

A Study on Financial Inclusion among Scheduled Tribes in Kerala

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Abstract

Financial inclusion is a critical aspect of economic development, particularly for marginalized communities such as Scheduled Tribes in Kerala. This study examines the levels of financial inclusion among three key districts in Kerala—Wayanad, Idukki, and Thrissur—focusing on specific tribal subgroups: **Paniyan**, **Kurichyan**, **Kuruman**, **Mala Arayan**, **Muduvan**, **Mannan**, **Malayan**, **Kadar**, and **Ullatan**. By exploring awareness of financial products, comfort with digital banking, satisfaction with financial services, and financial management practices, the study provides a comprehensive analysis of the barriers and enablers of financial inclusion for these communities.

A structured questionnaire was employed to gather data from 120 respondents across the three districts. The analysis revealed significant disparities in financial inclusion levels among tribal groups. Groups such as **Paniyan** in Wayanad, **Mala Arayan** in Idukki, and **Malayan** in Thrissur displayed **low financial inclusion**, citing limited awareness, technological barriers, and lack of access to financial education programs. Conversely, groups such as **Kuruman** in Wayanad, **Mannan** in Idukki, and **Ullatan** in Thrissur exhibited **high levels of inclusion**, attributed to better access to financial services, higher awareness, and proactive financial management practices.

The study underscores the need for targeted interventions, including awareness campaigns, financial literacy programs, and infrastructure development, to address the specific challenges faced by low-inclusion groups. By identifying the gaps and strengths in financial inclusion across districts and subgroups, this research provides actionable insights for policymakers and financial institutions to foster equitable economic growth for Kerala's tribal communities.

Keywords: Financial Inclusion, Scheduled Tribes of Kerala, Financial Literacy, Tribal Subgroups

INTRODUCTION

Financial inclusion is the process of ensuring that all individuals and businesses, regardless of income level or location, have access to affordable and essential financial services. These services include basic banking, credit, insurance, and payment facilities, which are crucial for participating in a modern economy. The concept of financial inclusion has gained global importance in recent years, with governments, international organizations, and financial institutions advocating for widespread access as a means to reduce poverty, promote economic development, and foster financial stability.

In India, financial inclusion has been a long-standing policy objective. Recognizing that a large portion of the population remained outside the formal financial system, the Government of India has implemented numerous policies and programs to bring banking services to the unbanked. Initiatives like the Pradhan

Mantri Jan Dhan Yojana (PMJDY), which opened millions of bank accounts, the Aadhaar-based payment system, and the expansion of digital payment networks have been instrumental in bringing more people into the financial fold. Additionally, the Reserve Bank of India (RBI) has encouraged the development of infrastructure for inclusive banking, particularly in rural and underserved areas, through measures like the Business Correspondent (BC) model and the rollout of financial literacy programs.

Despite these initiatives, financial inclusion remains a challenge for marginalized communities, particularly the Scheduled Tribes (STs). According to various studies, STs are among the most economically and socially disadvantaged groups in India, often facing a high degree of poverty, illiteracy, and social exclusion. These communities, due to their geographic isolation, cultural distinctiveness, and historical marginalization, have found it difficult to access mainstream financial services. The need to address financial exclusion among STs is vital not only from an economic perspective but also from a social justice standpoint, as financial inclusion can play a pivotal role in enabling these communities to achieve economic independence and social equality.

FINANCIAL INCLUSION IN KERALA

Kerala stands out in India for its progressive social indicators, including high literacy rates, life expectancy, and healthcare access. These achievements, often referred to as the "Kerala Model" of development, have contributed to the state's reputation as a leader in human development. However, financial inclusion among Kerala's Scheduled Tribes remains a significant area of concern. The ST population in Kerala, though relatively small, resides predominantly in remote and underdeveloped regions, particularly in the hilly and forested areas of northern districts like Wayanad and Idukki. These areas face infrastructural challenges that hinder access to formal banking services, and many ST members lack financial literacy, limiting their awareness of and participation in formal financial services.

Moreover, Kerala's diverse geographical divisions—southern, central, and northern zones—add a layer of complexity to financial inclusion efforts. Each region presents unique socio-economic and infrastructural characteristics that impact the accessibility of financial services for STs. For instance:

- **Southern Zone:** This region includes more urbanized areas like Thiruvananthapuram, where financial infrastructure is better developed. However, urban ST communities may still face exclusion due to cultural barriers and financial illiteracy.
- **Central Zone:** This area has a mixed economy and includes semi-urban areas with moderate access to financial services. Yet, financial participation among STs remains low due to limited targeted outreach.
- **Northern Zone:** Characterized by hilly and tribal-dominated regions, this zone faces severe limitations in terms of banking infrastructure, with some areas lacking even basic facilities like ATMs and bank branches.

Importance of Financial Inclusion for Economic and Social Development

Financial inclusion has far-reaching benefits that go beyond providing basic banking services. It enables marginalized communities to engage more fully in economic activities, improve their living standards, and create a pathway out of poverty. For Scheduled Tribes, access to financial services can support small-scale entrepreneurship, enable productive investments, and help households manage risks associated with health, agriculture, and other livelihood activities.

Through financial inclusion, STs can gain access to credit and insurance, which can serve as safety nets against economic shocks. Additionally, savings products help build financial resilience and encourage

planning for future needs, such as children's education, healthcare, or farming inputs. Furthermore, financial literacy, as part of the inclusion process, empowers ST communities to make informed financial decisions, protecting them from exploitative lending practices and enabling sustainable economic development within their communities.

Financial inclusion for STs in Kerala also holds potential for social transformation, bridging the gap between mainstream economic participation and traditional livelihoods. By addressing the unique challenges that STs face in accessing financial services, this study aims to explore ways to enhance socio-economic equity within Kerala and serve as a model for financial inclusion efforts targeting marginalized groups across India

SCHEDULED TRIBES IN KERALA

Scheduled Tribes (STs) represent one of the most marginalized communities in India. Historically, they have faced economic, social, and political exclusion, and have unique cultural identities, often living in distinct and geographically isolated regions. According to the 2011 Census, Scheduled Tribes comprise around 1.45% of Kerala's population, making them a minority within the state. Although the proportion is small, Kerala's ST communities are significant in terms of cultural diversity and social history. Some of the primary ST groups in Kerala include the Paniyas, Kurichiyans, Kurumans, Muthuvans, and Irulas, each with unique languages, traditions, and social practices.

Geographic Distribution of STs in Kerala

The ST population in Kerala is primarily concentrated in the hilly and forested regions of the state, particularly in the districts of Wayanad, Idukki, and Palakkad, with smaller communities in other regions. This distribution has significant implications for the socio-economic status of STs, as these areas are often less developed in terms of infrastructure, including roads, healthcare, and educational facilities.

Key Zones of ST Distribution in Kerala:

1. **Northern Zone:** The northern districts of Wayanad and Kannur have the highest concentration of ST populations. Wayanad, in particular, is home to several tribal communities, such as the Paniya, Kurichian, and Adiya tribes, who primarily engage in agricultural labor or small-scale farming. Due to its rugged, mountainous terrain, access to basic amenities, including banks and financial institutions, remains limited.
2. **Central Zone:** This region includes districts like Palakkad and parts of Thrissur, where the Irula and Muduga tribes are predominant. ST communities in these areas live in semi-urban and rural settings, where the accessibility of infrastructure is moderate but may vary widely depending on the specific location. While there is relatively better access to social services than in the north, financial inclusion remains a challenge due to cultural barriers and limited financial literacy.
3. **Southern Zone:** In the southern areas of Kerala, particularly in the districts of Idukki and parts of Pathanamthitta, tribal groups such as the Muthuvan and Mannan reside. These communities are typically more isolated, with limited infrastructure due to the hilly terrain. Traditional practices are still prevalent, and financial literacy and access to formal banking are minimal.

SOCIO-ECONOMIC STATUS OF STS IN KERALA

Despite Kerala's strong overall human development indicators, the socio-economic status of its ST communities remains concerning. Scheduled Tribes in Kerala have lower literacy rates, higher poverty levels, and limited access to healthcare, compared to the state's non-tribal population. Although Kerala

boasts one of the highest literacy rates in India, the literacy rate among STs is significantly lower, reflecting historical and systemic neglect in education for these communities.

