variables. Furthermore, empirical evidence concerning the interaction between financial inclusion and local economic development remains limited in the context of Unnao district, Uttar Pradesh, despite the district's considerable dependence on agriculture, rural enterprises, and cottage industries. Addressing these gaps is important because local socioeconomic conditions, financial infrastructure, and entrepreneurial capabilities often determine the effectiveness of financial inclusion initiatives.

Against this background, the present study investigates the influence of financial literacy, financial products and services, credit availability, and financial inclusion on the growth of cottage industries and the economic development of Unnao district, Uttar Pradesh. The study adopts an integrated analytical framework to examine how these financial dimensions collectively influence enterprise performance and regional development. The findings are expected to enrich the existing literature on financial inclusion while providing practical recommendations for policymakers, financial institutions, and development agencies seeking to strengthen rural entrepreneurship and promote inclusive economic growth. By focusing on district-level evidence, the study also contributes to bridging an important gap in the literature and offers a context-specific understanding of financial inclusion in emerging regional economies.

1.1 Problem Statement

Financial inclusion has expanded considerably in India through various government initiatives; however, many cottage industry entrepreneurs continue to face challenges in accessing and effectively utilizing formal financial services. Limited financial literacy, inadequate awareness of financial products, restricted access to institutional credit, and low adoption of digital financial services hinder business growth and economic progress. Existing studies have primarily examined financial inclusion at the national or state level, with limited attention to its integrated impact on cottage industries at the district level. Therefore, there is a need to examine how financial

literacy, financial products, credit availability, and financial inclusion collectively influence the growth of cottage industries and economic development in Unnao district, Uttar Pradesh.

1.2 Significance of the Study

The present study is significant because it provides empirical evidence on the relationship between financial literacy, financial products, credit availability, financial inclusion, cottage industry growth, and economic development in Unnao district, Uttar Pradesh. The findings will help policymakers, financial institutions, NABARD, commercial banks, and government agencies formulate effective strategies to improve financial inclusion and strengthen rural entrepreneurship. The study also contributes to the existing literature by developing an integrated framework that examines multiple financial dimensions simultaneously rather than independently. Furthermore, the results will support the design of policies aimed at enhancing institutional credit, financial awareness, enterprise sustainability, employment generation, and inclusive regional economic development.

2. Literature Review

2.1 Financial Inclusion: Concept, Evolution and Importance

Financial inclusion has evolved from a banking access initiative to a comprehensive development strategy that promotes equitable access to affordable and quality financial services. Contemporary literature defines financial inclusion as the effective availability, accessibility, and utilisation of formal financial products, including savings, credit, insurance, pensions, and digital payment services. Unlike earlier perspectives that focused primarily on account ownership, recent studies emphasise active usage, financial capability, service quality, and consumer protection as essential dimensions of inclusive finance (Sarma, 2008; Demirgüç-Kunt & Klapper, 2013; Demirgüç-Kunt et al., 2018; Kumar & Ahuja, 2025).

Financial inclusion is widely recognised as a catalyst for inclusive economic growth because it expands access to productive financial resources, reduces dependence on informal lending, and strengthens household financial resilience. Earlier studies established that well-developed financial systems improve capital allocation, encourage entrepreneurship, and stimulate long-term economic growth (Levine, 2005; Beck et al., 2007). Subsequent evidence from the Global Findex Database confirmed that greater access to formal financial services promotes savings, investment, and financial security, particularly among low-income households (Demirgüç-Kunt et al., 2018).

The rapid expansion of digital financial technologies has significantly transformed the scope of financial inclusion. Fintech innovations—including mobile banking, digital payments, electronic wallets, and online lending platforms—have reduced geographical and transaction barriers, thereby extending financial services to previously excluded populations. Nevertheless, recent systematic reviews argue that digital infrastructure alone cannot ensure effective financial inclusion unless accompanied by adequate financial literacy, digital capability, and institutional trust (Ozili, 2024; Ha et al., 2025; Kumar & Ahuja, 2025).

