

Financial Literacy and Financial Inclusion among the Tribal Communities in Kerala

Thesis

Submitted to the University of Calicut

for the award of the Degree of

DOCTOR OF PHILOSOPHY IN COMMERCE

By

MUHAMMED SHAMIL M N

Under the supervision of

Dr. ANIL KUMAR. K

Principal, Alphonsa Arts & Science College, Sulthan Bathery, Wayanad, Kerala
(Associate Professor and Principal (Retired), Pazhassiraja College,
Pulpally, Wayanad, Kerala)



**Department of Commerce
Government College Kodanchery
Kozhikode, Kerala, PIN-673580
(Affiliated to the University of Calicut)**

MARCH 2026

Declaration

I, Muhammed Shamil M N, hereby declare that the thesis entitled "**Financial Literacy and Financial Inclusion among the Tribal Communities in Kerala**" is the record of original work done by me under the guidance and supervision of **Dr. Anil Kumar.K**, Principal, Alphonsa Arts and Science College, Sulthan Bathery (Associate Professor & Principal (Retired), Pazhassiraja College, Pulpally, Wayanad, Kerala). I also declare that this thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar recognition. The contents of the thesis have undergone plagiarism check using iThenticate software at C.H.M.K. Library, University of Calicut and the similarity index was found within the permissible limit. I also declare that the thesis is free from AI generated contents.

MUHAMMED SHAMIL M N
(Research Scholar)

Dr. ANIL KUMAR.K
(Supervising Teacher)
PRINCIPAL

ALPHONSA ARTS & SCIENCE COLLEGE
SULTHAN BATHERY - 673592
WAYANAD (DIST.), KERALA, INDIA

Place: **ICODANCHERY**

Date: **22/06/2026**

Dr. ANIL KUMAR. K

Principal

Alphonsa Arts & Science College, Sulthan Bathery, Wayanad, Kerala

(Associate Professor & Principal (Retired), Pazhassiraja College, Pulpally, Wayanad, Kerala

Email ID: anilkvjd@gmail.com

Mobile Number: +91 9447388341

Certificate

This is to certify that the thesis entitled "**Financial Literacy and Financial Inclusion among the Tribal Communities in Kerala**" is a bonafide record of research work done by **Mr. Muhammed Shamil M N** under my guidance and supervision. The thesis is worth submitting in fulfilment of the requirements for the award of the Degree of Doctor of Philosophy in Commerce. This work has not previously formed the basis for the award of any degree, diploma, fellowship or other similar titles and it is approved for submission to the University of Calicut.

Neither of the examiners has recommended any modifications or suggestions, and therefore, the original thesis is submitted as such. The soft copy attached is the same as that of the hard copy submitted.

Place: **ICODANCHERY**

Date: **22/06/2026**


Dr. ANIL KUMAR.K
(Supervising Teacher)

Dr. ANIL KUMAR K

PRINCIPAL

ALPHONSA ARTS & SCIENCE COLLEGE

SULTHAN BATHERY - 673592

WAYANAD (DIST.), KERALA, INDIA



UNIVERSITY OF CALICUT CERTIFICATE ON PLAGIARISM CHECK

1.	Name of the Research Scholar	MUHAMMED SHAMIL M N	
2.	Title of thesis / dissertation	Financial Literacy and Financial Inclusion among the Tribal Communities in Kerala	
3.	Name of the Supervisor	Dr. ANIL KUMAR. K	
4.	Department/Institution	Department of Commerce, Government College Kodanchery, Kodanchery P O, Kozhikode, PIN-673580 (Affiliated to University of Calicut)	
5.	Similar content (%) identified	Non Core	Core
		Introduction/ Theoretical overview/Review of literature/ Materials & Methods/ Methodology	Analysis/Result/Discussion/ Summary/Conclusion/ Recommendations
		5%	3%
	Acceptable maximum limit (%)	10	10
6.	Software used	iThenticate	
7.	Date of verification	23.02.2026	

*Report on plagiarism check, specifying included/excluded items with % of similarity to be attached.

Checked by (with name, designation & signature)

Dr. Nasirudheen. T
Assistant Librarian
University of Calicut, Kerala.

Name and signature of the Researcher : MUHAMMED SHAMIL M N

Name and signature of the Supervisor : Dr. ANIL KUMAR. K

Dr. ANIL KUMAR K
PRINCIPAL

The Doctoral Committee* has verified the report on plagiarism check with the contents of the thesis, as summarized above and appropriate measures have been taken to ensure originality of the Research accomplished herein.

ALPHONSA ARTS & SCIENCE COLLEGE
SULTHAN BATTERY - 673592
KODANCHERY (DIST), KERALA, INDIA

Name & Signature of the HoD/HoI (Chairperson of the Doctoral Committee)

Prof. (Dr.) YC IBRAHIM
PEN: 592481
PRINCIPAL

GOVT. COLLEGE KODENCHERY

*In case of languages like Malayalam, Tamil etc..on which no software is available for plagiarism check, a manual check shall be made by the Doctoral Committee, for which an additional certificate has to be attached.

Dedicated to

***My Grandfather, the late Varambrath Ahammed Master
and to all the marginalised and vulnerable
people around the world — May your
voices be heard, your rights upheld
and your dreams realised.***

Acknowledgement

First and foremost I have great pleasure in expressing my deep sense of gratitude to my supervising teacher Dr. Anil Kumar.K, Principal, Alphonsa Arts and Science College, Sulthan Bathery (Associate Professor & Principal (Retired), Pazhassiraja College, Pulpally, Wayanad), for his masterly guidance, meticulous attention, research motivation, parently love and perceptive suggestions without which the study would not have been possible.

It gives me great pleasure to thank Prof. (Dr.) Y C Ibrahim, Principal, Government College Kodanchery for his support for completing this academic venture.

I am incredibly grateful and indebted to Prof. (Dr.) A. Mohandas, Professor and Head, Department of Commerce, Government College Kodanchery for his support and care throughout my academic journey.

I am also thankful to all the members of Faculty of the Department of Commerce, Government College Kodanchery: Prof. (Dr.) Haneesh P, Dr. Muhammed Basheer MP, Mr.Manoj Kumar KU, Mr.Basheer Ahammed E K, Mr.Haneefa P, Dr.Umesh K K and Ms. Shubha. I extend my sincere thanks to all the present and former teaching and non-teaching staff of Government College Kodanchery for their constant support and cooperation throughout this work. I also express my sincere thanks to the former members of Faculty of this Department: Dr. Anooja K, Mr.Sumesh John PV, Ms.Kathambari V, Ms.Viji C V, Ms.Sabira P K and Mr.Dilshad PK.

I express my deep sense of gratitude to Dr. Sudev PB, Population Research Centre (Retd.), University of Kerala, Karyavattom, Thiruvananthapuram for giving me advise and guidance in the statistical analysis of the research work. I am thankful to all the other Research Supervisors in Department of Commerce, Government College Kodanchery: Dr. Jubair T, Associate Professor, Department of Commerce, Kunnamanganlam Government Arts and Science College, Dr. Joobi VP, Assistant Professor, Department of Commerce, Sree Narayana Guru College, Chelannur.

I would like to thank all my fellow research scholars Dr.Ranjith PR, Ms. Minnu Sunny, Ms.Aneesha PH, Ms.Akshara Bimal Joy, Ms.Haritha P, Mr.Rojith Prakash CJ,

Ms.Rashina M, Mr.Shafeeque AT, Mr.Jobin George, Mr.Akhin P, Mr.Swarun Sebastian, Mr.Rajendran MK, Mr.Suhaib T, Mr.Babu TP, Mr.Ragudas PV, Mr.Rejish MT, Ms. Abeesha M, Mr.Rajesh J , Mr.Muhammed Rafi, Dr.Unni and Dr.Niranjana Govind. I am also grateful to former scholars of this centre Mr.Vishnuprasad T, Dr. Fathimath Sajna V, Ms.Fasla P and Ms.Gramiya CV. .

I extend my heartfelt thanks to my former teachers at the Department of Commerce, Pazhassiraja College Pulpally Mr. Nidheesh Thomas, Ms. Vimya K P, Ms. Jincy P V, Ms. Nincy Sebastian and Ms. Sini Eldhose for their support, guidance and encouragement throughout my academic journey.

I express my deep sense of gratitude to Dr. Shabeer KP, Associate Professor, Department of Economics, Government Arts and Science College, Kozhikode. I take this opportunity to thank Librarians of Government College Kodanchery, CHMK Library, University of Calicut, KN Raj Library Centre for Development Studies, Thiruvananthapuram, IIM Kozhikode and Dr. BR Ambedkar Memorial Library, Jawaharlal Nehru University, New Delhi. I extend my heartfelt thanks to all the esteemed resource persons of the various workshops which I attended.

I would express my special gratitude to all respondents of the study and to other family members of the respondents for their attention, caring and patience throughout my survey. I sincerely express my deep sense of gratitude to all the staff of Scheduled Tribe Development Department, Thiruvananthapuram, ITDP Office Kanjirapally, Kottayam, Tribal Development Office Mananthavady, Tribal Development Office Palakkad and to all the staff of Tribal Extension Offices in Wayanad, Palakkad and Kottayam districts.

I express my sincere thanks to the tribal promoters: Mr Shivan, Ms.Dinisha, Ms.Parvathy M S, Mr.Unnikrishnan, Ms.Mini, Ms.Ambily and Ms. Anila for their strong support during the field survey.

My parents Mr. Abdul Majeed P P and Ms. Shahida K M have provided me with unwavering support ever since the beginning of my research. My gratitude towards them cannot be expressed in words. With great affection I would like to thank my sister Ms. Fathima Shana M N for her support during this time. I also take this opportunity to thank my grandfather, the late Varambrath Ahammed Master and grandmother smt. Pathumma C. I express my heartfelt thanks to the other members

in the family: Ms. Soudhabi KM, Mr.Muneer Ahammed KM, Mr.Jafar K M, Ms.Soudha PK, Ms.Nabila, Mr.Namil Muhammed, Mr.Amal Ahammed and Zella Hanin.

I would like to give special mention and thanks to all my friends for their constant support and happiness throughout my life. I take this opportunity to express my sincere gratitude to the University Grants Commission (UGC) for providing me with the fellowship, which acted as a support system for the completion of my research work. I also acknowledge the support and contribution of many whose names have not been mentioned but who, nevertheless, played a big role in making this research work successful. Above all, I place my keen indebtedness to GOD ALMIGHTY for showering his blessings and grace on me to make this dream come true.

MUHAMMED SHAMIL M N

Contents

Chapter 1

Introduction	1 – 26
1.1 Introduction	1
1.2 Statement of the Problem	5
1.3 Significance of the Study.....	8
1.4 Scope of the Study.....	9
1.5 Objectives of the Study.....	11
1.6 Research Hypotheses.....	11
1.7 Variables Used for the Study.....	13
1.8 Conceptual Model of the Study	14
1.9 Research Methodology.....	14
1.9.1 Research Design	15
1.9.2 Sampling Design.....	15
1.9.3 Data Collection Instrument.....	18
1.10 Statistical Tools and Techniques	20
1.11 Period of the Study	20
1.12 Limitation of the Study.....	21
1.13 Chapter Scheme	21
References	24

Chapter 2

Review of Literature	27 – 106
2.1 Introduction	27
2.2 Financial Literacy (International Perspective).....	28
2.3 Financial Literacy (National Perspective)	39
2.4 Financial Inclusion (International Perspective).....	41
2.5 Financial Inclusion (National Perspective)	51
2.6 Financial Literacy and Financial Inclusion.....	60

2.7	Finance and Scheduled Tribes	64
2.8	Research Gap.....	89
2.9	Conclusion.....	90
	References	91

Chapter 3

Financial Literacy, Financial Inclusion and Scheduled Tribes: An Overview 107 – 182

3.1	Introduction	107
3.2	Financial Literacy	107
3.2.1	Global Initiatives for increasing Financial Literacy	109
3.2.2	Financial Literacy initiatives of RBI	112
3.2.3	National Strategy for Financial Education (2020-2025)	115
3.2.4	Financial Literacy Initiatives by Different Stakeholders.....	116
3.2.5	Financial Literacy and Consumer Protection.....	118
3.2.6	Financial Education and Financial Counselling.....	119
3.2.7	Financial Literacy Initiatives of Commercial Banks in India	120
3.3	Financial Exclusion	129
3.3.1	Financial Inclusion	131
3.3.2	Digital Financial Inclusion	136
3.3.3	Financial Inclusion Measurement Tools.....	137
3.3.4	Government Initiatives to Gear Financial Inclusion in India.....	139
3.3.5	National Strategy for Financial Inclusion 2019-2024.....	146
3.3.6	Financial Inclusion Index of RBI	146
3.3.7	Financial Literacy and Financial Inclusion.....	149
3.4	Scheduled Tribes in Kerala	151
3.4.1	Tribal Communities in Kerala	162
3.5	Conclusion.....	176
	References	178

Chapter 4

Analysis and Discussion 183 – 293

4.1	Introduction	183
4.2	Profile of the Sample	184

4.2.1	Relationship between Income and Expenses of the Scheduled Tribes.....	192
4.3	Financial Literacy among the Tribal Communities	194
4.3.1	Financial Knowledge	194
4.3.2	Financial Behaviour	196
4.3.2.1	Person making Household Financial Decision	196
4.3.2.2	Status of Making Personal Financial Decision	197
4.3.2.3	Financial Management Practices	198
4.3.2.4	Saving and investment Behaviour	200
4.3.2.5	Deficit of Income	201
4.3.2.6	Opinion Regarding Personal Financial Aspects.....	202
4.3.3	Financial Attitude.....	204
4.3.3.1	Personal Financial Attitude.....	204
4.3.4	Financial Awareness	207
4.3.4.1	Personal Financial Awareness	204
4.3.5	Individual Financial Literacy Score.....	209
4.3.5.1	Variation in Financial Literacy across Socio Demographic Variables.....	210
4.3.5.2	Variation in Financial Literacy across Tribal Communities.....	215
4.3.5.3	Variation in Financial Literacy across Region.....	218
4.3.6	Basic Digital Financial Literacy	220
4.3.6.1	Requirement of Physical Signature for Validity of Digital Financial Contracts	220
4.3.6.2	Opinion about Digital Financial Aspects.....	221
4.3.6.3	Individual Basic Digital Financial Literacy Score	223
4.3.6.3.1	Variation in Basic Digital Financial Literacy across Socio Demographic Variables	224
4.3.6.3.2	Variation in Basic Digital Financial Literacy across Tribal Communities.....	229
4.3.6.3.3	Variation in Basic Digital Financial Literacy across Region	232
4.3.6.4	Relationship between Financial Literacy and Basic Digital Financial Literacy	234

4.4	Financial Inclusion among the Tribal Communities	236
4.4.1	Status of Bank Account	237
4.4.2	Frequency of Deposit and Withdrawal	238
4.4.3	Status of Having Insurance Coverage	239
4.4.4	Individual Financial Inclusion Index	240
4.4.4.1	Variation in Financial Inclusion across Socio Demographic Variables.....	241
4.4.4.2	Variation in Financial Inclusion across Tribal Communities.....	246
4.4.4.3	Variation in Financial Inclusion across Region	249
4.4.4.4	Variation in Saving Behaviour across the Levels of Financial Inclusion	250
4.5	Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities	252
4.5.1	Association between Financial Literacy and Financial Inclusion	252
4.5.2	Effect of Gender and Age on the relationship between Financial Literacy and Financial Inclusion.....	254
4.5.2.1	Effect of Gender on the Relationship between Financial Literacy and Financial Inclusion	256
4.5.2.2	Effect of Age on the Relationship between Financial Literacy and Financial Inclusion	257
4.6	Status of Financial Planning, Financial Anxiety and Financial Confidence among the Tribal Households.....	259
4.6.1	Confidence Regarding the Financial Matters	259
4.6.2	Financial Planning	262
4.6.3	Financial Anxiety and Financial Satisfaction.....	264
4.6.3.1	Variation in Financial Satisfaction across Tribal Communities.....	265
4.6.4	Access Barriers	268
4.6.4.1	Effect of Language Problems on Financial Literacy.....	270
4.6.4.2	Influence of Inequality in Access on the Financial Inclusion of Scheduled Tribes.....	271
4.6.5	Attitude towards Informal Financial Sources	273
4.6.6	A Structural Analysis of Financial Literacy and Financial Inclusion of Tribal Communities.....	275

4.6.7	Consumption of Hazardous Substances.....	282
4.6.7.1	Variation in Alcohol Consumption across Tribal Communities.....	283
4.7	Financial Development of Tribal Communities	287
4.8	Conclusion.....	291
	References	293

Chapter 5

Summary of Findings and Conclusion..... 294 – 324

5.1	Introduction	294
5.2	Major Findings.....	297
5.2.1	Socio -Demographic Profile.....	297
5.2.2	Financial Literacy among the Tribal Communities.....	301
5.2.3	Financial Inclusion among the Tribal Communities.....	311
5.2.4	Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities	315
5.2.5	Status of Financial Planning, Financial Anxiety and Financial Confidence among the Tribal Households	316
5.2.6	Financial Development of Tribal Communities.....	322
5.3	Conclusion.....	323

Chapter 6

Recommendations, Implications and Scope for Future Research 325 – 336

6.1	Introduction	325
6.2	Recommendations	326
6.3	Implications of the Study.....	334
6.4	Potential Avenues for Future Research.....	335
6.5	Conclusion.....	335

Bibliography.....i – xxiii

Appendixi – xi

List of Tables

Table	Title	Page No
1.1	List of Variables	13
1.2	District Wise Population of Scheduled Tribes in Kerala	15
1.3	Distribution of Sample	18
1.4	Reliability Statistics	20
3.1	Financial Literacy Weeks from the beginning and its themes	114
3.2	Distribution of Financial Literacy in India (Gender wise)	118
3.3	Notable Financial Literacy Initiatives from Different Agencies in the Country	123
3.4	Financial Literacy Centres in Wayanad District	128
3.5	Financial Literacy Centres in Palakkad District	128
3.6	Financial Literacy Centres in Kottayam District	129
3.7	Overview of Global Findex Themes	138
3.8	CRISIL INCLUSIX Score	139
3.9	Scheduled Tribe Population (KERALA)	159
3.10	Percentage of Scheduled Tribe population to State Total Population (South Region)	160
3.11	Scheduled Tribe Population (KERALA)	160
3.12	Scheduled Tribe Population in Selected Districts	161
3.13	Paniyan Population (Kerala)	163
3.14	Background Information (Paniyan Community)	163
3.15	Highly Populated Districts in Kerala (Paniyan Community)	163
3.16	Paniyan Tribal Community in Wayanad	164
3.17	Adiyan Population (Kerala)	164
3.18	Background Information (Adiyan Community)	165

Table	Title	Page No
3.19	Highly Populated Districts in Kerala (Adiyan Community)	165
3.20	Adiyan Tribal Community in Wayanad	165
3.21	Kurichiyan Population (Kerala)	166
3.22	Background Information (Kurichiyan Community)	166
3.23	Highly Populated Districts in Kerala (Kurichiyan Community)	167
3.24	Kurchiyan Tribal Community in Wayanad	167
3.25	Mala Arayan Population (Kerala)	168
3.26	Background Information (Mala Arayan Community)	168
3.27	Highly Populated Districts in Kerala (Mala Arayan Community)	169
3.28	Mala Arayan Tribal Community in Kottayam	169
3.29	Ulladan Population (Kerala)	170
3.30	Background Information (Ulladan Community)	170
3.31	Highly Populated Districts in Kerala (Ulladan Community)	170
3.32	Ulladan Tribal Community in Kottayam	171
3.33	Malavedan Population (Kerala)	171
3.34	Background Information(Malavedan Community)	171
3.35	Highly Populated Districts in Kerala (Malavedan Community)	172
3.36	Malavedan Tribal Community in Kottayam	172
3.37	Eravalan Population (Kerala)	172
3.38	Background Information (Eravalan Community)	173
3.39	Highly Populated Districts in Kerala (Eravalan Community)	173
3.40	Eravalan Tribal Community in Palakkad	173
3.41	Malasar Population (Kerala)	174
3.42	Background Information (Malasar Community)	174
3.43	Highly Populated Districts in Kerala (Malasar Community)	174
3.44	Malasar Tribal Community in Palakkad	175

Table	Title	Page No
3.45	Malayan Population (Kerala)	175
3.46	Background Information (Malayan Community)	175
3.47	Highly Populated Districts in Kerala (Malayan Community)	176
3.48	Malayan Tribal Community in Palakkad	176
4.1	Region Wise Distribution of Respondents	184
4.2	Community Wise Distribution of Respondents	184
4.3	Gender Wise Distribution of Respondents	185
4.4	Age Wise Distribution of Respondents	185
4.5	Educational Qualifications of the Respondents	186
4.6	Occupation of the Respondents	187
4.7	Participation of Respondents in the MGNREGA	188
4.8	Monthly Income of the Respondents	188
4.9	Total Number of Family Members	189
4.10	Total Number of Members below 15 Years of Age	190
4.11	Total Number of Members above 65 Years of Age	190
4.12	Total Number of Earning Members in the Household	191
4.13	Total Income of the Household	191
4.14	Average Daily Expenses of the Household	192
4.15	Relationship between Income and Expenses	193
4.16	Financial Knowledge of the Respondents	195
4.17	Person Making Household Financial Decision	197
4.18	Status of Making Personal Financial Decision	198
4.19	Financial Management Practices	199
4.20	Saving Behaviour of the Respondents	200
4.21	Deficiency of Income among the Respondents	201

Table	Title	Page No
4.22	Strategies Adopted by Respondents to Manage Income Deficit	201
4.23	Opinions Regarding Personal Financial Aspects	202
4.24	Personal Financial Attitude	205
4.25	Personal Financial Awareness	208
4.26	Individual Financial Literacy Score	209
4.27	Financial Literacy Variation across Socio Demographic Variables	210
4.28	Financial Literacy Variation across Tribal Communities	216
4.29	Financial Literacy Variation across Tribal Communities (Post-hoc test)	217
4.30	Financial Literacy Variation across Region	218
4.31	Financial Literacy Variation across Region (Post-hoc test)	219
4.32	Requirement of Physical Signature for Validity of Digital Financial Contracts	220
4.33	Opinion about Digital Financial Aspects	221
4.34	Individual Basic Digital Financial Literacy Score	223
4.35	Variation in Basic Digital Financial Literacy across Socio Demographic Variables	225
4.36	Variation in Basic Digital Financial Literacy across Tribal Communities	230
4.37	Variation in Basic Digital Financial Literacy across Tribal Communities (Post-hoc test)	231
4.38	Variation in Basic Digital Financial Literacy across Region	232
4.39	Basic Digital Financial Literacy Variation across Region (Post-hoc test)	233
4.40	Relationship between Financial Literacy and Basic Digital Financial Literacy	234
4.41	Bank Account Status of the Respondents	237

Table	Title	Page No
4.42	Frequency of Deposit and Withdrawal	238
4.43	Status of Insurance	239
4.44	Types of Insurance Coverage	240
4.45	Individual Financial Inclusion Index	241
4.46	Variation in Financial Inclusion across Socio Demographic Variables	242
4.47	Variation in Financial Inclusion across Tribal Communities	247
4.48	Variation in Financial Inclusion across Tribal Communities (Post-hoc test)	248
4.49	Variation in Financial Inclusion across Region	249
4.50	Variation in Saving Behavior across the Levels of Financial Inclusion	250
4.51	Association between Financial Literacy and Financial Inclusion	253
4.52	Effect of Financial Literacy on Financial Inclusion	255
4.53	Effect of Gender on the Relationship between Financial Literacy and Financial Inclusion	256
4.54	Effect of Age on the Relationship between Financial Literacy and Financial Inclusion	257
4.55	Confidence Regarding the Financial Matters	260
4.56	Retirement Planning and Financial Goal Setting	263
4.57	Financial Anxiety and Financial Satisfaction	264
4.58	Variation in Financial Satisfaction across Tribal Communities	266
4.59	Variation in Financial Satisfaction across Tribal Communities (Post hoc test)	267
4.60	Barriers Faced in Accessing Financial Services	268
4.61	Effect of Language Problems on Financial Literacy	271
4.62	Inequality and Financial Inclusion	272
4.63	Inequality and Financial Inclusion (Post hoc test)	273

Table	Title	Page No
4.64	Attitude towards Informal Financial Sources	274
4.65	Regression Weights	277
4.66	Model Fit Indices	280
4.67	Total Effect of the Constructs	281
4.68	Consumption Frequency of Hazardous Substances	282
4.69	Variation in Alcohol Consumption across Tribal Communities	284
4.70	Variation in Alcohol Consumption across Tribal Communities (Post hoc test)	285
4.71	Preferences for Participating in Financial Development Initiatives	288

List of Figures

Figure	Title	Page No
1.1	Components of Financial Inclusion	3
1.2	Conceptual Model	14
2.1	Conceptual Overview of the Literature	28
3.1	Impact of Financial Literacy	109
3.2	Forms of Financial Exclusion	130
3.3	Financial inclusion Path towards Sustainable Development	133
4.1	Relationship between Income and Expenses	193
4.2	Differences in Financial Literacy Level across Age Groups	212
4.3	Differences in Financial Literacy Level across Education	212
4.4	Differences in Financial Literacy Level across Occupation	213
4.5	Differences in Financial Literacy Level across Income Group	215
4.6	Differences in Financial Literacy Level across Tribal Communities	216
4.7	Differences in Financial Literacy Level across Region	219
4.8	Differences in Basic Digital Financial Literacy Level across Age Groups	226
4.9	Differences in Basic Digital Financial Literacy Level across Education	227
4.10	Differences in Basic Digital Financial Literacy Level across Occupation	228
4.11	Differences in Basic Digital Financial Literacy Level across Income Group	229
4.12	Differences in Basic Digital Financial Literacy Level across Tribal Communities	230
4.13	Region wise Differences in Basic Digital Financial Literacy	233

Figure	Title	Page No
	Level	
4.14	Differences in Financial Inclusion across Age Groups	243
4.15	Differences in Financial Inclusion across Education	244
4.16	Differences in Financial Inclusion across Occupation	245
4.17	Differences in Financial Inclusion across Income Group	246
4.18	Differences in Financial Inclusion across Tribal Communities	247
4.19	Difference in the Saving Behaviour across the Levels of Financial Inclusion	251
4.20	Association between Financial Literacy and Financial Inclusion	253
4.21	Variation in Financial Satisfaction across Tribal Communities	266
4.22	Inequality and Financial Inclusion	272
4.23	Structural Equation Modeling	276
4.24	Variation in Alcohol Consumption across Tribal Communities	284

List of Abbreviations

APY	: Atal Pension Yojana
BC	: Business Correspondent
BF	: Business Facilitators
BSBDA	: Basic Savings Bank Deposit Account
CFEB	: Consumer Financial Education Body
CFI	: Comparative Fit Index
DBT	: Direct Benefit Transfer
FCAC	: Financial Consumer Agency of Canada
FIF	: Financial Inclusion Fund
FLAME	: Financial Literacy Agenda for Mass Empowerment
FLCC	: Financial Literacy and Counselling Centre
FLEC	: Financial Literacy and Education Commission
FSDC	: Financial Stability and Development Council
GCC	: General Credit Card
GPFI	: Global Partnership for Financial Inclusion
IBDFLS	: Individual Basic Digital Financial Literacy Score
IFI	: Incremental Fit Index
IFII	: Individual Financial Inclusion Index
IFLS	: Individual Financial Literacy Score
INFE	: International Network on Financial Education
IRDAI	: Insurance Regulatory and Development Authority of India
KCC	: Kisan Credit Cards
KYC	: Know Your Customer
NABARD	: National Bank for Agriculture and Rural Development
NCFE	: National Centre for Financial Education
NFI	: Normed Fit Index

NHG	: Neighborhood Group
NSFE	: National Strategy for Financial Education
NSFI	: National Strategy for Financial Inclusion
OECD	: Organisation for Economic Co-operation and Development
PFRDA	: Pension Fund Regulatory and Development Authority
PMJDY	: Pradhan Mantri Jan Dhan Yojana
PMJJBY	: Pradhan Mantri Jeevan Jyoti Bima Yojana
PMMY	: Pradhan Mantri Mudra Yojana
PMSBY	: Pradhan Mantri Suraksha Bima Yojana
PSB	: Public Sector Bank
RBI	: Reserve Bank of India
RCB	: Regional Cooperative Bank
RMSEA	: Root Mean Square Error of Approximation
RRB	: Regional Rural Bank
RSETI	: Rural Self Employment Training Institute
SDG	: Sustainable Development Goal
SEBI	: Securities and Exchange Board of India
SEM	: Structural Equation Modeling
SHG	: Self-Help Group
SLBC	: State Level Bankers Committee
ST	: Scheduled Tribes
TSP	: Tribal Sub Plan

Abstract

Financial literacy refers to the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources. It is the capacity to have familiarity with and understanding of financial products and services. Financial inclusion is the process of delivering affordable financial products and services to underprivileged and low-income groups within a population. These services include savings, remittances, payments, insurance, loans and all the financial advisory support facilitated by the formal financial system. Access to a bank account instills a sense of recognition, identity, trust and empowerment in the minds of the marginalised communities. The objectives of the study are: to assess the level of financial literacy and the level of financial inclusion among the tribal communities in Kerala, to analyse the role of financial literacy in promoting financial inclusion among the tribal communities and to examine the status of financial planning, financial anxiety and financial confidence among the tribal households. The sampling unit for the study consists of the financial heads of households from tribal communities in Kerala and the determined sample size for the study is 450. Multistage Random Sampling Method has been used in this study and nine tribal communities were selected accordingly. Descriptive statistics such as: frequencies, percentages, mean, and standard deviation were used for the purposes of summarising socio-demographic characteristics and for displaying the general states of financial literacy and inclusion. Inferential statistical methods including independent samples t-tests, chi-square tests, One-Way Analysis of Variance (One-Way ANOVA), Friedman test, Scheffe's post-hoc test, Sobel test, Pearson correlation, Simple linear regression, Multiple linear regression and Structural Equation Modeling (SEM) were used in accordance with the objectives of the study. The results of the study revealed that, despite considerable advancements in enhancing access to financial services for Scheduled Tribes in Kerala, significant deficiencies remain in terms of usage, effectiveness and sustainability. The levels of financial literacy were found notably low across various

communities with disparities influenced by factors such as education, income, age, occupation and regional factors. This limited financial literacy adversely impacts both basic digital financial literacy and financial inclusion which emphasizes the necessity for integrated approaches rather than isolated initiatives. Strengthening financial literacy, generating confidence in financial decision-making and minimising procedural barriers are requisites for transforming passive access into meaningful inclusion. At the same time, enhancing insurance coverage, encouraging diversified savings practices and promoting trust through culturally sensitive service delivery can significantly contribute to long-term financial security. Policy-level interventions, community-based initiatives and innovative financial products must work in synergy mode to bridge existing inequalities.

Keywords: Financial Literacy, Financial Inclusion, Scheduled Tribes, Financial Knowledge, Financial Behaviour, Financial Development

സംഗ്രഹം

ലഭ്യമായസാമ്പത്തികസ്രോതസ്സുകളുപയോഗിച്ച് ബോധപൂർവ്വവും ഫലപ്രദവുമായ തീരുമാനങ്ങളെടുക്കാൻ വ്യക്തിയെ സഹായിക്കുന്ന അറിവിനെയും നൈപുണ്യത്തെയുമാണ് സാമ്പത്തികസാക്ഷരത എന്നു പറയുന്നത്. സാമ്പത്തിക ഉൽപ്പന്നങ്ങളേയും സേവനങ്ങളേയും കുറിച്ചുള്ള ധാരണയും അവബോധവും ഇതിന്റെ ഭാഗമാണ്. സമൂഹത്തിലെ പിന്നോക്ക വിഭാഗത്തിൽപ്പെട്ടവരും താഴ്ന്ന വരുമാനക്കാരുമായവർക്ക് താങ്ങാനാവുന്ന സാമ്പത്തിക ഉൽപ്പന്നങ്ങളും സേവനങ്ങളും ലഭ്യമാക്കുന്ന പ്രക്രിയയാണ് സാമ്പത്തികമായ ഉൾച്ചേർക്കൽ. ഔദ്യോഗികമായ സാമ്പത്തിക സംവിധാനത്തിലൂടെ നടത്തുന്ന സമ്പാദ്യം, പണമിടപാടുകൾ, പേയ്മെന്റുകൾ, ഇൻഷുറൻസ്, വായ്പകൾ, സാമ്പത്തിക ഉപദേശങ്ങൾ എന്നിവയെല്ലാം ഇതിലുൾപ്പെടുന്നു. ബാങ്ക് അക്കൗണ്ട് തുടങ്ങുന്നത് പാർശ്വവൽക്കരിക്കപ്പെട്ടവർക്ക് അംഗീകാരം, തിരിച്ചറിവ്, ആത്മവിശ്വാസം എന്നിവ വളർത്താൻ സഹായിക്കുന്നു. കേരളത്തിലെ ഗോത്രവർഗ്ഗക്കാരുടെയിടയിൽ സാമ്പത്തിക സാക്ഷരതയുടെയും ഉൾച്ചേർക്കലിന്റെയും തോത് അളക്കുക, സാമ്പത്തിക സാക്ഷരത സാമ്പത്തിക ഉൾച്ചേർക്കലിനെ എങ്ങനെ സ്വാധീനിക്കുന്നു എന്ന് വിശകലനം ചെയ്യുക, ഗോത്രകുടുംബങ്ങളുടെ സാമ്പത്തികസൂത്രണം, സാമ്പത്തിക ആശങ്ക, ആത്മവിശ്വാസം എന്നിവ പരിശോധിക്കുക തുടങ്ങിയവയെല്ലാം ഈ പഠനത്തിന്റെ പ്രധാന ലക്ഷ്യങ്ങളാണ്. പഠനത്തിനുള്ള സാമ്പിൾ യൂണിറ്റായി കേരളത്തിലെ ഗോത്രവർഗ കുടുംബങ്ങളിലെ സാമ്പത്തികകാര്യങ്ങൾ തീരുമാനിക്കുന്ന 450 പേരെയാണ് തിരഞ്ഞെടുത്തത്. മൾട്ടി സ്റ്റേജ് റാൻഡം സാമ്പിളിങ് രീതി ഉപയോഗിച്ച് ഒൻപത് ഗോത്രവിഭാഗങ്ങളെ ഇതിനായി തിരഞ്ഞെടുത്തു. സാമൂഹ്യ ജനസംഖ്യാ സവിശേഷതകൾ, സാമ്പത്തിക സാക്ഷരതയുടെയും ഉൾച്ചേർക്കലിന്റെയും പൊതുവായ അവസ്ഥകൾ എന്നിവ പരിശോധിക്കുന്നതിനു വേണ്ടി ആവൃത്തികൾ, ശതമാനങ്ങൾ, ശരാശരി, സ്റ്റാൻറേർഡ് ഡിവിയേഷൻ, തുടങ്ങിയ വിവരണാത്മക സ്ഥിതിവിവരക്കണക്കുകൾ ഉപയോഗിച്ചു. ഇൻറിപെൻറ് സാമ്പിൾ, ടി-ടെസ്റ്റുകൾ, കൈ-സ്ക്വയർ ടെസ്റ്റുകൾ, വൺവേ വേരിയൻസ് വിശകലനം(വൺവേഅനോവ), ഫ്രീഡ്മാൻടെസ്റ്റ്, ഷെഫെ പോസ്റ്റ് -ഹോക്ക്ടെസ്റ്റ്, സോബൽ ടെസ്റ്റ്, പിയെഴ്സൺ കോറിലേഷൻ , സിമ്പിൾ ലീനിയർ റിഗ്രഷൻ, മൾട്ടിപ്പിൾ ലീനിയർ റിഗ്രഷൻ, സ്കൂർചാൽ ഇക്വേഷൻ മോഡലിംഗ് എന്നിവയുൾപ്പെടെ ഇൻഫെറൻഷ്യൽ സ്റ്റാറ്റിസ്റ്റിക്കൽ രീതികൾ പഠന ലക്ഷ്യങ്ങൾക്കനുസൃതമായി ഉപയോഗിച്ചു. കേരളത്തിലെ പട്ടികവർഗ്ഗക്കാർക്ക് സാമ്പത്തിക സേവനങ്ങൾ ലഭ്യമാക്കുന്നതിൽ പുരോഗതി ഉണ്ടായിട്ടുണ്ടെങ്കിലും അവയുടെ ഫലപ്രാപ്തിയിലും സുസ്ഥിരതയിലും വലിയ കുറവുകൾ ഉണ്ടെന്ന് പഠന ഫലങ്ങൾ വെളിപ്പെടുത്തുന്നു.പല ഗോത്ര വിഭാഗങ്ങളിലും സാമ്പത്തികസാക്ഷരതാനിലവാരം വളരെ കുറവാണ്. വിദ്യാഭ്യാസം,വരുമാനം, പ്രായം, തൊഴിൽ, പ്രാദേശിക ഘടകങ്ങൾ തുടങ്ങിയവ ഇതിനെ സ്വാധീനിക്കുന്നു സാമ്പത്തിക അറിവിന്റെ അഭാവം ഡിജിറ്റൽ ഇടപാടുകളെയും സാമ്പത്തിക ഉൾച്ചേർക്കലിനെയും ദോഷകരമായി ബാധിക്കുന്നു. ബാങ്ക് അക്കൗണ്ടുകൾ

ലഭ്യമാക്കുന്നതിനു മുമ്പായി സാമ്പത്തിക അറിവു പകരുകയും ആത്മവിശ്വാസം വളർത്തുകയും നടപടിക്രമങ്ങൾ ലളിതമാക്കുകയും ചെയ്യേണ്ടത് അത്യാവശ്യമാണ്. ഇൻഷുറൻസ് പരിരക്ഷ വർദ്ധിപ്പിക്കുക, വൈവിധ്യമാർന്ന സമ്പാദ്യ ശീലങ്ങൾ പ്രോത്സാഹിപ്പിക്കുക, അവരുടെ സംസ്കാരത്തിന് അനുയോജ്യമായ രീതിയിലുള്ള സേവനങ്ങൾ നൽകുക എന്നിവ ദീർഘകാല സാമ്പത്തികസുരക്ഷക്ക് അത്യാവശ്യമാണ്. നിലവിലുള്ള അസമത്വങ്ങൾ പരിഹരിക്കുന്നതിന് സർക്കാർ തലത്തിലുള്ള ഇടപെടലുകളും കമ്മ്യൂണിറ്റി അധിഷ്ഠിത പദ്ധതികളും നൂതനമായ സാമ്പത്തിക ഉൽപ്പന്നങ്ങളും ഒത്തൊരുമിച്ച് പ്രവർത്തിക്കേണ്ടതുണ്ട്.