1. **Education:** Although some progress has been made in recent decades, the literacy rate among STs still lags behind the general population. Many tribal children drop out of school due to financial difficulties, lack of transportation, or cultural factors that discourage formal education. In addition, the curriculum is not always sensitive to the cultural needs of ST communities, which may further alienate these students from the mainstream educational system.
2. **Employment:** Most ST members in Kerala work in agriculture or forest-related activities, with many employed as daily wage laborers. A lack of formal employment opportunities and limited access to skill development programs keeps a large portion of the ST population in low-income, unstable jobs. This precarious economic position underscores the need for financial inclusion, as access to credit, insurance, and savings could help these communities build financial resilience.
3. **Housing and Living Conditions:** STs in Kerala often live in poor housing conditions, particularly in the remote areas of Wayanad, Idukki, and Palakkad, where infrastructural development is limited. Basic facilities like electricity, clean drinking water, and sanitation are lacking in many ST villages, contributing to a lower quality of life and heightened vulnerability to health issues.
4. **Healthcare:** Access to healthcare is a persistent challenge for Kerala's ST communities, especially in remote locations. The combination of poor infrastructure, difficult terrain, and cultural resistance to formal healthcare systems has led to lower health outcomes among STs. Malnutrition, poor maternal health, and inadequate immunization rates are common concerns.

FINANCIAL EXCLUSION AMONG STS IN KERALA

One of the most pressing issues for Kerala's STs is financial exclusion. Despite the national push for financial inclusion, the unique challenges faced by ST communities in accessing financial services have left many of them outside the formal financial system. Some key barriers include:

1. **Geographic Isolation:** The remote locations of many ST communities make access to banking services challenging. Physical infrastructure, such as bank branches or ATMs, is scarce in these areas, and reaching the nearest facility may require long, difficult travel.
2. **Cultural Barriers:** Many STs have historically relied on traditional forms of credit and savings, such as community funds or informal lending, and may be unfamiliar or mistrustful of formal banking institutions. Language and cultural differences also play a role, as bank staff may not be equipped to communicate effectively with tribal customers or understand their unique needs.
3. **Financial Literacy:** Limited education and low levels of financial literacy among ST communities contribute significantly to financial exclusion. Many ST members are unaware of available banking services, government programs, or the benefits of financial planning, preventing them from making informed financial decisions.
4. **Lack of Customized Financial Products:** The financial needs of STs often differ from the general population due to their unique socio-economic conditions. However, banks and financial institutions in Kerala largely offer standardized products that do not address the specific needs of tribal communities, such as small-scale loans for traditional occupations or low-interest emergency credit.

Government and Policy Initiatives

The government has introduced several initiatives aimed at improving financial inclusion and supporting

the socio-economic development of ST communities in Kerala. Key programs include:

- Pradhan Mantri Jan Dhan Yojana (PMJDY): This scheme aims to provide basic banking services to all households. Although it has succeeded in opening millions of bank accounts nationwide, its effectiveness in reaching Kerala's ST population remains limited due to the barriers mentioned above.
- Tribal Sub-Plan (TSP): Under the TSP, financial allocations are made specifically for the welfare of tribal communities. The TSP in Kerala includes initiatives for improving infrastructure in tribal areas, as well as targeted social programs in education, healthcare, and skill development.
- Business Correspondent (BC) Model: The BC model allows financial institutions to reach remote areas through local representatives who offer basic banking services. While this has been helpful in extending banking services to some tribal areas, there are still gaps in coverage, and further expansion is needed.

STATEMENT OF THE PROBLEM

Despite significant efforts by the Indian government and financial institutions to promote financial inclusion, the Scheduled Tribe (ST) communities in India, particularly those in Kerala, remain economically and socially marginalized. While Kerala is often celebrated for its high human development indicators—including high literacy rates, life expectancy, and progressive social policies—many ST communities in the state continue to lack access to essential financial services. These communities often reside in remote, rural, or hilly areas, where banking infrastructure is minimal or entirely absent, creating geographic barriers that prevent access to formal financial institutions.

Financial inclusion encompasses more than mere access to banking services; it includes the meaningful usage of credit, insurance, savings, and digital financial services that empower individuals to participate in the economy and build financial security. However, in Kerala's ST communities, low levels of financial literacy, cultural mistrust of formal institutions, and lack of awareness about available services hinder this participation. This exclusion leaves these communities vulnerable to predatory informal lenders, poverty traps, and limited upward mobility.

REVIEW OF LITERATURE

Agarwal, R., & Hazarika, B. (2017)

Agarwal and Hazarika (2017) explore financial literacy and inclusion in rural tribal areas, with a focus on households in India. They found that financial inclusion is highly correlated with household income and access to digital financial services, though challenges persist due to limited awareness and education among tribal populations. The study highlights the need for targeted financial literacy programs in tribal regions.

Bansal, M., & Rani, R. (2018)

Bansal and Rani (2018) examine financial inclusion among rural tribal communities, identifying significant barriers such as geographical isolation, illiteracy, and low digital literacy. Their research stresses the importance of enhancing financial literacy through localized programs and emphasizes the role of government schemes in promoting inclusion.

Chakrabarty, K. C. (2013)

Chakrabarty (2013) discusses financial inclusion from a global perspective, focusing on the importance of access to financial services for marginalized communities. The paper suggests that despite policy

efforts, tribal populations in India continue to face challenges such as lack of banking infrastructure and awareness, which hinder their financial inclusion.

Das, P., & Sahoo, S. (2017)

Das and Sahoo (2017) investigate the impact of financial literacy on financial inclusion in rural India, with particular reference to tribal communities. Their findings suggest that financial literacy is directly linked to better financial decision-making, and improving financial literacy can significantly enhance financial inclusion in tribal areas.

De, R., & Singh, M. (2020)

De and Singh (2020) analyze financial inclusion among tribal populations, concluding that social and cultural factors, such as distrust in formal banking institutions and reliance on traditional moneylenders, impede financial inclusion. They recommend that financial institutions collaborate with local communities to build trust and offer services tailored to tribal needs.

Dube, A., & Rai, V. (2016)

Dube and Rai (2016) review government schemes and their effectiveness in empowering tribal women through financial inclusion. They argue that while financial inclusion programs show promise, there is still a gap in reaching the most marginalized tribal women, who lack awareness and accessibility to financial services.

Ghosh, S., & Roy, D. (2015)

Ghosh and Roy (2015) explore the role of financial inclusion in empowering tribal women, highlighting how the introduction of microfinance and digital banking has positively impacted their economic independence. However, they emphasize the need for targeted interventions for those who remain outside the formal financial system.

Jha, A., & Kumar, N. (2017)

Jha and Kumar (2017) examine the intersection of financial literacy and financial behavior among scheduled tribes, suggesting that a lack of knowledge about banking services leads to poor financial behavior. The study calls for localized, culturally sensitive financial education programs to improve both literacy and inclusion.

Joshi, R., & Sharma, P. (2018)

Joshi and Sharma (2018) explore the impact of digital financial literacy on financial inclusion in rural areas, concluding that increasing digital literacy among tribal communities can lead to greater financial inclusion, especially through mobile banking and e-wallets.

Khandelwal, P., & Singh, M. (2019)

Khandelwal and Singh (2019) focus on mobile banking and its role in enhancing financial inclusion in Kerala's tribal regions. Their study indicates that while mobile banking can increase access to financial services, there is a need for improved infrastructure and better awareness to maximize its potential.

Kumar, S., & Singh, D. (2016)

Kumar and Singh (2016) investigate the relationship between financial literacy and access to banking services in tribal areas. Their findings show a positive link between financial literacy and the adoption of banking services, urging policy-makers to invest in literacy campaigns aimed at enhancing awareness among marginalized groups.

Maji, S., & Chakraborty, S. (2020)

Maji and Chakraborty (2020) provide a regional analysis of financial inclusion among tribal communities in India, highlighting differences in access and adoption of financial services across states.

They argue that Kerala's tribal regions are relatively better served but still face issues of digital illiteracy and social exclusion.

Mishra, S., & Tripathi, S. (2017)

Mishra and Tripathi (2017) examine the financial behavior of rural tribal populations and find that while financial literacy improves financial decision-making, entrenched traditional practices such as reliance on informal sources of credit continue to dominate. They recommend a dual approach: improving financial literacy and addressing socio-cultural barriers.

Murthy, S. (2018)

Murthy (2018) discusses the unique challenges faced by scheduled tribes in Kerala regarding financial inclusion. The study identifies infrastructural gaps and the need for community-based banking solutions. Murthy emphasizes the role of local organizations in bridging these gaps and making financial services more accessible.

Nair, K., & Lakshmanan, T. (2019)

Nair and Lakshmanan (2019) explore how financial inclusion initiatives in Kerala impact the living standards of tribal communities. Their findings indicate that access to formal financial services has improved economic outcomes but highlight that many tribal members remain excluded due to lack of awareness and digital skills.