The literature also highlights a strong association between financial inclusion and entrepreneurial development. Improved access to institutional finance enables micro and small enterprises to invest in technology, expand production, enhance productivity, and improve business sustainability. Empirical evidence suggests that firms with better financial access exhibit higher growth, innovation, and employment generation than financially constrained enterprises (Ayyagari et al., 2008; Beck et al., 2012). Consequently, financial inclusion contributes not only to enterprise competitiveness but also to regional economic development.

In India, policy initiatives such as the Pradhan Mantri Jan Dhan Yojana (PMJDY), Aadhaar-enabled banking, Unified Payments Interface (UPI), and Direct Benefit Transfer (DBT) have substantially expanded financial outreach. However, contemporary research indicates that the policy focus has shifted from expanding financial access to ensuring effective financial usage. Financial literacy, digital awareness, and institutional confidence are now recognised as critical factors influencing the sustained adoption of formal financial services (Rehman & Mia, 2024; Ha et al., 2025).

2.2 Financial Literacy and Financial Products: Drivers of Financial Inclusion

Financial literacy is widely recognised as a fundamental determinant of financial inclusion because access to financial services alone does not guarantee their effective utilisation. It encompasses the knowledge, skills, attitudes, and behavioural competencies required to make informed financial decisions regarding savings, credit, investment, insurance, and risk management. Earlier studies established that financially literate individuals exhibit stronger saving behaviour, higher participation in formal financial markets, and improved financial planning than financially illiterate individuals (Lusardi & Mitchell, 2014; OECD, 2023). More recent research further confirms that financial literacy enhances financial capability, strengthens financial resilience, and promotes sustainable financial inclusion (Rehman & Mia, 2024; Kumar & Ahuja, 2025).

Contemporary literature increasingly views financial literacy as a behavioural driver rather than merely an educational outcome. Individuals with higher financial literacy are more likely to adopt formal banking services, digital payment systems, insurance products, and investment instruments because they possess greater confidence in evaluating financial alternatives and managing financial risks. Systematic reviews also indicate that demographic characteristics, education, income, digital competence, and institutional support significantly

influence financial literacy, thereby affecting the adoption of formal financial services (Rehman & Mia, 2024; OECD, 2023).

The rapid expansion of digital financial services has further strengthened the importance of financial literacy. Mobile banking, internet banking, electronic wallets, digital lending platforms, and Unified Payments Interface (UPI) require users to possess both financial and digital competencies. Recent evidence suggests that digital financial literacy improves the safe and efficient use of financial technologies by enabling individuals to evaluate financial products, compare service providers, and minimise financial risks. However, technological innovation alone cannot eliminate financial exclusion unless accompanied by adequate financial awareness and consumer confidence (Ha et al., 2025; Ozili, 2024).

Financial products and services constitute the operational dimension of financial inclusion by providing households and enterprises with opportunities to save, borrow, invest, insure against risk, and manage financial resources effectively. Nevertheless, previous studies consistently demonstrate that the availability of financial products does not necessarily translate into their effective utilisation. Individuals with limited financial literacy frequently underutilise formal financial products despite having physical access to financial institutions. Consequently, recent literature recommends integrating financial education with customer-oriented financial product design to improve financial participation and long-term financial well-being (Kumar & Ahuja, 2025; OECD, 2023).

Financial literacy also plays a significant role in entrepreneurial development. Entrepreneurs possessing higher financial knowledge generally demonstrate better budgeting, investment planning, debt management, and working capital decisions, which improve enterprise performance and sustainability. Furthermore, financially literate entrepreneurs are more likely to obtain institutional credit, evaluate financing alternatives, and utilise financial products efficiently. These capabilities contribute to enterprise growth, business resilience, and employment generation, particularly among micro and cottage industries (Lusardi & Mitchell, 2014; Rehman & Mia, 2024).

In the Indian context, initiatives such as the National Strategy for Financial Education, PMJDY, financial awareness campaigns by the Reserve Bank of India (RBI), and NABARD programmes have substantially improved financial awareness. Nevertheless, disparities in financial literacy persist across rural–urban regions, gender, education, and income groups, limiting the effective utilisation of formal financial services. Therefore, recent studies emphasise that financial literacy should be treated as a continuous developmental process supporting financial inclusion, entrepreneurship, and inclusive economic growth rather than as a one-time educational intervention.