സൂചകപദങ്ങൾ: സാമ്പത്തിക സാക്ഷരത, സാമ്പത്തിക ഉൾച്ചേർക്കൽ, പട്ടികവർഗ്ഗക്കാർ, സാമ്പത്തിക അറിവ്, സാമ്പത്തികസ്വഭാവം, സാമ്പത്തികവികസനം.

Chapter 1

INTRODUCTION

1.1	Introduction	1
1.2	Statement of the Problem	5
1.3	Significance of the Study.....	8
1.4	Scope of the Study.....	9
1.5	Objectives of the Study	11
1.6	Research Hypotheses.....	11
1.7	Variables Used for the Study	13
1.8	Conceptual Model of the Study	14
1.9	Research Methodology	14
1.10	Statistical Tools and Techniques	20
1.11	Period of the Study	20
1.12	Limitation of the Study.....	21
1.13	Chapter Scheme	21
	References	24

1.1 Introduction

The overall development of a nation cannot be achieved until ensuring the development and growth of each individual in the national territory. Inclusive economic growth of a country aims at providing equitable opportunities to economic participants with benefits incurred by every section of the society. Financial inclusion is one such process which ensures access to affordable and appropriate financial products and services for all individuals and businesses, particularly the vulnerable and underserved. Financial inclusion enables poor people to save and borrow allowing them to build their assets to invest in education and entrepreneurial ventures.

Financial inclusion refers to providing financial and banking services to those sections of the society which are still deprived of basic banking services. In India even after the launch of Jan Dhan Yojana, less than 60 percent of people have bank accounts but the beneficiaries are in between 92 to 99 percent in the case of developed world. The policy planners realized that development will be uneven and not wholesome, if we do not address the problem of exclusion. Providing opportunities to every individual to use his potential for improving his wellbeing is most essential for developing prosperous and stable society. Financial inclusion is intended to connect people with banks with consequential benefits by ensuring that financial system plays its due role in promoting inclusive growth which is one of the biggest challenges for economies.

Government of India makes tremendous effort to fulfill the inclusive growth aspiration of the country. The vision of the country towards inclusive growth is evident from its eleventh five year plan. (Chakraborty K.C ,2010) defined inclusive growth as “an equitable allocation of resources with benefits accruing to every section of society, focusing on the intended short and long term benefits and economic linkages at large on the basis of regional and population criteria”. Growth is inclusive when it

creates economic opportunities along with ensuring equal access to them. The inclusive growth by encompassing the hitherto excluded population can bring in several other benefits as well to the economy (Planning Commission, 2007). The inclusive growth of each individual was restricted mainly by the economic disparity prevailing in the society. Even though the British left India, the customs followed by the British such as inequality is still prevalent in India. The major causes of inequality in the modern era is mainly because of the financial discrimination between mainstream section of population and the under privileged section of population. The economic backwardness of the underprivileged or marginalized communities is caused mainly due to the existence of financial exclusion.

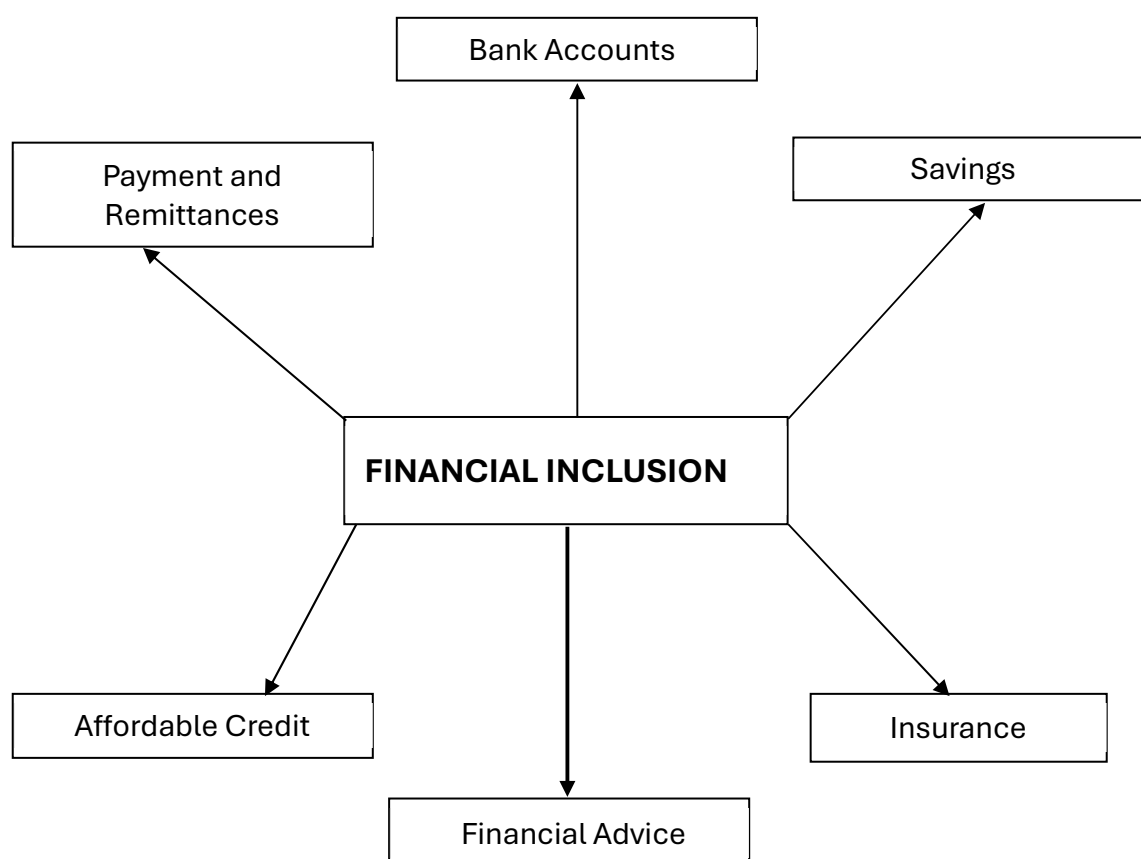
Financial exclusion is a worldwide phenomenon which is to be addressed irrespective of developed, developing and under developed nations. Financial exclusion is the situation where the citizens came across difficulties in accessing and utilizing financial products and services offered by the formal financial players in the respective country in a fair and equitable manner. The negative impact of financial exclusion on the economy and the distance towards sustainable development of the nations compelled to think about the rectification measures. The search of the world to overcome the financial exclusion leads to the development of a new branch of studies called financial inclusion. Financial inclusion is an extension of financial services to all parts of society especially to those that have so far been excluded or under-served by the formal financial system. It involves access to banking, saving, credit, insurance, and payment facilities. Rangarajan (2008) defines financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. A large number of tools have been adopted by Government of India from different periods in order to achieve inclusive growth, among the tools most relevant tools were the financial inclusion. It has the capability to bring the unbanked population in to the formal financial system. Financial inclusion is viewed as a driver to growth in an economy. At the international level, financial inclusion has been regarded as one of the most discussed system that can assist in enhancing the living conditions of the people. Financial inclusion is where the households and businesses

have access to financial services such as savings, payments, credit and insurance which is affordable and accessible (Nsiah & Tweneboah, 2023).

The idea of financial inclusion in India is attributed to its inception with the cooperative movement that was initiated in 1904. But it picked up pace in 1969 when the nationalization of 14 major commercial banks was carried out and the subsequent introduction of the lead bank scheme. Through the inclusion of unbanked the chance for saving and credit availability increased which had a positive result in the inclusive growth of the economy. Financial inclusion is aimed at providing financial products and services to each and every people in a fair, transparent and equitable manner at an affordable cost.

Figure 1.1

Components of Financial Inclusion



Source: Rangarajan committee on Financial Inclusion (2008)

Financial Inclusion of an individual is closely connected with financial literacy. Financial literacy gained wider recognition from policymakers around the world. The demand of the population towards formal financial products and services depend up on their level of financial literacy. Financial literacy refers to the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources. It is the capacity to have familiarity with and understanding of financial products and services. Financial literacy plays a vital role in the efficient allocation of household savings and the ability of individual to meet their financial goals. Financial literacy is a continuous process and it requires on-going support and reinforcement. Financial literacy empowers financially marginalized communities by providing them with the knowledge and skills to take control of their finances. Financial literacy enables people to plan for the future, make sound decisions, save, effectively manage debt and acquire entrepreneurial opportunities (V Mahesha, 2023). The relationship between financial literacy and financial inclusion is evident from the words of former Reserve Bank Governor Dr. Subbarao. According to Dr. Subbarao ‘in the Reserve Bank we treat financial inclusion and financial literacy as twin pillars, while financial inclusion acts from the supply side providing the financial products and services that people demand, financial literacy stimulates the demand side by making people aware of what they can demand’. The formal financial institutions in developing countries are facing difficulties to connect the entire population in the formal financial network and to provide basic banking products and services at a reasonable and affordable cost.

Financial literacy and financial inclusion stand as a poverty alleviation tool through individual economic growth and financial stability. Financial literacy has a huge impact on the financial inclusion of poor in rural areas. Indeed, financial literacy enables the poor to make sound financial judgments and choices before engaging in sophisticated financial services and products offered by official financial institutions (Panakaje, Rahiman, Parvin, Kulal, & Siddiq, 2023). A developing country like India needs miles to travel to reach its destination. Financial inclusion acts as a weapon for achieving inclusive growth and the resultant sustainable development. There is a considerable population who stands outside the purview of formal financial

institution. The main financially excluded sections are marginalised communities of the country which includes women, Scheduled Caste, Scheduled Tribe, fisherman etc. Among the marginalised communities tribal communities are the sections who need serious attention and care while framing the financial inclusion plans and policies. Indian tribal communities have been suffering from financial hardships for decades, and these have grown with commercialisation driven by industrialisation (Guha, Patel, & Parekh, 2017). A tribal community is a group that is confined to the peripheral edge of the society. Such a group denied involvement in mainstream economic, political, cultural and social activities. The main aim of financial literacy and financial inclusion for the tribal communities is to address their financial needs through formal financial system, abolish their dependence on private money lenders, eliminate the high cost interest regime and to build a strong saving and investment culture among them.

1.2 Statement of the Problem

Since nationalisation of banks in three phases such as 1950s; late 1960s; and, in 1969, the banks were mandated to provide credit to sectors like agriculture, small industries, and rural development. This policy resulted in the establishment of a vast network of bank branches across the country, with special focus on rural areas. Despite these efforts, the accessibility and reach of banking services remained limited, especially for the most economically disadvantaged sections of the population.

A majority of the Indian population are poor having lower, irregular and uncertain income concentrated in rural areas. Sustainable development of India is directly related to the inclusive growth of each individual in the territory. This forces them to maintain their meagre and uncertain incomes effectively in order to ensure regular cash inflow and to accumulate sufficient money to cover their daily needs. But the occurrence of unexpected expenditure may collapse most of their financial plans and dreams. Financial exclusion and its resulting poverty are back lifting the growth potential of rural households. A full-fledged financial inclusion of the nation would speed up the inclusive growth and the sustainable development of the nation. Although several financial inclusion programs have been introduced by the government still there are people especially those who belonging to tribal communities stand outside

the purview of these programs. People need access to policies, products and services to stabilize and secure their economic well-being. Policies and programs should pay particular attention to easing access to financial products, services and policies among vulnerable households at the bottom of the economic ladder who have been historically excluded from mainstream financial services (Sun, Chen, Ansong, Huang, & Sherraden, 2022).

Tribal communities are found to be one of the major vulnerable groups in the society in respect of resource allocation and income disparity. Scheduled Tribes in India constitute approximately 8.6 percent of population of India. The proportionate gap itself keeps this section faraway from enjoying the benefits of government policies and initiatives. The Scheduled Tribes constituting 1.45 percent of the total population in Kerala, are mainly identified by their geographic isolation and economic backwardness. Even though a sizeable portion of the marginalised communities in the country was uplifted through a combined effort of different governments and citizens in the country, the financial environment of the tribal communities in India is very pathetic in all respects. Financial literacy is crucial for the poor because they have trouble in making financial decisions that could have a big impact on their lives Okello (2020). Lack of proper savings, unplanned spending and the improper money management practices of tribal communities necessitates the significance of promoting financial education programs in schools and higher education institutions. This would encourage better saving habits and decision-making (Ananda, Kumar, & Dalwai, 2024).

It is worth to note that the leadership role played by tribal people in the financial landscape of the country as entrepreneurs, political leaders or as civil servants is very negligible. The concessions given to tribal communities need not always uplift their financial status instead they need to get proper financial education. Due to the lack of proper financial knowledge among the tribal community, there is a high chance for depending informal financial intermediaries and their trust in formal financial institutions is likely to be very less. Hence, there is an urgent need to address these issues through proper policies and actions. The financial literacy of Scheduled

Tribes(STs) in India is relatively very low since 77% of STs in rural India and 58% in urban India have no basic financial knowledge and are at the risk of financial exploitation (Mishra and Dash, 2019).

The inclusive growth of our country is struggling due to the vulnerability of many marginalised communities. Central, state governments and other authorities are taking serious efforts for the inclusive development of our nation. The authorities cannot be blamed altogether, because empowerment and growth of citizens is not their sole responsibility. Authorities can provide the ground for cultivation but the cultivation is the duty of the individual. Is the pain of a human heart spread like a disease to another human heart (Panoor, 1971). By neglecting the financial aspiration of marginalised communities and weaker sections the inclusive growth of the nation cannot be achieved. So there is an urgent need to study the forces that restraints the tribal communities in realising the benefit of accessing formal financial services. In this context the present study seeks to find answers to the following questions;

1. To what extend the tribal communities in Kerala avail financial services from formal financial institutions?
2. Whether there exist any community wise differences in the financial literacy and financial inclusion among the Scheduled Tribes in Kerala?
3. Whether the socio-economic status and demographic factors of the population influence their level of financial literacy and financial inclusion?
4. Does financial literacy play any role in promoting financial inclusion?
5. What are the problems faced by the tribal people while approaching formal financial institutions?
6. What policy measures can be taken for bringing financial development among the tribal communities?

1.3 Significance of the Study

“The stark reality is that most of the poor people in the world still lack access to sustainable financial services, whether it is savings, credit or insurance. The great challenge before us is to address the constraints that exclude people from full participation in the financial sector. Together, we can and must build inclusive financial sectors that help people to improve their lives.” Kofi Annan (UN Secretary-General)

Finance is the word that resounds in the universe since the birth of the human being. If one is not engaged in finance, the finance will engage in his life. The relevance of the finance is same as that of the food for existence. It is a type of basic need playing a greater role in shaping the living standard of an individual. If we are talking of financial stability, economic stability and inclusive growth with stability, it is not possible without achieving financial inclusion. Thus financial inclusion is no longer a policy choice but is a policy compulsion today and banking is a key driver for inclusive growth (Chakrabarthy K C 2010).

It is empirically evident that higher poverty ratios and higher inequality are found among countries with large proportion of population who are excluded from the formal financial system. The world is the collection of different nations consisting of individuals and families. Hence, the financial stability and development of an individual is likely to affect the financial stability and development of the world. Since every individual has his own distinctive role, it is not appropriate to discriminate a section of people who are marginalized and under privileged. It is an accepted fact that Scheduled Tribes in the country are subject to different forms of exploitations from the rest of the populations and they are not even aware of their rights. Even though several cores are allocated in each budget for the upliftment of Scheduled Tribes, the standard of living of tribal communities in Kerala continues to remain in the backward situation. Though there are different reasons for this marginalisation, the major reason behind their deprived condition is their financial instability.

The financial development and financial wellbeing of the communities can be achieved only through providing financial literacy and financial inclusion. Hence,

financial education is not an option but it is a necessity. The financial security of families and by extension, communities and nations is at stake (Xiao & O'Neill, 2016). The financial knowledge and skills achieved through financial literacy enables the poor to analyse complex financial products and services in order to make informed decisions so as to attain maximum utility from these products (Bongomin, Ntayi & Malinga, 2020).

A sizeable portion of the tribal population is making money through skilled and unskilled jobs. But they do not know how to develop savings and investment from their daily earning. Unplanned and emotional spending is ruining their earning and keeps them in the marginalised environment. In order to reduce poverty and integrate vulnerable groups into the mainstream financial system, financial inclusion is emerged as a matter of priority for the developing countries (Kamble, Mehta, & Rani, 2024). Various landlords are exploiting the sweat of this people by not paying a reasonable wage for their work in the land and they also give alcohol instead of the wage. A sizeable portion is giving more importance to the alcohol than the money. Financial inclusion can empower people and communities to meet basic needs, such as nutritious food, clean water, housing, education, and health care (UNSGSA 2024). The present study attempts to assess the financial literacy and financial inclusion of the Scheduled Tribes in Kerala, also suitable tribal centric actions and policies are suggested through the study. It is intended to help the tribal community to shorten their distance towards the financial development and financial wellbeing.

1.4 Scope of the Study

The inclusive growth of a nation can be achieved solely through the inclusive growth of each citizen residing in its territory. In a densely populated country like India, bridging the gap between the 'reached' and the 'unreached' remains a challenging multifaceted task. Despite the relentless efforts of national and state governments to bring even the last person in to the fold of development, Several marginalised groups, particularly the Scheduled Tribes remain voluntarily or involuntarily excluded from the mainstream formal financial system. Finance is the key to the developmental progress of the underdeveloped and hence the reasons for financial deprivation and

exclusion among Scheduled Tribes have to be identified with proper measures taken for their integration into the mainstream financial system. Financial inclusion, widely regarded as an instrument of policy, contributes to reducing poverty and inequality, fostering social inclusion and enhancing the socio-economic welfare of vulnerable households (Ozili, 2023). Having a bank account has traditionally been deemed as the first stride towards financial inclusion and many previous initiatives measured inclusion solely on the basis of ownership of account. However, the financial landscape has changed considerably and account opening alone cannot be taken as a credible parameter for financial inclusion. Genuine inclusion requires the continuous, active and intelligent use of accounts. In the rural areas, a vast majority of accounts are inoperable or inactive, often opened mostly with the sole purpose of receiving Direct Benefit Transfers (DBTs) with beneficiaries limiting the usage to withdrawal alone. Such limited engagement does not promote the broader goals of financial inclusion.

In this context, the current study assesses financial inclusion by taking into consideration a number of factors, including deposits, debit and insurance, in addition to account ownership. Scheduled Castes (SCs) and Scheduled Tribes (STs), belonging largely to the poorer segments of society exhibit lower levels of savings and investments compared to others, with a disproportionate reliance on physical assets like land and housing that yield limited long-term returns (Ramana & Muduli, 2019). By placing itself in the developmental dilemma faced by tribal society in a developing economy, this study seriously attempts to improve the financial development of Scheduled Tribes in Kerala, with specific interest in aspects that affect their financial stability. Geographically, the study is concentrated on the districts of Wayanad, Palakkad, and Kottayam which represent North, central and South regions in Kerala. By estimating the financial literacy and inclusion levels of tribal communities, the research contributes towards the broader agenda of inclusive growth. The findings and recommendations derived from this study are anticipated to serve as a crucial milestone in promoting financial development and consequently, the overall socio-economic growth of Scheduled Tribes in Kerala.

1.5 Objectives of the Study

1. To assess the level of financial literacy among the tribal communities in Kerala.
2. To evaluate the level of financial inclusion among the tribal communities in Kerala.
3. To analyse the role of financial literacy in promoting financial inclusion among the tribal communities.
4. To examine the status of financial planning, financial anxiety and financial confidence among the tribal households.

1.6 Research Hypotheses

Based on the above objectives, the following hypotheses were formulated and tested;

1. Ho: There is no significant relationship between income and expenses of the Scheduled Tribes.
2. Ho: There is no significant difference in the level of financial literacy across socio demographic variables.
3. Ho: There is no significant difference in the level of financial literacy across Tribal Communities.
4. Ho: There is no significant difference in the level of financial literacy across region.
5. Ho: There is no significant difference in the level of basic digital financial literacy across socio demographic variables.
6. Ho: There is no significant difference in the level of basic digital financial literacy across selected tribal communities.
7. Ho: There is no significant difference in the level of basic digital financial literacy across region.

8. Ho: There is no significant relationship between financial literacy and basic digital financial literacy among tribal communities.
9. Ho: There is no significant difference in the level of financial inclusion across socio demographic variables.
10. Ho: There is no significant difference in the level of financial inclusion across tribal communities.
11. Ho: There is no significant difference in the level of financial inclusion across region.
12. Ho: There is no significant difference between the saving behaviour and financial inclusion
13. Ho: There is no significant association between financial literacy and financial inclusion.
14. Ho: There is no significant effect of gender on the relationship between financial literacy and financial inclusion.
15. Ho: There is no significant effect of age on the relationship between financial literacy and financial inclusion.
16. Ho: There is no significant difference in financial satisfaction across tribal communities.
17. Ho: There is no significant difference in the language problems of Scheduled Tribes across their level of financial literacy.
18. Ho: There is no significant difference on facing inequality in accessing financial services across the level of financial inclusion.
19. Ho: Access barriers have no significant influences on attitude towards informal financial sources.
20. Ho: Attitude towards informal financial sources has no significant influences on financial inclusion.

21. Ho: Access barriers have no significant influences on financial inclusion.
22. Ho: Financial literacy has no significant influences on financial anxiety.
23. Ho: Financial inclusion has no significant influences on financial planning.
24. Ho: Financial inclusion has no significant influences on confidence on financial matters.
25. Ho: Financial literacy has no significant influences on confidence on financial matters.
26. Ho: There is no significant difference in the frequency of alcohol consumption among tribal communities.

1.7 Variables Used for the Study

Table 1.1

List of Variables

Demographic / Control Variables	Dependent/ Independent Variables
<ul style="list-style-type: none"> Gender Age Education Occupation Monthly Income 	<ul style="list-style-type: none"> A. Financial Literacy <ul style="list-style-type: none"> Financial Knowledge Financial Behaviour Financial Attitude Financial Awareness B. Financial Inclusion <ul style="list-style-type: none"> Deposit Debit Insurance C. Financial Aspects <ul style="list-style-type: none"> Financial Confidence Financial Planning Financial Anxiety Financial Satisfaction Access Barriers Attitude towards Informal Financial Sources

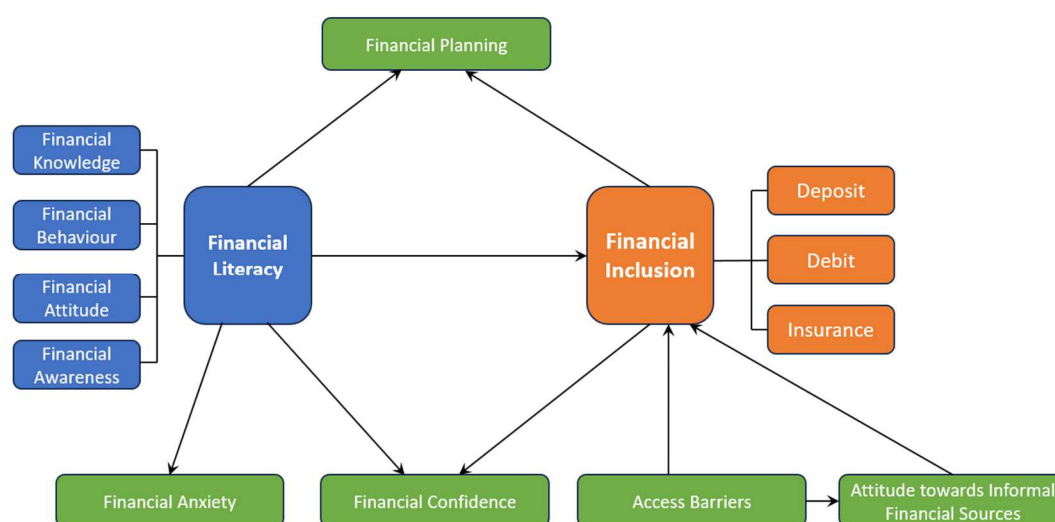
Demographic / Control Variables	Dependent/ Independent Variables
	<ul style="list-style-type: none"> • Consumption of Hazardous Substances D. Financial Development <ul style="list-style-type: none"> • Attending Financial workshops and Seminars • Remuneration for Attending Financial Workshops and Seminars • Government Offering a Free or Subsidized Mobile Phone with Free Recharge and Maintenance • Community of the Bank Officials • Banks Offering Daily Jobs • Government Sponsored Insurance Schemes

Source: Compiled by the Researcher

1.8 Conceptual Model of the Study

Figure 1.2

Conceptual Model



Source: Developed by the Researcher

1.9 Research Methodology

Research methodology is a vital part of a thesis or dissertation, aimed to allow for consistency between the chosen tools, techniques and the underlying philosophy (Melnikovas, 2018). when we talk of research methodology we not only talk of the

research methods but also consider the logic behind the methods we use in the context of our research study and explain why we are using a particular method or technique and why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others (Kothari, 2004).

1.9.1 Research Design

The present research is both descriptive and inferential in character. It is descriptive because it explains the characteristics and background of the variable based on the available information. The inferential aspects of the research systematically assess the variables and their relationship or association or impact or effect by using the suitable statistical techniques to test hypotheses and draw relevant inferences.

1.9.2 Sampling Design

1.9.2.1 Target Population

The population of the study consists of Scheduled Tribes in Kerala. As per Census 2011, there are 4, 84,839 Scheduled Tribes in Kerala from 36 tribal communities.

Table 1.2

District Wise Population of Scheduled Tribes in Kerala

No	District	Population	No	District	Population
1.	Thiruvananthapuram	26,759	8.	Thrissur	9,430
2.	Kollam	10,761	9.	Palakkad	48,972
3.	Pathanamthitta	8,108	10.	Malappuram	22,990
4.	Alappuzha	6,574	11.	Kozhikode	15,228
5.	Kottayam	21,972	12.	Wayanad	1,51,443
6.	Idukki	55,815	13.	Kannur	41,371
7.	Ernakulam	16,559	14.	Kasaragod	48,857
		Total			4,84,839

Source: Census 2011

1.9.2.2 Sampling Unit

The sampling unit for the study consists of the financial heads of households from tribal communities in Kerala. The financial heads refers to the person who is responsible for managing the financial affairs of the household.

1.9.2.3 Sampling Technique

Even though the population is dispersed throughout different parts of the state the sample survey carries more importance than Census Survey. Multistage Random Sampling method was used in the study because the tribal communities in Kerala are scattered geographically and administratively structured into multiple levels. The sampling process was carried out in successive stages using random selection at each stage to ensure representativeness while maintaining operational feasibility.

1.9.2.4 Sample Size Determination

The determination of the required sample size is a crucial task in the research process. If the determined sample is less than the required, it will not represent the actual population and the study will not be generalizable. If the determined sample is too more than the required it can be generalizable but it takes more time, cost and effort. In order to overcome these limitations and to get an optimum sample size, the study makes use of the available sample size determination formulae developed by different experts. The population of the study is finite, so the Cochran formula and MaCorr sample size determination formula is used in the study.

Cochran formula

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{Z^2 pq}{d^2} - 1 \right)}$$

n=Required Sample Size

Z= Standard normal value corresponding to 95% confidence interval (1.96)

p= Expected Proportion (0.50 used for sample needed)

q= 1-p

d=Precision (0.05 used for sample needed)

N= Size of the study population.

MaCorr Formula

$$\frac{\frac{Z^2 p (1 - p)}{e^2}}{1 + \left(\frac{Z^2 p (1 - p)}{e^2 N} \right)}$$

N=population Size

e=Margin of error(percentage in decimal form which is 0.05)

Z= Z Score (1.96 for 95% Confidence Level)

p=Expected Proportion (0.50)

On the basis of the above sample size determination formulae the minimum required sample size for this study is 384. The researcher decided to fix the sample size as 450.

1.9.2.5 Sample Selection Process

Stage 1:Random selection of three districts from three region of Kerala. The selected districts are Wayanad, Palakkad and Kottayam.

Stage 2: From the Selected districts, three tribal communities are randomly selected from each district. The selected communities are Adiyen, Kurichiyen and Paniyan from Wayanad, Eravalan, Malasar and Malayan from Palakkad, Mala Arayan, Malavedan and Ulladan from Kottayam respectively.

Stage 3: In order to select sample from the tribal community, randomly selected a Grama Panchayat/Municipality from the list of the Grama Panchayat/Municipality

(based on the representation of the community) in the respective district and samples were taken from the randomly selected unnathi within the boundaries of the selected Grama Panchayat/Municipality. From each house the financial head constitute the respondent of the study.

Table 1.3*Distribution of Sample*

No	Region	Districts	Tribal Community	Number of Sample Selected
1.	North	Wayanad	<ul style="list-style-type: none"> • Adiyan • Kurichiyan • Paniyan 	150
2.	Central	Palakkad	<ul style="list-style-type: none"> • Eravalan • Malasar • Malayan 	150
3.	South	Kottayam	<ul style="list-style-type: none"> • Mala Arayan • Malavedan • Ulladan 	150
Total Sample Selected				450

Source: Compiled by the Researcher

1.9.3 Data Collection Instrument

The most important activity in a research process is the collection of primary data from the samples or population of the study. By considering the respondents convenience and to reduce errors in the response the researcher used interview schedule for collecting primary data from the Scheduled Tribe communities.

1.9.3.1 Pilot Study

The pilot study was conducted among 60 tribal households from Wayanad district. Based on the finding from the pilot study some errors were identified and efforts were

made to rectify the errors. The final draft of the schedule is developed after considering every finding from the pilot study.

1.9.3.2 Testing of Reliability and Validity

A test is said to be reliable if it yields consistent results over repeated measurements. It is unreliable if repeated measurements yield different results under similar conditions (Tavakol, Mohagheghi, & Dennick, 2008). In order to assure the reliability Cronbach's alpha introduced by Lee Cronbach in 1951, where the value lies between 0 and 1 was used. Cronbach's alpha is one of the most widely used measures of reliability in the social and organizational sciences (Bonett & Wright, 2015). cronbach's alpha is the most frequently used objective measure to compute reliability (Tavakol & Dennick, 2011). Improper use of alpha can lead to situations where a test or scale is unfairly rejected or the test is faulted for being unreliable in terms of outcome.

A rigorous process of item development and expert panel review was used in this study to ensure content validity. Content validity refers to the extent to which a measurement reflects the trait or domain it purports to measure (Tavakol, Mohagheghi, & Dennick, 2008). Expert opinions can be sought to ascertain the degree to which the measurement device satisfies the requirements. In order to assure the content validity the interview schedule is finalised after consulting the bank officials, financial literacy trainers, tribal promoters, financial inclusion and statistical experts. Their suggestions were incorporated to refine item wording and ensure cultural and contextual relevance. The mentioned process confirmed that the instrument possessed satisfactory content validity.

Table 1.4*Reliability Statistics*

No	Construct	Number of Items	Cronbach's Alpha Value	Status
1.	Financial Knowledge	3	0.774	Acceptable
2.	Financial Behaviour	8	0.817	Acceptable
3.	Financial Attitude	5	0.793	Acceptable
4.	Financial Awareness	9	0.904	Acceptable
5.	Digital Financial Literacy	4	0.765	Acceptable
6.	Financial Inclusion	3	0.869	Acceptable
7.	Financial Aspects	26	0.793	Acceptable
8.	Financial Preferences	8	0.823	Acceptable

Source: Pilot Study

1.10 Statistical Tools and Techniques

Descriptive statistics such as: frequencies, percentages, mean and standard deviation, were used for the purposes of summarising socio-demographic characteristics and displaying the general states of financial literacy and inclusion. Inferential statistical methods, including One-sample t-tests, Independent samples t-test, Chi-square tests, One-way Analysis of variance (One-Way ANOVA), Friedman test, Scheffe's post- hoc test, Sobel test, Pearson correlation, Simple linear regression, Multiple linear regression and Structural Equation Modeling (SEM) were used in accordance with the objectives of the study.

1.11 Period of the Study

The applicability of any study is directly related to the time at which a study is initiated and data is collected. A properly designed study during an inadvisable period or a poorly designed study undertaken during a favourable period will not yield meaningful insights and will ultimately prove a waste of time and effort. Being aware of this fact, the current study is conducted during the period 2021–2025, a period of

critical importance for India's financial inclusion and literacy landscape. During this period, two key national strategies are also set to be initiated and eventually completed: the National Strategy for Financial Inclusion (NSFI, 2019–2024) and the National Strategy for Financial Education (NSFE, 2020–2025). By framing the research within this policy-driven environment, the study not only assesses the financial literacy and inclusion levels of tribal communities in Kerala but also aligns its findings with on-going national priorities.

Field survey was conducted during the year of 2024, documenting the post-pandemic realities when digital financial services were expanding tremendously, despite economic vulnerabilities persisted among marginalised households. This period is particularly relevant for analysing the opportunities and obstacles encountered by tribal communities while engaging with the formal financial system. The study span reflects a transformative phase in financial inclusion journey and the insights distilled are expected to contribute meaningfully to academic debate, policy assessment and forthcoming planning processes aimed at enhancing financial literacy, financial inclusion and financial development among Scheduled Tribes in Kerala.

1.12 Limitation of the Study

- The primary data were collected only from the financial heads of households; other members in the households were not included in the study.
- The geographical scope of the study is mainly concentrated on Wayanad, Palakkad and Kottayam districts and nine tribal communities were selected at random. Other districts and tribal communities were not considered for the study.

1.13 Chapter Scheme

Chapter 1: Introduction

This chapter sets a concise introduction to the background of this research work. It gives an insight in to the statement of the problem, significance of the study, scope of

the study, objectives of the study, research hypotheses, variable used for the study, conceptual model of the study, research methodology, period of the study and limitation of the study.

Chapter 2: Review of Literature

Previous literatures related to financial literacy, financial inclusion and Scheduled Tribes were reviewed through this chapter. The literature chapter is categorised in to Six Sections which consist of Financial Literacy (International Perspective), Financial Literacy (National Perspective), Financial Inclusion (International Perspective), Financial Inclusion (National Perspective), Financial Literacy and Financial Inclusion and Finance and Scheduled Tribes.

Chapter 3: Financial Literacy, Financial Inclusion and Scheduled Tribes - An Overview

This chapter provides glimpses in to the background of financial literacy, financial inclusion and the Scheduled Tribe population.

Chapter 4: Analysis and Discussion

This chapter presents the analysis and discussion of the collected data with appropriate statistical tools and techniques. It provides the results of the analysis undertaken followed by discussions and explanatory interpretation of the findings in the context of research objectives.

Chapter 5: Summary of Findings and Conclusion

This section of the chapter highlights the major findings from the study based on descriptive and inferential statistics and paves the path to draw conclusions for the study.

Chapter 6: Recommendations, Implications and Scope for Future Research

This chapter portrays certain valid suggestions and recommendations based on findings of the study. In addition, an attempt has been made to examine the implications of the research work and it also offers a set of potential research areas for future exploration within the field.

References

- Ananda, S., Kumar, R. P., & Dalwai, T. (2024). Impact of financial literacy on saving behavior: the moderation role of risk aversion and financial confidence. *Journal of Financial Services Marketing*, 843-854.
- Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1), 3–15.
- Bongomin , G. O., Ntayi, J. M., & Malinga, C. A. (2020). Analyzing the relationship between financial literacy and financial inclusion by microfinance banks in developing countries: social network theoretical approach. *International Journal of Sociology and Social Policy*, 40(11), 1257-1277.
- Chakrabarty, K. C. (2010). *Inclusive growth – Role of financial sector* [Speech]. National Finance Conclave 2010, Bhubaneswar, Orissa, India.
- Committee on Financial Inclusion (2008). *Report of the Committee on Financial Inclusion* (Chair: C. Rangarajan). Government of India, Ministry of Finance.
- Department of Financial Services, Ministry of Finance, Government of India. <https://financialservices.gov.in/>
- Government of India, Planning Commission. (2007). *Eleventh five year plan (2007–2012) document*.
- Guha, S., Patel, H., & Parekh, N. (2017). An exploration of the financial practices of tribal communities in Jhabua, India. *Development in Practice*, 27(6), 801-812.
- Kamble, P. A., Mehta, A., & Rani, N. (2024). Financial Inclusion and Digital Financial Literacy: Do they Matter for Financial Well-being? *Social Indicators Research*, 777-807.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd rev. ed.). New Age International Publishers.