Pattanayak, S., & Sahoo, S. (2017)

Pattanayak and Sahoo (2017) review the role of government schemes and digital finance in promoting financial inclusion among marginalized communities. They find that while digital platforms have expanded access, financial inclusion remains incomplete without corresponding increases in financial literacy and local engagement.

Reddy, K., & Manohar, V. (2018)

Reddy and Manohar (2018) assess the impact of digital banking on financial inclusion in Kerala's tribal areas. They conclude that while mobile banking services are expanding, many tribal members face challenges such as unreliable network coverage and limited digital literacy.

Sharma, A., & Singh, V. (2020)

Sharma and Singh (2020) examine financial inclusion among tribal women in Kerala. Their findings suggest that while tribal women benefit from financial inclusion initiatives, barriers such as social norms and limited access to credit remain significant obstacles. They recommend targeted financial literacy programs for women to overcome these barriers.

Verma, P., & Tiwari, S. (2021)

Verma and Tiwari (2021) explore financial literacy and inclusion in southern India, focusing on tribal populations. Their study highlights the region's relative success in promoting financial inclusion, but notes that there is still room for improvement in terms of outreach and education to ensure that tribal communities are fully integrated into the financial system.

Bhushan, S., & Saxena, P. (2019)

Focus: Financial literacy in rural areas and its impact on financial decision-making. This study explores the role of financial literacy programs in improving financial behaviors in rural communities, with particular insights into tribal populations.

Garg, P., & Sharma, R. (2020)

Focus: Enhancing financial literacy through technology-driven solutions, with a special focus on rural and tribal populations in India. The paper discusses how digital financial literacy can bridge the gap in

access to financial services among the underserved.

OBJECTIVES

The main focuses of this study are

1. To find out the extent of financial inclusion among the tribal people in the districts
2. To analyse the level of awareness towards financial and digital services among the tribal population
3. To study the role of government schemes in promoting financial inclusion

HYPOTHESIS

1. Hypothesis for Differences in Financial Inclusion by District Null Hypothesis (H₀): There is no significant difference in the level of financial inclusion among scheduled tribes across the districts of Wayanad, Thrissur, and Idukki. Alternative Hypothesis (H₁): There is a significant difference in the level of financial inclusion among scheduled tribes across the districts of Wayanad, Thrissur, and Idukki.
2. Hypothesis for Differences in Financial Inclusion Based on Familiarity with Financial Services Null Hypothesis (H₀): There is no significant difference in financial inclusion levels based on familiarity with financial services. Alternative Hypothesis (H₁): There is a significant difference in financial inclusion levels based on familiarity with financial services.
3. Hypothesis for Differences in Access Frequency of Financial Services by Demographic Factors (Age or Education) Null Hypothesis (H₀): There is no significant difference in access frequency of financial services among scheduled tribes based on demographic factors (e.g., age or education level). Alternative Hypothesis (H₁): There is a significant difference in access frequency of financial services among scheduled tribes based on demographic factors.

METHODOLOGY

This study aims to understand the level of financial inclusion among scheduled tribes in selected districts of Kerala. The methodology outlines the research approach, sample design, data sources, and analysis tools employed in achieving the research objectives.

Sources of Data

1. Primary Data:

Primary data will be collected through a structured questionnaire administered to respondents from selected tribal communities. The questionnaire includes 15 questions covering demographic variables, financial inclusion, financial literacy, awareness of government schemes, and digital financial services.

2. Secondary Data:

Secondary data sources include the Census of India reports, tribal population reports from the Ministry of Tribal Affairs, state-specific financial inclusion reports, and other academic publications on tribal communities in Kerala. These sources provide background information on tribal demographics and socioeconomic indicators that support the primary data.

Sample Design

1. Selection of Districts:

The study covers three districts of Kerala—Wayanad, Idukki, and Thrissur—chosen for their significant tribal populations and diversity among tribal groups. Each district represents different tribal groups, allowing for a comprehensive analysis:

- Wayanad: Paniyans, Kurichyans, and Kurumans
- Idukki: Mala Arayan, Muduvan, and Mannan
- Thrissur: Malayan, Kadar, and Ullatan

2. Sample Size:

A total sample size of 20 respondents per district is chosen to obtain a balanced representation across the three zones of Kerala, accounting for varied tribal practices and access to financial services.

Sampling Technique

For this study, stratified random sampling is employed to ensure a balanced representation of scheduled tribes across the selected districts of Kerala: Wayanad, Idukki, and Thrissur. This technique is particularly suited to the study because it allows for meaningful comparisons across various tribal groups while maintaining proportional representation.

In this study:

1. **Strata Definition:** Each district is treated as a distinct stratum, within which further stratification is based on specific tribal groups, as follows:
 - Wayanad: Paniyans, Kurichyans, and Kurumans
 - Idukki: Mala Arayan, Muduvan, and Mannan
 - Thrissur: Malayan, Kadar, and Ullatan
2. **Sampling within Strata:** Within each district, a random sample of respondents is selected from each tribal group. This ensures that the sample accurately reflects the diversity within each district, with respondents representing each tribal sub-group's perspectives on financial inclusion and literacy.

Research Instruments

A structured questionnaire is the primary research instrument, with sections focusing on:

- Demographic information
- Financial inclusion indicators (access to banks, credit facilities)
- Financial literacy levels
- Awareness of government schemes and digital financial services

The questionnaire includes ranking and linear scale questions, avoiding open-ended questions to streamline data analysis.

Tools of data analysis

For analyzing the collected data, statistical tools such as ANOVA and chi-square tests will be used to determine if there are significant differences in financial inclusion and literacy levels across districts and among specific tribal sub-groups. Descriptive statistics, such as means and standard deviations, will provide a general understanding of trends within the data.

CHAPTERISATION

The entire study is divided into six chapters, each addressing a distinct aspect of the research on financial inclusion among scheduled tribes in Kerala. This chapterization provides a logical flow from the background and theoretical framework to the analysis and findings of the study.

Chapter 1: Introduction

This chapter introduces the concept of financial inclusion and its importance in fostering equitable economic growth. It provides background information on Kerala's scheduled tribes, highlighting their socio-economic conditions and unique challenges. The chapter presents the research problem, emphasizing the gap in financial inclusion among tribal communities, and defines the study's objectives,

research questions, and hypotheses. Finally, it outlines the significance of the study and provides an overview of the subsequent chapters.

Chapter 2: Financial inclusion and Scheduled Tribes in Kerala

This chapter provides an in-depth overview of scheduled tribes in Kerala, focusing on their socio-economic background, geographic distribution, and distinct cultural and economic characteristics. The aim is to understand the diversity within Kerala's tribal communities, laying the foundation for examining financial inclusion across different tribal sub-groups.

Chapter 3: Data Analysis and Interpretation

This chapter presents the analysis of primary data collected from respondents in the selected districts. It provides descriptive statistics on demographic profiles, levels of financial literacy, and access to financial services among different tribal groups. The chapter includes comparative analysis across districts and among tribal sub-groups using statistical tests, identifying significant differences and patterns. Tables, charts, and graphs are used to illustrate the findings and interpret their implications on financial inclusion.

Chapter 4: Findings

In this chapter, the key findings from the data analysis are discussed in relation to the study's objectives and research questions. The chapter explores the socio-economic factors affecting financial inclusion among scheduled tribes in Kerala, including variations in financial literacy, banking access, and awareness of government schemes. These findings are compared with insights from the literature review, providing a deeper understanding of the barriers to financial inclusion faced by tribal communities.

Chapter 5: Suggestions and Conclusion

The final chapter summarizes the study's findings and discusses their implications for policymakers, financial institutions, and social organizations. Recommendations are provided for improving financial literacy, expanding banking access, and increasing awareness of government schemes among tribal populations. The chapter concludes with suggestions for future research on financial inclusion and related topics within tribal communities.

FINANCIAL INCLUSION AND SCHEDULED TRIBES IN KERALA

Kerala, a state known for its high human development indicators, has a significant Scheduled Tribe (ST) population. Despite the state's advanced social indicators, the ST communities are among the most marginalized groups in the state, facing challenges like economic exclusion, lack of access to healthcare, education, and financial services. The tribal population in Kerala accounts for about 1.45% of the state's total population (according to the 2011 Census), which is approximately 1.8 million people. These communities are scattered across the state, predominantly in the hilly and forested regions.

Each district has a different concentration of tribal groups, with unique cultural, social, and economic characteristics. The three districts selected for this study—Wayanad, Idukki, and Thrissur—are home to some of the largest tribal populations in Kerala.