2.3 Credit Availability, Cottage Industry Growth and Economic Development

Credit availability is widely recognised as a key determinant of the growth and sustainability of micro, small, and cottage industries. Timely and affordable access to finance enables enterprises to purchase raw materials, adopt improved technologies, expand production capacity, and strengthen market competitiveness. However, small enterprises continue to face greater financing constraints than large firms because of limited collateral, information asymmetry, inadequate financial records, and restricted access to formal lending institutions (Berger & Udell, 1998; Beck et al., 2005; Beck, 2020). These constraints often limit business expansion, productivity, and long-term sustainability.

Extensive empirical evidence confirms a positive relationship between credit availability and enterprise performance. Firms with improved access to institutional finance generally report higher investment, employment generation, innovation, and productivity than financially constrained enterprises (Ayyagari et al., 2011; Bakhtiari et al., 2020). Recent studies further indicate that affordable credit improves business resilience by enabling enterprises to respond effectively to market opportunities and economic uncertainties. Nevertheless, researchers argue that credit programmes alone are insufficient unless supported by favourable institutional policies, financial capability, and entrepreneurial skills.

Cottage industries play a vital role in employment generation, income diversification, and rural economic development, particularly in developing economies. Despite their economic significance, these enterprises continue to experience substantial financing challenges. Previous studies identify limited access to formal credit as one of the principal barriers to enterprise growth, technological adoption, and market expansion. Consequently, recent literature recommends integrating credit support with entrepreneurship development, managerial training, and financial literacy to maximise enterprise performance and sustainability.

The Indian MSME sector reflects similar challenges despite significant policy interventions. Government initiatives have expanded financial outreach; however, many enterprises remain underserved because of collateral requirements, weak credit histories, limited documentation, and inadequate financial awareness. Recent evidence suggests that financial institutions should adopt flexible lending models, simplify credit procedures, and develop financial products tailored to the operational characteristics of micro and cottage enterprises. Such reforms can improve financial accessibility while reducing dependence on informal sources of finance.

A growing body of literature also highlights the complementary relationship between credit availability, financial literacy, and financial inclusion. Financially literate entrepreneurs are more capable of evaluating financing alternatives, accessing institutional credit, and utilising borrowed funds efficiently. Consequently, enterprise

growth depends not only on the availability of credit but also on entrepreneurs' financial capability and managerial competence (Rekha et al., 2025; Njue & Wanjare, 2025). This integrated perspective suggests that financial inclusion policies should simultaneously strengthen financial education, credit accessibility, and institutional support to achieve sustainable enterprise development.

2.4 Critical Review, Research Gap and Chapter Summary

The reviewed literature consistently identifies financial inclusion as a multidimensional concept that extends beyond access to banking services and incorporates financial literacy, credit availability, digital financial services, and the effective use of financial products. Earlier studies primarily measured financial inclusion through banking outreach and account ownership (Sarma, 2008; Demirgüç-Kunt & Klapper, 2013), whereas recent research emphasises financial capability, digital adoption, service quality, and institutional support as key determinants of meaningful financial participation (Demirgüç-Kunt et al., 2018; Ozili, 2024; Kumar & Ahuja, 2025). This shift indicates that access alone is insufficient unless financial services are actively utilised to improve household welfare and enterprise performance.

The literature further demonstrates a strong association between financial literacy and financial inclusion. Financially literate individuals are more likely to adopt formal financial services, utilise financial products efficiently, and make informed financial decisions, thereby improving entrepreneurial performance and financial resilience (Lusardi & Mitchell, 2014; OECD, 2023; Rehman & Mia, 2024). Similarly, previous studies confirm that timely access to institutional credit enhances investment, productivity, innovation, and employment generation among micro and small enterprises (Berger & Udell, 1998; Beck et al., 2005; Ayyagari et al., 2011). However, recent evidence suggests that the effectiveness of credit depends on complementary factors such as financial literacy, managerial capability, institutional support, and appropriate financial products.

Another important development in the literature is the growing role of digital financial inclusion. Advances in fintech, digital banking, mobile payments, and online financial services have expanded financial access across developing economies. Nevertheless, scholars argue that technological innovation alone cannot eliminate financial exclusion unless supported by digital literacy, consumer awareness, and an enabling regulatory environment (Ha et al., 2025; Ozili, 2024). Consequently, recent research increasingly advocates an integrated approach in which financial literacy, digital capability, financial inclusion, and credit accessibility jointly promote entrepreneurship and inclusive economic growth.