- Melnikovas, A. (2018). Towards an explicit research methodology: Adapting research onion model for future studies. *Journal of Futures Studies*, 23(2), 29–44.
- Mishra, A.K. and Dash, M.K. (2019), “Financial literacy among tribal people in Odisha: a study on the Kondh tribe”, *International Journal of Scientific Research and Reviews*, Vol. 8 No. 2, 213-223.
- Nsiah, A. Y., & Tweneboah, G. (2023). Determinants of Financial Inclusion in Africa: Is Institutional Quality Relevant? *Cogent Social Sciences*, .
- Okello, G. (2020). examining the role of financial intermediaries in promoting financial literacy and financial inclusion among the poor in developing countries : Lessons from rural Uganda, *Cogent economics & finance* <https://doi.org/10.1080/23322039.2020.1761274>
- Ozili, P. (2023). Financial inclusion washing. *Journal of Financial Crime*, 30(5), 1140-1149.
- Panakaje, N., Rahiman, H., Parvin, S., Kulal, A., & Siddiq, A. (2023). Socio-economic empowerment in rural India: Do financial inclusion and literacy matters? *Cogent Social Sciences*, .
- Ramana, D.V. and Muduli, S. (2019), “Measuring financial capability of the street vendors”, Working Paper Series WR-708, doi: 10.2139/ssrn.3433606.
- Reddy, K., & Reddy, T. (2015). Indebtedness and Financial Inclusion Among the Tribal: An Experience of Woman Self- Help Group Member Households in Andhra Pradesh. *THE MICROFINANCE REVIEW, Journal of the Centre for Microfinance Research*, 7(1), 1-19.
- Singh, B., & Singh, M. (2023). Financial literacy and its determinants among the scheduled tribes: evidences from India. *International Journal of Social Economics*, 50(12), 1804-1817.
- Sun, S., Chen, Y.-C., Ansong, D., Huang, J., & Sherraden, M. (2022). Household Financial Capability and Economic Hardship: An Empirical Examination of

- the Financial Capability Framework. *Journal of Family and Economic Issues*, 716-729.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Tavakol, M., Mohagheghi, M. A., & Dennick, R. (2008). Assessing the skills of surgical residents using simulation. *Journal of Surgical Education*, 65(2), 77–83.
- United Nations Secretary-General's Special Advocate for Inclusive Finance for Development. (2024). *Foundational building blocks for financial inclusion: Insights and call to action to reach the last mile*. <https://www.unsgsa.org>
- V, Mahesha (2023). Financial Literacy For Empowering Financially Marginalized People Of Backward Areas. *IOSR Journal of Business and Management*, 25(8), 07-12.
- Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies*.

Chapter 2

REVIEW OF LITERATURE

2.1	Introduction	27
2.2	Financial Literacy (International Perspective)	28
2.3	Financial Literacy (National Perspective)	39
2.4	Financial Inclusion (International Perspective)	41
2.5	Financial Inclusion (National Perspective)	51
2.6	Financial Literacy and Financial Inclusion	60
2.7	Finance and Scheduled Tribes	64
2.8	Research Gap	89
2.9	Conclusion	90

2.1 Introduction

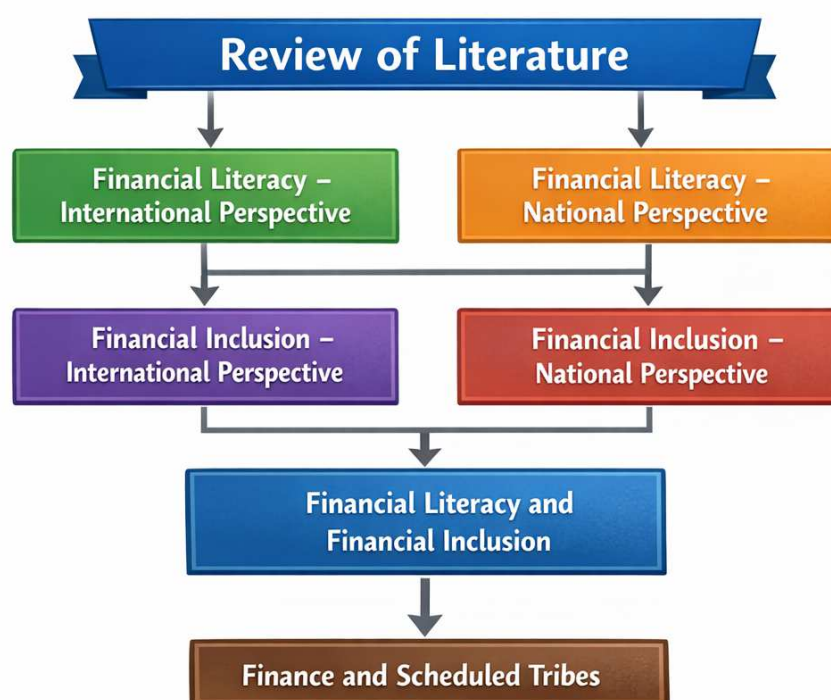
The review of literature serves as a foundational pillar for any academic inquiry, offering a critical understanding of the theoretical and empirical contributions made in the area under study. A comprehensive examination of prior research helps to contextualize the present study, identify gaps in the literature and overall it creates a path for further research. Financial literacy has emerged as a crucial determinant of individuals' ability to take effective and informed decisions with their financial resources. Globally, there is a growing recognition of the intersection between finance and indigenous or marginalized populations. Comparative studies and international reports shed light on the common challenges faced across different countries, including lack of financial access, inadequate literacy and socio-cultural disconnects with mainstream financial institutions. In the Indian context, the discourse on financial inclusion and literacy has gained considerable momentum over the past two decades with specific policy attention directed toward economically and socially disadvantaged groups. Despite the introduction of targeted schemes and institutional frameworks, evidence suggests that tribal populations continue to face structural and socio-economic barriers in the financial participation. By reviewing relevant national and international studies, this chapter aims to synthesize key findings, highlight methodological approaches and identify areas where further research is needed. The literature review is categorised under six heads.

1. Financial Literacy - International Perspective
2. Financial Literacy - National Perspective
3. Financial Inclusion - International Perspective

4. Financial Inclusion - National Perspective
5. Financial Literacy and Financial Inclusion
6. Finance and Scheduled Tribes

Figure 2.1

Conceptual Overview of the Literature



Source: Developed by the Researcher

2.2 Financial Literacy - International Perspective

Huston(2010) summarises the broad range of financial literacy measures used in research over the last decade. The analysis of the data collected displays three main obstacles in developing a standardized financial literacy measure; these obstacles include the absence of conceptualization and definition of the construct financial literacy, interpretation of the instrument and content of the instrument. The findings of the study reveal the necessity of implementing financial education programs to find solutions for overcoming financial problems faced by individuals and families. It is

recommended to implement customized financial education programs which suit different demographics, life stages and learning styles.

Sohnet al. (2012) in their study tested the relationships between financial socialization agents, financial experiences, money attitudes, demographic characteristics and the financial literacy of Korean Adolescents. This study used a financial socialization perspective as a framework to assess the relationship between financial literacy and financial socialization agents. The socialization agents for the study consist of schools, family, peers and media. The study not only analyzed the relationship between socialization agents and financial literacy but also examined the association between financial literacy, financial experiences and money attitudes. The result of the study reveals that high school students with positive attitudes towards money indicates higher financial literacy scores and the students with negative attitudes towards money indicates lower score. The study also states that for high school students in Korea, family, peers and schools play a vital role in shaping financial literacy. The study recommends to implement a media oriented financial literacy programs or initiatives to enhance the financial literacy among Korean Adolescents and also point out the role of parents in imparting financial literacy among their children.

Lusardi (2015) conducted a study on the topic ‘financial Literacy: Do people know the ABCs of Finance’. The main aim of the study is to evaluate the knowledge of people about the basics of finance and other more sophisticated financial concepts. The study revolves around the financial literacy which helps the citizens to make informed decisions regarding financial planning, debt, pension and wealth accumulation. The findings of the study reveals that most of the individuals in the United States and in other countries couldn’t undertake simple calculations and do not understand the basic financial concepts such as risk diversification, interest compounding and difference between nominal and real values. The author states that paying for initiatives to increase the level of financial literacy is better than paying for the societal cost of financial illiteracy. The study concludes by strongly focusing on

the necessity of incorporating financial literacy into the curriculum of school and providing a path for future work.

Yoshino et al. (2015) through their working paper ‘Financial Education in Asia: Assessment and Recommendations’ made an attempt to evaluate the current status of financial literacy and financial education in Asia. The study states that financial literacy in Asia is still weak and point out the gaps in financial education across the regions. The findings of the study indicate that more investment in financial education in the region results in substantial returns. The study recommends the introduction of diversified financial products and implementation of financial education programs at the national level.

Xiao & O’Neill (2016) explored the potential effects of financial education on the financial capability of American consumers. Financial capability is assessed using four individual indicators; objective financial literacy, subjective financial literacy, desirable financial behaviour and perceived financial capability. The results of multivariate linear regression demonstrated that respondents who had ever received financial education scored higher on all financial capability indicators (objective and subjective financial literacy, desirable financial behaviour, perceived financial capability and the financial capability index) after controlling demographic and financial variables. Additional state-level comparative analyses provide evidence that high school financial education may have both direct effects and spill over impacts on consumer financial capability. By increasing financial knowledge, promoting sound financial practices and boosting confidence in financial capability, the findings imply that financial education may have a number of beneficial effects on consumer financial capability. It is also critical to make financial education more widely available and to raise public awareness about its importance.

Kadoya & Khan (2017) assessed the importance of financial literacy in reducing anxiety about life in old ages. The total sample size of the study was 2412 and the respondents older than 40 years of age were 1761. Financial literacy increased the preparedness for old age through efficient investment and saving decisions. Ordered probit model was used to examine whether the financial literacy reduces the level of

anxiety about life in old ages. It was found that the geographical differences of respondents create differences in their living standard which had an impact on their anxiety about life at old ages. The employment condition of Spouses influenced the level of anxiety among the respondents. Financial literacy level of the Japanese people is not very high. The level of financial literacy among Japanese women and less educated citizens were found to be low. It is found that financially literate people showed reduced anxiety in their old ages because such people accumulate more assets for their old ages.

Cupak et al. (2019) studied the association between financial literacy and voluntary savings for retirement among the people in Slovakia. The result of the study depicts that individual's propensity to save for retirement in the supplementary private pension scheme is positively associated with the financial literacy level of the respondents. The study concludes by stating that a shortfall in financial literacy have strong impact on the financial security of the individuals during their whole life.

Nguyen et al. (2019) in their study analysed the impact of financial literacy and pension knowledge on employee's investment decision for their retirement. The findings of the study reveal that basic financial literacy level and pension knowledge increase the retirement investment choice of employees.

Kadoya & Khan (2020) attempted to assess the relationship between financial literacy and socio economic and demographic factors in Japan. In the study financial literacy is divided in to financial knowledge, financial attitude and financial behaviour. The study made use of Ordinary Least Squares (OLS) regression Model to explain the relationship between financial literacy and socio economic and demographic factors. Generalised Structural Equation Model in logit (GSEM in logit) was used to check the robustness of arrived results. Financial knowledge of the respondents was assessed on the basis of understanding financial calculations, inflation, interest rates and risk-return on financial securities. Financial behaviour is measured on the basis of the approach of respondents towards financial transactions and the utilisation of their financial knowledge in taking better financial decisions. It is found that financial knowledge is high among males than females, but positive

approach towards financial attitude and financial behaviour is high among females as compared to male samples. The result of the study identified that financial knowledge is high among middle age people and positive financial attitude is more among the younger and older citizens in the country. The study concludes that financial literacy helps individuals to take financial decisions which sustain the future wellbeing. The paper recommends the government to implement effective formal financial education at school level and also to encourage financial education in homes which eventually enhances the financial knowledge, positive financial attitude and financial behaviour among the population.

Kadoya & Khan (2020) identified the factors which impacted the financial literacy in Japan. The paper analyse the socio economic, demographic and psychological variables extracted from the consumer socialization and psychological and social learning theories. The financial satisfaction and anxiety about life in old ages is also examined through the study. It was found that the financial literacy level of the respondents is substantially related with their gender, age, education, perception about the future, income and occupation. The social contact and people's future orientation had influence on acquiring financial literacy in Japan, which eventually develop the retirement planning, saving and investment among the Japanese citizens. The study suggests socializing the financial education in Japan through training programs, television programs, newspaper articles and through mobilizing the service of well-trained people from financial institutions in delivering lectures in school and college regarding the financial matters.

Lee et al. (2020) explored the relation between financial knowledge and financial well-being and its influence in this relationship. The study used the financial well-being scale developed by the Consumer Financial Protection Bureau as it effectively captures individuals' subjective perceptions of their financial state. Findings of the National Financial Well-Being Survey 2016 indicated that both financial knowledge and a propensity to plan were positively related to financial well-being. The study confirmed that the propensity to plan serves as a moderating factor in strengthening the positive relationship between financial knowledge and financial well-being. The

results suggest that individuals with higher levels of objective financial knowledge tend to experience greater financial well-being. This study confirms that financial knowledge alone is not sufficient to enhance an individual's financial well-being. Households should not only work to improve their financial knowledge but also actively consider their financial situations and engage in planning to achieve their financial goals. When financial knowledge is coupled with a certain degree of behavioural discipline, its impact is amplified and offering households a greater opportunity to improve both their financial decisions and overall financial well-being.

Bjorklund & Sandahl (2021) addressed the financial issues in relation to the financial system, societal system and political governance. The paper also assessed the teaching and learning complications faced by the teachers of social studies. It is found that there is a necessity of widening the scope of financial literacy education beyond the money management. Students' response to the teaching of financial literacy is analysed through the present study. The findings of the study indicate that the students are capable of grasping and relating to financial concepts. Other adults and parents had greater role in imparting financial knowledge and experience to the students.

Koomson et al. (2021) attempted to assess the joint impact of financial literacy and women training programme on household consumption. The impact of the joint training on food and non-food consumption expenditure is also examined in the study. The necessary data were collected from the beneficiaries and non-beneficiaries of three poverty reduction programmes (NRGP, RTIMP and REP) in Ghana. The findings of the study indicate that the financial training increased when it is combined with women empowerment training. This training enhances the role of women in the decision making regarding the household consumption. The impact of financial literacy on household consumption is influenced by the design and delivery of the programme. Offering financial literacy training alone creates weaker impact on the beneficiaries. The combined delivery of the training programme significantly improved the household consumption of female beneficiary and younger households.

The study concludes by indicating the scope for future study by covering both rural and urban households and to expand the duration between training and endline survey.

Mountain et al. (2021) examined whether different types of financial learning activities influence young adults' objective financial knowledge and behaviour. Authors conducted an empirical evaluation of the direct and mediating effects between financial learning activities and financial behaviours. The purpose of this study is to examine the extent to which various types of financial educational interventions are associated with financial knowledge and financial behaviours and to determine whether the effects of each type of financial education influence financial behaviours directly or indirectly through objective financial knowledge. Findings suggest that voluntary, self-directed financial learning activities are the most effective in improving financial behaviours.

Putthinum et al. (2021) analysed the association between financial literacy and alcohol drinking behaviour in Japan. The review part of the paper indicates that people's cognitive abilities, rational finance and health related decision making skills can be enhanced through the financial literacy. The association between financial literacy and alcohol drinking behaviour is assessed by using the probit regression model. The sample respondents were categorised in to daily drinkers and non-daily drinkers. The result of the study depicts that financial literacy is not considerably associated with the alcohol consumption among Japanese citizens. It is evident that respondents education, employment status, marital status, household assets, basic knowledge about saving, risk preference, anxiety about the health condition have insignificant impact on the drinking behaviour of the respondents. The result of the study contradicts the findings of the previous studies that financial literacy can reduce the smoking and gambling habits. The study concludes by suggesting the authorities to revise the current policies regarding the availability of alcohol products and to limit the accessibility towards the alcohol consumption among the individual.

Alonzo et al. (2022) through their paper made an attempt to assess the current status of financial literacy and its influence on the retirement saving habits of high school students in South east Mexico. The current study tried to measure the financial

education role in the saving and saving for retirement. The authors identified the adequacy of building appropriate financial culture in order to manage the resources efficiently and to accomplish the future needs of the individuals during their old ages. The gender differences in the saving habits are also investigated through the paper. The paper states that economic sustainability is mainly depend on citizens and not on the support of the government. It is found that there is no dependence between the gender and the information related to pension or retirement. It is concluded by indicating the importance of parents in imparting financial knowledge to their children, which develops financial skill from childhood itself.

Dewi (2022) made an initiative to examine the relationship between socioeconomic and demographic factors and financial literacy variables in Indonesia. Financial literacy is mandatory to assess and to take decision regarding the financial aspects. The study adopted multivariable analysis to examine the financial literacy among the respondents. The study reveals that demographic variables had impact on the financial literacy variables. The financial capability of millennial generation strengthened their financial goals and helps in taking appropriate financial decisions. It is suggested that improving financial experience and awareness along with financial skills and knowledge among the citizens will improve the financial literacy level of the developing countries.

Khalisharani et al. (2022) conducted a cross country analysis to identify the influence of financial attitude and financial literacy on financial behaviour of Malaysian and Indonesian undergraduate students. The study is framed by recognising the importance of positive financial behaviour among the future generation. The methodology of the study indicates the data collected from 204 undergraduate students from the faculty of Human Ecology of University Putra Malaysia and IPB university Indonesia. The financial attitude is measured on the basis of money attitude scale developed by Yamauchi and Templer (1982). The financial attitude, financial literacy and financial behaviour of the Indonesian and Malaysian students were compared by using the independent sample t-test. The result of the study showed that financial literacy score is high among the Indonesian students, while the financial

attitude and financial behaviour score is high among the Malaysian under graduate students. Financial attitude depicted a significant positive impact on financial behaviour among the Malaysian and Indonesian students. Financial literacy had a negative impact on the financial behaviour of Indonesian students. The paper suggests the policymakers to develop programmes to encourage the parents-child relationship in sharing financial knowledge and other financial matters.

Oliveira et al. (2022) in their study assessed the level of financial literacy and the determinants of financial literacy among the Portuguese population, who lies between 18 years and 71 years of age. The study indicates that the financial risks and decisions taken by the present generation is more challenging than the past generations. The reason for the increased challenges is the development and the resultant complexity in the financial market. The findings of the study display that females closely follow a financial budget and are more conscious with money aspects. Males are more encouraged in calculations and prefer to work with numbers. More balanced financial life, better financial planning and saving for retirement is visible among the people who have a household budget. There is a strong positive relationship between the saving and closer to the retirement age among the respondents. The study concludes by recommending financial training throughout the life in order to promote family financial planning and to reduce the financial risk of the family.

Sun et al. (2022) examined the elements and workings of the financial capability framework using structural equation modelling and national representative data from the 2015 National Financial Capability paper. Three factors are combined in this paper to measure financial capability: financial behaviour, financial literacy, and financial access. Financial socialization and financial education are significantly associated with financial access, financial literacy which is associated with positive financial behavior and negatively associated with economic hardship. The findings demonstrate that financial capability lies in both the opportunity to act and the ability to act with opportunity relatively more important than ability and that financial capability is strongly associated with household experiences of economic hardship. To increase people's financial stability and well-being, policies and initiatives should offer

effective financial education and guidance. For everyone to have the chance to attain financial development and well-being more focus should be placed on increasing financial access and encouraging financial inclusion. Policies and programs should aim to provide accessible and affordable financial products while also enhancing effective financial education and guidance to promote financial inclusion. Policies and initiatives should take into account people's and families' capacity for optimal decision-making and concentrate on chances to access and use mainstream financial services and products in order to increase financial security and stability among households.

Watanapongvanich et al. (2022) examined the role of financial literacy in reducing gambling frequency in the United States. The study hypothesis that financially literate and rational people, who understand the benefits of saving and investment, the money value and the loss of utility from gambling are less likely to be frequent gamblers. The findings of the study speaks that individuals with lower financial literacy tends to become frequent gamblers more easily than the individuals with higher financial literacy. It is found that easy accessibility to the gambling outlets make the citizens frequent gamblers. The socio economic and health related variables, household income, smoking and alcohol consumption are positively related to gambling frequency. The paper concludes by suggesting the authorities to enhance the financial literacy through financial education programs and to minimise the gambling addiction prevailing among the citizens in the United States

Lusardi & Mitchell (2023) observed that the widespread lack of financial knowledge not only restricts individuals' ability to maximize their resources but also contributes to broader macroeconomic challenges. The transition from defined benefit to defined contribution retirement plans suggests that common people are now responsible for making decisions regarding investing, saving and other matters. Addition to managing the risks and expenses of ageing, older adults must decide how to withdraw their retirement assets. In order to properly manage their finances, save and invest, and accumulate their assets in retirement, ordinary consumers must also undergo rigorous preparation. They must take on the role of their own chief financial officers. It is

essential to offer customised programs to effectively meet the demands of particular subgroups. Instructing personal finance at both the school and college levels is an optimal method to enhance the accessibility of financial education, while programs implemented in the workplace also contribute significantly.

Ananda et al. (2024) assessed the impact of financial literacy on savings behaviour of investors in the Gulf Cooperation Council (GCC) countries. It also examines the moderating role of financial confidence and risk aversion between financial literacy and saving behavior. The findings of the research show that financial literacy impacts positively on the savings habit among investors. The research confirmed that risk aversion has a significant moderating effect on the relationship between financial literacy and savings habit. The three-way interaction between financial literacy, risk aversion and financial confidence has a significant impact on the investors' savings behaviour. The results point out that financial confidence will be high if investors' risk aversion is low. If investors' risk aversion is high, financial confidence among investors will be low. Financial confidence and risk aversion are significant and have a significant effect on the financial literacy and savings behaviour relationship. Policymakers should focus on giving higher priority to investor education courses related to financial literacy, financial confidence and risk aversion.

Berlinger et al. (2025) examined the gender gap in financial literacy in the context of top-level financial education with the potential influence of a talent management program in financial mathematics. To explore the gender and financial literacy relationship, making the assumption that there exists a gap in attitude, knowledge and behavior between university students by gender. It was observed that no gender difference is visible in the attitudes and financial knowledge among undergraduate finance students. Female students were about 10% less likely than men to take highly lucrative financial opportunities, even when adjusting for all other variables like lifestyle, academic performance, psychological variables, money attitudes and knowledge. The study proposed that university program planners and finance educators incorporate special emphasis on comprehending the behavioral aspects of financial literacy through gender-sensitive programs. The explanations of the

behavioral gender gap remain to be investigated but are probably affected by a range of non-observed factors such as social or cultural differences, parenting style or education method. There must also be balanced access to money management and talent management programs to enhance women's confidence and financial capability. Financial and educational institutions can collaboratively create enabling environments that help to build good financial habits. The outcome is an inclusive financial environment that supports the capability of men and women to make good financial decisions and provide economic stability and growth

Kyeyune & Ntayi (2025) investigated the relationship between financial literacy training and economic empowerment in rural communities of Uganda. This study emphasises importance of financial literacy in empowering marginalised groups and to steer them in the direction of inclusive growth. The results highlights that the poor financial literacy and management seriously impede the ability of rural communities to prosper sustainably. Such shortcomings suppress the possibility of comprehensive community empowerment in addition to impeding economic advancement. Investing in financial literacy becomes a vital tactic, highlighting the significance of giving people the information and abilities required for economic engagement and personal development. To achieve larger policy goals and spur economic growth and poverty alleviation initiatives, the study emphasises the necessity of thorough financial literacy training.

2.3 Financial Literacy - National Perspective

Naidu (2017) conducted a study on the topic 'Financial Literacy in India: A Review of literature'. The main objective of the study is to assess the level of financial literacy in India by analyzing the existing literature. Necessary secondary data for the study were collected from various websites, research papers, articles and journals. The findings of the study depicts that the financial literacy level in India is very low, notably among the youngsters and women. The study recommends the authorities to take necessary actions to enhance financial literacy level in India and also to evaluate the implemented financial literacy initiatives.

V Mahesha (2023) observed that the financial literacy is an effective tool to empower disadvantaged people to make informed financial choices, enhance their economic situation and end the poverty cycle. Study is employed to indicate the significance of financial literacy as a means of addressing the particular concerns of economically marginalized communities. The study aims to explore the impact of such programs on increasing financial knowledge, skills and behaviour, which in turn leads to improved financial inclusion and financial outcomes. Financial literacy is a key tool in the empowerment of financially excluded individuals who reside in rural districts.

Jambunathan et al. (2024) investigates the necessity of education on financial literacy in early childhood classrooms. The study highlights how crucial it is to teach financial literacy topics in early childhood classrooms in a purposeful and planned manner. The teachers who are confident in their subject matter are able to impart depth in their teaching in addition to feeling good about teaching it. Teachers can utilise the tools and tactics to teach the financial literacy concepts in the classroom and they can also work with parents to continue teaching these concepts at home. Financial education offers opportunities to children to learn about these ideas at a younger age by preparing them to make wise financial decisions as adults and possibly assisting their families in making wise financial decisions as well. By promoting sound financial practices among the adults can create positive impact not only on their personal lives but also on their communities and society as a whole. Financial literacy education can be purposefully introduced in early childhood schools worldwide with the help of suitable teacher education, support for teachers, curriculum modifications, family involvement and equitable access to resources and materials.

Kamble et al. (2024) formulated new multidimensional measures and examines the interaction between financial wellbeing, financial inclusion and digital financial literacy. Financial well-being is a qualitative measure based upon the perceived financial satisfaction, capability, confidence, and concern of an individual or household. Advancements in digital technologies and financial services have helped to overcome the access and usage barriers by fostering digital financial literacy. The findings reveal that financial inclusion and digital financial literacy have strong

positive effects on financial well-being. Financial inclusion and digital financial literacy are both positively correlated with financial well-being and results are robust in all the models with socio-demographics as controls and regional fixed effects. Governments and financial institutions play significant role in expanding the accessibility and utilization of digital financial services. Low cost, easy and affordable financial services and products would allow individuals to form positive financial behaviour, such as saving regularly and appropriate utilization of loans and insurance to enhance risk management.

2.4 Financial Inclusion - International Perspective

Akudugu (2013) carried out a study on ‘The Determinants of Financial Inclusion in Western Africa: Insight from Ghana’. The main objective of the study was to examine the determinants of financial inclusion in western Africa with specific focus on Ghana. The study states that age of individuals, wealth class, lack of documentation, literacy levels, lack of trust on formal financial institutions, distance to financial institutions, lack of money and social networks reflected in family relation has the substantial determinants of financial inclusion in Ghana. The study depicts the necessity of governmental intervention in formulating a holistic financial framework which mitigate the negative determinants of financial inclusion and sustain the positive determinants. Result of the study shows that still sixty percent of samples are excluded from formal financial system and the remaining forty percent of samples are included in formal financial system which is less than the global financial inclusion index of fifty percent. The researcher recommends a politically neutral, gender sensitive, financially stable and socially viable policy framework in order to develop sustainable financial inclusion.

Mbutor & Uba (2013) conducted a study on the impact of financial inclusion on monetary policy in Nigeria between 1980 and 2012. The paper aims to ascertain whether deepening financial inclusion can play any role in monetary policy implementation in Nigeria. The study assessed several measures of financial inclusion and evaluated its effects on the ultimate objective of monetary policy. There is an inverse relationship between the rate of inflation and the size of commercial bank

loans and advances as a ratio of the GDP. The study recommends that the Central Bank of Nigeria should increase its strength for improving financial inclusion as it not only helps economic growth but also it helps the monetary policy in Nigeria.

Fungacova & Weill (2015) examined the level of financial inclusion in China by comparing the country with other BRICS countries. The financial inclusion was measured on the basis of three different indicators, namely formal account, formal savings and formal credit. The study revealed that individual characteristics have more significant influence on the usage of formal account, which is considered as the main indicators of financial inclusion. The results of the study depicts that the level of financial inclusion is high by comparing with BRICS countries. The study states that even though the financial inclusion in China is high, the use of formal credit is very low due to the limited access to bank credit for Chinese individuals. In the long run the relatively low reliance on formal credit leads to slower economic growth and also hampers financial stability of the nation. Under these contexts the study recommends Chinese policymakers to take necessary measures to expand the use of formal credit in the country.

Park & Mercado (2015) evaluated the relationship between financial inclusion, poverty and income inequality in developing Asia. Authors developed financial inclusion indicators to assess various macroeconomic and country specific factors affecting the degree of financial inclusion for thirty seven selected developing Asian economies. Financial inclusion indicators were developed on the basis of five measures namely, Automated Teller Machine (ATM) per 1,00,000 Adults, Commercial bank branches per 1,00,000 Adults, Borrowers from commercial bank per 1,000 Adults, Depositors with commercial bank per 1,000 Adults and domestic credit to GDP ratio. The result of the study indicates that financial inclusion considerably reduces inequality in income and the prevalence of poverty. The study suggests that economies that have rapidly aging population structure can broaden the access to financial services of old age population through the implementation of retirement pension and other old age benefits.

Tambunan (2015) assessed the 'National Economic Development Strategy of Indonesia - Before and After the Asian Financial Crisis of 1997-1998'. The main objectives of the study was to understand the significance of the shift in national economic development strategy after the Asian financial crisis of 1997-1998, to identify the impact of this shift on the poor and Micro Small and Medium Enterprises (MSMEs) and the last objective of the study was to identify the barriers in implementing inclusive development and financial inclusion in Indonesia. The main goal of financial education formulated by the Bank of Indonesia was to build bank awareness in society, to build risk awareness in relation to financial transaction and to build public awareness on customer rights and obligations. In Indonesia the absence of proper storage facilities for savings like saving bank account, the savings of the poor became vulnerable to theft and other natural disasters. One way to achieve financial inclusion is through financial education, which can change the behaviour and culture of the society towards the financial world. Providing better employment or income opportunities and easy accessibility to financial institutions and financial tools is a pre-requisite for the success of financial inclusion policies and programs.

Gabor & Brooks (2016) assessed the growing importance of digital based financial inclusion through their study entitled 'The digital revolution in financial inclusion: International development in fintech era'. This paper examines the growing importance of digital based financial inclusion as a form of organising development interventions through network of state institutions, philanthropic investments, international development organisations and fintech companies. The researcher describes the financial(ised) inclusion as the commodification of a new class of financial consumer. The study concludes that access via digital footprints is not only the ability of the unbanked to access financial services but also for financial capital to access new risk frontiers within an institutional and policy framework that enables financial participants to reduce the risk of individual consumers through constant monitoring.

Sherraden & Ansong (2016) found that the world becomes more financialized and people must make increasingly difficult financial decisions and computations

throughout their lives. This reality has prompted calls for better financial behaviour and financial awareness. Access to advantageous financial products, services and public policies by a person is combined with his knowledge, abilities, and financial conduct to form his financial capability. Rigorously tested and validated measures are needed to clarify not only the inconsistent results on the facilitators and impacts of financial education but also the conceptualization of financial capability as a bi-dimensional concept. Access to accessible and advantageous financial goods, services and policies should be balanced with the emphasis on altering individual financial conduct in order to improve financial stability and provide future security for everyone.

Kim et al. (2017) in their study examines the relationship between financial inclusion and economic growth in Organisation of Islamic Co-operation (OIC) countries. The paper aims to assess the influence of financial inclusion up on the diffusion of Shariah-Compliant financial system on economic development by estimating the dynamic relationship between financial inclusion and economic growth. The study also states that Shariah-compliant financial product plays crucial role in developing financial inclusion in Islamic countries. The paper is concluded by stating that the financial inclusion had a positive impact on the economic growth of OIC countries.

Williams et al. (2017) explored the role of financial inclusion in poverty reduction and economic growth in a developing economy using panel data analysis from 2006 to 2015. The study states that most of the ATM in developing economy are superseded and so necessitate a technological up gradation in order to create a significant impact in rural areas. Analysis of data indicate that one percent increase in the ratio of active ATM will lead to about 0.0082 percent increase in the GDP and poverty reduction in developing economy. The result of the study reveals that financial inclusion has not effectively promoted stable financial and marketing support to the economic system in developing economy in terms of poverty reduction. The study recommends banks in developing economy to fully finance agriculture with attention to bank lending rates and inflation. The study also recommends the Government to focus more on poverty reduction through infrastructure development which will enhance banking services.

Bongomin et al. (2018) investigated the mediating role of social capital in the relationship between institutional and financial inclusion among poor households in rural Uganda. The study demonstrated a significant and positive relationship between institutions and financial inclusion in rural Uganda. Individuals in these communities generally believe that whether any issues arise while interacting with banks, the law exists to protect the interests of both parties. Social capital plays a vital role in enhancing financial inclusion among the poor in rural Uganda. Poor households leverage their existing social capital built through trust and reciprocity as a substitute for the physical collateral typically required by banks during the lending process. Poor rely on social capital as a form of social collateral to access financial services, particularly credit. This confirms the significance of social capital in facilitating economic activities among social actors, particularly in developing countries. The findings revealed that social capital partially mediates the relationship between financial inclusion and institutions. Additionally, a significant direct relationship was found between institutional factors and financial inclusion. Managers of financial institutions, financial inclusion working groups, and policymakers should place greater emphasis on the role of social capital in fostering cooperative behavior among the poor particularly in accessing scarce resources such as financial services.

Musau et al. (2018) made an attempt to assess the impact of financial inclusion, credit risk and bank competitiveness on commercial banks in Kenya. The financial inclusion for the study is measured on the basis of the three indicators such as bank accessibility, bank availability and bank usage. The credit risk is indicated on the basis of non-performing loans ratio. All the 43 commercial banks in Kenya were the target population for the study. The necessary secondary data were collected from commercial banks of Kenya published audited financial statements, Annual reports of Central Bank of Kenya and from the annual data for the period of 2007-2015 published by central bureau of statistics of Kenya. It is found that commercial banks in Kenya attempt for financial inclusion in order to enhance their customer base which eventually boost the loan and deposit accounts. The financial inclusion had significant effect on the credit risk and stability of commercial banks in Kenya. The study recommends the commercial banks in Kenya to adopt modern innovative financial

technologies, increase branches and ATM s in order to achieve financial inclusiveness around different regions in the country. The study concludes by suggesting to the commercial banks in the country to adopt policies for enhancing financial inclusion by maintaining the stability of the financial sector.

Nurbekyan & Hovannessian (2018) in their working paper ‘Financial Inclusion, Regulation, Financial Literacy and Financial education in Armenia’ emphasized the low level of trust in the formal financial institutions, particularly in rural areas and the negative attitude towards savings which are the major obstacles for financial inclusion in Armenia. The main barriers to financial inclusion from the demand side are poverty and the low level of financial literacy and the main barriers from the supply side are the high cost providing financial services in rural areas and the inadequate basic physical infrastructure. The study states that innovative technologies should be adopted to overcome the physical infrastructure gaps in the rural areas and the trust of rural population in postal services should be utilised for achieving financial inclusion in rural areas. The paper was concluded with a series of recommendation to further increase financial inclusion. Some of the valuable recommendations include creation of national strategy for financial inclusion, consider the largely untapped insurance potential in the insurance market and design targeted interventions for financial education for the most vulnerable groups.

Sethi & Acharya (2018) carried out their study in order to assess the impact of financial inclusion on economic growth of large number of developed and developing countries. Through the study it is visible that one percent improvement in the financial inclusion level establish 2.59 percent (in time fixed effect) and 0.22 (in fixed effect) increase in real per capita GDP of an economy. The quantitative impact of financial inclusion policies across the world is empirically measured through the study. Improvement of financial infrastructure has positive impact on the economic growth of the respective country. Increased usage of banking services develops more savings for the investment. These investments create more output in the economy. The study concludes by indicating the link between financial inclusion, poverty and economic

growth around the world. The increase in financial inclusion reduces income inequality and poverty.

Al-Duhaidahawi et al. (2019) assessed the role of financial inclusion in achieving competitive advantage among the islamic banks in Iraq. Ensuring world wide access to account is the main aim of the World Bank Group's financial inclusion initiative by 2020. The result of the study indicate significant impact of financial comprehensiveness in achieving competitive advantage regarding the customers. It is recommended that managerial staff of banks has to make efforts to achieve financial inclusion and competitive advantage of banks through providing technologically linked banking services.

Baber (2019) undertook a comparative study to evaluate the performance of countries following conventional and Islamic finance by specially focusing on their financial inclusion and fintech aspects. Findings of the study reveals that financial inclusion and the resultant women empowerment is traced from Islamic finance but these countries show a gap from fintech services as compared to conventional counterparts.

Kinsman (2019) in his study on the topic "Cardless Banking in the Nelson Mandela Metropole: A means of financial inclusion for the excluded" assessed the intentions and perceptions of under banked consumers regarding the Cardless Banking. The findings of the study reveal that under banked consumers tends to exhibit positive perception of the complexity, trial ability and compatible advantage of using cardless banking. It is recommended to develop cardless banking in a manner in which it will be fit for daily activities and aspiration of the under banked consumers. The study concludes by indicating to maintain financial products and services to provide benefits which are compatible with the current lifestyle of under banked in order to improve financial inclusion.