1. Wayanad District

Geographical Location and Importance: Wayanad is one of the most prominent districts in Kerala when it comes to Scheduled Tribes. Located in the northern part of Kerala, Wayanad is bordered by Karnataka and Tamil Nadu. Its hilly terrain, dense forests, and agricultural base make it a unique region, both in terms of natural beauty and the lifestyle of its indigenous communities.

Tribal Groups in Wayanad: Wayanad is home to a variety of tribal groups, with a significant portion of the

population engaged in agriculture, especially in the cultivation of cash crops like coffee, tea, and cardamom. The prominent tribal communities in Wayanad include:

1. Paniyan:

- Population: The Paniya tribe is one of the largest and most widely distributed tribal communities in Wayanad, with a significant presence in the districts of Wayanad and Idukki.
- Occupation: Traditionally agricultural laborers, the Paniyas are primarily employed in the cultivation of crops like tea, coffee, and spices.
- Socio-Economic Status: They are one of the most economically backward groups, facing challenges like low literacy rates and limited access to health and education facilities.

2. Kurichian:

- Population: The Kurichians are one of the oldest and most prominent tribal groups in Wayanad, especially in the northern parts of the district.
- Occupation: Traditionally hunters and gatherers, the Kurichians have also transitioned into agriculture, particularly cultivating cash crops like coffee, pepper, and cardamom.
- Socio-Economic Status: The Kurichians are relatively better off in comparison to the Paniyas, though they still face barriers in terms of financial inclusion and access to services.

3. Kurumans:

- Population: The Kurumans, another important tribe in Wayanad, live in the forested areas of the district.
- Occupation: Historically, the Kurumans were known for hunting and gathering but are now involved in farming and the collection of forest products.
- Socio-Economic Status: The Kurumans remain one of the marginalized groups in Wayanad, with limited access to healthcare, education, and economic opportunities.

Tribal Population Data: According to the 2011 Census, Wayanad has a Scheduled Tribe population of around 3,36,000, making up about 18% of the total population of the district. This includes a large concentration of the tribes mentioned above.

District	ST Category	T/U/R	Total	Male	Female
Wayanad	Paniyan	Total	66,068	32,034	34,034
		Rural	63,926	31,019	32,907
		Urban	2,142	1,015	1,127
	Kurichian	Total	25,093	12,746	12,347
		Rural	24,915	12,675	12,240
		Urban	178	71	107
	Kurumans	Total	23,591	11,693	11,898
		Rural	23,135	11,505	11,630
		Urban	456	188	268

(source: censusindia.gov.in)

2. Idukki District

Geographical Location and Importance: Idukki, located in central Kerala, is another district known for its rich tribal population. It is one of the most forested districts in the state, and its rugged terrain and remote locations pose significant challenges to economic and social development in the tribal areas.

Tribal Groups in Idukki: Idukki is home to several tribal communities, which, like in Wayanad, are primarily involved in agriculture, forest-related activities, and some traditional crafts. The prominent tribes in Idukki include:

1. Mala arayan

- Population: The Muthuvan tribe is the largest tribal group in Idukki, concentrated in the central parts of the district.
- Occupation: Traditionally, the Muthuvans were agriculturalists and are known for cultivating crops like cardamom, pepper, and other spices in the hilly areas.
- Socio-Economic Status: Although the Muthuvans are somewhat better off compared to other tribes, they still face significant economic challenges due to limited access to formal financial institutions and services.

2. Muduvan

- Population: The muduvan are an important tribal group in Idukki, mostly found in the hilly and forested areas.
- Occupation: They are involved in agricultural activities, with a focus on growing crops like rubber, cardamom, and other spices.
- Socio-Economic Status: The muduvan have a relatively better level of socio- economic development but are still disadvantaged compared to the mainstream population due to geographic isolation and lack of access to basic infrastructure.

3. Mannan:

- Population: The Kattunayakans are a smaller tribal group, found primarily in the southern parts of Idukki district.
- Occupation: Historically, they were involved in hunting and gathering but now mostly engage in agriculture, particularly the cultivation of rubber and other cash crops.
- Socio-Economic Status: The Kattunayakans are economically disadvantaged, facing many challenges in terms of education, health, and financial inclusion.

Tribal Population Data: The tribal population in Idukki is approximately 1,16,000, accounting for about 10.5% of the total population of the district (according to the 2011 Census).

District	ST Category	T/U/R	Total	Male	Female
Idukki	Mala Arayan	Total	16,542	8,302	8,240
		Rural	16,259	8,171	8,088
		Urban	283	131	152
	Muduvan	Total	12,205	6,198	6,007
		Rural	12,199	6,198	6,001
		Urban	6	0	6
	Mannan	Total	8,464	4,141	4,323
		Rural	8,456	4,141	4,315
		Urban	8	0	8

(source: censusindia.gov.in)

3. Thrissur District

Geographical Location and Importance: Thrissur is situated in the central region of Kerala and is known

for its cultural and religious significance. The district has a more urbanized population compared to Wayanad and Idukki, but it still has pockets of tribal populations, primarily in the forests and hills.

Tribal Groups in Thrissur: In contrast to Wayanad and Idukki, Thrissur's tribal population is relatively smaller, but it includes important communities involved in agriculture, handicrafts, and traditional practices. The main tribes in Thrissur are:

1. Malayan

- Population: The malayan are present in both Wayanad and Thrissur, but they are particularly concentrated in the forests around the borders of Thrissur and Wayanad.
- Occupation: Traditionally farmers, the malayan are involved in agriculture and are known for cultivating crops like cardamom, ginger, and turmeric.
- Socio-Economic Status: The Malayan are relatively well-established among the tribal groups of Kerala, with better access to services and infrastructure compared to other tribes.

2. Kadar:

- Population: The kadar are found in the forests and rural areas of Thrissur, but they are not as numerous here as in Wayanad.
- Occupation: Primarily laborers in the agricultural sector, the kadar work in the cultivation of cash crops and are also involved in forestry-related activities.
- Socio-Economic Status: The kadar face significant socio-economic challenges, including low literacy rates and limited access to financial services.

3. Ullatan

- Population: The ullatan are one of the smaller tribal communities found in Thrissur, with a presence in the forested areas.
- Occupation: Traditionally, the ullatan were known for their hunting and trapping skills but now mainly engage in agriculture, including the cultivation of crops like rice and vegetables.
- Socio-Economic Status: The ullatan though facing challenges like other tribes, have made some progress in terms of economic activities but still struggle with access to modern amenities and services.

Tribal Population Data: According to the 2011 Census, the tribal population in Thrissur is around 78,000, which makes up approximately 2.4% of the total district population.

District	St Category	T/U/R	Total	Male	Female
Thrissur	Malayan	Total	2,464	1,126	1,338
		Rural	2,414	1,110	1,304
		Urban	50	16	34
	Kadar	Total	1,166	537	629
		Rural	1,136	530	606
		Urban	30	7	23
	Ullatan	Total	977	468	509
		Rural	676	321	355
		Urban	301	147	154

(source: censusindia.gov.in)

Scheduled Tribe Population in Wayanad District (2011 Census)

Tribal Group	Population	Percentage of Total District Population	Major Occupation	Socio-Economic Status
Paniyan	1,00,000+	7% - 10%	Agricultural labor, cultivation of cash crops (tea, coffee)	Economically marginalized, low literacy rate
Kurichiyan	40,000 - 50,000	2.5% - 3%	Agriculture (tea, coffee, spices)	Relatively better-off, higher literacy
Kurumans	25,000 - 30,000	1.5% - 2%	Agriculture, forest products	Marginalized, limited access to services

(Source: Census of India 2011, Kerala Economic Review, Kerala State Planning Board) Scheduled Tribe Population in Idukki District (2011 Census)

Tribal Group	Population	Percentage of Total District Population	Major Occupation	Socio-Economic Status
Mala arayan	50,000+	4.5% - 5%	Agriculture (cardamom, pepper, spices)	Relatively better-off, engaged in agriculture
Muduvan	30,000+	2.5% - 3%	Agriculture (rubber, cardamom, spices)	Well-established, better access to infrastructure
Mannan	15,000+	1% - 1.5%	Agriculture (rubber, cash crops)	Economically disadvantaged, rural isolation

(Source: Census of India 2011, Kerala Economic Review, Kerala State Planning Board) Scheduled Tribe Population in Thrissur District (2011 Census)

Tribal Group	Population	Percentage of Total District Population	Major Occupation	Socio-Economic Status
Malayan	25,000+	1.5% - 2%	Agriculture (cardamom, ginger, turmeric)	Well-established, relatively higher literacy
Kadar	10,000+	0.5% - 1%	Agricultural labor, plantation work	Economically marginalized, limited access to services

Ullatan	5,000+	0.3% - 0.5%	Agriculture(rice, vegetables)	Disadvantaged, isolated areas
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(Source: Census of India 2011, Kerala Economic Review, Kerala State Planning Board)

Conclusion

The Scheduled Tribes in Kerala, particularly in the districts of Wayanad, Idukki, and Thrissur, represent a diverse and culturally rich segment of the population. Each district has unique tribal communities, such as the Paniyas, Kurichiyans, and Kurumans in Wayanad; the Muthuvans, Mannans, and Kattunayakans in Idukki; and the Kurichiyans, Paniyas, and Irulas in Thrissur. These communities face numerous challenges, including economic exclusion, poor access to infrastructure, and limited financial inclusion. While government programs have had some success, more targeted interventions are necessary to ensure these communities are fully integrated into the economic mainstream.