Despite these significant contributions, several limitations remain. Most empirical studies examine financial inclusion, financial literacy, credit accessibility, or enterprise performance independently, while relatively few investigate their combined influence within a single analytical framework. Furthermore, existing research largely concentrates on national or state-level data, with limited evidence from district-level economies, particularly concerning cottage industries in Uttar Pradesh. The impact of financial products and financial inclusion on local enterprise development therefore remains insufficiently explored.

The present study addresses these gaps by developing an integrated framework that examines the relationships among financial literacy, financial products and services, credit availability, financial inclusion, cottage industry growth, and economic development in Unnao district, Uttar Pradesh. Unlike previous studies that focus on isolated financial dimensions, this research provides a comprehensive assessment of how these factors collectively influence enterprise development and regional economic growth. The findings are expected to contribute to both academic literature and policy formulation by offering evidence-based recommendations for strengthening financial inclusion and promoting sustainable economic development.

2.5 Research Gap

Based on the critical review of the literature, the following research gaps have been identified:

Most previous studies focus on financial inclusion at the national or state level, whereas empirical evidence from district-level economies, particularly Unnao district, remains limited.

Existing research generally examines financial literacy, financial inclusion, credit availability, and financial products as separate constructs rather than investigating their integrated influence on cottage industry growth.

Limited studies have explored the combined contribution of financial inclusion and financial literacy to the sustainable growth of cottage industries and regional economic development.

Although digital financial services have expanded significantly, empirical evidence regarding their effectiveness in strengthening rural enterprises and promoting local economic development is still inadequate.

There is a need for a comprehensive framework that simultaneously explains the relationships among financial literacy, financial products, credit availability, financial inclusion, cottage industry growth, and economic development, particularly in the context of rural and semi-urban economies.

2.6 Research Objectives

To examine the impact of credit availability on the growth of cottage industries in Unnao district.

To analyze the relationship between financial literacy and the use of financial products and services among the people of Unnao district.

To examine the relationship between financial inclusion and the overall economic development of Unnao district.

2.7 Hypotheses

H₀₁: There is no significant relationship between credit availability and the growth of cottage industries in Unnao district.

H₀₂: There is no significant relationship between financial literacy and the use of financial products and services in Unnao district.

H₀₃: There is no significant relationship between financial inclusion and the overall economic development of Unnao district.

3. Research Methodology

3.1 Research Design

The present study adopted a quantitative research approach using a descriptive and analytical research design to examine the relationship between financial inclusion, credit availability, financial literacy, financial products, cottage industry growth, and economic development in Unnao district, Uttar Pradesh. A quantitative research design is appropriate for collecting numerical data and testing hypotheses using statistical techniques (Creswell & Creswell, 2018). Descriptive research helps describe the characteristics of respondents and study variables, whereas analytical research enables the examination of relationships among variables (Kothari, 2004).

3.2 Study Area

The study was conducted in Unnao district, Uttar Pradesh, India. The district comprises both rural and urban populations where agriculture, cottage industries, and small enterprises contribute significantly to employment and income generation. The expansion of financial inclusion initiatives such as banking services, digital payments, institutional credit, and government financial schemes makes the district suitable for examining the relationship between financial inclusion and economic development.

3.3 Population of the Study

The target population consisted of owners of cottage industries, self-employed individuals, farmers, small entrepreneurs, and adults using formal financial services in Unnao district.

3.4 Sample Size

A total of 400 respondents participated in the study. The selected sample size was considered adequate to achieve the research objectives and perform statistical analysis.

3.5 Sampling Technique

The respondents were selected using the Convenience Sampling Technique, a non-probability sampling method in which participants are chosen based on their accessibility and willingness to participate in the study (Etikan et al., 2016).

3.6 Sources of Data

The study used both primary and secondary data. Primary data were collected through a structured questionnaire, whereas secondary data were obtained from books, peer-reviewed journals, RBI publications, NABARD reports, government reports, policy documents, and other academic sources related to financial inclusion and economic development.