Le, Dang et al. (2019) took an initiative to assess the key determinants of financial inclusion among twenty Asian countries between the periods of 2011 to 2016 by using Random Effects Model (REM). The finding of the study indicates that the countries with higher income and stronger economic growth exhibits higher financial inclusion index. The higher literacy rate among the people leads to higher financial inclusion

because literate individual can efficiently grasp merit and demerit of financial services and providers. Population density, network, inflation, deposit, interest rate and Islamic banking were positively related to the financial inclusion. Income level of the individual greatly influences their financial inclusiveness. Increase in the income level shows more tendencies towards saving, insurance and to other financial services. In order to enhance the financial inclusion the study recommends to policymakers for creating an environment to improve literacy, increase economic growth, increase the income level of the people and to reduce the un employment rates.

Naumenkova et al. (2019) through their study targeted to analyse the influence of digitalisation of economy on the financial inclusion in Ukraine. The down turn of Ukraine economy enhanced the financial exclusion of its population. Non-price and price barrier among the population negatively influenced their access to financial services. By using the methodological approaches proposed by the G20 financial inclusion indicators and World Bank, the study analysed the traditional and digital financial services accessibility in Ukraine by comparing with other countries around the world. The study suggests that the modern digital infrastructure had greater role in improving the accessibility of public towards formal financial services. It is found that during 2017; only 63% of Ukraine adults had accounts in formal financial institutions, within the working age citizens only 70% had account in formal financial institution which is lower than the 97% in European Union.

Ngo (2019) examined the index of financial inclusion and its determinants among Asian economies during the period of 2008-2016. The study analysed the relation between the index of financial inclusion and the selected determinants like rural population, gender, income, infrastructure and unemployment. A positive relationship was found in between the financial inclusion and infrastructure availability also with the income level. The study recommends the policymakers to offer more opportunities to rural population in accessing financial services with simple procedures and reasonable rates. The study concludes by indicating the absence of proper method for effectively measuring the level of financial inclusion.

Sayed & Shusha (2019) in their study ‘Determinants of Financial Inclusion in Egypt’ examined individual determinants of financial inclusion. The findings of the study clearly highlight the inevitable role of religion and religious beliefs in the financial inclusion drive of the country. The study recommended the financial institutions of the country to diversify their financial products and services and also to integrate religious principles while designing financial products and services.

Bongomin & Munene (2020) analysed the financial inclusion of impoverished individuals by formal financial service providers in developing countries, with data collected from rural Uganda. The results showed that the following factors are significant determinants of financial inclusion of the poor in developing economies particularly in rural Uganda: appropriate initial account opening fees, minimum deposit requirements, limited eligibility requirements, permanence of use, depth of financial services and products, relevance of financial services and products in terms of convenience, flexibility, reliability, continuity, safety, dignity of treatment (clients’ protection) and welfare improvement. It was discovered that the financial institution's terms and conditions for using its financial services are inappropriate and unfavourable to the financial circumstances and state of the impoverished.

Ouechtati (2020) conducted study to assess the role of financial inclusion in reducing poverty and income inequality in developing countries. The effect of financial inclusion on poverty and inequality in income were empirically assessed with the help of three different dynamic panel data estimator. The findings of the study depict a negative relationship between financial inclusion and income inequality as well as poverty. The study concludes by suggesting to adopt innovative financial tools and to improve financial inclusion by specially focusing on the integration of marginalised people in to the banking and financial system, which can reduce the income inequality and poverty prevailing among this section of population.

Nsiah & Tweneboah (2023) explored the determinants of financial inclusion in Africa with both demand and supply as well as infrastructure side factors using General Method of Moments (GMM) and the Ordinary Least Square (OLS) models with data covering 2004 to 2020. The study suggests that when households and

businesses obtain credits it will allow them to increase production and widen profit margins which would make them capable of saving and investing which will lead to their inclusion in the financial sector.

Ozili (2023) in his study discussed the financial inclusion washing. It was claimed that financial inclusion washing refers to the intentional or inadvertent use of unsubstantiated claims or misleading representations to express an entity's intention to enhance the extent of financial inclusion. This paper also determined the means through which entities can prevent financial inclusion washing. The study suggests avoiding non-credible designations or certification labels for financial inclusion. Exaggerated claims of financial inclusion can affect unbanked and banked adults. It makes unbanked and banked adults to have high expectations of having greater access to finance which expectations may never be met. Non-achievement of the expectations may result in the under supply of financial services which does not enhance the welfare of banked and unbanked adults and it may result in dissatisfaction and distrust of agents of financial inclusion. This indicates that banked and unbanked adults have the power to end financial inclusion washing. However, they must be informed about financial inclusion washing and they must be taught how to recognize financial inclusion washing when they encounter it.

Asongu & Zogo (2025) investigates the contribution of financial inclusion dynamics (depth, access and efficiency) in the reduction of income inequality incidence on gender inclusion in terms of women in business and women in politics. Income inequality decreases gender inclusion whereas financial inclusion dynamics mitigate the depressive impact of income inequality on gender inclusion. The study suggests that Policy makers should enhance financial inclusion because it is associated with both reduction of income inequality and gender empowerment. Building financial inclusion and reducing income inequality can create more inclusive results within the scope of female empowerment.

Bari et al. (2025) in their research examined the impact of every attribute on the slum dwellers' deposit product choice. Exclusion from formal social, economic and financial activities due to the lack of education and low income make the slum

dwellers exposed to income shocks and chronic poverty. The research demonstrates that slum dwellers are more inclined towards profit and loss sharing type of returns compared to interest-based types of returns. Help desk arrangements can further enhance the financial inclusion of female respondents. Study indicates that slum dwellers' financial inclusion should be encouraged as a public service by developing a financial inclusion policy by the Central Bank and facilitating an environment that provides safety net allowance through banking channels by the government.

Sethy et al. (2025) analysed the effects of financial inclusion on inflation in the member countries of the South Asia Association of Regional Cooperation. Finding indicates that financial inclusion plays a key role in managing inflation in the economies of the region.

2.5 Financial Inclusion - National Perspective

Morawczynski et al. (2010) studied the trend of underutilizing the bank accounts prevailing among the poor account holders and also tries to formulate a path to improve the financial inclusion drive in the country. The study criticizes the evaluation criteria of financial inclusion effectiveness which solely consider the accessibility to bank accounts but ignore the usage of these bank accounts. The paper recommends considering both usage and accessibility of bank accounts for measuring the effectiveness of financial inclusion initiatives. The work concludes by recommending the government to take dominant role in improving financial inclusion and integrating financial education strategies to financial inclusion and NREGA Schemes.

Bagli & Dutta (2012) examined the financial inclusion status of Indian states. The main goal of the study is to identify the relationship between financial inclusion and human development. The findings of the study indicate a strong positive relationship between the human development and financial inclusion of the states in India. The study undoubtedly identified the adequacy of mass financial literacy and awareness among the marginalized sections of the country in order to capture financial inclusion.

Gupte et al. (2012) through their study entitled 'computation of financial inclusion index for India' targeted to study the determinants which measures the extent of

financial inclusion and focuses on the computation of an index which displays the impact of multi-dimensional variables by using a sound methodology. This study strongly recommends developing an index which measures the extent of financial inclusion within a country and studying the trend without reference to the world's min – max values.

Roy (2012) made an attempt to highlight the pros and cons of financial inclusion in India through the study “Financial Inclusion in India: An Overview”. The article states that financial inclusion had reduced poverty and leads to greater equity in the country. Introduction of No-frill account brought forward many unbanked populations in to the mainstream formal financial system and encouraged saving habit among the population. The study points out the crucial role played by the banks in the country in enhancing financial inclusion and also revealed that still there are large segment of the population outside the formal financial system.

Singh & Tandon (2012) conducted a study on the topic ‘Financial Inclusion in India: An Analysis’. Through the study authors made an attempt to assess the present status of financial inclusion in India based on various secondary data. The main aim of the study is to identify various initiatives of Government of India and RBI for promoting financial inclusion and also to understand the role of micro finance model in enhancing financial inclusion in the country. The paper clearly points out that most of the banks are denying their innovative financial products and services to the vulnerable groups.

Chakrabarty (2013) pointed out the banks as the principal vehicle for financial inclusion and also draw their role in facilitating meaningful financial inclusion through offering suitable products. It clearly states the importance of achieving universal financial inclusion in order to ensure inclusive growth with financial stability.

Chakravarty & Pal (2013) through the study entitled ‘Financial Inclusion in India: An Axiomatic Approach’ tried to develop an axiomatic measures for financial inclusion. This measure is very helpful in determining policies for promoting financial inclusion. The study analysed the impact of major banking policies on financial

inclusion across the different states in India during the period of 1979–2009. The study found that the overall economic development of a region is positively related with the level of financial inclusion, whereas dependence on agriculture and allied activities are negatively related with the level of financial inclusion.

Dangi & Kumar (2013) analysed the current status and future prospects of financial inclusion in India and also focused on the initiatives and policy measures Government of India and Reserve Bank of India for financial inclusion in the country. The study found that a large number of populations including rural households of India are far away from the banking and formal financial services. The study recommends incorporating efficient financial inclusion regulation for the nation and to access financial services through self-help groups and micro finance institutions.

Gupta & Singh (2013) attempted to evaluate the correlation between the usage dimension of financial inclusion index and literacy level in India. The Karl Pearson co-efficient of correlation is adopted for the study. It is evident that the large variations in the correlation between literacy rate and financial inclusion index in different states depicts that financial exclusion in India is not mainly an impact of lower literacy rates. The study strongly recommends the government to introduce ICT enabled financial products and services which do not consider the literacy level in achieving the financial inclusion.

Kodan & Chhikara (2013) analysed the determinants and impacts of financial inclusion through their article ‘A Theoretical and Quantitative Analysis of Financial Inclusion and Economic Growth’. The study also assessed the impact of depth, availability, usage ratio as well as overall financial inclusion on poverty and overall human development by using log-linear regression model. The study indicates that a 1 percent increase in the value of financial inclusion leads to an average 0.034 percent increase in the value of HDI around the world, and in case of Indian states it results in a 0.295 percent increase in financial inclusion. The analysis of various data exhibits that financial inclusion is the prerequisite for economic growth and inclusive growth. The study recommends the policymakers around the world to raise the level of

financial inclusion for an optimal, inclusive and sustainable economic growth and development of the economies by relaying on eliminating the regional disparities.

Kumar N (2013) conducted a study on financial inclusion and its determinants in India with the objective to examine the status of financial inclusion in India. The determinants of financial inclusion were studied by using panel fixed effects and dynamic panel generalized methods of Moments (GMM) methodologies. The findings of the study states that a region's socio-economic and environmental setup had a greater role in shaping banking habit of the population.

Shankar (2013) analysed the role of micro finance institutions in destroying the barriers to financial inclusion in India. A field interviews with 103 MFI Field officers were conducted and the penetration of micro finance in the country were analysed through the study. The Study points out those micro finance institutions play a vital role in demolishing the barriers to financial inclusion but there are limitations in reaching the financially excluded sections in the society. The paper suggests implementing a targeted incentive packages at the national level to encourage the reach of micro finance in the excluded regions and sections.

Sharma & Kukreja (2013) analysed the role of financial inclusion in strengthening the position of India in relation to the economies of other countries. The study states that proper channelization of financial inclusion can make the life of rural villagers easy and in harmony. The authors recommend formal financial institutions to attract the goodwill and trust of the poor through developing a strong linkage with community based financial ventures and co-operatives.

Aggarwal (2014) took an initiative to study the challenges and opportunities of financial inclusion in India and also made an attempt to study the various steps introduced by RBI to facilitate financial inclusion. The study found the speedy progress of banking technology as a result of financial inclusion and realized the contribution of poor sector towards a pool of financial resources. The study recommended the banks to implement simple procedures and formalities for various services in order to reduce the distance between banks and poor people. The study identified the inevitable role of poor sections in the inclusive growth of the country. It

is recommended to make use of post offices in rural areas which are more close to the rural population than bank branches.

Gandhi (2014) made an attempt to study the issues and challenges of financial inclusion in India. This paper systematically assessed the initiatives of banks in achieving financial inclusion and their efforts in introducing IT enabled financial services by using the data from RBI reports and other empirical studies. The author clearly identified the need of universal financial inclusion in achieving inclusive growth with appropriate financial stability.

Garg & Agarwal (2014) assessed the initiatives adopted by Indian banks in achieving inclusive growth in the country through financial inclusion and focused on the past years progress and performance. The main aim of the study is to identify the financial exclusion and its extent and also to understand the financial inclusion and its importance. The study finds the importance of empowering MSMEs who can play a vital role in the inclusive growth of the country. The study suggested to build financial awareness through financial education with the active participation of regulatory bodies, banks and governments.

Singh et al. (2014) attempted to focus on utilizing the existing resources of the country with the interest of the rural population and formal sector in an efficient and user friendly manner. The findings of the study reveal that the lack of awareness and financial literacy among the rural population should be the main reason for the slow growth of financial services in the country. The study recommends to change the distribution of printed literature in spreading financial knowledge and to adopt audio and visual media for spreading financial knowledge in vernacular languages. It also recommends the banks to maintain a relationship with Indian post offices in order to utilize their extensive network for setting up of banking counters at the post offices mainly in rural branches.

Kesavan (2015) conducted a study on “Financial Inclusion in India – A Road Map towards Growth of Initiatives and Achievements”. The focus of the study was to evaluate financial inclusion and its importance for overall development of the society and the economy of the nation. The study also focuses on various approaches adopted

by different Indian banks towards achieving the ultimate goals of financial inclusion and examined the past years progress and achievements. The findings of the study reveals that in order to overcome the obstacles on implementing financial inclusion there should be effective planning on financial inclusion plans and at most care should be taken in framing financial inclusion regulation policies which enables the implementation process more effective and efficient in the country.

Barua et al. (2016) in their working paper “The Status of Financial Inclusion, Regulation, and Education in India” describes the structure of banking and micro finance institutions in India relevant to the developing model of financial inclusion, regulatory structure and modes of delivery. This paper explains the present status of financial inclusion, suggest appropriate regulatory changes to make inclusion viable and criticize some of the recommendations of the Mor committee. The study concludes that the stability of new financial system depends on the ability to monitor and overcome the risk associated with borrowers. Researchers recommends to implement a data sharing arrangement among telecommunication operators, electric utilities and credit bureaus in order to develop a detailed risk matrix for the economy.

Bijoy (2017) carried out a study with the primary and secondary information were primary information was collected from six states of India i.e., Himachal Pradesh, Haryana, Delhi, Uttar Pradesh, Bihar, Jharkhand and the secondary information were collected from reports of various governmental committees. The main aim of this information gathering was to find out the present status of financial inclusion in India and to analyse the different kinds of financial inclusion initiatives implemented by the central government (DBT, PMJDY, MGNREGA etc). It is evident from the study that the low income groups in the country were not able to utilize the financial products and services due to insufficiency of sustainable income. The study memorises the role played by PMJDY in enhancing the accessibility towards banking services and insurance products also remarks the inefficiency of this scheme in maintaining the usability of this account by the accountholders.

Goel & Sharma (2017) took an attempt to construct an index which provides a general overview of India in terms of financial inclusion. Here financial inclusion

index is constructed not only on the basis of banking penetration, availability of banking services, usage of banking system but also it is constructed on the basis of access to savings and access to insurance. The financial inclusion index was constructed for a period of twelve years. The main aim of the study is to develop a financial inclusion index which helps to measure the financial inclusion in India. The findings of the study clearly states that during the period 2005 -2012 India was categorized under low financial inclusion with a financial inclusion index value between 0 -0.4. During the period of 2013 stagnant changes were occurred in India which results in reaching medium financial inclusion with a financial inclusion index value between 0.4 and 0.6. The most surprising fact is that during the period 2014 – 15 the financial inclusion status of India reached high financial inclusion with an index value between 0.6 and 1.

Iqbal & Sami (2017) explored the impact of financial inclusion on growth of the economy over a period of seven years through their study titled ‘Role of Banks in Financial Inclusion in India’. The objective of the study is to identify the major factors influencing access to financial services and to study the impact of financial inclusion indicators on growth of the Indian economy. Through the analysis of data, it is evident that financial inclusion is strongly associated with the progress and development of the economy. Result of the study reveals that the number of bank branches and credit deposit ratio had positive impact on the GDP of the country. The study recommends the authorities and banks to formulate proper financial inclusion regulation, provide training to customers on E-banking and to undertake financial literacy programs.

Mahajan & Singla (2017) carried out an attempt to study the effects of demonetization on financial inclusion in India. The study states the necessity of reaching technology at the bottom of the country in order to achieve financial inclusion and also to make India a cashless and digital economy. By going through the impact of demonetization, the authors could see the rise of an account named benami account. The analysis of the study reveals that the negative effects of demonetization is highly faced by the ordinary population than the main players of black money. It is a worrying fact that demonetization had adversely affected the rural

citizens of the country who are highly relayed on the physical money and have limited access to banks and other formal financial institutions. The study recommends the youth of the country to take remedial actions to educate the poor, old aged and rural citizens regarding the digital financial products, services and its usages.

Inoue (2018) went for an attempt to study the financial inclusion and poverty reduction in India. The main motive behind the paper was to assess the impacts of financial development through commercial banks in poverty conditions in India. The methodology of the study focuses on the unbalanced panel data for Indian states and union territories from 1973 to 2004. The generalized method of Moments estimation is applied in this study. The author clearly differentiates the Indian commercial banks into private sector banks and public sector banks, and compared their impact on financial inclusion deepening and poverty conditions. The finding of the study reveals that there is statistically significant negative relationship between financial inclusion deepening and poverty ratio for public sector banks. The paper ends up by recommending the public sector banks in extending their branch network towards remote areas with the help of mobile banking technology.

Khaki (2018) carried out a study to evaluate the financial inclusion plan and its progress within Jammu and Kashmir. The result of the study indicates that banking industry in the state exhibits urban oriented preference in the financial inclusion. It is found that after years of launching the financial inclusion schemes, they are inactive. Conflicting policies, unsuitable uptake, crony capitalism, weak absorption capacity, lack of complementary infrastructure, bankers unwillingness, lack of voluntary contribution, NGO's absence in the banking environment etc had negatively influenced in delivering effective financial access. It is suggested to incorporate financial inclusion with other social welfare and developmental schemes. A scientific appraisal of the performance of financial inclusion schemes and support mechanism should be strengthened to improve the post-delivery usage of financial services. The study proposes to develop financial literacy centres in coordination with the local governments, such as panchayaths in order to transmit knowledge regarding new schemes and to encourage the usage of financial services available in the country.

Menon (2018) in his study entitled 'Financial Inclusion, banking the unbanked; concepts, issues and policies for India' compares the financial inclusion situation of India with other BRICS nations. The study insists on three main indicators such as formal accounts, formal saving and formal credit in order to understand the financial inclusion condition of India and other BRICS nations. It is found that the main barriers to financial inclusion are raised from the voluntary exclusion. The paper recommends the RBI to seek help from various educational bodies (CBSE, UGC, AICTE etc.) in order to enhance the flow of financial awareness among the citizens. The study had identified the importance of financial literacy in achieving financial inclusion goals.

Anoop (2019) found that quality of financial inclusion is a crucial factor in achieving sustainable financial inclusion. The quality of financial inclusion consists of convenience, safety, affordability, dignity of treatment, product-fit and customer protection which promptly attract towards formal banking system. The result of the study reveals that there is inadequacy in providing quality banking services to the rural households. The study recommends the bank to maintain special attention to impart financial literacy and financial counseling to the less affluent people.

Barik & Sharma (2019) made an initiative to analyse the progress and future prospects of financial inclusion in India. The Findings of the study pointed that the low financial literacy, insufficient digital infrastructure facility, low income and absence of formal employment opportunities are the main reasons for acting as a barrier to rural consumers in utilizing digital technology for meeting their financial transactions. The paper recommends to open more financial literacy centres, availing sufficient digital infrastructure to the remote areas and to spread credit facilities to marginalized peoples in order to capture the goal of financial inclusion in India.

Dar & Ahmed (2020) assessed the determinants of financial inclusion and the determinants of barriers to financial inclusion in India. The finding of the study identifies the positive effect of education on the financial inclusion of the country. The barriers to financial inclusion includes the lack of documentation, lack of money, distance, un affordability, family member already had an account, no need for the financial services and religious reasons. Informal saving is visible among poor and

illiterate people in the country. Formal credit, informal credit, family and friends are the three types of borrowing sources put forward by Findex 2017. The study indicates the importance of education, especially financial literacy on the financial inclusion in India. The study concludes by recommending the Indian policymakers to give priority to the education of female population in the country and to focus on measures for enhancing the income of the individual in order to make the financial inclusion of the country more inclusive.

Mohakud et al. (2020) analysed the financial inclusion in the Mahuapur village of Badohi district in the Uttar Pradesh by focusing on incomes and expenditures, bank loans and subsidies and general awareness regarding money. The purpose of the study was to introduce financial inclusion among the people of the village, allowing them the opportunity to access financial products and services in a sustainable manner. The result of the study reveals that farmers depend very little on agricultural activities as their main source of income. This is due to two factors, namely due to decreasing farm size over the years and increase in the number of mouths to be fed. It is evident from the study that non-agricultural earners were successful in utilizing the availed loans for productive activity. The study suggests focusing more on non-agricultural sources of income to enhance rural prosperity.

2.6 Financial Literacy and Financial Inclusion

Mindra & Moya (2017) attempted to identify the extent to which financial literacy, financial attitude and financial self-efficacy stimulate an individual's financial behaviour and the usage of formal financial products to advance financial inclusion. The paper attempts to develop a theoretical model regarding the financial inclusion from a demand side aspect in Uganda. The findings of the study reflect a significant positive relationship between financial literacy and financial inclusion. It is evident that financial self-efficacy is a partially mediating variable in the relationship between financial literacy and financial inclusion and fully mediates in the relationship between financial attitude and financial inclusion. The prominent barrier to financial inclusion was the limited availability of demand side information. The study recommends to improve the policy programmes to enhance financial inclusion among

the individual's and consequently it improves financial knowledge and skills by maintaining economic and social welfare.

Bongomin et al. (2018) examined the interaction effect of cognition on the relationship between financial literacy and financial inclusion among the poor in rural Uganda, based on the premise that cognition shapes how individuals think and make decisions. The study employed a cross-sectional research design, and quantitative data were collected and analysed using the Statistical Package for Social Sciences (SPSS). The results demonstrated that cognition significantly moderates the relationship between financial literacy and financial inclusion among the poor in rural Uganda. Moreover, both cognition and financial literacy were found to have direct effects on financial inclusion of the poor in rural Uganda. The combination of cognition and financial literacy enables the poor to make informed financial decisions and choices regarding the use of financial services and products provided by formal financial institutions.

Bongomin et al. (2020) identified the mediating role of financial intermediaries in the relationship between financial literacy and financial inclusion of the poor in developing countries. It is evident that the role of microfinance banks in offering financial literacy to the poor enhances the scope of financial inclusion. The result of the study reveals that the financial intermediation of microfinance banks plays significant roles in promoting financial literacy and financial inclusion of its rural based clients.

Bongomin et al. (2020) determined the role of social network as a mediator between financial literacy and financial inclusion of poor people by microfinance banks in developing nations. The study revealed that social network strongly and positively mediates the relationship between financial literacy and financial inclusion of the poor by microfinance banks in developing countries. The presence of social network in rural communities particularly in developing nations serve as a channel through which financial skills and knowledge are passed to enable the poor to make more informed financial choices and decisions. The results of correlation showed that there is a significant and positive relationship between financial inclusion and financial literacy.

Similarly, the social network and financial inclusion are significantly and positively correlated. Networks rooted in social capital of poor people's relationships provide access to information like financial skills and knowledge, which enable the poor to make sound and prudent financial decisions and choices. Financial literacy proponents and microfinance bank managers in developing nations must ensure that they use the available local institutions like community and village associations to carry out the financial literacy training.

Fessler et al. (2020) analysed the link between financial knowledge, attitude and behaviour based on the Austrian Survey of financial literacy. Financial education empowers individuals financially by reducing financial literacy gaps and promoting consumer protection and inclusion. The study assumes that reading high quality newspaper is an instrument for maintaining financial knowledge. Analysis of the study indicates that financial knowledge and financial behaviour are positively correlated with financial attitude. It is evident that financial knowledge positively affects financial behaviour and financial attitude. The respondents who hold risky assets had higher knowledge score than who does not hold risky assets. In Austria household budget is prevalent among the low income households; it may be because of the requirement by their bank or to meet the each end of the family. Women exhibits higher gaps in financial knowledge, but they overcome it through better financial attitude and financial behaviour scores. The study concludes by stating the interrelationship between financial knowledge, attitude and behaviour because most people who scores high in financial knowledge and financial attitude also have high scores in financial behaviour.

Koomson et al. (2020) examined the impact of financial literacy training on financial inclusion and its intensity with the support of data generated by a Randomized Control Trial (RCT). The life cycle influence of financial literacy training on financial inclusion is also identified through the paper. The findings of the study reveal that financial literacy training has significant impact among the younger individual than the adults. Efficient borrowing and lending behaviour leads to effective saving which prevent the leakage of financial resources. The result of the study indicates that the

adequacy of strengthening financial literacy training in order to fill the gender-financial inclusion gap. The paper recommends the authorities behind the financial literacy training programmes to focus more on the young population, who can meet the objective of the programme effectively.

Panakaje et al. (2023) in their study critically analyzed the role of financial literacy in socio-economic empowerment through financial inclusion by considering the mediating role of financial decision-making and financial management behavior with a view to providing a new direction to the existing research on financial literacy and inclusion. The result of the study established that financial inclusion is greatly influenced by the financial literacy of rural population in a direct manner; but when they are able to make effective financial decisions and are prudent in financial conduct they are more likely to exhibit greater financial inclusion which has led to their socio-economic empowerment. It was concluded that there is a need for strongly promoting financial literacy to have improved management of finance and decision-making skills in the rural population for sustainable and inclusive growth towards balanced regional progress.

Muthetia (2024) studied the determinants of financial inclusion among working women in Uganda. Theories that formed the basis of the theoretical framework included the empowerment theory and the social cognitive theory. The study showed a strong positive influence of financial self-efficacy and financial literacy on financial inclusion among working women. It was found that a working woman with financial literacy will be able to gain access to good quality financial services that enhance her well-being. This research validates the fact that the empowerment theory can explain how the literacy level of a working woman can increase her ability to utilize the available economic data in order to become financially included. If the working woman is sure about her capability to control her money and make good use of credit to cover unexpected expenses then she will grab the available financial opportunities to improve her standard of living. The study recommended the government of Uganda to design policies deliberately to increase the financial literacy of working women.

This can be done by approving training curricula that include content regarding financial behavior, attitudes, and skills.

Nutassey et al. (2024) examined the mediating effect of financial inclusion on the link between financial literacy and financial well-being in Ghana. It is found that a positive and significant association between the financial literacy and financial well-being. Similarly, the Financial literacy has a positive direct impact on financial inclusion. In order to enhance the effectiveness of financial literacy on financial well-being in Ghana, policymakers need to give financial institutions sufficient autonomy to provide a range of financial services.

Bongomin et al. (2025) investigated the relationship between financial inclusion and sustainability of indigenous micro, small and medium-sized enterprises (MSMEs) in Africa, when there exists financial literacy. This research utilizes theories of consumer socialization and social learning to understand the relationship between financial inclusion, financial literacy and indigenous MSMEs' sustainability in Africa. The findings indicate a positive relationship between financial inclusion and sustainability of indigenous MSMEs in Africa when there exists financial literacy based on consumer socialization and social learning theories. This research provides guidance on how to design financial literacy curricula to cover the financial literacy gaps in MSMEs in Africa. Financial literacy and financial inclusion has a considerable impact on the sustainability of indigenous MSMEs in Africa particularly rural Uganda. Short financial literacy training sessions can also be provided by managers of financial institutions to owners and managers of MSMEs prior to loan disbursements. This will help to ensure proper utilization of loans, resulting in timely repayment and minimizing default rates, hence promoting financial inclusion and sustainability among MSMEs. Empirical evidence on the role of sociological theory in economic development through the promotion of financial knowledge and skills through financial literacy was clearly stated by the authors.

2.7 Finance and Scheduled Tribes

Xaxa (1999) observed that more systematic efforts to distinguish the tribe from caste were started only after the independence. Prior to that period, ethnographers did not

have a clear picture regarding the distinction between tribe from caste. This indicates that the tribes are a section consisting of illiterate, simple and backward society which show huge deviation from the dominant modern society. By changing this identity on the basis of modern occupation; new technology and education, this society no longer been considered as tribal. The empirical and conceptual problems encountered by the use of the term tribe or tribal society can be overcome to an extent by replacing with the term indigenous.

Nidheesh (2009) attempted to assess the role of self-help groups in the empowerment of tribal women in Kerala. Empowerment of tribal women from the perspective of economic aspects is necessary to protect the tribal women from the further marginalisation and exclusion from the society. The paper took an initiative to study the contribution of self-help groups in strengthening tribal women and also examined the role of different stakeholders in promoting tribal SHGs. The main aim behind the formation of SHGs is to promote collective actions to reduce poverty among the family. The SHGs working towards gender development is analysed throughout this paper. It is found that 74 percent of the samples are engaged in the social programmes, which includes the actions to closedown liquor shops, allowing daughter to continue their education, encouraging parents and child towards the educational institutions and approaching the district collector to take necessary action for the development of the village. The collective effort of this group finds solution to the water problems faced by the village by bringing borewell in the village for drinking water. Their efforts in bringing concrete roads in and around the village are also found remarkable.

Mohindra et al. (2011) through the participatory poverty and health assessment (PPHA) studied the usage of alcohol and its consequences among the Paniya tribal community in Kerala. PPHA allowed the community to express and define their perception through the participatory and qualitative approaches. The availability of alcohol is high among the tribal communities through licensed shops and they produce it illegally in their colonies. Many of non-tribal employers are attracting the Paniya through offering alcohol for daily work. Earlier drinking habits were seen among the elder males but now drinking is prevalent among the younger men too. The alcohol

consumption among the Paniya community negatively influenced their social and economic wellbeing and it leads to poverty in their settlements. Responses indicates that inability to save the earnings is the major reason for their marginalisation and their saving is deteriorated or destroyed by the alcohol consumption among their male section of the population.

Joseph (2012) studied the financial literacy of economically marginalised people in Kerala. Marginalised people constitute the section of the society who are socially and economically depressed and differentiated from the mainstream population. Happiest moment of the person occurs when they are employed, healthier, married or in a committed relationship and financially secure. The main objective of the study is to develop a theoretical base for measuring financial literacy of the marginalised people and to analyse the overall financial literacy of economically marginalised people and also the association of financial literacy with the demographic factors of the respondents. Overall financial literacy is assessed by incorporating four factors namely saving literacy, borrowing literacy, investment literacy and spending literacy. The findings of the study indicate that 44% of the respondents show good financial literacy, 12% shows excellent financial literacy, 39.3% exhibits satisfactory financial literacy and only 4.7% shows poor financial literacy. Vulnerable groups can be empowered through creating accessibility to financial system, which help them to open a bank account, insure their belongings, save and invest, credit availability and leads them to overcome the poverty. Absence or low financial literacy leads to financial exclusion, improper savings and investments. The presence of higher financial literacy among the marginalised sections in Kerala is the result of the self-Help Groups and highest general literacy prevailing in the state.

Shroff & Prasad Rao (2012) observed that the accessibility towards formal financial products and services is a path towards the empowerment of vulnerable groups. The study aims to facilitate financial inclusion initiatives undertaken by the RBI and other financial sector regulators of the country. The study states the necessity of formal financial system in improving financial literacy and financial counselling to reach the financial inclusion. Commercially profitable business aspects of financial inclusion

can be considered by the financial institutions. Technology enables the banks to reach the customer without geographical barriers. RBI is taking several measures to solve the customer problem relating to the inadequate service charges imposed by banks in the country. Financial exclusion of the people leads them to accessing credit from informal sources at exorbitant rate of interest, higher incidence of crime, decline in the investment and high unemployment. Banks can consider the financial inclusion of low income groups as a corporate social responsibility and a business opportunity. Banks can utilise the service of NGOs and micro finance institutions in including the excluded sections in the financial sector of the country.

Jain & Jain (2013) found a remarkable achievement of complete financial inclusion among the tribal communities of hilly district Chamba in Himachal Pradesh. The main objective of the paper is to study the role of different financial inclusion tools like bank account, post office account etc in the financial inclusion of the tribals in Chamba district and to study the financial inclusion status under MGNREGA Scheme. Even though the district is hilly inaccessible terrain and financial infrastructures are less than optimal, this district achieved cent percent financial inclusion through the MGNREGA. The beneficiaries of MGNREGA are fully included in the formal financial system and every one of them has opened account in post offices and banks. The study suggests ensuring efficient strategies and coordination among the stakeholders to widen the inclusiveness through availing timely and cost effective credit to the population. Increased acceptability of telephone and mobile phones in Himachal Pradesh can be effectively utilised to bring an alternative to branch banking through digital banking technologies which make use of the mobile phones and telephones. The complaints and problems of MGNREGA account holders should be redressed on priority basis. Credit inclusion in Chamba is increasing towards making its citizens self-sustainable and financially independent.

Pramod (2013) attempted to study the education and development among scheduled tribes in the Wayanad district of Kerala. The main objective of the study is to critically analyse the developmental initiatives of the state towards the tribals, to evaluate the role of education in their development and to identify the barriers faced in expanding

education to the tribal community. The dominant group establish themselves as the agents of socio economic discrimination towards the minorities in the surrounding. The original inhabitants of the Wayanad district were the tribes. The migration towards Wayanad from different parts of the state enhanced after 1940s, which leads to the displacement of the original inhabitants and made them a minority in the district. The invasion of tribal land by the migrants resulted in the marginalisation of tribal community. They didn't receive the share of the development which takes place in the post independent era though tribal population constitute the main marginalised and disadvantaged population in the country. It is found that school dropout rate is high among the Paniya community as compared to the Kurichya community. The material status of Paniya colonies is still in a pathetic situation. The perception of the government and the planners about the tribal development strategies should be changed in order to achieve the exact development. Adequate attention should be given to the potential strength of this section. The family problems in the tribal houses lead to irregular attendance and early dropout of tribal children from the school. The introvert mind-sets and inferiority complex of tribal children were the main reason for their low education. The prevailing curriculum wouldn't consider the living condition, socio cultural peculiarities and interest of the tribal community. Education can do a lot in the life of these marginalised sections. Education can lift them from the exploitation and backwardness by creating mental and physical strength in their minds and prepare them for the nation building initiatives.

Ray & Rout (2015) conducted a study on the topic 'financial inclusion among the urban tribal households in Odisha: A case study of JolliMunda Sahi community, Khordha district'. The main goal of the study is to identify the level of financial inclusion in terms of access, usage of financial services and financial awareness among the tribal households. The study indicates that around the 40 % of the tribal households in the community do not have a bank account and the usage pattern of the households with an account is limited due to lack of proper financial literacy among them. The findings of the study reveal that there is lack of awareness about the banking services and its utilization pattern among the respondents both with and without the bank account. The study recommends the authorities to take necessary steps in order

to spread banking awareness among the tribal communities and suggest appointing Business Correspondents who can work from the community by focusing on their challenges and needs.

Reddy & Reddy (2015) in their study aims to comprehend the indebtedness of tribal families, to measure the contribution of SHGs towards family credit, to understand the extent of dependence on traditional sources, to identify the issues of credit access and to evolve strategies towards reaching the unreached. Most of the tribal households were benefited from the financial services of banks through SHGs and their federations. The formal institutions were not able to survive in meeting the credit requirements of the SHG member households because of several factors. The tribal household had the opportunity to get credit from varied formal and informal sources. Of the formal sources, the banks have offered a lion's share to household credit under SHG bank linkage programme; whereas, of the informal sources, money lenders and relatives and friends have largely contributed to household credit. There is a massive burden of interest for the majority of tribal families because of exorbitant rate of interest on loans charged by the informal sources; however, the majority of families go for loans because of massive amount of loan at door steps, any time and for any purpose with flexible repayment terms and without any bribe or payments. Exorbitant rate of interest, loss of assets mortgaged and low prices to their agriculture produce are the important issues while accessing credit from informal sources. The major problems faced by the families in seeking credit from the banks are absence of title deeds and collateral security issues, loans for particular purposes and inaccessibility of credit services. In order to reduce the dependence of tribal families on money lenders and to provide and extend quality financial facilities to the poor and marginalized has to adopt two approach: first is to offer the business correspondents model by utilising the latest available technologies wherein connectivity is not a problem and secondly in the absence of technology, make use of village organizations as business correspondents with the requisite capacity building inputs on strengthening financial literacy.

V.A Haseena (2015) observed that the scheduled tribes come across different discriminations from the social participation, educational opportunities and access to their own land. The study attempted to evaluate the poverty and livelihood problems among the scheduled tribes in Attapady regions of Kerala. There are total of 183 ooru in Attapady block, which consist of three communities Irula, Muduga and Kurumba. Among this 183 ooru, 140 ooru is of Irula community, 24 Mudugaooru and 19 ooru of Kurumba community. In the event of financial crisis, tribes approach non tribes for loan by pledging their owned land. Inability to repay the loan leads to transfer of ownership of their land to the moneylenders. Infant mortality rate of Attapady region is four times higher than the state average of 12. The non-tribes took tribes land for cultivation on the basis of lease for a short period and after the completion of this period, the non tribes retain the land of the scheduled tribes. It is visible that most of the tribal people live for a day and do not think of their future, this problem can be overcome through imparting education which will create a better hope for their future. In order to sustain the health of tribal sections and to create livelihood opportunities for them the right to common property resources, right to common needs to be implemented in an effective manner and also a special land distribution Act for Attapady is to be implemented. The study recommends providing the right to 'Moopan' of each ooru to take decision regarding the rural employment guarantee scheme in tribal areas or belts. The accessibility and connectivity problems in tribal settlements can be abolished through channelling the investment towards transportation sector.