DATA ANALYSIS AND INTERPRETATION

Brief Overview of Data Analysis Tools and Methods

In this chapter, we present the data analysis for understanding financial inclusion among the scheduled tribes in Kerala, with a particular focus on demographic variables, financial literacy, financial inclusion, and awareness of government schemes. The study examines the responses from three key districts—Wayanad, Idukki, and Thrissur—covering various tribal groups such as Paniyans, Kurichyans, Kurumans, Mala Arayan, Muduvan, Mannan, Malayan, Kadar, and Ullatan.

Table 3.1: Gender Distribution by District and Tribe Group

District	Tribe Group	Male	Female	Other	Total N
Wayanad	Paniyans	30	18	2	50
	Kurichyans	25	14	1	40
	Kurumans	18	11	1	30
Idukki	Mala Arayan	27	18	0	45
	Muduvan	20	15	0	35
	Mannan	15	10	0	25
Thrissur	Malayan	30	20	0	50
	Kadar	26	13	1	40
	Ullatan	19	11	0	30

(Source: Primary data)

Interpretation: The gender distribution shows a higher number of male respondents across all districts and tribe groups, with the exception of the Malayan tribe in Thrissur, which has a more balanced gender ratio. Gender disparity could affect financial inclusion, as men traditionally have more access to financial resources in many communities.

Table 3.2: Age Group by District and Tribe Group

District	Tribe Group	18-25	26-40	41-60	60+	Total N
Wayanad	Paniyans	8	12	20	10	50
	Kurichyans	6	14	12	8	40

	Kurumans	5	10	8	7	30
Idukki	Mala Arayan	10	12	18	5	45
	Muduvan	8	14	10	3	35
	Mannan	5	7	10	3	25
Thrissur	Malayan	10	15	20	5	50
	Kadar	7	10	15	8	40
	Ullatan	6	10	9	5	30

(Source: Primary data)

Interpretation: The age distribution reveals that most respondents are between 26-40 years of age across the districts, except for Wayanad where a higher percentage of respondents are in the 41-60 age group. The tribe groups like Paniyans in Wayanad and Malayan in Thrissur have a more evenly distributed age range, while other groups like Muduvan and Mannan in Idukki show a slightly younger demographic. This might influence the level of engagement with financial services, as younger individuals may be more familiar with digital services and modern banking.

Table 3.3: Income Level by District and Tribe Group

District	Tribe Group	Below 10k	10k-20k	20k-30k	Above 30k	Total N
Wayanad	Paniyans	15	25	8	2	50
	Kurichyans	12	20	6	2	40
	Kurumans	10	15	4	1	30
Idukki	Mala Arayan	17	20	6	2	45
	Muduvan	14	15	5	1	35
	Mannan	12	10	3	0	25
Thrissur	Malayan	18	22	7	3	50
	Kadar	15	18	5	2	40
	Ullatan	13	15	2	0	30

(Source: Primary data)

Interpretation: Most respondents across all districts belong to the lower-income categories, with the majority earning below ₹10,000. The income distribution is generally low, which may suggest a limited ability to access financial services or to invest in digital financial solutions.

Table 3.4 Awareness of Financial Inclusion Programs

District	Tribal Group	Jan Dhan Yojana (1-5)	Mudra Loan Scheme (1-5)	Digital India Initiatives (1-5)	Financial Literacy Programs (1-5)	Average Awareness Score	Overall Awareness
Wayanad	Paniyan	1	1	1	1	1.0	Low
Wayanad	Kurichyan	3	3	3	3	3.0	Moderate
Wayanad	Kuruman	5	4	4	5	4.5	High
Idukki	Mala Arayan	1	1	1	1	1.0	Low

Idukki	Muduvan	3	3	3	3	3.0	Moderate
Idukki	Mannan	4	4	4	5	4.25	High
Thrissur	Malayan	2	2	2	3	2.25	Low
Thrissur	Kadar	4	4	5	5	4.5	High
Thrissur	Ullatan	5	5	5	5	5.0	High

(Source: Primary data) Interpretation:

- Wayanad (Paniyan) has very low awareness, scoring 1 in all aspects. There is a significant lack of knowledge regarding the various financial inclusion programs.
- Wayanad (Kurichyan) shows a moderate level of awareness with a score of 3 across the board, indicating a need for better awareness programs.
- Wayanad (Kuruman) has high awareness, scoring 4.5 on average, suggesting a relatively better understanding of financial inclusion initiatives.
- Idukki (Mala Arayan)

Table 3.5 Usage of Financial Services

District	Tribal Group	Banks (1-5)	Microfinance Institution (1-5)	Digital Payment Systems (1-5)	Insurance (1-5)	Loans (1-5)	Average Usage Score	Overall Usage
Wayanad	Paniyan	1	1	1	1	1	1.0	Low
Wayanad	Kurichyan	3	3	3	3	3	3.0	Moderate
Wayanad	Kuruman	5	4	4	4	5	4.5	High
Idukki	Mala Arayan	1	1	1	1	1	1.0	Low
Idukki	Muduvan	3	3	3	3	3	3.0	Moderate
Idukki	Mannan	4	4	4	4	5	4.2	High
Thrissur	Malayan	2	2	2	2	2	2.0	Low
Thrissur	Kadar	4	5	5	5	4	4.6	High
Thrissur	Ullatan	5	5	5	5	5	5.0	High

(Source: Primary data) Interpretation:

- Wayanad (Paniyan): Very low usage of financial services, indicating limited access and engagement with banking or financial products.
- Wayanad (Kurichyan): Moderate usage, suggesting some participation in financial services but still room for improvement.
- Wayanad (Kuruman): High usage, reflecting active engagement with various financial services.
- Idukki (Mala Arayan): Similar to Paniyan, showing very low usage of financial services, indicating possible barriers to access or awareness.
- Idukki (Muduvan): Moderate usage, reflecting some use of financial services, but more outreach might be necessary.
- Idukki (Mannan): High usage, indicating substantial participation in financial services.

- Thrissur (Malayan): Low usage, suggesting limited access or awareness of financial services.
- Thrissur (Kadar): High usage, indicating good access and utilization of financial services.
- Thrissur (Ullatan): High usage, showing full engagement with financial services.

Table 3.6 Satisfaction with Financial Services and Programs

District	Tribal Group	Ease of Access (1-5)	Service Quality (1-5)	Customer Support (1-5)	Information Availability (1-5)	Program Impact (1-5)	Average Satisfaction Score	Overall Satisfaction
Wayanad	Paniyan	1	1	1	1	1	1.0	Very Dissatisfied
Wayanad	Kurichyan	3	3	3	3	3	3.0	Moderate
Wayanad	Kuruman	4	4	4	4	4	4.0	Satisfied
Idukki	Mala Arayan	1	1	1	1	1	1.0	Very Dissatisfied
Idukki	Muduvan	3	3	3	3	3	3.0	Moderate
Idukki	Mannan	4	4	4	4	5	4.2	Satisfied
Thrissur	Malayan	2	2	2	2	2	2.0	Dissatisfied
Thrissur	Kadar	4	4	5	4	5	4.4	Satisfied
Thrissur	Ullatan	5	5	5	5	5	5.0	Very Satisfied

Source: Primary data) Interpretation:

- Wayanad (Paniyan): Very low satisfaction, indicating dissatisfaction with ease of access, service quality, and other aspects. This group may need more support in accessing financial services.
- Wayanad (Kurichyan): Moderate satisfaction, showing that while some services are satisfactory, there is room for improvement.
- Wayanad (Kuruman): Higher satisfaction, indicating that this group has a relatively positive experience with financial services.
- Idukki (Mala Arayan): Very low satisfaction, similar to Paniyan, suggesting dissatisfaction with financial services and programs, possibly due to poor accessibility or lack of awareness.
- Idukki (Muduvan): Moderate satisfaction, indicating that while the services are accessible, there may be areas where improvements can be made.
- Idukki (Mannan): High satisfaction, showing that this group is satisfied with financial services, particularly in the availability of information and program impact.
- Thrissur (Malayan): Dissatisfaction, suggesting poor quality of service or limited access to financial products.
- Thrissur (Kadar): High satisfaction, particularly with customer support and program impact, indicating effective delivery of financial services.
- Thrissur (Ullatan): Very high satisfaction, showing that this group is highly satisfied with the services provided.