3.7 Research Instrument

Primary data were collected using a structured questionnaire consisting of demographic information and statements measuring Financial Literacy, Credit Availability, Financial Products, Growth of Cottage Industry, and Economic Development.

3.8 Measurement Scale

The questionnaire items were measured using a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The Likert scale is widely used in behavioural and social science research because it effectively measures respondents' attitudes, opinions, and perceptions (Likert, 1932).

3.9 Reliability Analysis

The internal consistency of the research instrument was assessed using Cronbach's Alpha, one of the most widely accepted measures of scale reliability (Cronbach, 1951). According to Nunnally and Bernstein (1994), a Cronbach's Alpha value of 0.70 or above indicates acceptable reliability, while Hair et al. (2022) suggest that values above 0.90 demonstrate excellent internal consistency. In the present study, the reliability coefficients for the study constructs ranged from 0.940 to 0.966, indicating excellent reliability. Furthermore, the corrected item-total correlation values exceeded the recommended threshold, and the Cronbach's Alpha if Item Deleted values were lower than the original alpha coefficients, confirming that all questionnaire items contributed positively to their respective constructs. Therefore, the research instrument was considered reliable and appropriate for further statistical analysis.

3.10 Data Analysis Techniques

After data collection, the responses were coded and analysed using IBM SPSS Statistics. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the characteristics of the respondents and the study variables. Since the data were collected using a Likert scale and analysed as ordinal data, Spearman's rho correlation analysis was employed to examine the relationships among the variables

(Field, 2018). Scatter plots were also used to provide a graphical representation of the relationships. All hypotheses were tested at the 5% level of significance ($p < 0.05$).

Data Analysis

The data collected from 400 respondents were systematically analysed to achieve the objectives of the study and test the proposed hypotheses. Descriptive statistics were used to summarize the respondents' characteristics and key study variables. Spearman's rho correlation analysis was applied to examine the relationships among credit availability, financial literacy, financial inclusion, financial products and services, cottage industry growth, and economic development. The analysis was performed using IBM SPSS Statistics, and all hypotheses were tested at the 5% level of significance ($p < 0.05$). The findings are presented through tables and scatter plots to provide a clear understanding of the relationships between the study variables and to support meaningful interpretation of the results.

H₀₁: There is no significant relationship between credit availability and the growth of cottage industries in Unnao district.

Table-1 Correlations

Correlations				
			Credit Availability	Growth of Cottage Industry
Spearman's rho	Credit Availability	Correlation Coefficient	1.000	.695**
		Sig. (2-tailed)	.	.000
		N	400	400
	Growth of Cottage Industry	Correlation Coefficient	.695**	1.000
		Sig. (2-tailed)	.000	.
		N	400	400

** . Correlation is significant at the 0.05 level (2-tailed).

The relationship between credit availability and the growth of cottage industries was examined using Spearman's rho correlation analysis. The results indicate a correlation coefficient of 0.695, showing a strong positive relationship between the two variables. This means that as access to credit increases, the growth of cottage industries also tends to improve. The positive coefficient suggests that both variables move in the same direction, indicating that better financial access supports industrial growth. The significance value ($p = 0.000$) is lower than the accepted level of 0.05, which confirms that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that credit availability has a significant positive association with the growth of cottage industries. The findings suggest that access to credit plays an important role in strengthening cottage industries. Financial support enables entrepreneurs to purchase raw materials, adopt improved technologies, expand production capacity, and manage day-to-day business operations more effectively. It also provides opportunities to introduce new products, improve product quality, and explore wider markets. As a result, enterprises become more productive and competitive, leading to sustainable business growth.