Sherraden & Ansong (2016) observed that a sizeable portion of the financial excluders in the country consist of tribal sections. They examined the financial inclusion services provided by the banks and its awareness among the tribes in Nilgiris district. The financial inclusion helps to reduce the dependence on informal channels for meeting the financial requirement of the population. The inclusive growth not only requires people to be attracted towards banking environment, but also their awareness of the financial services is mandatory. The standard of living of the tribal population can be improved only through their proper awareness regarding the financial products and services. About 53.1 percent of the respondents prefer money lenders for meeting

their financial needs. The main reasons for the exclusion of tribal people from the formal financial institutions were the financial illiteracy, distance barriers, income constraints, gender inequality and procedural formalities.

Guha (2017) examined the financial practices of tribal communities in Jhabua district of Madhya Pradesh, India and outlines a microfinance model which may be appropriate for the Jhabua scenario. Scheduled Tribes (STs) of India, the tribal people, have long been suffering from socio-economic issues. They are poor and economically backward because they lack education and livelihood. Understanding the economic issues of the tribal communities involves an examination of their access to financial and non-financial resources and the reasons why developmental finance programmes are unpopular among the tribal communities. Traditional microfinance model failed since the culture of the community did not support the practice of group lending and a few financial products are able to cater to the needs of this community. The research has proposed focusing on a financial model that initially attempts to smooth income and lower the cost of production. Secondly, it must start insurance products that cover crops and minimize farmers' uncertainty. Finally, individual credit products must be made available in accordance with the culture of the community.

Kumar B P (2017) through his study entitled 'Financial Vulnerability among Tribes in Rural Areas' makes an effort to assess the financial vulnerability among the Tribes in Wayanad district. The main goal of the study is to formulate a strategy in order to reduce the financial vulnerability of these socially and economically disadvantaged sections like tribes. The analysis of the data reveals that more than ninety percent tribes opened bank accounts but the surprising fact is that most of these people were forced to open the bank accounts in order to receive the remuneration under MGNREGS. It is found that the Kuruma community who is recognized as the advanced tribe community in the Wayanad district depends more on the formal financial institution in order to meet their credit needs. However, the community like Adiya and Paniya depend more on informal money lenders to meet their financial needs. More than 60% of tribes depend on informal sources to satisfy their financial requirements. The author concludes the study by recommending enhanced

intervention from government side to include the tribal communities in the formal financial structure. The study also recommends the formal banking institution to take initiative for meeting the credit requirement of tribal communities and there by abolishing their dependence on private money lenders.

Mohan et al. (2017) analysed the school dropouts and impact of digital literacy among the girls of Muthuvan tribes in Kerala. A good majority (77.23 percent) of dropout rate found among the scheduled tribes demands adequacy of attention. The study aims to explore the variables related to the dropout among tribal girls. Female tribal population are vulnerable to abuse and exploitation. The success of computer literacy intervention among dropout tribal girls was assessed seriously. Lack of support from home, negative attitude of tutors, seasonal requirement to work, lack of study materials, danger from wild animals, financial issues, learning difficulties, poor self-esteem and low self-efficacy in understanding the subjects teaching in the educational institutions were found to be the major reasons for the dropout of girls from Muthuvan tribes. The dropout of Muthuvan tribes usually begins after class 5 because schools with higher than 6th standard were located in the places far away from tribal settlements. 'Gothravelicham' project leads to the decrease in the dropout percentage among the tribal students. The study suggests to provide training to the teachers for encouraging and supporting the low performing tribal students and to make the teachers aware of the tribal culture and skilled in speaking the dialects of tribal students.

Sahoo et al. (2017) carried out study on the determinants of financial inclusion in tribal concentrated districts of Odisha. In this study the researchers made an attempt to investigate the financial inclusion status of tribal people and determinants of financial inclusion in tribal concentrated districts, namely Bolangir and Mayurbhanj in the state of Odisha. The main objective of the study is to evaluate the present status of financial inclusion among tribal households and to identify the various factors which influence the financial inclusion of tribal households. The findings of the study point out that the annual income of tribal households, household possession of private land, educational qualification of household head and possession of MGNREGS Job

card by the household are positive determinants of financial inclusion in these districts. The researchers recommend policymakers to formulate Indian policy agenda which focus on demand side factors along with the supply side factors in order to bring the marginalized sections of economy towards mainstream development path.

Konwar (2018) observed that the nationalisation of banks leads to transfer of control over the distribution of finances and credit to the government and public authorities. The financial exclusion and social exclusion in the country is prevalent among the marginal farmers, scheduled tribe, scheduled caste, landless labourers and among other backward classes. The objective of the study is to evaluate the financial inclusion level, disparity in financial inclusion and to examine the role of FLCCs in promoting financial inclusion among the tribal communities of Tinsukia district of Assam. The findings of the study indicate the aggregate IFI Score of the district has low financial inclusion. The purpose of savings, credit and sharing benefit of SHG availed credit were identified as the main reason for opening the bank account. More than one-half (55.4%) of the respondents didn't deposit money in their account during the last six months. Cost of visiting the bank was found more than the amount to save. This compels the tribal people to keep cash in their hand. Financial inclusion level is high among the male than females. Language problem and status differences are the main reasons for the low participation of tribes in the financial literacy camps. The study recommends integrating the financial inclusion programme with the livelihood generation activities of the tribal communities. The study concludes by identifying the crucial role of financial literacy and credit counselling on the financial inclusion of the tribal population.

Nanda & Samanta (2018) reviewed papers to identify the role of financial literacy in mainstreaming the tribal communities. The reviews are undertaken on the basis of four parameters, which consist of socioeconomic conditions of tribes, social exclusion among tribes, financial literacy on the life of the tribes and the initiatives made by the government for the development of the tribes. The dropout rate among the tribes is found high compared to the non-tribes. In order to help the family, tribal children quit the education after enrolling the primary education. Some of the studies identified that

poor quality in the schooling facilities, high cost of schooling, irrelevance of education for the immediate work needs, deprivation from the income generating opportunities as the main constraints in the economic development of the tribal society. It is found that absence of income or irregular income, low education, lack of financial literacy leads them to the mismanagement of money and the resultant poverty. The impact of financial exclusion needs to be addressed through the presence of financial literacy. Availing financial products and services to the vulnerable and deprived section is a prerequisite for reducing poverty, generating employment and achieving economic growth.

Sethy & Goyari (2018) took an initiative to study the relationship between financial exclusion and social exclusion in the tribal districts of Odisha. The main aim of the study is to evaluate the circularity linkage between financial exclusion and social exclusion and to assess the demographic and socio-economic status of tribal populations in the districts of Odisha. The study brings out the extent of exclusion of tribal people from bank branches, bank accounts, loans and credit deposit ratio. The necessary data for the study were collected from census reports, NABARD and other relevant reports. The study also identified the development in the number of accounts, deposits and credit has a result of government financial inclusion schemes like Pradhanmantri Jan DhanYojana (PMJDY) and Pradhan Mantri Mudra Yojana (PMMY). Even though financial inclusion of tribal population has enhanced, still a majority of rural tribes of Odisha does not have access to bank and also their awareness about financial services are below the mark. The result of the study depicts that there is a circularity linkage between financial exclusion and social exclusion and if one is addressed the other should be automatically addressed. The study strictly remarks that increase in the bank branches and opening of zero balance accounts alone should not uplift the financial inclusion. In order to enhance the financial inclusion in tribal oriented districts, it is recommended to provide banking, financial and social awareness programs and basic educational facilities.

Xavier (2018) observed that the sincere attention and consideration of Kerala towards the marginalised communities is insufficient. The problems and challenges faced by

the Kadar tribe in Kerala was analysed throughout the study. Kadar tribal community is one among the five particularly vulnerable tribal groups. They are mainly settled in the vazhachal forest division, parambikulam wildlife sanctuary and in the vicinity of the Athirapally waterfalls on riverside of Chalakudy. The financial sources of the community concentrated on the non-wood forest produce and forest labour. Illiteracy and low education made them to depend on the income from the forest resources and other traditional labour which provides less income and the resultant low standard of living. Mother tongue of the dominant non-tribal group in the state is included in the government schools, which makes the tribal children to struggle in understanding the subjects taught in the educational institutions. Smoking, alcoholism and displacement negatively affected the education of the children from Kadar community. The forest resources are getting drained day by day which creates hamper in the financial stability of this community, who are highly depended on the forest resources. The follow up of counselling and de-addiction is necessary by assigning duty to promoters of tribal welfare department in order to stop the smoking and drinking habits among this community. The overall living conditions of the community are poor according to the study. Kadarbasha should be included in the medium for communication in the educational premises. The major problems encountered by Kadar tribes in Kerala are: Lack of education, Alcoholism among the households, Payment delay from government agencies, Scarcity of forest resources, Lack of infrastructure facilities, Government rules and regulations, Ill health and malnutrition, Financial liability, Displacement threats, Exploitation by the government officials, Inadequate finance, Unavailability of proper employment, Absence of stable income, Existence of unwed mothers, Lack of document for the ownership of land and Inappropriate implementation of the forest regulation Act(2006).

Govind (2019) analysed the effectiveness of financial inclusion, financial literacy and the extent of utilization of financial services among the tribal people in Wayanad districts of Kerala. The main objective of the study is to examine the influence of financial inclusion and financial literacy among the tribal people and to assess the gender wise differences in receiving governmental benefits. The financial knowledge of tribal people was limited to using bank accounts for receiving government

subsidies, scholarships and NREGP remunerations. It is evident from the study that still the awareness level of tribal people regarding the major services provided by the commercial banks were very poor and the tribal people were far away from enjoying the initial goals of financial inclusion and financial literacy. The study strongly recommends the government and other organizations to educate these marginalized communities regarding the necessity of financial security and financial literacy.

Kumar P (2019) examined the importance of indigenous knowledge in tribal education. Tribal education in the country from its beginning onwards neglected their traditional knowledge and culture in the educational system and also created several barriers in their effective learning process. The objective of the article is to identify the role of formal education system in the educational attainment of tribal students and to conceptualise different arguments related to indigenous knowledge and its importance in the education of tribal communities. The memories of past exploitation and oppression still persist in the minds of tribal people and it has a wider influence on their lives. The majority of the knowledge provided in the educational institutions was culturally unfamiliar and disinteresting to the tribal children. A high majority (93 percent) of the respondents stated that their traditional occupations can be included in the school curriculum. Some of the constraints in providing education to the tribal children were the adjustment problems in the hostel, structure of the school system, nature of the text books, supervision and also includes the negative approach of parents towards the schooling of their children. By considering the educational aspects of Paniya communities, household decision plays a greater role in the schooling of children. A very high majority (95.8 percent) of teachers mentioned that the tribal students are facing difficulties in grasping the subject because the contents in the curriculum are very unfamiliar to their knowledge.

Kumar P (2019) conducted a journey on the topic ‘financial literacy and digital financial inclusion among tribal people of Kallar Gramapanchayath in Kasargod district. The major focus of the study is to evaluate the importance of financial literacy for the financial inclusion and the extent of digital financial inclusion among the tribal people. The salient objective of the study is to analyse the level of awareness of tribal

people regarding the various financial terms and to identify the level of digital financial inclusion among tribal people in the study area. The findings of the study reveal that a majority of the tribal people are relaying on the traditional mode of banking transactions and also it is found that the major portion of the samples are having little knowledge about the various aspects of digital financial inclusion.

Kuttencherry (2019) observed that the cultural differences of scheduled tribes from the mainstream society cause for the isolation, exclusion and under development of this tribal community. The elimination of social discrimination against the marginalised sections was not covered through the welfare approaches. The main objective of the study is to assess the savings pattern and banking habits, to analyse the working of the thrift and credit mechanism and its impact and to evaluate the role of NHGs in moulding human resources, mentally, socially and economically among the tribal and non-tribals in the Attapady regions of Kerala. The population of the study were the women members of NHGs of Kudumbashree Mission. The participatory approach of NHGs is appreciable in the tribal areas. In order to attain the sustainable development of society, participatory approach played a greater role rather than the project approach. The tribal infant mortality rate of Attapady was 66 which is higher than the national average of 40 and also very close to the rate of South Sudan which is 66.7. The computer knowledge is visible only among 16.8% of tribal respondents and 20.9% of non-tribal respondents. A majority (69.1%) of tribal respondents and 41.8% of non-tribal respondents opened bank accounts through MGNREGS. The daily requirement of the tribal is mainly met through the MGNREGS. The various activities conducted by the Kudumbashree Mission helps the tribal community to overcome their problems to an extent. Their training programs created social interaction power, good vision, self-confidence, savings, collective bargaining power among the tribal women. The study suggests the Kudumbashree Mission to strengthen the income generation and livelihood activities among the tribal communities. The water scarcity problem of the tribal community should be addressed by the government, which leads the tribal community to concentrate on their agricultural activities.

Nanda (2019) observed that, one of the important reasons for the distance between the tribes and mainstream society were the geographical habitations of the scheduled tribes. The large proportion of the tribal population is concentrated on the Jharkhand, Odisha, West Bengal, Chattisgarh, Gujarat, Rajasthan, Maharashtra, Madhya Pradesh and Andhra Pradesh. The main objective of the research is to understand the nature of exclusion, to identify the perception about financial inclusion and to assess the influence of financial literacy programmes among the tribal communities in the district of Koraput in Odisha. In order to overcome the inactivity of bank accounts among the tribes, government planned to link different direct benefit scheme with their accounts. Finance can play an important role in uplifting their living standards. It is found that bank account is prevalent only among 28% of the males and 23% of the females. Similarly, 55% of the male account holders and 81% of the female account holders opened accounts only for receiving government benefits. The study suggests identifying the areas where tribes can use their expertise and explore the opportunities. Tribal people necessitate the adequacy of financial literacy which helps them to survive and manage their budget. The need of the hour is to avail them the education, health care and income generating activities which foster their living.

Raihanath (2019) evaluated the effectiveness of financial inclusion programmes from the supply side and demand side. The nationalisation of commercial banks in 1969 resulted in the shift from class banking to the mass banking. Financial inclusion plays a major role in alleviating poverty from the developing and under developed countries by offering saving opportunities and availing credit to the needed in a faster and less economic mode. The effectiveness of financial inclusion programmes is measured by considering whether a person got any income generation, employment generation and asset creation opportunity through the mentioned programmes. The main objective of the study is to understand the factors associated with banking policies and implementation of financial inclusion programmes. Statistically financial inclusion is measured on the basis of opening an account in the formal financial sector. However, the real financial inclusion should be measured on the basis of improvements in the economic position of the people. The cumbersome procedures and geographical differences were the main barriers in accessing formal financial

services. Higher usage perceptions towards formal financial sector are visible among the person who has financial literacy. Economic desire and changing lifestyles of the people should be considered while planning and executing financial inclusion programmes. The policies should be flexible in accordance with the changing requirements of the people. Time should be allocated by senior managers for having a fruitful conversation with the actual and potential customers. Even though the financial inclusion programmes are constant in all over India, many plans like BC/BF models are not working properly in Kerala. It should be noticed that banking to the poor is not the poor banking.

Ramanujam & Dhanyamol (2019) found that the factors which exclude people from participating in the financial system can be addressed through the financial inclusion. Access to transaction account is the first attempt towards the broader financial inclusion. It opens up the path towards other financial products and services. The impact of personality traits on the financial inclusion of the scheduled tribes is assessed through the study. The combined effort of financial inclusion and infrastructure development is necessary for the overall development of the tribal sections. The large scale accessibility to the financial services like savings, insurance, credit and easily availability of cash through ATM had positive impact on the self-employment, overall wellbeing and poverty and on household consumption. It is found that the personality traits are highly influenced by the financial inclusion of scheduled tribes in Kerala.

Asha (2020) investigated the education among the tribes in Kerala and identified the socio, economic, institutional and cultural factors which determine the dropout of these sections from the formal education sector. Even though the overall educational development indices of Kerala were higher than the national level indices, the educational status of the scheduled tribes in the state is still a question mark. The sampling frame for the study consists of the young tribal children who are facing any constraints from going on with their formal education and also tribal students who are studying in the 9th or 10th level. The findings of the study depict that from the 31.7 percent of the dropout respondents, 42 percent were dropout at the lower primary

level. A majority (94.8 percent) of the dropout respondents replied that the decision to dropout was their own. The necessity of the education and the importance of encouraging children to the academic culture should be clearly imparted to the parents of tribal students. Allowances for travelling to attend PTA meeting and students' residential facility should be availed to the parents. The development and social economic transformation of the tribal community is possible through the attainment of education.

Shyni (2020) found that the relevance of financial literacy has increased compared to the previous period because of its influence on the success of financial inclusion programs implemented widely among the nations. Because of this relevance, developed and developing countries give prior attention to the financial literacy. The presence of financial inclusion in the country offers solution to the problems of poverty. Financial inclusion focuses on the opening of bank accounts by the poor in the formal financial institutions which helps the accountholder to save, borrow, invest, repay, insure and avail credit when required. The objective of the study is to analyse the influence of financial literacy on the better financial behaviour and to examine the relationship between awareness regarding financial inclusion policies, its usage and financial literacy among the scheduled caste and scheduled tribes in Kerala. Individuals should be competent in managing their financial resources because in the present world the responsibility of managing the financial dealing is vested in the hands of each individual. The findings of the study indicate that the respondents whose income was Rs 2,000 and above possess more awareness and usage of the policies of financial inclusion. A positive relationship is identified in between the awareness regarding financial inclusion policy and financial literacy among the households from scheduled castes and scheduled tribes. The increase in the financial literacy results in the development of their financial behaviour too. A direct relationship is found between savings and income level. The study suggests the government to implement micro savings scheme in the formal financial institutions. Business correspondents should be employed in the areas where people show reluctance in approaching formal financial institutions. Education and protection should be provided to the customers,

so that they can select the products which met their needs and reduce the wastage of financial resources.

Thomas & Suresh (2020) carried out a study on the topic ‘Digital financial inclusion: A catalyst for socio - economic transformation of scheduled castes and scheduled tribes in Kerala. The present study evaluates whether the digitalization of financial products and services reach the needed sections like scheduled castes and scheduled tribes and also measure the ability of digital innovations in uplifting the socio-economic condition of these marginalized communities. The study makes use of parametric tests for testing the hypothesis and structural equation modeling have been adopted for testing the validity and fit of the already developed socio-economic transformation model. The result of the study reveals that modern branchless banking system is capable enough to achieve greater social and economic transformation as compared to traditional branch banking system. At the end of the study, it is evident that digital financial inclusion leads to effective money management among scheduled caste and scheduled tribe communities and also uplifted the socio-economic condition of these marginalized communities.

Varkey (2020) examined the overall and category wise financial literacy of the scheduled tribes in Kerala. The literacy of the sample regarding basic banking services, loan services, financial regulatory institutions, ICT enabled banking services, insurance services and stock markets were assessed through an extraordinary initiative. In the modern world fintech is revolutionising the banking and financial sectors. The overall financial literacy of the respondents shows the statistics of 47.90 percent. Even though the sample sections of 50.4 percent were aware of the apex bank of India (RBI), only 6.4 percent were aware of the IRDAI which regulates the insurance sector of the country. Health insurance was found to be the most familiar insurance products among the respondents.

Varkey (2020) studied the financial inclusion and organic farming practices among the Kuruchya tribe in Wayanad district of Kerala. The influence of institutional credit in the organic farming practices of Kuruchya tribes was examined through a dedicated effort. The objective of the paper is to analyse the financial determinants of

institutional credit among farmers from Kuruchya tribe and to identify the financial factors which characterise the organic/primitive farming practices among the selected samples. Most of the tribes who have access to formal credit still insist on their traditional/ organic farming methods. The tribal people who are depending on the informal credit sources mainly practices inorganic farming methods. The exclusion of rural farmers from formal credit system negatively influences the development of agriculture sector in the country and it results in relaying in the primitive farming methods. The existence of formal credit seeking among the farmers can be possible through the promotion of banking behaviour among them. Necessary strategies should be adopted to promote formal credit mechanism and other basic financial services in the rural parts of the nation. The improvement and promotion of organic farming leads to financial inclusion and economic development of farmers from tribal population.

Veluchamy & Lingaraja (2020) analysed the personality traits and its impact on financial inclusion among the scheduled tribes. The main objective of the study is to reveal the socio- economic profile of the scheduled tribes and their level of financial inclusion and to assess the factors which affect the financial inclusion accessibility of the scheduled tribes. The findings of the study indicate that the loans, savings, value added services and e -banking services are the important banking activities in financial inclusion. The study recommends the bank branches to analyse the expectations of the scheduled tribes before delivering products or services and also recommends to provide some interpersonal and psychological training to bank staff in order to develop their relationship with the scheduled tribes. The analysis of the study concludes that the level of financial inclusion among the rural scheduled tribes is less than that of the urban scheduled tribes.

Bharathi (2021) observed that the insufficient knowledge regarding the financial products and services and its risk return factors are the result of the financial illiteracy. The study examines the financial literacy among scheduled communities in Tuticorin district of Tamil Nadu. The literacy level of scheduled communities regarding banking, postal services, insurance and other financial services were assessed deeply. Empowerment of the household is possible through imparting financial literacy also

it helps in the growth of economy and financial sector. The influence of financial literacy on the family decision making regarding budgeting, retirement planning, financing child education and saving for the future emergencies is clear. The findings of the study indicate that 21.2% of the scheduled community people only have the awareness regarding the electronic fund transfer or Google Pay. The study suggested the banks to introduce aggressive financial literacy campaign among the working and educated population. Financial inclusion in the absence of financial literacy is not sustainable. The financial literacy level among the sample selected is very low and necessary steps should be taken to enhance the financial knowledge in the rural counterparts of the country.

Prasanth and Balasubramaniam (2021) surveyed 270 tribal people from the Eastern Ghats of Tamil Nadu in order to identify the constraints faced by this communities in accessing and availing the services from social institutions. The literacy rate of tribal people in India is 58.97 percent, where the corresponding rate of the country is 74.4 percent which shows a substantial gap in the figures. The authors states that welfare schemes in the form of monetary benefits and subsidies particularly brings development among the scheduled tribes but the effective implementation of this welfare schemes is essential for achieving the complete development of scheduled tribes. The main constraints identified through the study were poor awareness regarding various developmental programs, changing the size of the family in to nuclear family, indebtedness of the family which negatively affect the schooling of children and difficulty in adopting the spiritual needs. Inadequate financial literacy is one of the important constraints in availing and accessing economic services. In order to overcome the mentioned constraint, the paper suggest to enhance the number of schools and colleges near to the tribal villages, create awareness regarding the various developmental programmes available to them and to enhance their literacy relating to financial products and services. It is suggested to conduct capacity building program among the tribes by focusing on financial management and income generating activities.

Thomas S. T., et al. (2021) assessed the health status of women and children from indigenous tribal communities of Attapady region in Kerala. The result from these communities was compared with the United Nation Sustainable Development Goals (SDG) of 2030, in order to identify the areas of growth and need. The status of health and wellbeing of tribal women and their empowerment minimise the gap and results in the survival of indigenous communities. The presence of malnutrition among the women is prevalent among the tribal communities. Low household income, consumption of rice without micro nutrient rich vegetables and eating fewer than three meals a day were the prime reasons for this malnutrition. Most of the children born in the Attapady were underweight according to the Indian standards. Child birth is a natural process which does not require any intervention is the mind-sets of the tribal households. The scarcity of firewood leads them to consume river or lake waters without proper boiling, which creates a serious issue to their health status. Health literacy, sanitation, addressing the healthcare inaccessibility and girls' education were the areas which need kind attention from the authorities. Tribal women should be encouraged for the decision making of local community needs. Sustainable infrastructures and partnership with local community leaders from each hamlet is necessary for their empowerment.

Chellasamy & Kannamudaiyar (2022) examined the factors influencing the particularly vulnerable tribal groups livelihood by specially focusing on the tribal communities residing in the Nilgiris district of Tamil Nadu. The income, literacy and living conditions of the primitive tribal groups are still in the infancy stage. The size of their population is too small and their settlement is located in the inaccessible terrains. The insufficient income status of these groups makes them to struggle for meeting their day-to-day obligations. Reduced level of poverty, financial inclusion benefits, enhanced household income had significant influence on their livelihood. It was concluded that the upliftment of the primitive tribal groups is possible through the effective implementation and management of developmental programmes.

Sarkar (2022) stated that simply having a bank account is not a good indicator for financial inclusion. This study evaluates the status of financial literacy and financial

inclusion among the tribal population of Purulia district of West Bengal. A sizeable portion of the sample holds at least one savings bank account but they are illiterate and their financial literacy level is inadequate. The prime motive of holding bank account is to avail the Government benefits and other monetary transfers. The financial literacy is assessed on the basis of the financial knowledge, attitude and financial behaviour of the respondents. Favourable financial inclusion is identified only among the 31.2 percent of the respondents. Visiting to the bank branches is rare and the knowledge regarding the modern banking facilities is visible only among a few respondents. The main hindrances which created gap from the formal financial institutions were the insufficient literacy and distances towards the bank branches.

Singh. R (2022) found that the financial services accessibility is necessary for minimising poverty, improving the service quality, achieving economic growth and overcoming financial exclusion. Presence of formal financial system and availability of different financial products are required for improving financial independence and stability. The goal of the study is to identify the key factors of financial literacy and financial inclusion and to examine the relationship between financial literacy, financial inclusion and government schemes among the tribes from the selected districts of Madhya Pradesh and Chhattisgarh. Exploratory factor analysis identified three major dimensions of financial literacy which includes financial behaviour, financial knowledge and financial attitude. Financial behaviour considers the budgeting, saving, borrowing, paying bills on times and deliberating over a purchase. It was found that only 38.23% and 48.81% respondents replied positively to financial knowledge and financial awareness related questions. The three dimensions of financial inclusion identified through the exploratory factor analysis were affordability, access and usage. The analysis of the primary data shows the significant impact of financial literacy on financial inclusion. Financial literacy plays remarkable role in the financial inclusion of residents from developing and under developed nations. The study suggests government to adopt adequate steps for improving financial literacy in collaborating with the financial literacy centres and other institutions. Financial education should be provided in native languages in order to make the learning easier.

Solomon (2022) observed that while comparing with other Indian states, a high level of financial literacy is visible in the state of Kerala. Kerala was declared as the India's first total banking state and the district of Palakkad was declared as the first total banking district in the country. However, the vulnerable sections in Kerala stand outside the formal financial network due to the lack of financial awareness, financial education and empowerment. The aim of the research is to assess the efficiency of FLC Camps in promoting financial literacy among beneficiaries, to evaluate the level of satisfaction among the beneficiaries of FLC camps and to assess the operational activities of FLCs. A sizeable portion of the population in our country was denied in accessing various financial resources. The presence of financial literacy can assist the citizen in planning financial resources for their future and creates confidence to face future unanticipated problems without incurring undue debt. It was found that after attending the FLC camp the literacy regarding the twelve financial products was enhanced among the respondents. Also, the awareness on private money lenders increased considerably. There is no significant difference between the satisfaction level on hands on sessions and the educational qualification of the FLC beneficiaries. Financial literacy is found low among the people with limited education. So financial literacy lessons should engaged at the school levels. Financial education should be imparted to the women, because it has greater impact on the financial position of the country. Financial education should be practiced in daily life which helps in taking better financial judgements. Public awareness regarding the financial education programmes should be enhanced. Improvements of financial knowledge and changing the financial attitude towards money can improve financial literacy which results in changing the financial behaviour in managing financial resources.

Singh A. K., (2023) examined the financial and marketing funding assistance provided by the government in the development of tribal entrepreneurship. Most of the Indian tribes live in remote regions with limited access to capital, markets, infrastructure, and technology. They continue to have no choice but to rely on informal sources of finance at exorbitant interest rates and unfavourable terms. It is evident that the three NSTFDC income-generation schemes have produced varied results in providing livelihood opportunities for Scheduled Tribes (STs). These schemes proved

to be significantly beneficial to tribes in some of the states but not for all. This suggests that state governments can tap the yet unutilized entrepreneurial spirit of tribal people by providing them with minimum financial, technical, and marketing support. The study suggests streamlining the process of sanctioning of loan and disbursal by the National Scheduled Tribes Finance and Development Corporation (NSTFDC). This will make the organization more efficient and it will also be convenient for the tribal population to obtain loans. This will encourage them and make them financially strong.

Singh, B & Singh, M (2023) attempted to comprehend the status of financial literacy as well as its drivers among the weaker section of society residing in the hilly region. There are two broad goals of the study, first was to measure the existing level of financial literacy of scheduled tribes living in hilly terrain and to determine the reasons that cause it. This study noticed that financial literacy is extremely poor among the scheduled tribes. Their place of residence, educational level, income, family structure and internet availability play an important role in their financial scores. Respondents have a broad knowledge gap with regard to sophisticated financial literacy. The research noted that most individuals in these tribal regions lack a good level of financial knowledge since over 89.3% of the respondent's financial literacy score was less than the median financial literacy score. Education level, income status and Internet connection are important in enhancing the financial knowledge. The result of the paper can be beneficial to create personalized awareness programs and financial products targeting scheduled tribes who reside in remote areas so that they are able to avail the benefits of market-oriented financial products. Financial awareness can assist scheduled tribes in financial inclusion thus alleviating poverty and inequality through making informed financial choices. Therefore, the result if adopted can assist in realizing the goal of inclusive growth. It is a concern for the policymakers because these societies are already under financial pressure, and their insufficient knowledge of finance can create more financial troubles in the future.

Biswal&Jha (2024) assessed the financial exclusion of the juang tribes in Keonjhar district of Odisha on the basis of certain demand side and supply side factors. An

extensive study was conducted to analyse the financial behaviour, infrastructural challenges, the local dynamics and the demand side issues in service delivery among the Juang tribes. Financial inclusion is considered as a key element in the life of the rural tribal households which benefit them from the policies and products of formal financial institutions. Financial inclusion as a program and policy should be redesigned and realigned for the primitive tribal groups. A majority (80 percent) of the tribal households are addicted to alcohol, smoking, Ganja and other types of intoxicants. The debt trap and financial wastage of the respondents are the result of the alcohol. The inability to repay the loan leads the tribes towards the bonded labour. The geographical proximity, lack of paper work, 24*7 availability, collateral free loans and simple procedures attracted most of the tribal households towards private money lenders. The developmental policies and programs should be implemented after considering the cultural, religious, local, social and geographical factors of the tribal households. It is found that educated people need financial literacy to make rational financial judgement. The procedural requirements and limitations of providing formal financial products and services to the tribal communities should be abolished and customised financial products and services should be made available to the tribal counterparts.

Katini et al. (2024) ascertained the degree of financial literacy among Mao-Naga tribes in India, particularly the women of the Mao-Naga Tribe in Northeast India. Financial literacy can lead to the financial well-being required for socio-economic development among Mao-Naga Tribal women. In the world at large, limited literature has pinpointed vulnerable tribes as being part of their population and documented that financial illiteracy prevails within developing and advanced economies. Mao-Naga Tribal women have the potential to contribute towards the socio-economic development of the region if they are provided opportunities to reaffirm their financial literacy advantage by inclusive financial education programs commingled with their cultural rituals. It was revealed that financial education intervention, socio-cultural practices, social affinity, and early life financial experience influence financial literacy. It has also been found that a productive way of attaining financial literacy and inclusion is through the incorporation of financial education programs into the

socio-cultural practices of tribal women. Encouraging women to pursue financial education can give a boost to tribal society. Meanwhile, older women require preliminary financial education and illumination that can be passed down by oral tradition to the young ones. Unpreparedness for retirement, low knowledge of different social schemes, weak financial literacy, and being described as "underclass citizens" has led tribal women to opt out of socio-economic development arenas. This research indicates that financial literacy interventions can improve women's well-being and socio-economic inclusion. This research paper will enable governments, central bank, regulators and researchers familiarize themselves with the key components of financial literacy and to determine the relevant topics to empower further among sub-populations, particularly among tribal women of Northeast India.

2.8 Research Gap

While substantial literature exists on financial literacy and financial inclusion, significant gaps remain in understanding how these concepts interact within marginalized communities, particularly among the Scheduled Tribes (STs). The majority of existing studies have focused on broad populations or specific demographic categories such as women, rural poor or urban low-income groups, with relatively limited focus on indigenous and tribal populations in Kerala. As a result, the unique socio-cultural, economic and geographical challenges faced by Scheduled Tribes in accessing and utilizing financial services are underexplored. Most of the national level studies evaluated the effectiveness of financial inclusion schemes in terms of quantitative outreach such as the number of accounts opened or credit disbursed without adequately assessing the qualitative aspects like awareness, usage and sustainability of inclusion. Only a very few number of researches were undertaken to examine the depth of financial literacy and financial inclusion among tribal population. A few studies adopted an interdisciplinary approach that combines finance and social perspectives to holistically assess the financial condition of Scheduled Tribes. These gaps underscore the need for focused research that not only examines the current levels of financial literacy and inclusion among Scheduled Tribes but also investigates the structural barriers, enabling factors and the real-world outcomes of

financial interventions. Addressing these factors is critical for designing inclusive financial policies and programs and for the sustainable development of the nation.

2.9 Conclusion

The review of existing literature reveals a growing body of work highlighting the significance of financial literacy and financial inclusion as essential tools for economic empowerment and poverty alleviation. It also underscores their interdependence in promoting equitable and inclusive growth. While numerous studies have examined these themes separately across various populations, there is limited literature that holistically explores the intersection of financial literacy, inclusion and financial development specifically within the Scheduled Tribe communities. At the national level, several policy initiatives and academic inquiries have addressed financial inclusion, yet many of them adopt a generalized or urban-centric approach that may overlook the unique challenges faced by tribal population such as lack of financial awareness, inadequate institutional outreach, socio-cultural exclusion and low digital and banking infrastructure. The identified research gaps emphasize the need for more focused, ground-level and inclusive studies that not only measure the financial access and literacy but also assess their real impact on the socio-economic conditions of Scheduled Tribes.

References

- Aggarwal, R. (2014). Financial inclusion in India: Challenges and opportunities. *International Journal of Research*, 1(4).
- Akudugu, M. A. (2013). The determinants of financial inclusion in Western Africa: Insight from Ghana. *Research Journal of Finance and Accounting*, 4(8), 1–10.
- Al-Duhaidahawi, H. M. K., Zhang, J., Abdulreza, M. S., Harjan, S. A., & Shah, S. S. H. (2019). The role of financial inclusion and competitive advantage: Evidence from Iraqi Islamic banks. *International Journal of Economics and Financial Issues*, 9(3), 193–199.
- Alonzo, D. E.V, Santillan, A. G., & Molchanova, V. S. (2022). Saving habits of high-school students associated with their future retirement as financial literacy topics. *European Journal of Contemporary Education*, 11(3), 946–961.
- Ananda, S., Kumar, R. P., & Dalwai, T. (2024). Impact of financial literacy on saving behavior: The moderation role of risk aversion and financial confidence. *Journal of Financial Services Marketing*, 843–854.
- Anoop, V. (2019). A study on the service quality of financial inclusion in rural area. *UNNAYAN: International Bulletin of Management and Economics*, 11, 71–81.
- Arunmozhi, M. S. (2016). Tribal people of Nilgiris District and their financial inclusion awareness. *International Journal of Engineering Research and Technology (IJERT)*, 4(27).
- Asha, C. M. (2020). Education of tribal communities in Kerala. *International Journal of Social Science and Economic Research*, 5(6), 1390–1399. <https://doi.org/10.46609/IJSSER.2020.v05i06.001>
- Asongu, S. A., & Zogo, T. E. (2025). Financial inclusion, inequality and women in politics and business. *International Journal of Public Administration*. Advance online publication.