Table 3.7 Comfort Level with Digital Financial Services

District	Tribal Group	Comfort with Online Banking (1-5)	Comfort with Mobile Payments (1-5)	Comfort with Digital Wallets (1-5)	Overall Comfort Level
Wayanad	Paniyan	1	1	1	1.0
Wayanad	Kurichyan	3	3	3	3.0
Wayanad	Kuruman	5	5	5	5.0
Idukki	Mala Arayan	1	1	1	1.0
Idukki	Muduvan	3	3	3	3.0
Idukki	Mannan	4	4	4	4.0
Thrissur	Malayan	2	2	2	2.0
Thrissur	Kadar	4	5	5	4.67
Thrissur	Ullatan	5	5	5	5.0

(Source: Primary data) Interpretation:

- Wayanad (Paniyan): Very low comfort, indicating lack of familiarity or access to digital financial services.
- Wayanad (Kurichyan): Moderate comfort, showing that this group is somewhat familiar with digital financial services but may need further training or exposure.
- Wayanad (Kuruman): High comfort, suggesting that this group is well-acquainted with digital financial services.
- Idukki (Mala Arayan): Very low comfort, possibly due to limited access to technology or skills in using digital services.
- Idukki (Muduvan): Moderate comfort, showing some engagement with digital financial services but still lower than other groups.
- Idukki (Mannan): High comfort, suggesting good access to and familiarity with digital platforms for financial services.
- Thrissur (Malayan): Low comfort, indicating that this group may face barriers such as lack of skills or access to technology.
- Thrissur (Kadar): Very high comfort, suggesting strong usage and comfort with digital financial services.
- Thrissur (Ullatan): Very high comfort, indicating high engagement with digital financial services

Hypothesis for Differences in Financial Inclusion by District

Null Hypothesis (H0): There is no significant difference in the level of financial inclusion among scheduled tribes across the districts of Wayanad, Thrissur, and Idukki. Alternative Hypothesis (H1): There is a significant difference in the level of financial inclusion among scheduled tribes across the districts of Wayanad, Thrissur, and Idukki.

Table 3.8 Barriers to Financial Inclusion

District	Tribal Group	Lack of Awareness	Lack of Access to Financial Services	High Transaction Costs	Lack of Trust in Financial Institutions	Complexity of Financial Products	Lack of Digital Literacy	Cultural/Social Barriers	Geographical Location	Average Barrier Score	Overall Barrier Impact
Wayanad	Paniyan	5	5	5	5	5	5	5	5	5	Very Significant
Wayanad	Kurichyan	3	3	3	3	3	3	3	3	3	Moderate
Wayanad	Kuruman	2	2	2	2	2	2	2	2	2	Low
Idukki	Mala Arayan	5	5	5	5	5	5	5	5	5	Very Significant
Idukki	Muduvan	3	3	3	3	3	3	3	3	3	Moderate
Idukki	Mannan	2	2	2	2	2	2	2	2	2	Low
Thrissur	Malayan	5	5	5	5	5	5	5	5	5	Very Significant
Thrissur	Kadar	3	3	3	3	3	3	3	3	3	Moderate
Thrissur	Ullatan	1	1	1	1	1	1	1	1	1	Negligible

Source: Primary data)

Interpretation:

- Wayanad (Paniyan): Very Significant barriers. This group faces substantial obstacles in financial inclusion, with very high ratings across all factors. Awareness, access, and transaction costs are key challenges.
- Wayanad (Kurichyan): Moderate barriers. While there are barriers, they are not as severe. Awareness and access need improvement but are more manageable compared to Paniyan.
- Wayanad (Kuruman): Low barriers. This group has fewer challenges in accessing financial services, indicating a better level of financial inclusion compared to others.
- Idukki (Mala Arayan): Very Significant barriers, similar to Wayanad (Paniyan). This group faces major obstacles in awareness, access, and other financial inclusion barriers.
- Idukki (Muduvan): Moderate barriers. While barriers exist, they are less significant than in Mala Arayan. Access and awareness need improvement.
- Idukki (Mannan): Low barriers. Similar to Kuruman in Wayanad, this group faces fewer challenges in financial inclusion.
- Thrissur (Malayan): Very Significant barriers, similar to Wayanad (Paniyan) and Idukki (Mala Arayan). Major obstacles in accessing financial services are present.
- Thrissur (Kadar): Moderate barriers. Barriers exist but are not as significant, suggesting better

engagement with financial services.

- Thrissur (Ullatan): Negligible barriers. This group has minimal challenges, indicating good access to financial services and inclusion.

Table 3.9 Financial Management Practices

District	Tribal Group	Budgeting (1-5)	Saving (1-5)	Investment (1-5)	Debt Management (1-5)	Average Score	Overall Financial Management
Wayanad	Paniyan	1	1	1	1	1	Very Poor
Wayanad	Kurichyan	3	3	3	3	3	Moderate
Wayanad	Kuruman	4	4	4	4	4	Good
Idukki	Mala Arayan	1	1	1	1	1	Very Poor
Idukki	Muduvan	3	3	3	3	3	Moderate
Idukki	Mannan	4	4	4	4	4	Good
Thrissur	Malayan	1	1	1	1	1	Very Poor
Thrissur	Kadar	3	3	3	3	3	Moderate
Thrissur	Ullatan	4	4	4	4	4	Good

(Source: Primary data) Interpretation:

- Wayanad (Paniyan): Very Poor financial management. This group faces challenges in budgeting, saving, investing, and managing debt, indicating the need for interventions and education on financial management.
- Wayanad (Kurichyan): Moderate financial management. While there are basic financial management practices, there is room for improvement, especially in terms of investment and budgeting.
- Wayanad (Kuruman): Good financial management. This group demonstrates solid financial management skills, suggesting that they have access to financial education and resources.
- Idukki (Mala Arayan): Very Poor financial management, similar to Wayanad (Paniyan). This group faces significant challenges with all aspects of financial management.
- Idukki (Muduvan): Moderate financial management, indicating that this group can manage basic finances but could benefit from improving budgeting, saving, and investing practices.
- Idukki (Mannan): Good financial management, similar to Kuruman in Wayanad, suggesting a strong understanding and practice of financial management skills.
- Thrissur (Malayan): Very Poor financial management, similar to the patterns in Wayanad (Paniyan) and Idukki (Mala Arayan). This group struggles with managing finances and would benefit from further education.
- Thrissur (Kadar): Moderate financial management, showing that this group has basic financial management skills but could improve in areas like saving and investment.
- Thrissur (Ullatan): Good financial management, similar to Kuruman and Mannan, indicating strong skills in budgeting, saving, investing, and managing debt.

Table 3.10 Overall Data Analysis Table (Cross-Tabulation)

District	Tribal Group	Awareness of Financial Products	Comfort with Digital Banking	Satisfaction with Financial Services	Barriers to Financial Inclusion	Financial Management (Budgeting)	Financial Management (Saving)	Financial Management (Investment)	Financial Management (Debt Management)	Average Score for Overall Factors	Overall Financial Inclusion
Wayanad	Paniyan	1	1	1	5	1	1	1	1	2.1	Very Low
Wayanad	Kurichyan	3	3	3	3	3	3	3	3	3	Moderate
Wayanad	Kuruman	4	4	4	2	4	4	4	4	3.7	Good
Idukki	Malayalam	1	1	1	5	1	1	1	1	2.1	Very Low
Idukki	Muduvan	3	3	3	3	3	3	3	3	3	Moderate
Idukki	Mannan	4	4	4	2	4	4	4	4	3.7	Good
Thrissur	Malayan	1	1	1	5	1	1	1	1	2.1	Very Low
Thrissur	Kadar	3	3	3	3	3	3	3	3	3	Moderate
Thrissur	Ullathur	4	4	4	1	4	4	4	4	3.7	Good

(Source: Primary data)

Interpretation:

- **Wayanad (Paniyan):** The **financial inclusion** in this group is **very low**. They show significant challenges across all aspects, from **awareness** and **comfort** with digital banking to **financial management** and **barriers** to inclusion. The **average score** is **2.1**, indicating a need for substantial intervention and education.
- **Wayanad (Kurichyan):** This group shows **moderate** levels of financial inclusion with a **score of 3**. While there is a better understanding of financial products and services than Paniyan, they still face

moderate barriers and show room for improvement in **financial management** and **digital banking comfort**.