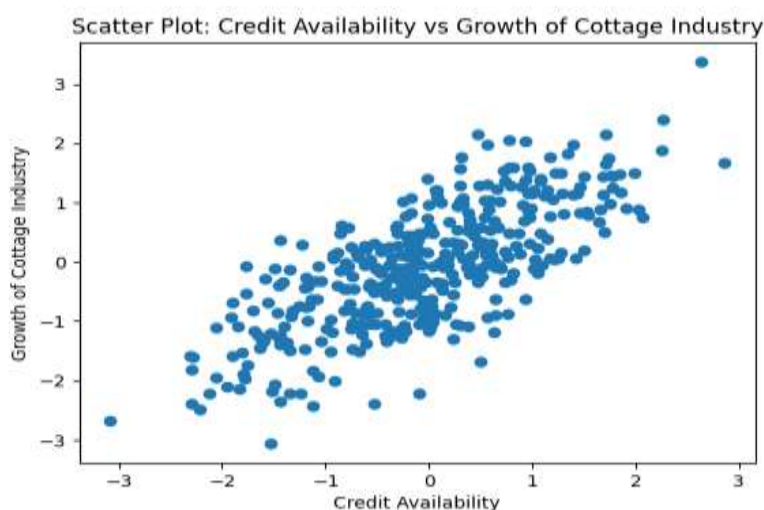


Figure 1: Scatter Plot Showing the Relationship Between Credit Availability and Growth of Cottage Industries

The scatter plot shows a clear positive relationship between credit availability and the growth of cottage industries. Most of the data points follow an upward trend, indicating that higher access to credit is associated with greater industrial growth. Although a few observations are scattered away from the main pattern, the overall distribution confirms a strong positive association between the two variables. This visual evidence is consistent with the statistical result obtained from Spearman's rho ($r = 0.695$, $p < 0.05$), indicating that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that improved credit availability plays an important role in supporting the growth and development of cottage industries.

H₀₂: There is no significant relationship between financial literacy and the use of financial products and services in Unnao district.

Table-2 Correlations

Table 2: Correlations				
Correlations			Financial Literacy	Financial Product
Spearman's rho	Financial Literacy	Correlation Coefficient	1.000	.774
		Sig. (2-tailed)	.	.000
		N	400	400
	Financial Product	Correlation Coefficient	.774	1.000
		Sig. (2-tailed)	.000	.
		N	400	400
**, Correlation is significant at the 0.05 level (2-tailed).				

The relationship between financial literacy and financial products/services was examined using Spearman's rho correlation analysis. The results show a correlation coefficient of 0.774, indicating a strong positive relationship between the two variables. This means that individuals with higher levels of financial literacy are more likely to use financial products and services. The positive correlation suggests that both variables increase together, reflecting the important role of financial knowledge in promoting the use of formal financial services. The significance value ($p=0.000$) is lower than the accepted level of 0.05, confirming that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that financial literacy has a significant positive relationship with the use of financial products and services. The findings indicate that financially literate individuals are better able to understand and utilize banking services, insurance, savings schemes, investment options, and other financial products. This improves their financial decision-making, encourages effective financial planning, and supports greater financial inclusion. Overall, the study demonstrates that financial literacy is an important factor in increasing the awareness and use of financial products and services.

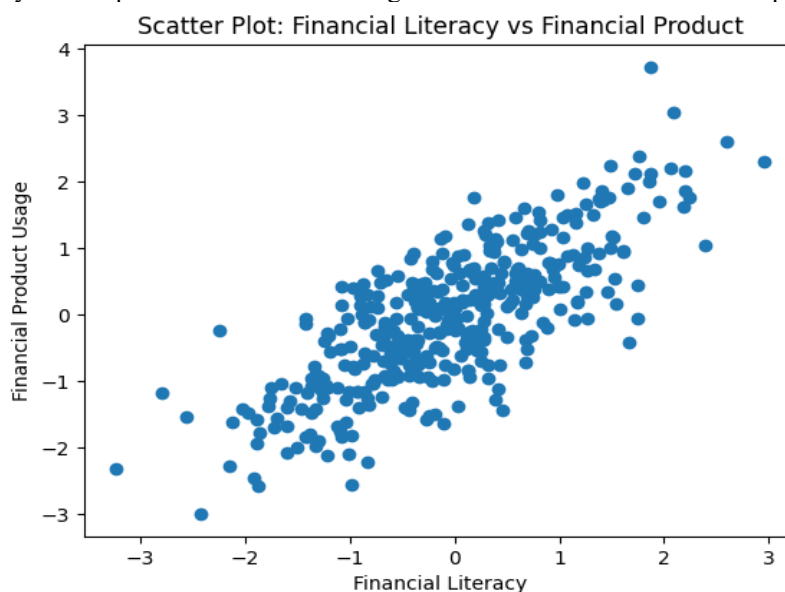


Figure 2: Scatter Plot Showing the Relationship Between Financial Literacy and the Use of Financial Products and Services