- Baber, H. (2019). Financial inclusion and FinTech: A comparative study of countries following Islamic finance and conventional finance. *Qualitative Research in Financial Markets*, 12(1), 24–42. <https://doi.org/10.1108/QRFM-12-2018-0131>
- Bagli, S., & Dutta, P. (2012). A study of financial inclusion in India. *Journal of Radix International Educational and Research Consortium*, 1(8).
- Bari, M. A., Khan, G. D., Gani, M. O., & Yoshida, Y. (2025). Financial inclusion strategies for slum households: Insights from a conjoint analysis. *Journal of Applied Economics*, 28(1). <https://doi.org/10.1080/15140326.2025.2509207>
- Barik, R., & Sharma, P. (2019). Analysing the progress and prospects of financial inclusion in India. *Journal of Public Affairs*.
- Barua, A., Kathuria, R., & Malik, N. (2016). *The status of financial inclusion, regulation, and education in India* (ADB Working Paper 568). Asian Development Bank Institute. <http://www.adb.org/publications/status-financial-inclusion-regulation-and-education-india>
- Berlinger, E., Domotor, B., Megyeri, K., & Walter, G. (2025). Financial literacy of finance students: A behavioral gender gap. *International Journal of Educational Management*, 39(8), 116–133. <https://doi.org/10.1108/IJEM-04-2024-0221>
- Bharathi, A. M. (2021). *A study on financial literacy among scheduled communities in Tuticorin district* (Doctoral dissertation, Manonmaniam Sundaranar University, Tirunelveli). Department of Commerce, Manonmaniam Sundaranar University.
- Bijoy, K. (2017). Financial inclusion in India and PMJDY: A critical review. In *Proceedings of the First International Conference on Information Technology and Knowledge Management* (pp. 39–46). ACSIS, 14. <https://doi.org/10.15439/2018KM32>

- Biswal, R., & Jha, M. (2024). Financial inclusion at the intersection of social exclusion: A study among the Juang tribes in Keonjhar district of Odisha. *GLS KALP: Journal of Multidisciplinary Studies*, 2(2), 30–39.
- Bjorklund, M., & Sandahl, J. (2021). Inviting students to independent judgement: Teaching financial literacy as citizenship education. *Citizenship, Social and Economics Education*, 20(2), 103–121.
- Bongomin, G. O. C., & Munene, J. C. (2020). Financial inclusion of the poor in developing economies in the twenty-first century: Qualitative evidence from rural Uganda. *Journal of African Business*, 21(3), 355–374.
- Bongomin, G. O. C., Chrysostome, E., Nkongolo-Bakenda, J.-M., & Yourougou, P. (2025). Toward increasing financial inclusion and sustainability of indigenous microenterprises in Africa in the presence of financial literacy. *Journal of Business and Socio-economic Development*, 5(2).
- Bongomin, G. O. C., Ntayi, J., & Akol, C. (2020). Analyzing the relationship between financial literacy and financial inclusion by microfinance banks in developing countries: Social network theoretical approach. *International Journal of Sociology and Social Policy*, 40(11), 1257–1277.
- Bongomin, G. O. C., Munene, J., & Yourougou, P. (2020). Examining the role of financial intermediaries in promoting financial literacy and financial inclusion among the poor in developing countries: Lessons from rural Uganda. *Cogent Economics & Finance*, 8(1).
- Bongomin, G. O. C., Munene, J., Ntayi, J., & Akol, C. (2018). Nexus between financial literacy and financial inclusion: Examining the moderating role of cognition from a developing country perspective. *International Journal of Bank Marketing*, 36(7), 1190–1212.
- Bongomin, G. O. C., Ntayi, J., Munene, J., & Akol, C. (2018). Institutions and financial inclusion in rural Uganda: The mediating role of social capital. *Journal of African Business*, 19(1), 1–18.

- Chakrabarty, K. C. (2013, September 6). *Financial inclusion in India – Journey so far and way forward* [Keynote address]. Finance Inclusion Conclave, CNBC TV 18, New Delhi, India. Reserve Bank of India.
- Chakravarty, S., & Pal, R. (2013). Financial inclusion in India: An axiomatic approach. *Journal of Policy Modeling*, 35(5), 813–837.
- Chellasamy, P., & Kannamudaiyar, S. (2022). Factors influencing the particularly vulnerable tribal groups livelihood towards tribal co-operative marketing development federation: A study with reference to Nilgiris District. *International Journal of Health Sciences*, 6(S2), 10886–10892.
- Cupak, A., Kolev, G., & Brokesova, Z. (2019). Financial literacy and voluntary saving for retirement: Novel causal evidence. *The European Journal of Finance*, 25(1), 1-20.
- Dangi, N., & Kumar, P. (2013). Current situation of financial inclusion in India and its future visions. *International Journal of Management and Social Sciences Research*, 2(8), 155–166.
- Dar, A., & Ahmed, F. (2020). Financial inclusion determinants and impediments in India: Insights from the Global Financial Inclusion Index. *Journal of Financial Economic Policy*.
- Dewi, V. I. (2022). How do demographic and socio-economic factors affect financial literacy and its variables? *Cogent Business and Management*, 9(1), 2077640.
- Fessler, P., Silgoner, M., & Weber, R. (2020). Financial knowledge, attitude and behaviour: Evidence from the Austrian Survey of Financial Literacy. *Empirica*, 47(4), 929–947.
- Fungáčová, Z., & Weill, L. (2015). Understanding financial inclusion in China. *China Economic Review*, 34, 196–206. <https://doi.org/10.1016/j.chieco.2014.12.004>

- Gabor, D., & Brooks, S. (2016). The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy*, 22(4), 423–436. <https://doi.org/10.1080/13563467.2017.1259298>
- Gandhi, M. M. (2014). Financial inclusion in India: Issues and challenges. In *Conference proceedings of International Finance and Economics Conference* (Vol. 1). Germany: Lupcon Centre for Business Research.
- Garg, S., & Agarwal, P. (2014). Financial inclusion in India: A review of initiatives and achievements. *IOSR Journal of Business and Management*, 16(6), 52–61.
- Goel, S., & Sharma, R. (2017). Developing a financial inclusion index for India. *Procedia Computer Science*, 122, 949–956. <https://doi.org/10.1016/j.procs.2017.11.358>
- Govind, N. (2019). Extent of financial inclusion among tribal people of Wayanad districts. *International Journal of Social Science and Economic Research*, 4(2), 1–10.
- Guha, S., Patel, H., & Parekh, N. (2017). An exploration of the financial practices of tribal communities in Jhabua, India. *Development in Practice*, 27(6), 801–812.
- Gupta, P., & Singh, B. (2013). Role of literacy level in financial inclusion in India: Empirical evidence. *Journal of Economics, Business and Management*, 1(3), 272–276.
- Gupte, R., Venkataramani, B., & Gupta, D. (2012). Computation of financial inclusion index for India. *Procedia - Social and Behavioural Sciences*, 37, 133–149.
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Inoue, T. (2018). Financial inclusion and poverty reduction in India. *Journal of Financial Economic Policy* 11(1), 21–33.

- Iqbal, B. A., & Sami, S. (2017). Role of banks in financial inclusion in India. *Contaduría y Administración*, 62(2), 644–656. <https://doi.org/10.1016/j.cya.2017.01.007>
- Jain, A., & Jain, A. (2013). Achieving financial inclusion under MGNREGA in a tribal hill district: A study of Chamba (HP). *Journal of Land and Rural Studies*, 1(2), 173–198.
- Jambunathan, S., Aldemir, J., & Jayaraman, J. (2024). Teaching financial literacy in early childhood classrooms. *Early Childhood Education Journal*, 1–7.
- Joseph, J. (2012). *Financial literacy of economically marginalised people of Kerala* (Doctoral dissertation, Mahatma Gandhi University, Kottayam). School of Gandhian Thought and Development Studies, Mahatma Gandhi University.
- Kadoya, Y., & Khan, M. S. (2017). Can financial literacy reduce anxiety about life in old age? *Journal of Risk Research*, 21(12), 1533–1550.
- Kadoya, Y., & Khan, M. S. (2020). Financial literacy in Japan: New evidence using financial knowledge, behaviour and attitude. *Sustainability*, 12(9).
- Kadoya, Y., & Khan, M. S. (2020). What determines financial literacy in Japan? *Journal of Pension Economics and Finance*, 19(3), 353–371.
- Kamble, P. A., Mehta, A., & Rani, N. (2024). Financial inclusion and digital financial literacy: Do they matter for financial well-being? *Social Indicators Research*, 171(3) 777–807.
- Katini, K., Hriizhiinio, K., & Amalanathan, S. (2024). Mainstreaming Northeast tribal women in India through financial education: A systematic review. *Journal of International Women's Studies*, 26(2), 1-14.
- Kesavan, V. (2015). Financial inclusion in India – A road map towards growth of initiatives and achievements. *IOSR Journal of Economics and Finance*, 6(3), 70–81. <https://doi.org/10.9790/5933-06327081>

- Khaki, A. R. (2018). Effectiveness of financial inclusion programs: A case study of Jammu and Kashmir state. *International Journal of Financial Innovation in Banking*, 2(1), 29–47.
- Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The influence of financial literacy and attitude towards financial behaviour amongst undergraduate students: A cross-country evidence. *Pertanika Journal of Social Sciences and Humanities*, 30(2), 449–474.
- Kim, D.-W., Yu, J.-S., & Hassan, M. K. (2017). Financial inclusion and economic growth in OIC countries. *Research in International Business and Finance*, 43, 1–14. <https://doi.org/10.1016/j.ribaf.2017.07.178>
- Kinsman, J. E. (2019). Cardless banking in the Nelson Mandela Metropole: A means of financial inclusion for the excluded. *Journal of Economic and Financial Sciences*, 12(1).
- Kodan, A. S., & Chhikara, K. S. (2013). A theoretical and quantitative analysis of financial inclusion and economic growth. *Management and Labour Studies*, 38(1–2), 103–133. <https://doi.org/10.1177/0258042X13498009>
- Konwar, N. (2018). *A study on financial inclusion among tribal communities of Tinsukia district of Assam* (Doctoral dissertation, Dibrugarh University, Assam).
- Koomson, I., Vilano, R. A., & Hadley, D. (2020). Intensifying financial inclusion through the provision of financial literacy training: A gendered perspective. *Applied Economics*, 52(4), 375–387.
- Koomson, I., Vilano, R. A., & Hadley, D. (2021). Accelerating the impact of financial literacy training programmes on household consumption by empowering women. *Applied Economics*, 53(29), 3359–3376.
- Kumar, N. (2013). Financial inclusion and its determinants: Evidence from India. *Journal of Financial Economic Policy*, 5(1), 4–19. <https://doi.org/10.1108/17576381311317754>

- Kumar, P. (2019). Financial literacy and digital financial inclusion among tribal people – A case study of KallarGramapanchayath in Kasaragod district. In *MESMAC International Conference Proceedings* (pp. 1–12). MESMAC. ISBN: 978-81-939574-0-0
- Kumar, B.P. (2017). Financial vulnerability among tribes in rural areas: A study. *International Journal of Multidisciplinary Educational Research*, 6(7), 1–10.
- Kuttencherry, A. J. (2019). *A study on socio-economic impact of neighbourhood groups (NHGs) in Attappady: A comparison between tribal and non-tribal communities* (Doctoral dissertation, Mahatma Gandhi University, Kottayam). Department of Applied Economics, Cochin University of Science and Technology.
- Kyeyune, G. N., & Ntayi, J. M. (2025). Empowering rural communities: The role of financial literacy and management in sustainable development. *Frontiers in Human Dynamics*.
- Lê, T., Dang, N., Nguyen, T., Vu, T., & Tran, M. (2019). Determinants of financial inclusion: Comparative study of Asian countries. *Asian Economic and Financial Review*, 9(10), 1107–1123.
- Lee, J. M., Lee, J., & Kim, K. T. (2020). Consumer financial well-being: Knowledge is not enough. *Journal of Family and Economic Issues*, 41(2), 218–228.
- Lusardi, A. (2015). Financial literacy: Do people know the ABCs of finance? *Public Understanding of Science*, 24(3), 260–271. <https://doi.org/10.1177/0963662514564516>
- Lusardi, A., & Mitchell, O. S. (2023). The importance of financial literacy: Opening a new field. *Journal of Economic Perspectives*, 37(4), 137–154.
- Mahajan, P., & Singla, A. (2017). Effects of demonetization on financial inclusion in India. *International Journal of Science, Technology and Management*, 6(1), 338–343.

- Manojan, K. P. (2018). Indigenous knowledge in education: A study among Paniya tribes in Kerala. *Journal of Social Work Education and Practice*, 3(1), 43–55.
- Mbutor, O. M., & Uba, I. A. (2013). The impact of financial inclusion on monetary policy in Nigeria. *Journal of Economics and International Finance*, 5(8), 318–326. <https://doi.org/10.5897/JEIF2013.0541>
- Menon, P. (2018). Financial inclusion, banking the unbanked: Concepts, issues and policies for India. *Wiley Practitioner Paper*.
- Mindra, R., & Moya, M. (2017). Financial self-efficacy: A mediator in advancing financial inclusion. *Equality, Diversity and Inclusion: An International Journal*, 36(2), 151–170.
- Mohakud, S., Singh, A., Jagdale, S., Pandey, A., & Narayanan, B. (2020). Financial inclusion in rural India: A case study of Mahuapur. *DME Journal of Management*, 1(1), 1–12.
- Mohan, A., Gutjahr, G., Pillai, N. M., Erickson, L., Menon, R., & Nedungadi, P. (2017). Analysis of school dropouts and impact of digital literacy in girls of the Muthuvan tribes. In *5th IEEE International Conference on MOOCs, Innovation and Technology in Education*, (pp. 72–76).
- Mohindra, K., Narayana, D., Anushreedha, S., & Haddad, S. (2011). Alcohol use and its consequences in South India: Views from a marginalised tribal population. *Drug and Alcohol Dependence*, 118, 70–73.
- Morawczynski, O., Hutchful, D., Rangaswamy, N., & Cutrell, E. (2010). The bank account is not enough: Examining strategies for financial inclusion in India. *ICTD Conference Proceedings*.
- Mountain, T. P., Kim, N., Serido, J., & Shim, S. (2021). Does type of financial learning matter for young adults' objective financial knowledge and financial behaviors? A longitudinal and mediation analysis. *Journal of Family and Economic Issues*, 42(1) 113–132.

- Musau, S., Muathe, S., & Mwangi, L. (2018). Financial inclusion, bank competitiveness and credit risk of commercial banks in Kenya. *International Journal of Financial Research*, 9(1), 203–218.
- Muthetia, O. (2024). Empowering financial inclusion: The role of financial literacy and self-efficacy among working women. *International Journal of Contemporary Africa Research Network*, 1(1), 50–62.
- Naidu, G. J. (2017). Financial literacy in India: A review of literature. *International Journal of Research in Business Studies and Management*, 4(6), 30–32.
- Nanda, A. K. (2019). *Mainstreaming tribals through financial literacy: With special reference to Koraput District of Odisha* (Doctoral dissertation, KIIT Deemed to be University, Bhubaneswar). School of Management, KIIT Deemed to be University.
- Nanda, A. K., & Samanta, S. (2018). Mainstreaming tribals through financial literacy: A review of literature. *International Journal of Social Economics*, 45(2), 437–444.
- Naumenkova, S., Mischenko, S., & Dorofeiev, D. (2019). Digital financial inclusion: Evidence from Ukraine. *Investment Management and Financial Innovations*, 16(3), 194–205.
- Ngo, A. L. (2019). Index of financial inclusion and the determinants: An investigation in Asia. *Asian Economic and Financial Review*, 9(12), 1368–1382.
- Nguyen, T. A. N, Polách, J., & Vozňáková, I. (2019). The role of financial literacy in retirement investment choice. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 14(4), 569–589.
- Nidheesh, K. B. (2009). Strengthening tribal communities through tribal women's self-help groups in Kerala. *International Journal of Sociology and Anthropology*, 1(4), 77–81.

- Nsiah, A. Y., & Tweneboah, G. (2023). Determinants of financial inclusion in Africa: Is institutional quality relevant? *Cogent Social Sciences*, 9(1).
- Nurbekyan, A., & Hovanesian, N. (2018). *Financial inclusion, regulation, financial literacy, and financial education in Armenia* (ADB Working Paper No. 843). Asian Development Bank Institute. <https://www.adb.org/publications/financial-inclusion-armenia>
- Nutassey, V. A., Frimpong, S., & Ageyi, S. K. (2024). Financial literacy induced financial well-being in Ghana: Does financial inclusion mediate? *Thunderbird International Business Review*, 325–337.
- Oliveira, T. F., Gomes, A. L., & Jorge, S. V. (2022). Financial literacy: An exploratory analysis in Portugal. *Studies in Business and Economics*, 17(2), 252–269.
- Ouechtati, I. (2020). The contribution of financial inclusion in reducing poverty and income inequality in developing countries. *Asian Economic and Financial Review*, 10(9), 1051–1061.
- Ozili, P. K. (2023). Financial inclusion washing. *Journal of Financial Crime*, 30(5), 1140–1149.
- Panakaje, N., Rahiman, H. U., Parvin, S. M. R., Kulal, A., & Siddiq, A. (2023). Socio-economic empowerment in rural India: Do financial inclusion and literacy matter? *Cogent Social Sciences*, 9(1), 2225829.
- Park, C.-Y., & Mercado, R. V., Jr. (2015). *Financial inclusion, poverty, and income inequality in developing Asia* (ADB Economics Working Paper Series No. 426). Asian Development Bank. <https://www.adb.org/publications/financial-inclusion-developing-asia>
- Pramod, K. M. (2013). *Education and development among tribals in Kerala: A study with special reference to Wayanad District* (Doctoral dissertation). Department of Education, University of Calicut.

- Prasanth, A., & Balasubramaniam, P. (2021). An analysis on constraints faced by scheduled tribes in access to social institutions in Eastern Ghats of Tamil Nadu. *Asian Journal of Agricultural Extension, Economics & Sociology*, 39(12), 185–192. <https://doi.org/10.9734/ajaees/2021/v39i1230818>
- Putthinum, P., Watanapongvanich, S., Khan, M. S. R., & Kadoya, Y. (2021). Financial literacy and alcohol drinking behaviour: Evidence from Japan. *Sustainability*, 13, 8858.
- Raihanath, M. P. (2019). *Effectiveness of financial inclusion programme in Kerala* (Doctoral dissertation, Cochin University of Science and Technology, Kochi). School of Management Studies, Cochin University of Science and Technology.
- Ramanujam, V., & V.R, Dhanyamol.(2019). Personality traits impact on financial inclusion among Scheduled Tribes in Kerala. *Indian Journal of Research*, 8(5), 50–55.
- Ray, D., & Rout, H. S. (2015). Financial inclusion among the urban tribal households in Odisha: A case study of JolliMundaSahi community, Khurdha district. *Orissa Economic Journal*, 47(1), 1–12.
- Reddy, K.R., & Reddy, T. C. S (2015). Indebtedness and financial inclusion among the tribal: An experience of woman self-help group member households in Andhra Pradesh. *The Microfinance Review, Journal of the Centre for Microfinance Research*, 7(1), 1–19.
- Roy, S. K. (2012). Financial inclusion in India: An overview. *Asian Journal of Multidimensional Research*, 1(5), 134–141.
- Sahoo, A. K., Pradhan, B. B., & Sahu, N. C. (2017). Determinants of financial inclusion in tribal districts of Odisha: An empirical investigation. *Social Change*, 47(1), 45–64. <https://doi.org/10.1177/0049085716683072>

- Sarkar, S. (2022). Financial inclusion among tribal households of backward areas: A study of Purulia District of West Bengal. *International Journal of Multidisciplinary Educational Research*, 11(4).
- Sayed, M. N., & Shusha, A. (2019). Determinants of financial inclusion in Egypt. *Asian Economic and Financial Review*, 9(12), 1383–1404.
- Sethi, D., & Acharya, D. (2018). Financial inclusion and economic growth linkage: Some cross-country evidence. *Journal of Financial Economic Policy*, 10 (3), 369-385.
- Sethy, S. K., & Goyari, P. (2018). Relationship between financial exclusion and social exclusion: A study in tribal districts of Odisha. *Orissa Economic Journal*, 50(2), 164–174.
- Sethy, S., Sethi, N., & Joshi, D.P. P. (2025). Does financial inclusion improve the effectiveness of monetary policy in South Asian countries? Exploring the role of interest rate. *Journal of Financial Economic Policy*.
- Shankar, S. (2013). Financial inclusion in India: Do microfinance institutions address access barriers? *ACRN Journal of Entrepreneurship Perspectives*, 2(1), 60–74.
- Sharma, A., & Kukreja, S. (2013). An analytical study: Relevance of financial inclusion for developing nations. *International Journal of Engineering and Science*, 2(6), 15–20.
- Sherraden, M. S., & Ansong, D. (2016). Financial literacy to financial capability: Building financial stability and security. *International Handbook of Financial Literacy* (pp. 83–96). Singapore: Springer Science + Business Media.
- Shroff, F. T., & Prasad Rao, M. (2012). Taking banking services to the common man "AamAdmi": Inclusive growth for tribal development. *Pacific Business Review International*, 5(1), 36–45.

- Shyni, V. K. (2020). *Influence of financial inclusion policy awareness and usage on the financial behaviour of Scheduled Caste and Scheduled Tribe households: A study with special reference to selected districts of Kerala* (Doctoral dissertation, Cochin University of Science and Technology, Kochi). School of Management Studies, Cochin University of Science and Technology.
- Singh, A. B., & Tandon, P. (2012). Financial inclusion in India: An analysis. *International Journal of Marketing, Financial Services and Management Research*, 1(1), 41–54.
- Singh, A. K. (2023). Tribal entrepreneurship in India: Role of National Scheduled Tribes Finance and Development Corporation. *Manpower Journal*, 57(1-2) 57–80.
- Singh, B., & Singh, M. (2023). Financial literacy and its determinants among the scheduled tribes: Evidences from India. *International Journal of Social Economics*, 50(12), 1804–1817.
- Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R., Ram, K., Suresh, R., Chandrakar, R., & Kumar, U. (2014). Financial inclusion in India: Select issues. *SSRN Electronic Journal*.
- Singh, R. (2022). *Study of financial inclusion and financial literacy among tribes in selected districts of Madhya Pradesh and Chhattisgarh* (Doctoral dissertation, Indira Gandhi National Tribal University, Amarkantak, M.P.). Department of Commerce, Indira Gandhi National Tribal University.
- Sohn, S.-H., Joo, S.-H., Grable, J. E., Lee, S., & Kim, M. (2012). Adolescents' financial literacy: The role of financial socialization agents, financial experiences and money attitudes in shaping financial literacy among South Korean youth. *Journal of Adolescence*, 35(4), 969–980. <https://doi.org/10.1016/j.adolescence.2012.02.002>

- Solomon, M. L. (2022). *Financial literacy centres in Kerala – An evaluation* (Doctoral dissertation, University of Kerala, Thiruvananthapuram). PG & Research Department of Commerce, Mar Ivanios College (Autonomous).
- Sun, S., Chen, Y.-C., Ansong, D., Huang, J., & Sherraden, M. (2022). Household financial capability and economic hardship: An empirical examination of the financial capability framework. *Journal of Family and Economic Issues*, 43(4), 716–729.
- Tambunan, T. (2015). Financial inclusion, financial education and financial regulation: A story from Indonesia. *ADB Working Paper Series* 535.
- Thomas, S. T., Thomas, E. T., McLean, M., & Titus, T. T. (2021). Paving the way to achieving the United Nations Sustainable Development Goals for women from indigenous communities: Lessons from Attapady, India. *Discover Sustainability*.
- Thomas, T., & Suresh, T. S. (2020). Digital financial inclusion: A catalyst for socio-economic transformation of Scheduled Castes and Scheduled Tribes in Kerala. *IOSR Journal of Business and Management*, 22(5), 18–26. <https://doi.org/10.9790/487X-2205021826>
- V, Mahesha. (2023). Financial literacy for empowering financially marginalized people of backward areas. *IOSR Journal of Business and Management*, 25(8), 7–12.
- V.A, Haseena (2015). Poverty and livelihood problems among the scheduled tribes in Kerala: A study on Attapady. *Journal of Poverty, Investment and Development*, 14, 94–101.
- Varkey, J. (2020). Financial inclusion and organic farming practices of Kuruchya tribe in Wayanad: An empirical study. *SSRN*.
- Varkey, J. (2020). Financial literacy in the FinTech era: A study of scheduled tribes in Kerala. *International Journal of Advanced Science and Technology*, 29(5), 2904–2915.

- Veluchamy, R., & Lingaraja, K. (2020). Personality traits and its impact on financial inclusion: A study among the scheduled tribes. *International Journal of Psychosocial Rehabilitation*, 24(8), 6890–6910. <https://doi.org/10.37200/IJPR/V24I8/PR280782>
- Watanapongvanich, S., Khan, M. S., Putthinum, P., Ono, S., & Kadoya, Y. (2022). Financial literacy and gambling behaviour in the United States. *Journal of Gambling Studies*, 38(2), 445–463.
- Williams, H. T., Adegoke, J. A., & Dare, A. (2017). Role of financial inclusion in economic growth and poverty reduction in a developing economy. *International Journal of Research in Economics and Social Sciences*, 7(5), 265–271.
- Xavier, S. (2018). The problems and challenges of the Kadar tribe of Kerala. *Contemporary Voice of Dalit*, 10(2), 204–215.
- Xaxa, V. (1999). Tribes as indigenous people of India. *Economic and Political Weekly*, 34(51), 3589–3595.
- Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies*, 40(6), 712–721.
- Yoshino, N., Morgan, P. J., & Wignaraja, G. (2015). *Financial education in Asia: Assessment and recommendations* (ADB Working Paper No. 534). Asian Development Bank Institute.

Chapter 3

**FINANCIAL LITERACY, FINANCIAL INCLUSION
AND SCHEDULED TRIBES: AN OVERVIEW**

3.1	Introduction	107
3.2	Financial Literacy	107
3.3	Financial Exclusion	129
3.4	Scheduled Tribes in Kerala	151
3.5	Conclusion.....	176
	References	178

3.1 Introduction

This chapter strives to provide an overview of the financial literacy, financial inclusion and the Scheduled Tribe population. It explores the emerging definitions, policies, and frameworks at both global and national levels while identifying the unique challenges faced by people in accessing and utilizing financial services. The discussion also points out the role of financial education, institutional outreach and government schemes in demolishing the inclusion gap within the country. The financial literacy initiatives of the developed countries and other financial sector regulators within the country are deeply assessed through this chapter. Understanding the background of financial literacy and inclusion is crucial for designing effective policies that not only empower individuals but also promote sustainable economic development among Scheduled Tribes.

3.2 Financial Literacy

Important Definitions

- “Financial literacy is a necessary pre-condition for financial inclusion. It is integral to achieving financial inclusion, financial stability and consumer protection. It is a pre-requisite for financial stability. That’s why financial literacy is in the interest of regulators” ”- Dr. K.C Chakrabarty (Deputy Governor, RBI).
- “Financial literacy as an essential life skill. It lays the ground work for many important life changing decisions, whether it is evaluating a job contract, purchasing a first home or managing retirement savings”. Angel Gurria (Secretary-General of the OECD)

- “A pre-condition for financial sector deepening is the existence of a large number of financially literate households. India cannot grow at a sustained high pace without greater financial inclusion and hence a significant investment in financial literacy is no longer a policy option, but a compulsion”- Deepak Parekh (Chairman, HDFC).
- Financially un-experienced users may not be able to benefit from account ownership if they do not understand how to use financial services in a way that optimize benefits and avoid consumer protection risks. Shifting payments from cash in to accounts can serve as an entry point to the formal financial system (Global Findex Database, 2021).

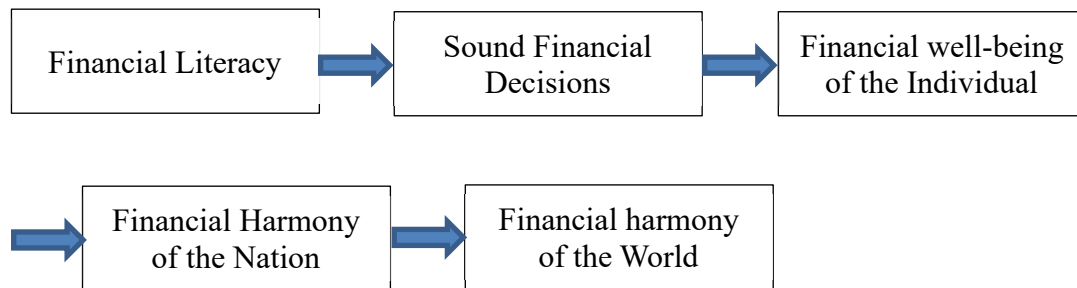
The simple yet powerful message of financial literacy initiatives is that higher returns involve higher risks, and people should refrain from taking the risk that they are unable to comprehend. Financial literacy empowers individuals to prepare budgets, monitor personal spending, plan for retirement, as well as management of debt. It is the most important prerequisite for financial inclusion, financial development, and the overall financial well-being of the citizens. Financial literacy refers to the ability to make informed decisions about financial resources. Financially literate consumers ensure fair competition in the market, stimulate the demand to develop innovative products and enhance overall market efficiency. By empowering individuals to take sound financial decisions, financial literacy contributes to both personal financial well-being and the economic stability of the nation.

Elementary school teachers should improve financial literacy by teaching basic economic concepts in a creative and practical manner such that students can master, practice and relate economic concepts (decision making concepts) to money management and the economy as a whole (Elonge, 2013). The lower and average income sections in India show comparatively high priority to bank savings and insurance whereas the higher income sections in the country give more priority to share market investments (Das, 2011). People with low financial literacy most often reside in distressed communities and they find difficult to distinguish between financial products and to understand the implications of the transactions in to which

they are entering (Servon & Kaestner, 2008). The main hurdle in providing financial literacy to illiterate people is to create an awareness regarding the necessity of financial education.

Figure 3.1

Impact of Financial Literacy



Source: Developed by the Researcher

3.2.1 Global Initiatives for Increasing Financial Literacy

Financial literacy has gained substantial importance in present challenging environment. Developed and developing countries have realized the importance of consolidating the financial priorities of their respective boundaries. Developed nations recognized the significance of financial literacy faster than the developing countries. It is evident that financial development in these nations has progressed alongside the enhancement of financial literacy among their citizens, highlighting the disparities in financial awareness across economies. As a way to address this, the Organisation for Economic Co-operation and Development (OECD) established the International Network on Financial Education (INFE) in the year 2008. This attempt seeks to advance and facilitate international cooperation among policymakers and other stakeholders on financial education matters across the world. Financial education empowers individuals to answer critical financial questions, such as why it is essential to insure, save, invest, repay debts on time, save with banks, borrow within limits, and take loans for income-generating purposes. Some of the notable financial literacy initiatives around the world are as follows:

- Consumer Financial Education Body (CFEB)- 2011

The Consumer Financial Education Body (CFEB) is an independent organization introduced to promote personal financial literacy in the United Kingdom. It was developed with the support of all political parties in Parliament to enhance financial education across the country. The CFEB is responsible for increasing public knowledge and understanding of financial matters, empowering individuals to manage their own financial affairs effectively. Consumer Financial Education Body was replaced by Money Advice Service on April 4, 2011.

- Financial Literacy and Education Commission (2003)

The Financial Literacy and Education Commission (FLEC) of the United States were established under the Fair and Accurate Credit Transactions Act of 2003. The commission was tasked with developing a national strategy for financial education, with the primary goal of securing the financial well-being of individuals and families across the country. The commission is chaired by the Secretary of the Treasury, with the Director of the Bureau of Consumer Financial Protection serving as the vice chair. The Department of the Treasury's Office of Consumer Policy is responsible for coordinating the commission's efforts. FLEC consist of 22 federal agencies and the domestic policy council of the white house.

National Strategy on Financial Literacy in USA

In 2006, the Financial Literacy and Education Commission announced a national strategy to advance financial literacy in the United States.

Key Objectives of the Strategy:

- To coordinate the financial education initiatives of federal government and to recognize, as well as to promote, best practices in financial education.
- Encouraging both public and private sector efforts in advancing financial literacy.
- To create a website, Money.gov, aimed at providing information about federal financial literacy and education programs, grants and other related resources.

- To set up a toll-free helpline to assist the general public in accessing information regarding financial literacy and education.
- To review and synchronize federal activities designed to enhance financial literacy and education.

Financial Consumer Agency

The Financial Consumer Agency of Canada (FCAC) was formed to maintain the rights and interests of consumers of financial products and services in Canada. In June 1999, the Government of Canada developed a policy paper outlining 57 measures aimed to reform the financial services sector of the country. Among these measures there was a proposal to create a Financial Consumer Agency to track consumer interests and enhance consumer protection. The Financial Consumer Agency of Canada was officially launched in 2001 under the Financial Consumer Agency of Canada Act. As a federal agency, it monitors financial entities and promotes financial literacy among Canadian citizens. Its primary goal is to ensure the stability and integrity of Canada's financial system. To achieve this, the agency offers programs to educate consumers regarding their rights and responsibilities when dealing with financial institutions. Additionally, it oversees and monitors banks, federal credit unions, federally incorporated or registered insurance companies, trust and loan companies, and other external complaint bodies. The Commissioner serves as the head of FCAC and is appointed for a five-year term. The commissioner reports annually to the Parliament of Canada through the Minister of Finance on the compliance of financial institutions with consumer protection measures. As of July 2025, the current Commissioner of the FCAC is Shereen Benzvy Miller. She was appointed by Deputy Prime Minister and Minister of Finance Chrystia Freeland to a five-year term starting from November 7, 2024.

Importance of Financial Literacy

- Financial literacy empowers people to make informed financial decisions and maintain financial stability.

- It provides the necessary knowledge and skills to manage financial resources efficiently.
- Helps in effectively managing money matters.
- Enhances understanding of key financial concepts.
- Contributes to long-term growth and financial success.
- Plays significant role in maintaining financial stability at the national level.
- Reduce dependence on informal financial networks.
- Strengthens an individual's financial potential by effectively enhancing their planning, saving, and budgeting ability.

3.2.2 Financial Literacy initiatives of RBI

Multilingual website for the common person

The Reserve Bank of India (RBI) launched a multilingual website on 18 June, 2007, to broaden its engagement with the general public. The ultimate objective of this initiative is to strengthen the relationship between the general public and the central bank of the country. The website contains comprehensive information about the role and functions of the Reserve Bank of India and it is accessible in 13 languages and offers important financial information, including:

- Lending rates of banks
- Recent instructions from the RBI on customer service
- Right to Information (RTI) Act guidelines
- Frequently Asked Questions (FAQs)
- Details of Banking Ombudsman Scheme
- Links to commercial bank websites

Multilingual reading Materials

The Reserve Bank of India (RBI) has introduced multilingual reading material tailored to the specific needs of various groups, including school children, senior citizens, small entrepreneurs, farmers, and Self-Help Groups (SHGs). The primary objective of this initiative is to improve financial awareness and education across different segments of the population, ensuring that individual from diverse background have access to essential financial knowledge.

Banking ombudsman Scheme

The Reserve Bank of India (RBI) introduced the Banking Ombudsman Scheme in 1995 to address and resolve customer complaints regarding banking services. The scheme was later modified with the introduction of the Banking Ombudsman Scheme, 2006, which initiated a more structured framework for grievances handling. The scheme consider Scheduled Commercial Banks, Regional Rural Banks (RRBs) and Scheduled Primary Cooperative Banks, ensuring that customers have a formal mechanism to seek solution for their banking-related complaints. By focusing on the principle of ‘One Nation, One Ombudsman’ Reserve Bank-Integrated Ombudsman Scheme was launched in November 2021 by integrating the three-ombudsman scheme of RBI and brought the non-scheduled urban cooperative banks with deposits above Rs.50 crore under its scope. The three Ombudsman Scheme consist of Banking Ombudsman scheme 2006, Ombudsman scheme for NBFCs 2018 and Ombudsman scheme for Digital transactions, 2019.

Reserve Bank of India Young Scholars Award Scheme

The Reserve Bank of India introduced the Young Scholars Award Scheme to spread awareness about the RBI and the banking sector among the young minds of the country. This initiative aims to encourage young individuals to step into the banking and financial environment while fostering a sense of pride in being associated with the central bank of India. The main objective of the scheme is to develop interest and knowledge about the Indian banking system and the RBI. Under this program, RBI

conducts a nationwide competitive examination to select up to 150 young scholars, who are then awarded scholarships based on their individual performance.

Financial Literacy Weeks

The Reserve Bank of India (RBI) has been celebrating Financial Literacy Week annually since the year 2016 with the aim of promoting financial education and awareness throughout the country. The prime objective of this initiative is to educate citizens on secure digital banking practices while encouraging safe and efficient digital transactions.

Table 3.1

Financial Literacy Weeks from the beginning and its themes

Year	Period	Theme
2017	June 5 – June 9	“KYC, Exercising credit Discipline, Grievance Redressal and Going Digital”
2018	June 4 – June 8	“Customer Protection”
2019	June 3 – June 7	“Farmers”
2020	February 10 – February 14	“Micro, Small and Medium Enterprises(MSMEs).
2021	February 8 – February 12	“Credit Discipline and Credit from formal institutions”.
2022	February 14 – February 18	“GO Digital, Go Secure”
2023	February 13- February17	“Good Financial Behavior- Your Saviour”
2024	February 26 – March 1	“Make a Right Start: Become a Financially Smart”
2025	February 24 – February 28	“Financial Literacy – Women’s prosperity”

Source: Compiled by the Researcher

Other Notable Initiatives from RBI

- The RBI makes use of social media platforms such as YouTube Twitter, and Facebook to spread awareness about the functioning of banks along with other financial matters.

- Public awareness campaigns are carried out by the RBI to educate citizens about their responsibilities and rights concerning to banking services in the country.
- Celebrity athletes from cricket and badminton, who are employees of the RBI, have appeared in financial awareness videos to capture the attention of audiences who might otherwise have little interest in matters related to finance.

3.2.3 National Strategy for Financial Education (2020-2025)

The first National Strategy for Financial Education was introduced for the period of 2013-2018 by the Technical Group on Financial Inclusion and Financial Literacy (TGFIFL- chaired by Deputy Governor of RBI) under the Financial Stability and Development Council (FSDC- Chaired by Hon'ble Finance Minister, Government of India). After review of progress made under this strategy National Centre for Financial Education (NCFE) in consultation with the four financial sector regulators and other relevant stakeholders, formed the revised NSFE (2020-2025). It was implemented with the prime goal of creating a financially aware and empowered India. The main objective of the NSFE is to empower the various sections of population through developing appropriate financial skills, financial attitude, financial knowledge and financial behavior. It is identified that a nationwide financial literacy can be attained only through a multi stakeholder approach, in which different stakeholders have to play their own role in this financial development. Digitalization era created more scope and opportunities for digital financial products and services. The cashless economy motive of the Government of India paved the scope for digital financial products and services.