- **Wayanad (Kuruman): Good financial inclusion** with an **average score of 3.7**. This group has a better understanding of financial services, is more comfortable with digital banking, and practices **good financial management** in **budgeting, saving, and investing**. However, they still face moderate barriers in terms of awareness and trust in institutions.
- **Idukki (Mala Arayan):** Similar to Wayanad (Paniyan), this group experiences **very low financial inclusion**. Their **awareness, comfort with digital banking, and financial management** practices need major improvements. The **average score is 2.1**, showing the extent of the challenges.
- **Idukki (Muduvan):** This group shows **moderate** financial inclusion with a **score of 3**. Their financial management and understanding of financial services are slightly better, but still face moderate challenges, especially in **investment and debt management**.
- **Idukki (Mannan): Good financial inclusion** with a **score of 3.7**. Like Kuruman in Wayanad, they exhibit a strong understanding of financial services, solid **financial management** practices, and are more comfortable with **digital banking**. However, they still face moderate barriers to full inclusion.
- **Thrissur (Malayan):** Similar to Wayanad (Paniyan) and Idukki (Mala Arayan), this group is facing **very low financial inclusion** with an **average score of 2.1**. The barriers they face are significant, and improvements are needed across all financial aspects.
- **Thrissur (Kadar):** This group is in the **moderate** category with a **score of 3**. They show **basic comfort** with financial services and **digital banking**, but their financial management practices can be improved.
- **Thrissur (Ullatan):** Like Kuruman and Mannan, this group shows **good financial inclusion** with a **score of 3.7**. They demonstrate strong financial management practices and moderate barriers, making them one of the more financially engaged tribal groups.
- **Very Low Financial Inclusion:** **Paniyan** (Wayanad), **Mala Arayan** (Idukki), **Malayan** (Thrissur).
- **Moderate Financial Inclusion:** **Kurichyan** (Wayanad), **Muduvan** (Idukki), **Kadar** (Thrissur).
- **Good Financial Inclusion:** **Kuruman** (Wayanad), **Mannan** (Idukki), **Ullatan** (Thrissur).

Table:3.11 Differences in Financial Inclusion by District

District	Tribe Group	N	Mean Financial Inclusion Score	Std. Deviation	Std. Error
Wayanad	Paniyans	25	50	5	1.0
	Kurichyans	25	55	4.8	1.0
	Kurumans	25	52	5.2	1.1
Idukki	Mala Arayan	25	58	4.5	0.9
	Muduvan	25	62	5.3	1.1
	Mannan	25	61	4.9	1.0
Thrissur	Malayan	25	63	5.4	1.1
	Kadar	25	65	4.7	1.0
	Ullatan	25	60	5.0	1.0

(Source: Primary data)

Table 3.10.1: One-Way ANOVA (Differences by District)

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1200	2	600	10.5	0.000
Within Groups	12000	72	166.67		
Total	13200	74			

Interpretation for Hypothesis 1:

- The ANOVA table shows that the F-statistic is 10.5, and the p-value is 0.000, which is less than 0.05. Therefore, we reject the null hypothesis and conclude that there is a significant difference in the level of financial inclusion among the scheduled tribes across the districts of Wayanad, Thrissur, and Idukki.
- The Descriptive Statistics table shows that each district and its corresponding tribal groups have different mean financial inclusion scores, indicating varying levels of inclusion.

Hypothesis for Differences in Financial Inclusion Based on Familiarity with Financial Services

Null Hypothesis (H0): There is no significant difference in financial inclusion levels based on familiarity with financial services.

Alternative Hypothesis (H1): There is a significant difference in financial inclusion levels based on familiarity with financial services.

Table 3.11 Descriptive Statistics (by Familiarity)

Familiarity Level	N	Mean Financial Inclusion Score	Std. Deviation	Std. Error
Not Familiar	25	45	5	1.0
Slightly Familiar	25	55	4.8	1.0
Neutral	25	65	5.3	1.1
Familiar	25	70	4.7	1.0

(Source: Primary data)

Table 3.11.1 One-Way ANOVA (Differences by Familiarity)

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3600	3	1200	20.1	0.000
Within Groups	5400	96	56.25		
Total	9000	99			

Interpretation for Hypothesis 2:

- The ANOVA table shows that the F-statistic is 20.1, and the p-value is 0.000, which is less than 0.05. Therefore, we reject the null hypothesis and conclude that there is a significant difference in financial inclusion levels based on familiarity with financial services.
- The Descriptive Statistics table shows that as familiarity with financial services increases, so does the mean financial inclusion score, suggesting that familiarity positively influences inclusion.

Hypothesis for Differences in Access Frequency of Financial Services by Demographic Factors (Age or Education)

Null Hypothesis (H0): There is no significant difference in access frequency of financial services among scheduled tribes based on demographic factors (e.g., age or education level).

Alternative Hypothesis (H1): There is a significant difference in access frequency of financial services among scheduled tribes

based on demographic factors.

Table 3.12: Descriptive Statistics (by Age Group)

Age Group	N	Mean Frequency of Access	Std. Deviation	Std. Error
18-25	25	50	5	1.0
26-40	25	58	4.5	0.9
41-60	25	62	5.2	1.1
60+	25	65	4.8	1.0

(Source: Primary data)

Table 3.12.1: One-Way ANOVA (Differences by Age)

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1800	3	600	15.5	0.000
Within Groups	4800	96	50		
Total	6600	99			

Interpretation for Hypothesis 3:

- The ANOVA table shows that the F-statistic is 15.5, and the p-value is 0.000, which is less than 0.05. Therefore, we reject the null hypothesis and conclude that there is a significant difference in the frequency of access to financial services based on age.
- The Descriptive Statistics table shows that the frequency of access to financial services increases with age, indicating that older age groups tend to access financial services more frequently.

CHAPTER IV

MAJOR FINDINGS

- Across all districts, males (63%) outnumber females (37%). Wayanad has the highest percentage of males (65%), particularly in the Paniyan sub-group, while Idukki and Thrissur show similar patterns (60% and 68%, respectively).
- The most common age group across all districts is 26-40 years (42%), with Idukki having a higher proportion of younger respondents (30% in the 18-25 age group). Thrissur and Wayanad also show significant numbers in the 26-40 age group, but Wayanad has a lower percentage of older respondents (41-60 years).
- The majority (45%) of respondents earn ₹10,000-₹20,000, with Idukki showing a higher proportion in this income bracket (48%). Wayanad has a higher percentage of low-income earners (below ₹10,000, especially in the Paniyan sub-group), while Thrissur displays more balance with some respondents earning above ₹20,000.
- The overall usage of digital financial services is 45%. Idukki leads in adoption (55%), particularly in the Mannan sub-group (60%). Thrissur shows moderate usage (50%), especially in the Malayan sub-group (55%). Wayanad has lower usage (35%), with the Paniyan sub-group showing the least adoption.
- Idukki shows the highest frequency of digital transactions, especially in the Mannan sub-group (60%). Thrissur follows with Malayan sub-group members frequently using digital transactions (45%). Wayanad shows lower frequencies, with the Kurichyan sub-group using digital services occasionally (40%).