The scatter plot shows a clear positive relationship between financial literacy and the use of financial products and services. Most of the data points are distributed along an upward trend, indicating that individuals with higher financial literacy are more likely to use financial products and services. Although a few observations are scattered away from the main pattern, the overall distribution demonstrates a strong positive association between the two variables. This visual evidence is consistent with the statistical findings of Spearman's rho ($r = 0.774$, $p < 0.05$), confirming that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that financial literacy plays a significant role in increasing the awareness and use of financial products and services.

H₀₃: There is no significant relationship between financial inclusion and the overall economic development of Unnao district.

Table-3 Correlations

Correlations			Financial Inclusion	Economic Development
Spearman's rho	Financial Inclusion	Correlation Coefficient	1.000	.755
		Sig. (2-tailed)	.	.000
		N	400	400
	Economic Development	Correlation Coefficient	.755	1.000
		Sig. (2-tailed)	.000	.
		N	400	400

**. Correlation is significant at the 0.05 level (2-tailed).

The relationship between financial inclusion and the overall economic development of Unnao district was examined using Spearman's rho correlation analysis. The results show a correlation coefficient of 0.755, indicating a strong positive relationship between the two variables. This means that higher levels of financial inclusion are associated with greater economic development in the district. The positive correlation suggests that improvements in access to financial services contribute to better economic outcomes. The significance value ($p = 0.000$) is lower than the accepted level of 0.05, confirming that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that financial inclusion has a significant positive relationship with the overall economic development of Unnao district. The findings suggest that greater access to banking services, credit facilities, insurance, and savings instruments encourages investment, supports business activities, increases employment opportunities, and improves household income. As a result, financial inclusion contributes to sustainable economic growth and enhances the overall development of the district.

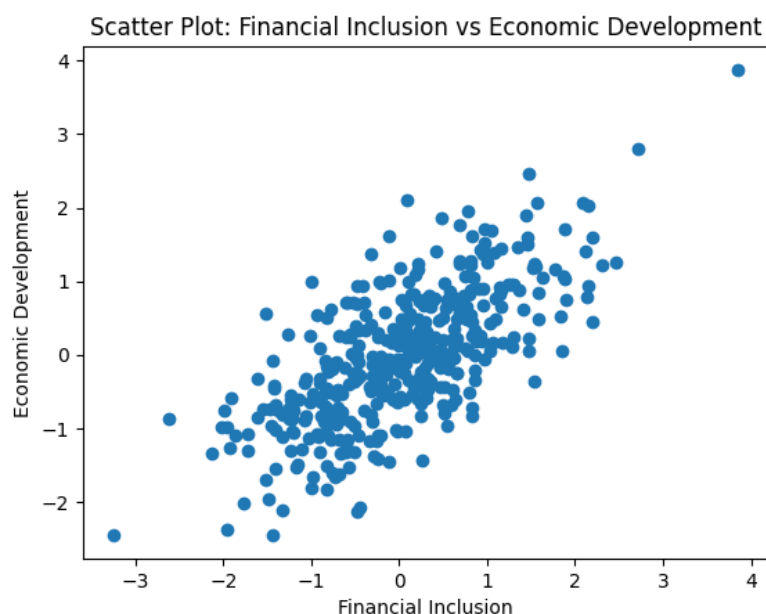


Figure 3: Scatter Plot Showing the Relationship Between Financial Inclusion and Economic Development

The scatter plot shows a clear positive relationship between financial inclusion and the overall economic development of Unnao district. Most of the data points follow an upward trend, indicating that higher levels of financial inclusion are associated with greater economic development. The close and nearly linear distribution of the observations suggests a strong relationship between the two variables. This visual pattern supports the statistical findings of Spearman's rho ($r=0.755$, $p < 0.05$), confirming that the relationship is statistically significant. Therefore, the null hypothesis is rejected, and it can be concluded that financial inclusion is an important factor in promoting the overall economic development of Unnao district.