The NSFE (2020-2025) was framed with a strong emphasis on digital financial literacy to align with the growing adoption of digital financial services in India. The inclusion of digital financial services in the strategy recognizes the importance of digital payment systems, mobile banking, and fintech innovations in present modern financial transactions. Significant progress of India on financial inclusion can be traced to previous efforts like NSFE (2013-2018), which laid the building block for digital financial adoption. Moving forward, financial literacy remains crucial in

helping individuals to utilize formal financial services responsibly, leading to economic stability and the resultant financial well-being.

3.2.4 Financial Literacy Initiatives by Different Stakeholders

1. SEBI

- SEBI initiate financial education programs for the public with the assistance of trained resource persons. These SEBI-empaneled resource persons can conduct free workshops in local languages and receive an honorarium for their services. The workshops introduce fundamental concepts related to banking, finance, pension, investment, and insurance, targeting retired personnel, homemakers, self-help groups, executives, and individuals from the middle-income groups.
- Financial education booklets are provided to the general public, addressing essential topics such as savings, investment, borrowing, financial planning, tax-saving strategies, grievance redressal systems and awareness against Ponzi schemes.
- SEBI launched a toll-free helpline at 1800 22 7575 / 1800 266 7575 in 2011 to assist the public with financial queries. This service is available daily from 9:00 AM to 6:00 PM (except on declared public holidays in Maharashtra) in English, Hindi, and various regional languages.

2. NABARD

The National Bank for Agriculture and Rural Development (NABARD) keep a close contact with the rural population. Various surveys conducted by different organizations reached in a conclusion that financial literacy and inclusion levels among rural citizens are lower compared to their urban counterparts. Given its extensive reach in rural areas, NABARD plays a crucial role in promoting financial literacy.

Some of the significant efforts made by NABARD to transmit financial literacy throughout the country are as follows:

- Organized financial literacy awareness programs by targeting farmers, school children, adults, senior citizens, self-help groups (SHGs), entrepreneurs and persons who are new in the financial system.
- Digital financial literacy awareness programs are implemented through mobile demo vans equipped with audio-video facilities, ATMs and micro-ATMs to educate rural communities.
- Capacity-building programs are undertaken to train Regional Rural Banks (RRBs), Rural Cooperative Banks (RCBs) and commercial banks staffs for the effective delivery of financial literacy.
- Financial literacy training is imparted to Business Correspondents (BCs) and Business Facilitators (BFs) to enhance outreach and financial inclusion.
- Financial Inclusion Funds are disbursed to RCBs, RRBs and scheduled commercial banks to assist financial literacy and digital financial literacy camps organized at their branches and financial literacy centers.

National Centre for Financial Education

The National Centre for Financial Education (NCFE) has been formed to spread financial education across all sections of the population in India, in line with the National Strategy for Financial Education (NSFE). It is a not-for-profit organisation developed by financial regulators of the country including SEBI, RBI, PFRDA, and IRDAI, operating under the administrative oversight and supervision of the Financial Stability and Development Council (FSDC). The core vision of NCFE is to build a financially aware and empowered India. Its main goal is to spread financial education to all layers of society as per the NSFE framework. The organisation focus on promoting financial awareness as well as empowerment through various activities, including workshops, campaigns, conclaves, seminars, and training programs. Additionally, NCFE distributes financial education materials in both electronic and non-electronic modes to facilitate the understanding of financial concepts among the public.

Table 3.2*Distribution of Financial Literacy in India (Gender wise)*

	Male	Female
Financial Attitude	88%	90%
Financial Behaviour	56%	43%
Financial Knowledge	50%	45%
Financial Literacy	29%	21%

Source: NCFE, 2019

Male achieve 29% in Overall financial literacy and female remain at 21%, reflecting a visible gender gap of 8 percentage. Female also report better positive financial attitudes with willingness and inclination toward responsible management of money. But this doesn't translate into action and female considerably lag behind in behaviour and knowledge, forming the lowest overall literacy. Male outperform female in knowledge and behaviour, which elevate their overall literacy to 29%. However, even among male, literacy remains considerably below the desirable standards, reinforcing that gender disparities persist within an already low national baseline.

3.2.5 Financial Literacy and Consumer Protection

Rigid consumer protection regulations are necessary in the current competitive financial environment. The global financial crisis of 2008 emphasised the significance of effective financial literacy and consumer protection to maintain the long-term soundness of the financial sector. Consumer protection in the financial sector fosters confidence in financial products and services, motivating more excluded groups to engage in the formal financial system. Consumers can be safeguarded by providing access to clear and up-to-date financial information and by preventing financial institutions from engaging in unfair or fraudulent practices. By embracing financial literacy and consumer protection, the financial sector can improve competition, efficiency, and boost confidence in retail financial markets. These goals can be successfully attained through comprehensive financial education.

3.2.6 Financial Education and Financial Counselling

Financial education and financial counselling contribute remarkably to develop financial knowledge and behaviour of the people. The aim of financial education is to impart knowledge about financial matters, while financial counselling focus is to address the financial situations of specific target groups. These two factors play a substantial position in maintaining the financial well-being of the citizens. The financial knowledge and attitude of children and adolescents can be enhanced through the implementation of school based financial education programs. The existence of debt among adults and youth is because of their poor financial skills and irresponsible financial behaviour. The financial education goal is to motivate and empower people to change their financial behaviour (Amagir, Groot, Brink, & Wilschut, 2018). Financial education and counselling can contribute to mitigating financial stress among individuals, especially in the presence of financial complexities and vulnerabilities. By developing a sense of financial confidence, they contribute to sustaining overall financial well-being. Financial stress directly impacts overall well-being since financial stability is the foundation of every household, even a small disruption in financial stability can have a significant impact on living conditions of the household.

Nowadays, financial education is also provided through financial counselling. The professionals responsible for providing financial counselling are known as a financial counsellor. Financial counsellors offer both emotional and informational support, so that the customers may be in a position to make informed decisions regarding their own finances. Financial education and financial socialization go hand in hand with both financial access and financial literacy to quite some extent. The programs and policies must offer accessible and affordable financial products. It should provide effective financial education and appropriate guidance for promoting financial inclusion (Sun, Chen, Ansong, Huang, & Sherraden, 2022). The presence of money may or may not impact the life of anyone but its absence may generate deep and sometimes revolutionary consequences. The lack of financial resources may result in loss of confidence, happiness, and stability and in severe cases it leads to serious

mental health issues. In order to avoid the negative consequences of financial instability, financial counselling must be provided free of cost by the government authorities with particular focus on vulnerable and marginalised communities who lack access to basic financial education.

3.2.7 Financial Literacy Initiatives of Commercial Banks in India

Some of the major measures undertaken by commercial banks to ensure financial literacy throughout the country are given below.

Canara Bank

After the recommendation by the RBI for setting up FLCCs, Canara Bank established the Canara Financial Advisory Trust (CFAT) on October 8, 2010. The main role of this trust is to educate and create awareness regarding the necessity of saving, management of money, advantages of saving and borrowing through banks and other financial services available to the public. CFAT also renders financial guidance with the intention of keeping the people out of the debt trap and also to manage the finances in the best way. As on March 2025, CFAT operates 115 Financial Literacy Centres in various districts across India. The Board of Trustees of CFAT meets bi-monthly to analyse the performance of these centers and establish guidelines for their day-to-day administration. The operational expenses of these centers are jointly funded by Canara Bank and Grameen Bank.

Punjab National Bank (PNB)

Punjab National Bank (PNB) launched the 'Gram Sampark Abhiyan,' a financial inclusion and literacy initiative, in honor of the 150th birth anniversary of Mahatma Gandhi. This effort focuses on four key areas: credit, social security, digital literacy, and financial literacy. Remaining in tune with the vision of 'AtmaNirbhar Bharat,' this initiative aims to cover 526 districts across 24 states, conducting two financial literacy camps per branch every month. As part of this initiative, PNB marked a significant milestone with the release of its documentary film, VARDAN. The film aims at creating awareness regarding financial matters and educating rural section regarding the various initiatives of banks in the country. It has been screened at

Farmers' Training Centres, KisanGosthies and Rural Self Employment Training Institutes (RSETIs).

Axis Bank

Axis Bank, one among the largest private sector bank in India has undertaken several initiatives in consideration to boost financial inclusion and literacy throughout the nation. The bank had opened 9.06 lakh PradhanMantri Jan DhanYojana (PMJDY) savings accounts by March 31, 2021. Axis Sahyog is the flagship microfinance program of Axis Bank started in February 2013, which targets to empower the economically active poor women by providing them with small loans for income generation activities through the Joint Liability Group (JLG) model. Under this microfinance program, the women groups are also obliged to participate in Compulsory Group Training (CGT) programs related to financial aspects prior to disbursement loan. AXIS Sahyog also organises financial literacy campaigns and promotes awareness regarding PMJDY and the PradhanMantri Mudra Yojana (PMMY) scheme.

In connection with the Digital Financial Literacy Week of the Reserve Bank of India (RBI), Axis Bank launched the three-month intensive programme known as the Digi-Prayas with the target of imparting financial literacy among 80,000 people among 24 specially selected villages. The initiative includes workshops and awareness sessions regarding digital banking options, hands-on training in using electronic payment methods such as IMPS, POS devices and UPI and steps to promote the use of digital payments among village merchants. Axis Bank also organises financial literacy camps under its Pragatishala program, which it targets to expand across 600 rural branches. During the financial year 2016-17, the bank conducted 15,240 financial literacy camps and reached out to 2,18,041 rural individuals.

Federal Bank

To improve financial literacy and money management skills among the people, Federal Bank established the Federal Ashwas Financial Literacy Centre (FAFLC). FAFLC is a non-profit organization financially supported by Federal Bank, providing

financial advice and guidance to the public through certified counsellors. These centers operate under the Federal Ashwas Trust, with retired bank officials serving as counsellors.

FAFLC services are made accessible to the public through counsellors who visit different bank branches within their designated areas. Individuals seeking financial counselling must visit an FAFLC, complete a registration form and submit photocopies of the required documents as specified by the counsellor. Once the application is received, the counsellor schedules a one-on-one session at a convenient date and time. During the session, the counsellor assesses the client's financial concerns and offers tailored suggestions and solutions for overcoming financial difficulties. Additionally, the counsellor develops a personalized spending plan that accounts for the client's living expenses and debt repayments. Federal Bank also extends its financial literacy initiatives to Kudumbashree units by providing foundational financial training through its branch network.

Bank of Baroda

Under the corporate social responsibility initiative, Bank of Baroda set up Financial Literacy Centres (FLCs) under the name "SAARTHEE". The main target of such centres is to sensitize rural and urban communities regarding the use of financial products and services provided by formal financial institutions. FLCs also offer financial counselling to individuals struggling with debt burden from both formal and informal financial sources. To further support financial inclusion and skill development, Bank of Baroda formed the Baroda Swarojgar VikasSansthan Trust, which sponsors Rural Self Employment Training Institutes (RSETIs). This initiative aims to provide employment training to unemployed youth in the age group of 18-45, primarily from rural and semi-urban areas, fostering a mindset for rural development.

Furthermore, the bank launched the Baroda Grameen Paramarsh Kendra (BGPK) to provide financial counselling on credit-related matters, promote financial literacy and exhibit information on prices of agricultural products. As part of its financial inclusion initiatives, Bank of Baroda successfully adopted 500 villages in order to attain 100% financial inclusion. The bank also attained full financial inclusion in 12 lead districts and 10,000 villages located by the State Level Bankers' Committee (SLBC). To spread

banking services to underserved communities, the bank launched mobile microfinance loan facilities through the Self-Help Group – Bank Linkage Programme (SHG-BLP), ensuring easier access to credit and banking services for SHGs.

YES Bank

YES Bank branches across the country organised activities in order to promote financial literacy by extending knowledge on counterfeit currency detection techniques, conducting workshops, and promoting branch visits for school students. Additionally, the bank conducted various financial literacy camps in connection with youth clubs, schools, associations, and nationwide colleges. Under its community initiative, "YES Community", YES Bank launched several programs to improve financial education and to positively influence individuals' personal finances. The bank also introduced "YES DIGI Village" to empower farmers by providing financial and digital literacy sessions, along with other supportive activities.

Table 3.3

Notable Financial Literacy Initiatives from Different Agencies in the Country

Name of the Agencies	Coverage	Programme Design	Name of the Programme (If any)
1. India Infoline Group	Planned to organise financial awareness workshops in 1000 cities around India.	Provide financial education and awareness related to different financial products and protect the target groups from financial frauds like Ponzi schemes. Conducted mass media campaigns and published book to enhance financial awareness among the population.	Financial Literacy Agenda for Mass Empowerment (FLAME).

Name of the Agencies	Coverage	Programme Design	Name of the Programme (If any)
2. National Stock Exchange and Maharashtra Knowledge Corporation Ltd	It is a certification course on basic personal finance targeted to students. This course consists of topics related to saving, spending, borrowing, budgeting and management of risk.	This course consists of 14 modules for which 60 minutes allotted for each module. After the successful completion of the course, an online examination will be conducted and the candidate who cleared the exam is eligible to get NSE-MKCL Certification.	NSE-MKCL Financial Literacy Programme
3. Smile Foundation in association with Sanchayan Society.	Offers financial literacy and inclusion measures to under privileged youth.	Impart knowledge related to investment management, financial instruments, risk associated with financial instrument, Indian economy and on financial crisis take place globally.	Sanchayan Financial Literacy Program.
4. National Centre for Financial Education(NCFE)	Promote financial awareness and financial literacy across India through their financial education campaigns.	Financial education is provided through training programmes, workshops, discussion forums and campaigns.	Financial Education Training Programme, Money Smart School Programme, Financial Education Programme for Adults and Financial Awareness and

Name of the Agencies	Coverage	Programme Design	Name of the Programme (If any)
			Consumer Training.
5. Financial Literacy Advisory Body India	Conduct more than 1200 workshops in more than 125 cities across India.	Enhance financial literacy in the country through providing financial education in association with government and educational institutions.	
6. Citi Centre for Financial Literacy	Objective of this agency is to impart financial literacy to the poor and women population. It had covered 4,00,000 SHG members.	Initiate workshops, mass campaigning and training of trainers engaged in imparting financial literacy.	

Source: Compiled by the Researcher

Standard and Poor Global Financial Literacy Survey (S&P GLOBAL FINLIT SURVEY)

S&P's Global Financial Literacy Survey is the most comprehensive and biggest global measure for assessing financial literacy. This survey evaluates financial literacy in terms of knowledge on inflation, risk diversification, compounding of interest, and basic numeracy. The survey has up to this point covered 140 countries with 150,000 respondents. The significant goal of the report is to provide accurate information to researchers, policymakers, and regulators in the development and implementation of financial education programs and policies. The 2014 S&P survey revealed weak financial literacy globally, with only 33% of adult population being financially literate. Additionally, the financial literacy rate among women lags behind men, with

35% of the men being financially literate compared to 30% of women population globally.

Financial Literacy and Financial Inclusion Survey 2019

“Financial education is the process by which individuals improve their understanding of financial products and concepts, and through information, instruction and or objective advice develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help and to take other effective actions to improve their financial wellbeing and protection” (OECD, 2005). The National Centre for Financial Education (NCFE) undertaken the first Financial Literacy and Financial Inclusion Survey during 2013-2014. Subsequently, NCFE conducted the second survey during June 2018-October 2019. NCFE conducts the survey in consideration of the effort put in by the regulators of the financial sector and the government in the form of various education and literacy initiatives. The effect and sustainability of such initiatives also evaluated through the survey. The survey was conducted by Development and Research Services Pvt. Ltd. (DRS) in consultation with NCFE. The study grouped the states and Union Territories (UTs) of India into six zones, with sample respondents aged between 18 and 80 years.

Financial Literacy Agenda for Mass Empowerment (FLAME)

FLAME is the Corporate Social Responsibility (CSR) project of the India Infoline (IIFL) Group, launched in February 2011 by Dr. K. C. Chakrabarty (Deputy Governor, RBI) and Mr. Deepak S. Parekh (Non-Executive Chairman, HDFC). Its basic aim is to spread financial literacy among people and to ensure their inclusion in the growth of Indian economy. This project aims to "light a flame" to eradicate the dark shadow of financial illiteracy and empower people to be part of the financial development of the nation. IIFL indicates that even the "banked" population in India has a limited understanding of how financial products can improve financial security, maintain a comfortable post-retirement life, avoid losses from fraudulent agents and Ponzi schemes and create wealth. FLAME aims at supporting the government's financial

inclusion agenda by enabling individuals to utilise available financial and banking services in an effective manner. Financial literacy initiatives of FLAME include;

- **Mass Media Campaign:**

Mass media campaigns have been carried out to enhance financial literacy across the country. Financial concepts are conveyed through the media in simple and easily comprehensible terms. Cartoons and other creative techniques are applied to effectively communicate financial information to the public.

- **Financial Literacy Workshops:**

Under the banner of FLAME, IIFL has conducted several financial awareness and literacy workshops across the country. In the Tier II and Tier III cities, the professional team of IIFL educates people regarding the fundamentals for financial literacy.

- **Publications:**

Published various books and periodicals in electronic and portable formats to support general public in taking informed financial decisions and planning effectively. These publications are distributed at workshops and sold at reasonable cost in bookstores. The revenue generated from these sales is reinvested into financial literacy campaigns of the FLAME.

- **Tie-Up with Educational Institutions:**

IIFL will collaborate with B-Schools and other educational institutions throughout the country in delivering guest lectures. This initiative would aims to educate the present and future potential investors.

- **Financial Awareness Help Line:**

Interested individuals can call up and seek answers to their queries regarding the financial services through the call centres provided by the IIFL. This helpline service is controlled by the trained professionals of IIFL who will be ready to solve the queries.

Financial Literacy Centres in Kerala

Table 3.4

Financial Literacy Centres in Wayanad District

FLC Code	Block	Location	Sponsor Bank
98801	Sulthan Bathery	Semi Urban	Canara Bank
98802	Sulthan Bathery	Rural	Federal Bank Ltd
98803	Kalpetta	Semi Urban	Federal Bank Ltd
98805	Panamaram	Semi Urban	State Bank of India
98806	Mananthavady	Semi Urban	State Bank of India
98807	Kalpetta	Semi Urban	South Indian Bank

Source: SLBC Kerala

Table 3.5

Financial Literacy Centres in Palakkad District

FLC Code	Block	Location	Sponsor Bank
97401	Alathur	Rural	South Indian Bank
97402	Agali	Rural	Canara Bank
97403	Chittur	Urban	Federal Bank
97404	Kuzhalmannam	Rural	State Bank of India
97405	Kollenkode	Semi Urban	State Bank of India
97407	Nenmara	Semi Urban	Union Bank of India
97408	Ottapalam	Semi Urban	Punjab National Bank
97409	Palakkad	Urban	Canara Bank
97410	Pattambi	Semi Urban	State Bank of India
97411	S K Puram	Semi Urban	State Bank of India
97412	Thrithala	Semi Urban	CSB Bank Ltd
97413	Malampuzha	Semi Urban	HDFC Bank Ltd
97414	kuzhalmannam	Semi Urban	South Indian Bank

Source: SLBC Kerala

Table 3.6*Financial Literacy Centres in Kottayam District*

FLC Code	Block	Location	Sponsor Bank
96810	Vaikom	Semi Urban	Dhanlaxmi Bank
96805	Pala	Semi Urban	Federal Bank Ltd
96808	Pampady	Semi Urban	Indian Overseas Bank
96801	Erattupetta	Semi Urban	Kerala Gramin Bank
96803	Kaduthuruthy	Semi Urban	South Indian Bank
96802	Ettumanoor	Semi Urban	State Bank of India
96807	Pallom	Semi Urban	State Bank of India
96811	Vazhoor	Semi Urban	Union Bank of India
96806	Madapally	Semi Urban	Canara Bank
96809	Uzhavoor	Semi Urban	Canara Bank
96804	Kanjirapally	Semi Urban	CSB Bank Ltd

Source: SLBC Kerala

3.3 Financial Exclusion

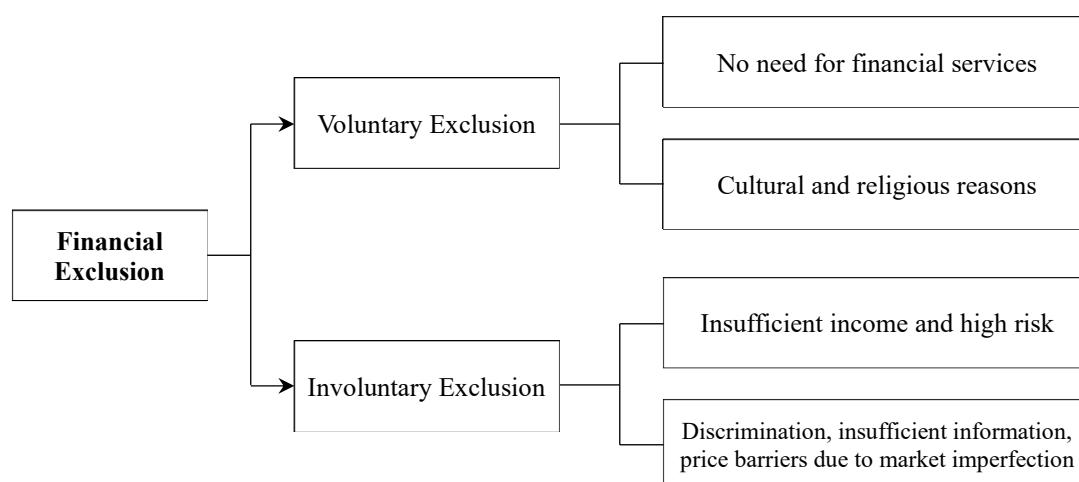
Financial exclusion refers to the condition where citizens within the respective borders encountered various obstacles in using or accessing the financial products and services provided by the mainstream institutional players which exactly meet their requirements and guarantee their wellbeing in the community. Leyshon and Thrift (1995) define financial exclusion as the processes that prevent poor and disadvantaged social groups from gaining access to the financial system. The problem of the financial exclusion gets considerably important for communities when it disproportionately impacts the low-income sections or persons facing financial difficulties. Although financial exclusion is generally found to happen at the individual, family or household level, the exclusion sometimes will be widespread or be concentrated geographically or focused amongst particular ethnic minorities in these areas. Levels of financial exclusion are particularly high among social tenants, lone parents, unemployed people and people from most ethnic minorities. It is higher still in areas of deprivation (Collard, Kempson, & Whyley, 2001).

Forms of Financial Exclusion

Kempson and Whyley (1999) identified five categories of financial exclusion in the society: access exclusion, condition exclusion, price exclusion, marketing exclusion, and self-exclusion. The World Bank (2014) in its Global Financial Development Report classified financial exclusion into two types: voluntary and involuntary exclusion. Voluntary exclusion occurs when individuals intentionally refuse to engage with formal financial services because they are either dissatisfied with or uninterested in the available financial products and services. Cultural dimensions and personal beliefs are the root causes of this form of exclusion. Conversely, involuntary exclusion happens when certain segments of the population is restrained from accessing the formal financial products and services. This form of exclusion is often outside the control of the excluded persons or society.

Figure 3.2

Forms of Financial Exclusion



Source: World Bank, 2014

Major Reasons for Financial Exclusion

- ❖ Lack of surplus income
- ❖ Lack of trust in the system
- ❖ Not suitable to customer's requirements
- ❖ High transaction costs

-
- ❖ Lack of requisite documents
 - ❖ Remoteness of service provider
 - ❖ Lack of awareness about the product
 - ❖ Poor quality of services rendered
-

Source: NSFI 2019-2024

3.3.1 Financial Inclusion

Definition

“ Financial sector that provides access to credit for all bankable people and firms, insurance for all insurable people and firms and to savings and payments services for everyone. Inclusive finance does not require that everyone who is eligible to use each of the services but they should be able to choose to use them if desired” United Nations(2006).

“Financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs like transactions, payments, savings, credit and insurance which is delivered in a responsible and sustainable way” World Bank (2014).

“Financial inclusion also means that people get the right counselling on how to access and use financial services”- Deepak Parekh (Chairman, HDFC).

“Financial inclusion is the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost” Rangarajan (2008).

“Financial inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost in a fair and transparent manner by mainstream institutional players” Chakrabarty (2011).

“Financial inclusion is the universal access to a wide range of financial services at a reasonable cost. These include not only banking products but also other financial

services such as insurance and equity products” Committee on Financial Sector Reforms (2008).

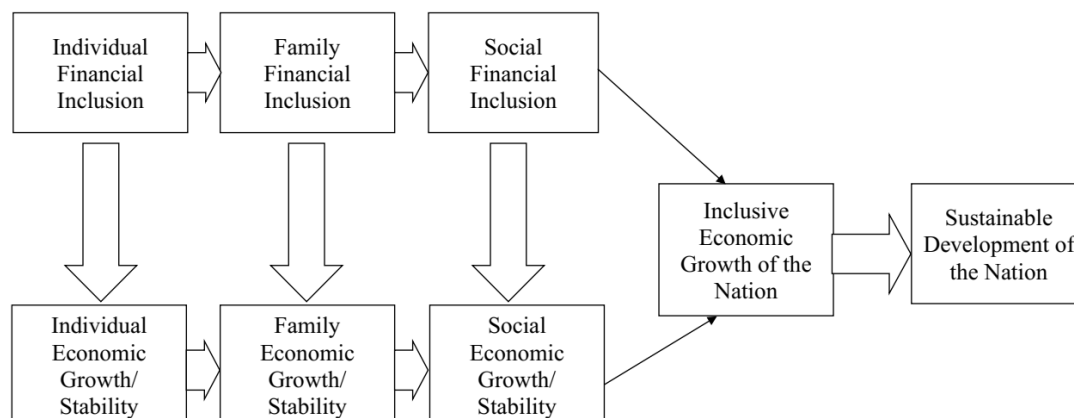
“Financial inclusion a key driver of sustained and balanced economic growth which helps to reduce income inequality and poverty. We must continue our efforts for greater financial inclusion in pursuance of the goal of sustainable future for all” Das (2021).

Meaning

Financial inclusion is the process of delivering affordable financial products and services to underprivileged and low-income groups within a population. These services include savings, remittances, payments, insurance, loans, and financial advisory support, all facilitated by the formal financial system. Access to a bank account instills a sense of recognition, identity, trust, and empowerment in the minds of the marginalised communities. Mismanagement of the financial system and subjecting large sections of the population to exclusion from the formal financial structures are the root causes of global poverty. Financial inclusion for all the sections is the goal that needs to be accomplished in order to create inclusive growth and leads to the eradication global poverty. It is important to note that the inclusive development of individual countries collectively contributes to the inclusive growth of the world. The United Nations Sustainable Development Goals (SDGs) for 2030 emphasize financial inclusion as a critical factor in achieving worldwide sustainable development. By advancing the living standards of poor and marginalised communities, financial inclusion plays a central role in elevating global progress. However, financial inclusion extends far beyond merely opening a savings account; it is a comprehensive process where account access serves as a foundational step.

Figure 3.3

Financial inclusion Path towards Sustainable Development



Source: Developed by the Researcher

Objectives of Financial Inclusion

- Assure the availability of formal financial products and services to the financially excluded citizens.
- Safeguard the financial well-being and harmony of every individual in the society.
- Provide financial products that are compatible with the needs and capabilities of underprivileged communities.
- Foster financial awareness and knowledge amongst citizens.
- Introduction of affordable financial products which are appropriate for the requirements of backward sections, particularly in the remote areas of the nation.
- Achieve sustainable development through inclusive growth.
- Establish institutions that take into consideration and cater the needs and aspirations of the marginalised groups.
- Reduce income disparities and eradicate poverty in the society.
- Offer no-frills bank accounts for essential transactions like making and receiving payments.

- Drive national economic growth by encouraging savings and investments among excluded citizens.
- Reduction of reliance on informal credit sources by easing access to formal credit through established financial institutions.
- Mitigate the inefficiencies and leakages involved in the delivery of government benefits and subsidies.

Factors affecting the Financial Inclusion

- Level of Income:

Income levels play a pivotal role in determining financial inclusion. Individuals with low incomes often refrain from utilising formal financial products and services because they believe that these institutions and their services are tailored primarily for high-income class.

- Limited Literacy:

Limited or low literacy levels among citizens have negative effect on their perception of the formal financial system and dilute their confidence in the utilisation of formal financial products and services.

- Social Exclusion:

Socially excluded groups often seclude themselves from mainstream society and communal spaces, which hinder their ability to achieve individual and social goals. As a result, they are more likely to remain outside the scope of financial inclusion.

- Lack of Proper Legal Documents:

A sizeable segment of marginalized population does not have adequate legal documents, thereby creating a major hurdle to accessing formal financial services. Financial institutions in the nation will generally need legal documentation to initiate savings accounts or other types of accounts. Although the Reserve Bank of India (RBI) has eased Know Your Customer (KYC) norms, a major chunk of the

marginalized population continues to find it difficult to adhere to the eased requirements.

- **Rigid Financial Products and Services:**

The formal financial instruments available in the nation are often inflexible and designed for the masses without addressing the specific needs of underprivileged groups. It is imperative for the modern economic system to create tailor-made financial products and services that better suit the needs and desires of these groups.

- **High Transaction Cost:**

Under the globalized and competitive environment, the formal banks' service-oriented approach has been replaced by a profit-maximizing model. Most of the financial institutions charge high fees for transactions done through customer accounts, discouraging poor and marginalized sections of the society from accessing the formal financial system.

- **Inappropriate Behaviour of Bank Staff:**

The behaviour and attitude of bank staff undertake an important role in shaping the relationship between the bank and its customers. Despite receiving customer relation training, a notable number of bank staff is incapable of understanding the objectives of the training or the broader goals of financial institutions in the country. This is often evident in the form of misbehaviour and a lack of proper consideration toward marginalized and backward communities, who are often seen as less important by staff members due to the pressure to meet the profit-driven targets of the institutions.

- **Geographical Disparity:**

Commercial banks in the country primarily focus their services in profitable regions, typically where high or moderate-income households are residing. As a result, they tend to build branches in urban areas and more developed rural regions. This selective approach excludes underdeveloped and backward areas, making it difficult for citizens in these regions to access banks and other financial institutions.

- Procedural Formalities:

The rigid and complicated procedures involved in opening an account at formal financial institutions leads to the exclusion of elderly, illiterate and other marginalized groups from the formal financial system.

- Cultural and psychological factors:

The Cultural and psychological aspects play profound role in the financial inclusion efforts of a nation. However, the financial inclusion needs of the people must always take priority over their cultural and psychological constraints.

- Branch Timing:

The operating hours of many bank branches are not convenient for daily wage earners, who often have to skip a day's work to visit the bank.

3.3.2 Digital Financial Inclusion

Digital financial inclusion refers to the utilisation of the cost saving digital channel to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at affordable cost to customers and sustainable for providers (World Bank, 2014). The uptake of digitisation and financial technology (Fintech) has reshaped the delivery of various financial services and products and accelerated the speed of financial inclusion. FinTech innovations and digital financial inclusion have the capabilities to fill gaps, reduce costs, and increase accessibility to financial services, especially for the unbanked and underbanked segments (Patra, 2021). Financial inclusion through digital means refers to utilisation of digital financial services for pulling larger sections of the population into the formal financial system. The use of technology in financial services is necessary for achieving the United Nations' Sustainable Development Goals (SDGs) by 2030. As World Bank President Jim Yong Kim remarked that, "Universal access to financial services is within reach, thanks to new technologies, transformative business models, and ambitious reforms. By 2020, tools

like e-money accounts, debit cards, and affordable bank accounts can significantly increase financial access for currently excluded populations."

Digital financial inclusion means to the use of digital financial services for the purpose of meeting the goal of financial inclusion. It attempts to leverage digital channel for reaching the financially unserved and underserved populations with a variety of formal financial services and products that are suited to their needs in a safe, affordable and transparent manner. UPI has indeed revolutionised the drive towards financial inclusion of so far excluded sections of the Indian population by way of a simple, safe, accessible and convenient payment offering (BRICS, 2021).

Digital financial inclusion encompasses the establishment of economically feasible digital infrastructure aimed to integrate underserved and disadvantaged populations into the formal financial system of the nation. The advent of innovative digital technologies and the proliferation of telecommunications into rural areas have facilitated enhanced access to affordable financial products and services for rural and economically disadvantaged populations. Historically, these groups frequently faced exclusion from the formal financial system due to geographical limitations and transaction-related expense. The status of digital technologies within India is in a phase of maturity, having achieved significant penetration across nearly all regions of the country. The extensive presence of digital infrastructure in the country presents a valuable opportunity to accelerate the financial inclusion drive of the nation.

3.3.3 Financial Inclusion Measurement Tools

1. GLOBAL FINDEX:

The Global Findex database is the world's most comprehensive dataset that examines how adults handle their finances, including savings, borrowing, payments, and risk management. This database was launched in 2011 with funding assistance from the Bill & Melinda Gates Foundation, this reputable source has worldwide recognition for its contribution towards the measurement of financial inclusion. The database pools together the data from over 150,000 adult respondents across 140 economies. It includes data on how people use financial technology (FinTech) for their financial

operations. This initiative is a global mission dedicated towards advancing financial inclusion.

Table 3.7

Overview of Global Findex Themes

Year	Theme
2011	Measuring Financial Inclusion Around the World
2014	Measuring Financial Inclusion Around the World
2017	Measuring Financial Inclusion and the Fintech Revolution
2021	Financial Inclusion, Digital payments and Resilience in the Age of COVID-19
2025	Connectivity and Financial inclusion in the Digital Economy

Source: Compiled by the Researcher

2. CRISIL INCLUSIX:

CRISIL Inclusix is the first financial inclusion index of India which was launched in the year 2013. The key motivating factor behind the establishment of CRISIL Inclusix is the necessity of a reliable yardstick for the measurement of the financial inclusiveness of the country. The financial inclusiveness is evaluated on the basis of four dimensions such as branch penetration, credit penetration, deposit penetration and insurance penetration. CRISIL defines financial inclusion as “the extent of access by all sections of society to formal financial services such as credit, deposit, insurance and pension services”. CRISIL Inclusix constitutes a relative index that incorporates different categories of basic financial services in to a single metric. This instrument always places importance to number of individuals included rather than the cumulative amount deposited or loaned. The financial inclusion at the national, regional, state level and district levels were assessed by using Inclusix. The level of inclusiveness in this context is measured on a scale of 0 to 100, where hundred is the maximum score which can be attained.

Table 3.8

CRISIL INCLUSIX Score

CRISIL INCLUSIX Score	Level of Financial Inclusion
Greater than 65.0	High
Between 50.1 – 65.0	Above Average
Between 35.0 – 50.0	Below Average
Less than 35.0	Low

Source: CRISIL, 2018

3.3.4 Government Initiatives to Gear Financial Inclusion in India

1. SHG Bank Linkage Program

NABARD implemented the SHG-Bank Linkage Program to boost the financial inclusion and literacy among SHG members across the nation. This program enables SHG members to access credit easily and utilise government funds, such as interest subvention and insurance services. Opening an SHG savings bank account and facilitating credit linkage are two crucial steps essential for the promotion of the SHG-Bank Linkage Program. The relevance of linking SHGs with banks has been emphasised in the Reserve Bank of India's monetary policy statements and Union Budget announcements over the years.

The program encourages rural poor women to keep a certain amount as joint savings and also to carry out internal lending among the members of the group. Loans are also provided by the banks to these groups after a specified period without collateral security, predominantly for income generation activities. The SHG-Bank Linkage Program is functioning under three categories. Under the first category, banks themselves promote SHGs and extend credit to their members; with the complete credit liability remains that of the promoting banks. Under the second category, SHGs are promoted by government or non-government organizations, while financial responsibility remains on the banks. In the third category, SHGs are promoted and the disbursal of the loans is carried out by agencies other than banks. This approach is particularly useful in areas where the services provided by the banks are not easily accessible.

2. SWABHIMAN

The SWABHIMAN programme is a Government of India initiative aimed at availing basic banking services to all unbanked villages with a population of over 2,000. The basic objective of this scheme is to bridge the economic gap between rural and urban India. Under the SWABHIMAN scheme, efforts are being made to open bank accounts, extend need-based credit, facilitate remittances, and develop financial literacy in rural areas through the extensive use of modern technology.

3. Direct Benefit Transfer (DBT)

The Direct Benefit Transfer (DBT) program was introduced in January 1, 2013, with the aim of improving the government's mechanism for delivering services by reconfiguring the current process of transferring funds and information in a more dependable and efficient manner. This initiative has improved transparency, accountability and operational efficiency across various government schemes, thereby fostering increased public trust in governance. The DBT prioritizes the direct transfer of subsidies and other governmental financial support into the bank accounts of beneficiaries, as opposed to disbursing these funds through government offices. To ensure effective execution of this initiative, the DBT Mission was first established under the Planning Commission. In July 2013, oversight of the mission was transferred to the Department of Expenditure, where it remained until September 14, 2015. Following this date, responsibility for the DBT Mission and associated matters was assigned to the Cabinet Secretariat. While the DBT scheme was formally launched on January 1, 2013, it was expanded nationwide on December 12, 2014. Notable programs, including the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and several scholarship schemes, were incorporated into the DBT framework across 300 districts with higher levels of Aadhaar enrollment.