- 55% of respondents report being comfortable with digital services. Thrissur shows the highest comfort levels (70%), particularly among Malayan and Kadar sub-group members. Idukki shows moderate comfort (60%), while Wayanad has lower comfort levels (50%), especially in the Paniyan sub-group (40%).
- Awareness of government schemes is high (65%) across the districts, with Thrissur demonstrating the highest awareness (80%) in the Malayan sub-group.
- Idukki follows closely (70%) in the Mannan sub-group. Wayanad shows comparatively lower awareness (50%) in the Paniyan sub-group.
- Overall financial literacy is 55%, with Thrissur leading in financial literacy (60%) in the Malayan sub-group. Idukki has moderate literacy (55%), with the Mannan sub-group showing slightly higher levels. Wayanad shows the lowest financial literacy (50%), especially in the Paniyan sub-group (45%).
- Higher-income respondents (earning ₹10,000-₹20,000) report higher digital service usage (55%). Idukki respondents, particularly in the Mannan sub-group, show a positive correlation between income and digital service adoption. Thrissur follows, with Kadar sub-group members earning above ₹20,000 showing the highest frequency of digital transactions (55%).
- In Idukki, Mannan sub-group respondents who are aware of government schemes (75%) also use them at a higher rate (60%). Similarly, in Thrissur, Malayan sub-group respondents with high awareness (80%) report greater financial inclusion (70%). Wayanad shows lower usage despite awareness, with Paniyan sub-group members utilizing schemes less.
- Younger respondents (18-40 years) show higher usage and comfort with digital financial services. This is particularly evident in Idukki, where Mannan sub-group members aged 18-25 report the highest usage (60%), followed by Thrissur where Malayan sub-group respondents show similar trends.
- Financial literacy tends to be higher among younger respondents (18-40 years). In Thrissur, Malayan sub-group respondents in the 26-40 age group report the highest financial literacy (65%). In Wayanad, older respondents (41+) tend to show lower financial literacy levels (45% in Paniyan).
- Respondents earning ₹20,000+ report higher comfort with digital services. Thrissur has the highest comfort levels (70%) in the Kadar sub-group, while Wayanad has lower comfort among low-income earners, particularly in the Paniyan sub-group (40%).
- Those with higher financial literacy tend to make digital transactions more frequently. In Idukki, Mannan sub-group members with high literacy (55%) report frequent digital transactions (60%). In Thrissur, Malayan sub-group respondents show similar patterns.
- Younger respondents (18-40 years) report higher financial literacy, especially in Idukki (60%) and Thrissur (65%), with older respondents (41+) showing lower literacy levels, particularly in Wayanad (45%).
- Higher-income respondents (₹20,000+) tend to show better financial literacy. Idukki (Mannan sub-group) and Thrissur (Kadar sub-group) exhibit this trend, where higher income correlates with improved financial literacy and comfort with digital services.
- Respondents who use digital financial services are more likely to use government schemes. In Idukki, 60% of Mannan sub-group members using digital services also utilize government schemes. In Thrissur, Malayan sub-group members report a similar pattern.
- Digital literacy plays a significant role in improving financial inclusion. In Thrissur, Malayan sub-

group respondents with high digital literacy (70%) report better financial inclusion (70%).

- There is a positive relationship between income and digital financial literacy. Higher-income respondents, particularly in Idukki and Thrissur, show a higher understanding and adoption of digital financial services.
- Respondents who are aware of government schemes tend to use digital financial services more. In Idukki, Mannan sub-group members who are aware of schemes (75%) report frequent usage of digital services (60%).
- A significant correlation is observed between awareness of government schemes and digital transaction usage. Thrissur (Malayan sub-group) and Idukki (Mannan sub-group) show the strongest correlations, with high awareness also leading to higher digital transaction frequency.
- Higher-income groups in Thrissur (Kadar sub-group) and Idukki (Mannan sub-group) tend to have higher digital literacy (60-65%), which contributes to their higher adoption of digital financial services.
- There is a direct correlation between financial inclusion and income. Higher-income respondents, particularly in Thrissur (Kadar sub-group), report better access to financial services (70%).
- Usage of digital services has a positive impact on financial literacy. In Idukki, Mannan sub-group members who use digital services also show improved financial literacy levels (60%).
- Idukki has the highest overall adoption of digital financial services (55%), particularly in the Mannan sub-group. Thrissur follows with 50% adoption, especially in the Malayan sub-group, while Wayanad shows lower adoption (35%), particularly in the Paniyan sub-group.

CHAPTER V SUGGESTIONS AND CONCLUSION

Based on the findings from the present study on financial inclusion and financial literacy among scheduled tribes in Kerala, the following suggestions are tailored to address the specific gaps, challenges, and opportunities identified within the study. The recommendations are divided by the specific sub-groups and districts (Wayanad, Idukki, and Thrissur) while also addressing overall patterns that emerged.

- In districts like Wayanad, where awareness of government schemes like PMGDISHA and Jan Dhan Yojana is low, it is critical to implement targeted awareness programs. Utilize local leaders and community influencers from sub-groups like Paniyans and Kurumans to raise awareness through community meetings, local events, and digital platforms (e.g., WhatsApp, which is more popular in certain areas).
- Findings revealed that males have better access to financial products than females across the selected districts. Specifically, in Idukki, where Mannan and Muduvan sub-groups showed lower female participation in banking, creating women-centric programs becomes essential.
- As digital literacy remains low, particularly in Wayanad (Paniya, Kurichya), Idukki (Mannan), and Thrissur (Malayan), hands-on digital training must be expanded. Training centers should not only focus on the basics of using smartphones but also emphasize the use of banking apps, online payments, and secure financial transactions.
- A significant portion of the sample population in remote areas struggles to access banking services due to a lack of physical branches or ATMs. This issue is particularly prevalent in districts like Wayanad, where the terrain is difficult. Mobile banking units can be set up in remote areas to serve as a mobile ATM, banking correspondent, or a micro-ATM unit.

- Based on findings, there is a clear need for simplified and culturally appropriate financial products. Many tribal communities, especially in Idukki (Mala Arayan, Muduvan), face difficulty understanding complex loan structures and financial products.
- The study indicates a gap in financial literacy among younger members of the tribes. Introducing financial literacy programs at the school level in districts such as Thrissur (Kadar, Ullatan) can help cultivate financial habits early on.
- In Wayanad (Paniya, Kurichya), there is a relatively higher tendency towards informal savings groups. Leveraging and strengthening these groups can promote formal financial inclusion.
- The adoption of digital services is slow, particularly in Idukki and Thrissur, where many tribal members prefer traditional methods of financial transactions. Introducing incentives for using digital platforms can drive adoption.
- There exists a significant trust deficit towards formal financial institutions, particularly in districts like Idukki, where tribal communities are wary of formal banking. This is especially notable among Mannan and Muduvan sub-groups, who are more likely to rely on informal lenders.
- A key finding was the high interest in loans for agricultural and livelihood needs, particularly in Wayanad (Paniya, Kurichya), where many tribal groups are engaged in agriculture and forest-based livelihoods. Financial products designed for these sectors could be more useful.
- In light of the ongoing gaps in financial understanding, setting up local financial literacy support centers would help maintain ongoing support for communities in Thrissur (Malayan, Kadar) and Idukki (Mannan).
- Findings revealed that a large portion of the tribal population in districts like Idukki and Wayanad is engaged in local crafts or agricultural work but struggles with access to capital and business skills.

CONCLUSION

The study on financial inclusion and financial literacy among scheduled tribes in Kerala provides valuable insights into the socio-economic challenges and opportunities faced by tribal communities in the regions of Wayanad, Idukki, and Thrissur. The findings highlight several key aspects that impact financial inclusion, with a particular focus on the Paniya, Mannan, Muduvan, Kurichya, Malayan, and Kadar sub-groups across these districts.

The research reveals that while financial inclusion has made some strides in these areas, access to formal financial services remains limited, especially for women and certain sub-groups. The study also emphasizes the low levels of financial literacy, particularly in areas such as digital banking, savings habits, and government scheme awareness. These gaps in understanding and access continue to hinder the full integration of tribal communities into the mainstream financial system.

However, the study also uncovers significant opportunities for improvement. It shows that tribal communities are highly receptive to financial inclusion initiatives, especially when they are contextualized and delivered in culturally sensitive formats. The use of mobile banking, digital literacy programs, and community-driven financial education has the potential to bridge the gap in financial knowledge and services. Moreover, gender-inclusive financial programs, particularly targeting tribal women, are crucial for increasing overall financial participation.

The study's findings also underscore the importance of local trust-building between financial institutions and tribal communities. It is essential to design simplified financial products tailored to the needs of these populations, such as loans for agriculture, livestock, and small-scale entrepreneurial ventures. This

will encourage greater participation in formal financial systems and ensure that tribal communities benefit from the financial empowerment that such systems can offer.

In conclusion, financial inclusion and literacy among scheduled tribes in Kerala require a multi-faceted approach that addresses the unique challenges faced by these communities. A combination of targeted awareness campaigns, gender-sensitive programs, digital literacy training, and locally accessible financial products will play a key role in enhancing financial inclusion for the tribal population. The implementation of these suggestions will not only improve economic participation but also contribute to the overall social and financial empowerment of scheduled tribes in Kerala, ensuring that they are integrated into the evolving financial landscape of the state.

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