Discussion

The present study examined the relationship between credit availability, financial literacy, financial products and services, financial inclusion, and economic development in the context of Unnao district. The findings revealed significant positive relationships among all the variables, indicating that financial inclusion plays a crucial role in promoting entrepreneurship and local economic development. The correlation analysis showed that credit availability is positively associated with the growth of cottage industries ($r = 0.695$, $p < 0.05$), financial literacy is strongly related to the use of financial products and services ($r = 0.774$, $p < 0.05$), and financial inclusion has a significant positive relationship with the overall economic development of the district ($r = 0.755$, $p < 0.05$). These results suggest that better access to financial resources and financial knowledge contributes to sustainable economic progress. One possible explanation for these findings is that access to formal financial services enables entrepreneurs and households to make better financial decisions. Easy availability of credit allows cottage industry owners to purchase raw materials, adopt modern technology, expand production, and improve product quality. Similarly, individuals with higher financial literacy are more likely to understand banking services, savings schemes, insurance, and digital payment systems, leading to greater use of financial products. Increased participation in the formal financial system encourages investment, income generation, and employment creation, which ultimately contributes to economic development.

The findings are consistent with previous studies. Beck, Demirgüç-Kunt, and Levine (2007) reported that financial development promotes economic growth by improving access to financial resources. Demirgüç-Kunt and Klapper (2013) emphasized that financial inclusion enhances household welfare and supports economic participation. Similarly, Sarma and Pais (2011) found that greater financial inclusion is associated with higher levels of economic development across countries. Studies by Karlan et al. (2016) and Grohmann, Klühs, and Menkhoff (2018) also highlighted that financial literacy increases the effective use of financial services and improves financial decision-making.

The findings have important practical implications for policymakers and financial institutions. Expanding affordable credit facilities, strengthening financial literacy programmes, and improving access to formal financial services can enhance the performance of cottage industries and support inclusive economic growth. Government agencies, banks, and development institutions should continue promoting financial awareness and simplifying access to financial products, particularly in rural and semi-urban areas. Overall, the study demonstrates that strengthening financial inclusion can contribute significantly to entrepreneurship development, employment generation, and sustainable economic development in Unnao district.

Conclusion

The present study examined the relationship between credit availability, financial literacy, financial inclusion, and economic development, with particular emphasis on the growth of cottage industries in Unnao district. The findings provide strong evidence that financial inclusion plays a significant role in supporting entrepreneurship and promoting sustainable economic development. The results of the Spearman's rho correlation analysis revealed statistically significant positive relationships between credit availability and the growth of cottage industries, financial literacy and the use of financial products and services, and financial inclusion and the overall economic development of the district. Therefore, all the null hypotheses were rejected, confirming that these financial factors are closely associated with economic progress. The study demonstrates that access to affordable credit enables cottage industry entrepreneurs to invest in production, purchase quality raw materials, adopt improved technologies, and expand their business operations. Similarly, higher levels of financial literacy encourage individuals to make informed financial decisions and increase their use of formal financial products such as savings accounts, insurance, loans, and digital payment services. Greater financial inclusion also supports income generation, employment creation, and investment activities, thereby contributing to the overall economic development of the region. The findings have important implications for policymakers, financial institutions, and development agencies. Expanding access to affordable credit, strengthening financial literacy programmes, and improving the availability of financial services can significantly enhance the performance of cottage industries and promote inclusive economic growth. Government initiatives aimed at supporting small entrepreneurs should continue to focus on reducing financial barriers and increasing awareness of formal financial services, particularly in rural and semi-urban areas. Banks and other financial institutions should also simplify lending procedures and encourage the adoption of digital financial services to improve financial accessibility.

This study contributes to the existing literature by providing empirical evidence from Unnao district, where limited research has examined the combined role of credit availability, financial literacy, and financial inclusion in promoting cottage industry development and economic growth. Although the study provides valuable insights, it is limited to one district and a specific sample. Future research may extend this work by including larger geographical areas, additional socioeconomic variables, or advanced analytical techniques such as Structural Equation Modelling (SEM) to provide a deeper understanding of these relationships. Overall, the study concludes that strengthening financial inclusion through improved credit access and financial literacy is essential for supporting cottage industries and achieving sustainable and inclusive economic development..

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