4. Pradhan Mantri Jan DhanYojana (PMJDY)

The PradhanMantri Jan DhanYojana (PMJDY) is a financial inclusion program introduced by the Government of India in August 2014 with the motto "MeraKhata, BhagyaVidhata". This national mission aims to ensure universal access to financial

services, including basic savings and deposit accounts, credit, pensions, remittances and insurance in a reasonable and equitable manner. The primary objective of this scheme is to provide at least one basic bank account per household to assure financial accessibility. Within the purview of PMJDY, individuals who do not have a bank account can open a Basic Savings Bank Deposit (BSBD) account in any authorised bank branch or Business Correspondent (BC) outlet.

The introduction of PMJDY occurred in two phases:

Phase 1 focused on achieving Universal access to financial services through sub-area services.

Phase 2 (2015-2018) entailed facilitating the opening of bank accounts for 7.5 crore families within a year.

As of May 2022, the total number of beneficiaries under the scheme stands at 45 crore, with total deposits amounting to ₹1,67,406crore. As of August 18, 2021, the deposit balance in PMJDY accounts was ₹1,46,230.71crore. The average deposit per account has increased by over a third, from ₹1,064 in March 2015 to ₹3,397 in August 2021.

Benefits under PradhanMantri JanDhanYojana

- A single basic saving bank account is opened for unbanked persons.
- Interest is earned on the money deposited in Pmjdj accounts.
- There is no Minimum balance requirement in Pmjdj accounts.
- RupayDebit Card is availed to Pmjdj account holders.
- Eligible account holders are provided with the overdraft limit of Rs.10,000.
- A Rs. 1 Lakh accident insurance cover (Enhanced to Rs. 2 Lakh for new Pmjdj accounts that are opened subsequent to 28/08/2015) is available with Rupay card issued to the Pmjdj account holders.

- Pmjdya accounts are qualified for Direct Benefit Transfer(DBT), Pradhan Mantri Jeevan Jyoti BimaYojana(PMJJB), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Micro units Development and Refinance Agency Bank (MUDRA) Scheme.

Jan DhanDarshak

A Geographic Information System (GIS) mobile application was launched in order to create a citizen-oriented platform for identifying the location of financial service touch points across varied providers like banks, post offices, Business Correspondents (BCs) and ATMs. These services can be utilised based on the requirement and convenience of the general citizens. The web version of this application, Find My Bank (findmybank.gov.in), allows users to easily identify the location of the financial service points. Over 8.42 lakh financial touch points have been mapped on GIS, including 1.68 lakh bank branches, 2.11 lakh ATMs, 1.36 lakh post offices and 3.25 lakh BCs.

5. Pradhan Mantri Mudra Yojana (PMMY)

PM Mudra Yojana scheme was introduced on 8 April 2015 for financing small business enterprise in manufacturing, trading and service sectors. PM Mudra yojana scheme is designed under three sub schemes namely shishu, kishore and Tarun. 'shishu' scheme under PMMY addresses loan amount up to Rs.50,000, 'Kishore' scheme Comprises of loan amount between Rs.50,000 and Rs.5,00,000 and Rs.5,00,000 to Rs.10,00,000 is covered under the sub scheme 'Tarun'. The processing fee is free under Shishu scheme. A Mudra Card (Rupay Debit card) is issued to borrowers for drawing working capital which can be used in different ATM or can be availed for purchasing using Point of sale machine. For the financial year 2024-2025 5,46,61,648 PMMY loans and Rs5,52,801.78 Crore were Sanctioned and Rs. 5,41,802.58 crore were disbursed respectively.

6. Atal Pension Yojana (APY)

Atal pension Yojana is a financial inclusion programme of Government of India which was launched on 9 may 2015 by Prime Minister Sri NarendraModi. It was formerly

known as SwavalambamYojana. This scheme was first stated in the budget speech of 2015 by Finance Minister Sri Arun Jaitley. The main aim of this scheme is to extend the pension support to workers of unorganized sectors and to motivate them to save for the retirement. All the saving bank and post office saving bank account holders under the age group of 18 to 40 years are qualified to participate under this scheme. There will be differences in the contribution of each individual depend up on the selected pension amount. After attaining the age of 60 years the contributor to the scheme will be eligible to receive a guaranteed minimum monthly pension of Rs.1000 or Rs.2000 or Rs.3000 or Rs.4000 or Rs.5000. In the occurrence of premature death of the subscriber, Government has decided to give an option to the spouse of the subscriber to contribute to the Atal Pension Yojana account of the subscriber for the remaining period, until the original subscriber would have attained the of 60 years.

7. Pradhan Mantri Jeevan Jyoti BimaYojana (PMJJBY)

PM Jeevan Jyoti BimaYojana which was introduced in 2015 is a one year life insurance scheme which can be renewable from year to year and cover the death of the subscriber. This scheme is accessible to people in the age category of 18 to 50 years having a bank account and who render their permission to enable auto-debit. The scheme will be offered and managed by both public and private sector insurance companies in association with scheduled commercial banks, regional rural bank and cooperative banks. The present scheme targets to bring socially excluded and poorer sections under insurance coverage and also to accelerate the inclusive growth with the vision of “sabkesaath sab ka vikas”. As on 30/04/2025, cumulative enrolment under PMJJBY was 23.69 crore. This scheme cover Rs.2 lakh for the one year period starting from 1 June to 31 May, which is renewable and the premium amount is Rs.436 per annum which will be auto debited in one installment from the bank account of the subscriber as per the option given by him on or before 31 may of each annual coverage period under the scheme.

8. Pradhan Mantri Suraksha Bima Yojana (PMSBY)

PM SurakshaBimaYojana is an accidental insurance cover announced in the 2015 budget of Government of India. All bank account holders between the age group of

18 and 70 who subscribe to this scheme will receive a one-year renewable accidental death cum disability cover of Rs. 2 lakh. The annual premium to be paid under this scheme were Rs.12 per annum. This scheme is provided through public sector general insurance companies and other general insurance companies. A claim of Rs.2 lakh is granted under PMSBY in cases of death or complete disability, while Rs.1 lakh is given in cases of partial disability. As on 30/04/2025 cumulative enrollment under PM surakshaBimaYojana is 51.14 crore.

9. Stand Up India Scheme

On April 5, 2016, the Indian government introduced the Stand Up India scheme. This program's goal is to provide at least one Scheduled Caste or Scheduled Tribe borrower and at least one female borrower from each bank branch with bank loans ranging from Rs. 10 lakh to Rs. 1 crore for the establishment of greenfield businesses. As of 30 June, 2025, 2,75,321 applications have been approved for a total of Rs 62,807.46 crore. The green field businesses ought to be in the trading, manufacturing, services, or agriculturally related activities. The goal of this program is to provide finance to the under privilege segments of society for starting green field businesses. A Scheduled Caste, Scheduled Tribe, or female entrepreneur should own at least 51% of the shares and controlling stake in a non-individual enterprise.

Financial Inclusion Fund

The Committee on Financial Inclusion, chaired by Dr. C. Rangarajan, proposed the creation of the Financial Inclusion Fund (FIF) and the Financial Inclusion Technology Fund (FITF) under NABARD. These funds were meant for reimbursement of the expenditure incurred in developmental and promotional activities for enhancing the credit absorption capabilities among the poor and the vulnerable, and facilitation of technology application for deepening financial inclusion. FIF and FITF were merged in July 2015 into a Financial Inclusion Fund with enlarged coverage for scaling up advances in financial inclusion.

The creation of such a fund shall focus on building the infrastructure for the financial inclusion across the country, addressing demand-side concerns through promoting

financial awareness, investment in green ICT solutions, develop stakeholder capacity and improve the technological adaptability of both users and providers of financial services to ensure maximum financial inclusion. The operations, administration and utilization of the Financial Inclusion Fund (FIF) are monitored and controlled by the Financial Inclusion Fund Advisory Board, which has been established by the Government of India. Financial inclusion initiatives funded by Government of India are managed by a specialised sub-committee of the Financial Inclusion Fund Advisory Board, which submits its suggestions and recommendations for review to the advisory board. The Financial Inclusion Fund (FIF) is generated from the interest differential exceeding 0.5% on deposits made by commercial banks with NABARD under the Warehousing Infrastructure Fund, Rural Infrastructure Development Fund and Food Processing Fund, in respect of priority sector shortfall obligations. As of March 31 2024, a total amount of Rs. 5891.80 crore was sanctioned to the Financial Inclusion Fund out of which Rs. 3300.28 crore was disbursed during the same year.

Role of Financial Inclusion in the Sustainable Development Goals

Financial inclusion provides necessary support in fulfilling the following Sustainable Development Goals:

SDG 1: Eliminating Extreme Poverty

SDG 2: Reducing Hunger and promoting Food Security

SDG 3: Achieving Good Health and Well being

SDG 5: Promoting Gender Equality

SDG 8: Promoting Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work.

SDG 9: Building Resilient Infrastructure, Promote Inclusive and Sustainable Industrialization and Foster Innovation.

SDG 10: Reducing Income Inequality Within and Among Countries.

3.3.5 National Strategy for Financial Inclusion 2019-2024

The Reserve Bank of India and the Financial Inclusion Advisory Committee developed the National Strategy for Financial Inclusion 2019–2024 by taking into account recommendations from the Indian government and other financial sector regulators. The National Payment Corporation of India, Commercial Banks, Corporate Business Correspondents, NABARD, and other financial system participants have all contributed to this initiative. NSFI was established with the goal of maintaining and enhancing national financial inclusion by implementing a number of initiatives and incorporating all stakeholders involved in the financial sector. Additionally, it seeks to enhance consumer protection and financial literacy in the nation. The 2030 Sustainable Development Goals (SDGs) of the UN place a higher priority on financial inclusion in order to improve the lives of the impoverished and marginalized segments of society and to achieve global sustainable development. Low-income and financial exclusion attracted poorer sections towards informal sources, which in turn caused them to debt, fall into poverty, and become more susceptible to financial difficulties. The adequacy of financial literacy is enhancing because an informed consumer can make wise financial decisions and is aware of the goods and grievance redressal procedures that are available. In order to establish sustainable financial inclusion, client complaints must be addressed and their protection must be guaranteed. India's road towards financial inclusion began in 1956 when life insurance companies were nationalized. This was followed by the nationalization of banks in 1969 and 1980. In order to help entrepreneurs create professional financial plans and project reports and to help banks in making well-informed lending choices, the Certified Credit Counselors (CCC) program was established. The establishment of India Post Payments Bank (IPPB) in 2018 was a significant attempt to increase the level of financial inclusion. Utilizing the extensive network of 1.55 lakh post offices, over 3 lakh postmen, and Grameen Dak Sewaks, IPPB supports the financial inclusion drive of the nation.

3.3.6 Financial Inclusion Index of RBI

RBI had made outstanding efforts to assess the outcome made through the policies implemented for the financial inclusion. RBI has developed a multi-dimensional

composite financial inclusion index (FI – Index). FI Index is rooted on a scale of 0-100, where absence of financial inclusion is represented by zero and complete financial inclusion is represented by 100. FI index is released by RBI once a year during the month of July and the same is calculated on the basis of 97 indicators and these indicators primarily emphasize upon three key dimensions viz. Access, Usage and Quality.

a) Access:

Access dimension of financial inclusion is further sub divided in to four dimensions, namely Banking, Pension, Digital and Insurance. Which concentrate on the supply side aspects of financial inclusion.

b) Usage:

Usage dimension comprise of fifty two indicators on the basis of saving, investment, credit, digital, insurance and pension. This aspect highlights the demand side parameters of financial inclusion which evaluate the savings and investment habits, usability of the retail digital payments, extent of availing credit from the banks and the non-banks, contribution to pension schemes and penetration of the life and non-life insurance.

c) Quality:

The quality dimension of FI Index is based on consumer protection, financial literacy, and equity in the distribution of financial infrastructure. It also assesses how well stakeholders are doing at educating the public about their rights, the proper financial services that are accessible, and the grievance redressal process. Inequality is measured by using Gini coefficient based on Lorenz curve with district level data granularity .

Banking Sector

The banking industry is carrying the financial inclusion drive of the nation in its shoulders. The banking industry in India provides reasonable banking services to both

affluent and underprivileged individuals. Banks and other financial institutions are unavoidably important to the nation's economic development and progress.

State Level Bankers Committee (SLBC)

The RBI implemented the Lead Bank Scheme in India on December 1969 after taking into account the recommendations given by the Nariman and Gadgil committees. The primary goal of putting this plan into action is to motivate banks and other financial institutions to work together to support the growth of the district economy. The RBI recommended lead banks to establish district level consultative committees (DLCCs) in their lead districts to improve cooperation amongst them. The committees tasked with evaluating the operation of lead bank schemes in Gujarat and Maharashtra determined that state-level committees needed to be established in order to preserve the effectiveness and coordination of lead banks in the state level. SLBC was formed in 1977 under lead bank schemes as per RBI guidelines, to promote coordination and transparency among the financial institutions operating in the State. The convenorship of SLBC was designated to the lead bank of the state and the chairman/ Managing Director of the convenor bank will preside over SLBC meetings. Representatives from the RBI, commercial banks, RRBs, state cooperative banks, small finance banks, foreign banks' wholly owned subsidiaries, NABARD, the National Commission for Scheduled Castes and Tribes etc make up this committee. In order to convey their particular issue to the committee, representatives from a variety of economic sectors, including exporters, retail traders, farmers' unions, industry bodies, etc., are invited to the SLBC meeting. The Convenor bank of the state is responsible for organising the SLBC meeting, which is typically held every three months.

SLBC – KERALA

An inter-institutional committee called SLBC was established at the state level to keep banks and the government in sync for the growth of the state's financial sectors. This committee oversees and upholds developmental programs pertaining to financial literacy, priority sector lending, financial inclusion, poverty alleviation, and providing banking outlets in underserved areas etc. While considering the SLBC of Kerala, the convenor bank of the committee is Canara Bank and the convenor is the General

Manager of Canara Bank, Trivandrum circle. The chief secretary of the state government and the MD and CEO of Canara Bank serve as co-chairs of this bankers committee in Kerala.

Achievements Made by SLBC Kerala

- First SLBC to publish PMJDY mission document in local language and published FLC Material.
- First state to have banking services in all villages.
- First state to set up financial literacy centers in all blocks.
- First state with physical branches in all Grama Panchayats.

3.3.7 Financial Literacy and Financial Inclusion

There is a close relationship between financial literacy and financial inclusion. The existence of financial literacy enhances the effectiveness of financial inclusion initiatives of the country. Financial literacy raises awareness and comprehension of how to use the financial system efficiently, while financial inclusion grants access to this system. The financial inclusion of the population has a major influence on the sustainability and expansion of the financial system. Due to the growing complexity of financial markets and its influence on personal financial decision-making, financial literacy has been increasingly important. It is essential for advancing financial inclusion, financial stability, and overall financial well-being. Financial literacy stimulates demand for financial services and products by increasing people's understanding and confidence in financial affairs, where financial inclusion act from the supply side by providing financial services and products. When combined, they help to create a financial system that is more inclusive and stable. Financial literacy encourages positive financial awareness and behavior among individuals. On the other hand, target groups may suffer if financial literacy and education are not delivered effectively. The literacy level of many marginalised communities is still very low and the introduction of financial products and services to people who lack literacy can have detrimental effects on their everyday lives as well as the country as a whole.

Unrestricted access to financial services and products can lead to debt traps among low-income groups. There could be serious repercussions from this financial crisis, such as suicides and other unethical practices among weak and illiterate people. The country is losing its valuable human capital when one person or one family commits suicide. It is the responsibility of the citizen to protect his fellow beings from debt traps and other financial crisis.

In India, financial education heavily emphasizes the value of saving among the people. As a result citizens' saving habits have significantly improved. However, in financial education programs, the necessity of effective investing is frequently disregarded. In the current economic climate, saving money and making wise investments go hand in hand. One of the most often used statements "Poor people save, while rich people invest" had greater importance in this current financial environment. People in India can be divided into two groups: those who save money after spending it and those who spend money only after saving the necessary amount. However, in the words of the researcher, to attain inclusive economic growth, Indian citizens should prioritize investment first, followed by saving, and then spending. People who are literate in financial affairs are essential for a developing country. These people encourage financial market innovation and make the economy more competitive. Prior to putting financial inclusion measures into action, it is important to evaluate the financial literacy levels of the target population and to take the proper remedial measures, if the literacy level is poor. The effectiveness of financial inclusion initiatives is limited since consumers are unlikely to demand financial products and services due to lack of financial awareness.

According to Subbarao (2010) "in the Reserve Bank, we treat financial inclusion and financial literacy as twin pillars. Financial literacy stimulates the demand side-making people aware of what they can and should demand. Financial inclusion acts from the supply side by providing in the financial market what people demand". Without making financial decisions ones in a life time, no one can survive in our world. Financial decisions of an individual start from his childhood it self. Such as buying chocolates or soft drinks from the nearest shops, also finding the source for getting money to purchase etc. When this child became an adult he wants to find

money for buying clothes, bikes and mobile phones and all its services. The children and adults in India find their parents and relatives as their source of money to purchase their necessities and un necessities. It is clear that children and adults in India especially Kerala, highly depends on their parents for meeting their needs and they do not once think about saving and investment in their life, But the children and adults in the developed countries will be conscious about saving and investment from their childhood itself. It is the result of financial learning from their family and also the effectiveness of financial education of the developed countries. The financial education and its resultant financial literacy of the children and the adults should be efficiently promoted in the journey of India from a developing nation to a developed nation. Citizens in India show reluctance in speaking financial matters to their relatives and neighbours. Instead they speak about other personal matters occurring in neighbourhood families. This culture of the households should be changed and the financial matters should be communicated inside and outside the home at least once in a month. Speaking financial matters occurring in the world, home country and in the family should be discussed in the dining table; it had high positive impact on the financial behavior of family members, especially in the behaviour of the children. The growing stage, children capture all the things in their surrounding and it may be in their mind still their old ages or still their death. When the adults reaches middle ages he will compel to take decisions regarding children education, retirement saving, extra income for living etc. The effectiveness of the financial decisions in different life stages will depends on the financial literacy and awareness gained by each one during their past life. Efficient management of one's personal finance had greater role in the financial wellbeing of the individual, family and of the nation. Every individual in this world should be a customer in any extent. Financial awareness of the individual protects him from fraudulent practices prevailing in the markets and also in the society.

3.4 Scheduled Tribes in Kerala

Either Kerala's ecosystem, which is dominated by the coconut tree (Kera), or the historical Chera/Cera dynasty, which gave the land (alam) its name, was the sources of Kerala's identity. Kerala is renowned for its diversity in terms of religion, culture, caste, language, food, festivals, traditions, customs etc. In Kerala, every district is

unique, and some of the panchayaths within a district also represent a variety of traditions. Malayalam, which is again a word formed from the ecosystem, malay or Mala (the hill and mountain), and alam (land), is the primary language that defines Kerala's identity. The 14th century saw the development of Malayalam as a language. From the 15th century onwards, Malayalam script also appears in the inscriptions.

"Collection of families bearing a common name, speaking a common dialect, occupying or professing to occupy a common territory and is not usually endogamous though originally it might have been so," is how the Imperial Gazetteer of India (1911) describes tribes. Article 366(25) of the constitution of India refers Scheduled Tribes as those communities who are scheduled in accordance with article 342 of the constitution. This article says that only those communities who have been declared as such by the president through an initial public notification or through a subsequent amendment Act of parliament will be considered to be Scheduled Tribes. Though tribes and tribal areas vary in geo physical, agro climatic, socio economic and cultural characteristics, they share certain common features such as nature of rurality, illiteracy, economic backwardness and social deprivation. They have been subjected to exploitation from generation and their life is characterised by servitude, poverty and misery. Inadequate investment and non-integration of the tribal economy with the rest of the society have contributed to the present state of backwardness in these areas (Shanthudu, 1993). According to the Article 342, 365(25) special privileges and consideration are provided to the Scheduled Tribes in India. This article aims the development of the tribal communities in the country. 'Tribals are an extremely disciplined people, often much more democratic than most others in India. Without a constitution and the rest, they function democratically and carry out the decisions made by their elders or their own representatives almost without exception' (Jawaharlal Nehru).

Scheduled Tribe communities in our nation are characterized by social, educational, and economic backwardness, primitiveness, geographical isolation and shyness which distinguish them from other communities. Tribal people around the nation have unique lives and customs, as well as rich traditions, cultures, and histories. Despite considerable regional variance, the tribes have a lot in common, such as living in

comparatively remote locations and being more homogeneous and self-contained than non-tribal social groups. The territory of the tribal communities' make up a sizable portion of the nation's under developed regions. In addition to numerically an important section of Indian society, Dalits are a group that is still fighting to escape from the mental bondage of the centuries, the oppressive and hegemonic of social exclusion. The British administrators referred to the tribes as "aboriginals," "forest tribes," "hill tribes," and "backward tribes." After independence the expression "Scheduled Tribes" has appeared for the first time in the constitution of India in 1950. Presently the society recognize and use the term "tribe" to refer to the group of people in the nation whose names are specified by the president of India in accordance with clause (1) of Articles 341 and 342 of the Indian Constitution. Illiteracy, ignorance, indebtedness, poverty, landlessness, morbid health conditions, unemployment, and a lack of technological and economic skills are still prevalent in many tribal concentrated areas of India. Tribal people have a highly rich cultural legacy and are an essential component of Indian civilization. These indigenous tribal communities face extreme difficulties in accessing education and are subjected to exploitation in all spheres of life including economic, social, cultural and political which hinder their development and empowerment. In addition, tribal communities also face difficulties such as land alienation, homelessness, displacement, illiteracy, poverty, malnutrition etc.

The state has adopted a development strategy in the fourteenth five-year plan (2022–2027) that emphasizes sustainability and inclusivity of the underprivileged groups, particularly the backward classes, especially Scheduled Castes, and Scheduled Tribes. Programs are framed to improve their access and participation in economic, political, and social process through the development of inclusive policies to bring them at par with the other sections of the society. Kurumba, Kadar, Koraga, Kattunaikan, and Cholanaiakan are the five particularly vulnerable tribal groups among the Scheduled Tribe communities in the state. In Kerala about 11 percent of the tribal residential settlement are located inside the forest and 20 per cent are situated in the immediately vicinity of reserve forests. Between 2016-2017 and 2023-2024 the state government has earmarked Rs.6408.05 crore for the welfare of people belonging to Scheduled

Tribes. The ST department estimates that there are now 7251 land-owning tribal families without a home to live. There are 7449 scheduled tribes in the state that are landless, according to data from the Tribal Resettlement and Development Mission. The housing program is run by LIFE Mission starting from 2017–2018. Housing for STs is also funded by the Prime Minister Awaas Yojana and the funds designated by the Local Self-Governments from their Tribal Sub Plan fund. Out of 1284 tribal settlements without connectivity, 1083 now have internet access through the ST Department's efforts to provide digital learning facilities. In partnership with C-DAC, the "Digitally Connected Tribal Area" project was launched in Wayanad, concentrating on community study centers that prioritize the employment, health, and education of the residents of the ST regions. Kerala Tribal Plan Scheme is introduced by the state Government aims to provide up to 100 additional days of wage employment beyond the guaranteed period of 100 days provided under MGNREGS to every tribal household in the state (Kerala State Planning Board, 2025).

Scheduled Tribes make up 1.45% of Kerala's population, according to the 2011 census. India is the world's second most tribal concentrated country. There are 635 tribal communities in India, according to the Anthropological Survey of India. Kerala's tribal populations have a 74.5% literacy rate (male 77%, female 72%), which is 20% lower than the state's total literacy rate. Kerala now has 37 tribal communities (Marathi was added in 2013). There are 1518 (3188) tribal settlements near and inside the forest as per the 2008 survey by KILA and the Scheduled Tribe Development Department. Of them, 978 (64.43%) of the settlements are behind the forest, while 540 (35.57%) are inside the forest.

Tribes that live in close proximity to the natives and those that live in the hills have different speech forms. The Kadar of Kochi speech is similar to Tamil and Malayalam. However, it differs from the speech of Kadar of Wayanad, which is a dialect of Malayalam. The Irular, Mudugar, and Kurumba are the three prominent tribal groups in the Attapdy of Palakkad district. While the Irular speech is more divergent and closer to Tamil, the speech of the subsequent two is nearly identical. Each tribal community preserves its unique culture and way of life, and tribal ritual are

interconnected and passed down through the generations. Even though the world is changing, they continue to preserve their traditional knowledge throughout generations. Their authority over the land and natural resources was destroyed by the British invasion and the movement of people from various parts of the state. Previously, forest goods were their primary living source. Tribal communities' traditional employment, culture, and economic foundation changed as a result of the adoption of contemporary economic policies and competitiveness by the country. In order to meet their needs for housing, drinking water, food, clothing, health care, and education, these changes forced them to wait for government welfare development programs. By preserving their customs and culture, ST should be brought in front of the mainstream society. Each community had its own food habits, housing style, dressings, medical treatments, art forms etc. It is their privilege. Without endangering the traditional, inherited environment of the tribal communities, the researcher hopes to provide them with a more sustained financial environment. The goal of the research is to provide these communities with sufficient financial literacy and to expose them to the outside world. Financial education is providing to tribal communities in order to open the gate of the world. Since their customs are the pride for diversified India, it shouldn't be damaged. Our nation failed to integrate these people into the mainstream society even after the seventy years of independence. Various government and non-government organizations implement different programs and funds to support the growth and well-being of the Scheduled Tribes, however this endeavour fails to achieve its goal. Prior to the unauthorized entry of other mainstream population segments, tribal groups had their own economic and social structure that relied on agricultural production and forest resources. They were also quite self-sufficient during that time. Presently it is important to achieve their overall and financial development without compromising their values, traditions, customs, or forest resources. After determining the beliefs, attitudes, behaviors, customs, and requirements of each community, policies and programs should be developed accordingly. Each community is unique and has a distinct identity in every area of their lives, therefore a one-size-fits-all strategy is not possible at all. There is an Africa in our Kerala. There are number of black peoples in this Africa. They are born, live

and died as slaves. They are the tribal communities in our state (Panoor, 1971). The onething we had forgotten that once this marginalised people are the owners of our land.

It seems unlikely that ST people have benefited equally from the advancements made in India after independence. Since the turbulence of some tribes greatly troubled the British government, they sought to appease them, which necessitated learning about their culture and values. Early research on the tribes was therefore driven by the desire to produce baseline data that would support the upkeep of law and order and ensure efficient administration. The ST communities of the nation are a unique group of individuals who have been preserving their unique and unusual identities in all spheres of life. The majority of the tribal communities are found inside the deep forest, behind the forest, and on hilly terrain. Their settlements itself allow them to interact with nature. Among them, urban settlements are unfamiliar. The majority of tribal people place a high priority on nature. For some of them, nature is also their god. According to earlier research, tribal identity and British attitudes toward these groups are the main causes for the differentiation of tribal communities from the mainstream population. Tribal communities were able to hold an autonomous power and resisted the British invasion because of their higher self-privilege, self – reliance and isolated living conditions. This attitude of tribes leads the Britishers to avoid them and permitted them to live in their own ways. The colonial authority chose to separate the tribal concentrated areas from the rest of the nation by classifying them as either excluded or partially excluded areas. Developmental activities of the country were implemented in the areas except in the excluded and partially excluded areas. The marginalization and exclusion of the tribal communities began from the British perspective.

Tribes are group of families living as a community bound together by common languages and traditions and governed by one or more chiefs. The absence of infrastructure amenities hinders the growth of the tribal economy. Rapid development of tribal economy is hampered by extremely low literacy rates and the predominance of specific social conditions. Some members, who are mostly from nearby locations

or outside the settlements, have an influence on the tribal economy by acting as traders and moneylenders. Tribal groups should be given access to economic possibilities and job opportunities while taking into account their ethical standards and cultural practices. Traditions and cultures of this section were somewhat altered by globalization and its aftereffects. In this digital age, Nehru's goal of integrating indigenous groups into mainstream modern society while preserving their traditional customs is even more pertinent. The primary characteristics that set them apart from non-tribes are their community wise farming practices, traditional medicinal treatments, food habits, and artistic expressions.

The author of "Keralathile Africa," K Panoor, compares the state to Africa in order to highlight the pathetic situation of tribal communities in Kerala. The British were the first to categorize ST as tribal communities on the Indian subcontinent based on their subsistence patterns. The tribes were referred to as "forest tribes" by J A Brains (The commissioner of Census 1891). Scheduled Tribes in Kerala are equally diverse in all respects, despite the state's diversified traditions and culture. The eight marginalized ST communities are Adiyar, Eravalan, Hill Pulaya, Irula, Malasar, Malayan, Mudugar, and Paniyan (Kerala State Planning Board, 2022). Tribal hordes became village settlements when their food-gathering economy gave way to an agricultural food producing economy. 11,781 students (35.29%), including 249 graduating, 105 post-graduating, and 17 pursuing engineering degrees, have stopped their education due to poverty and financial difficulties in their families (Scheduled Tribes Development Department, Government of Kerala, 2013).

Scheduled Tribes' employment patterns can be essentially divided into three categories: non-agricultural and allied sectors, agriculture and allied sectors, and forestry sectors. Among ten districts, nearly 80% of the families still do not have insurance coverage. Wayanad district has the highest percentage of families without having insurance (Scheduled Tribes Development Department, Government of Kerala, 2013). According to community-level data, majority of families without insurance coverage are from the Paniyan community (Scheduled Tribes Development Department, Government of Kerala, 2013). The Tribal Sub Plan (TSP) was first

adopted in the fifth five-year plan (1974–75). Even though Kerala's local governments made great strides in providing citizens with high-quality services, Scheduled Tribes did not receive the same level of treatment. For a variety of reasons, including inclusion and exclusion, the Scheduled Tribes Order 1950 was modified in 1956 and amended in 1976 and 2002, respectively.

For the sake of carrying out development initiatives, a group of five or more Scheduled Tribe households located next to one another has been referred to as a "ooru" (settlement). Wayanad district has the largest number of settlements (2167) followed by Kasaragod (612) and Palakkad (426) districts. Kollam District has the least number of (26) settlements. About 94.66 per cent of the tribal populations are living in settlements (Kerala State Planning Board, 2022). Kerala model of development is discussed all over the world in respect of human development indices like exemplary demographic indicators, high literacy, and better standards of health. In terms of Human Development Indices, Scheduled Tribes' standing differs significantly from that of the general population in the State. Across all human development measures, Scheduled Tribe communities are the most disadvantaged category among outlier communities. Thus, it is necessary to design, develop, implement, and monitor a complete strategy that covers every facet of human resource development.

Pradhan Mantri Janjatiya Unnat Gram Abhiyan

With a total budget of ₹79,156 crore (Central Share: ₹56,333 crore and State Share: ₹22,823 crore), the Union Cabinet has approved the PradhanMantriJanjatiyaUnnat Gram Abhiyan, which aims to improve the socioeconomic conditions of tribal communities. According to the Budget Speech 2024–2025, the program will embrace saturation coverage for tribal families in aspirational districts and tribal-majority villages, including around 63,000 villages and providing benefits to over 5 crore tribal people. It will be applied to all tribal-majority settlements in every States and Union Territories, encompassing 2,740 blocks and 549 districts. By combining several Government of India schemes and strengthening outreach initiatives, the PradhanMantriJanjatiyaUnnat Gram Abhiyan seeks to close important gaps in social

infrastructure, health, education, and livelihood. Drawing on the lessons learned and achievements of the PradhanMantri Janjati Adivasi Nyaya MahaAbhiyan (PMJANMAN), its goal is to guarantee the sustainable and holistic development of tribal territories and communities. The mission consist of twenty-five interventions that will be implemented by Seventeen line ministries. Each ministry or department is responsible for executing its respective schemes in a time-bound manner, using the funds allocated under the Development Action Plan for Scheduled Tribes (DAPST) over the next five years.

Table 3.9

Scheduled Tribe Population (KERALA)

	1991	2001	2011
ST Population	3,20,967	3,64,189	4,84,839
Literate	52,647	2,02,249	3,26,272
Percentage	16%	56%	67%
Illiterate	1,64,906	1,61,940	1,58,567
Percentage	51%	44%	33%

Source: Census, 2011

The ST population in Kerala increased from 3.21 lakh in 1991 to 4.85 lakh in 2011, indicating a 50.9% increase over almost two decades. The most striking feature is the remarkable growth in literacy, during 1991 only 16% of Scheduled Tribes were literate, while in 2001 literacy surged to 56%, exhibiting the impact of the educational efforts made in the 1990s. In 2011 literacy has improved to 67%, approaching closer to the state average yet still lagging behind. The population that remained illiterate decreased steadily over the years dropped consistently from 1.65 lakh (51%) in 1991 to 1.59 lakh (33%) in 2011. The actual number of illiterates decreased in spite of the overall population growth, which is a positive sign of educational progress. It is the result of the effort made by the government (through SarvaShikshaAbhiyan, ST-specific hostels, scholarships, and residential schools) which immensely enhanced the education accessibility among the tribal communities.

Table 3.10*Percentage of Scheduled Tribe population to State Total Population (South Region)*

State	1991	2001	2011
Andhra Pradesh	6.3	8.8	6.3
Karnataka	4.3	6.6	7.0
Kerala	1.1	1.1	1.5
Tamil Nadu	1.0	1.0	1.1

Source: Census, 2011

In Andhra Pradesh, the proportion of the Scheduled Tribes increased from 6.3% in 1991 to 8.8% in 2001, but eventually declined to 6.3% in 2011. By way of contrast, Karnataka experienced an uninterrupted rise in the share of Scheduled Tribes, increasing the share from 4.3% in 1991 to 6.6% in 2001 and then going up to 7% in 2011, indicating a consistent upward demographic presence. While coming to Kerala, the Scheduled Tribe population is comparatively smaller in relation to its neighbouring states, with only a marginal improvement from 1.1% in 1991 and 2001 to 1.5% in 2011. In Tamil Nadu, the share of Scheduled Tribes has remained largely stagnant, showing only modest variation from 1.0% in 1991 and 2001 to 1.1% in 2011, expressing minimal demographic changes and their continued presence as a very small proportion of the state's population.

Table 3.11*Scheduled Tribe Population (KERALA)*

	Male	Female	Total
ST Population	2,38,203	2,46,636	4,84,839
Rural	2,13,208	219,884	4,33,092
Urban	24,995	26,752	51,747

Source: Census, 2011

The total ST population in Kerala is 4,84,839, comprising males (2,38,203; 49.1%) and females (2,46,636; 50.9%). The slight female domination mirrors Kerala's demographic structure of higher female population, which is consistent with the

state's overall sex ratio advantage. An astounding 89.3% (4,33,092) of STs live in rural regions, while only 10.7% (51,747) reside in urban regions. In rural areas, both males (2,13,208) and females (2,19,884) demonstrate a balanced distribution, with slightly more females. In urban areas, the male–female split (24,995 & 26,752) remains proportionately similar, depicting that urban migration has not developed a gender skew, a contrast to other states where male-dominated labour migration is prevalent.

Table 3.12

Scheduled Tribe Population in Selected Districts

		Male	Female	Total	% to Total Population (District)	% to Total ST Population (Kerala)
1. Wayanad	Combined Population	4,01,684	4,15,736	8,17,420	18.53	31.24
	ST population	74,476	76,967	1,51,443		
2. Palakkad	Combined Population	13,59,478	14,50,456	28,09,934	1.74	10.10
	ST population	24,314	24,658	48,972		
3. Kottayam	Combined Population	9,68,289	10,06,262	19,74,551	1.11	4.53
	ST population	10,974	10,998	21,972		

Source: Census, 2011

Wayanad has the highest concentration of tribal population, accommodating almost one-third of the ST population with strong visibility (31.24% of total tribal population in the state and 18.53% of district population). Palakkad has the next highest in contribution (10.10% of total tribal population in the state), but the relative proportion within the district is low, which could minimise political/administrative attention. Kottayam has minimal tribal presence (1.11% of district population), making them even more susceptible to neglect because of the lack of visibility among the overall

population. STs in Kottayam are small, dispersed groups, which can result in a greater risk of exclusion since they lack the critical mass to influence local policy priorities.

3.4.1 Tribal Communities in Kerala

Following tribal communities are selected from the districts of Wayanad, Palakkad and Kottayam for the purpose of the study;

Paniyan

The Paniya community is referred to as Paniyar in Tamil Nadu, Paniyan in Kerala, and Paniyerava in Karnataka. Because they share certain traits that other tribal groups do not and the Paniyan and Adiyar constitute a distinct subgroup. The paniyans were brought and sold as slaves through a contract till the early decades of the twentieth century. Many of these contracts were held during the annual festival at Valliyurkavu temple near Mananthavady. For the Paniyan and Adiyar of Mananthavady, the Valliyurkavu festival is a significant event. They claim that Ippimala is where they originated. The word "Paniyan" means "labourer," and they consider agriculture to be their main occupation. "All tribes are misfortunate's. Paniyans are the misfortunate's among the misfortunate's" (Panoor, 1971).

The Paniyan are found in Wayanad district, the adjoining of Kozhikode, Kannur, and Malappuram, as well as Gudalur Taluk in Nilgiri Tamil Nadu. The Paniyan have only a spoken language without any script, which they use with the kin groups. The dialect contains words from Tamil, Tulu and Malayalam languages. The language and script used with others is Malayalam (Singh, 2002). The most common family structure among them is the nuclear family, which is primarily caused by their high reliance on wage earning, which makes it impossible for them to support and sustain a large group. Since the majority of Paniyan are landless, their main source of income is labour, and they enjoy modern amenities and benefits like hotels, movie theatres, electricity, midday meals for kids, scholarships, and rations from fair price shops. According to the census 2011 Paniyan was the most populated tribal community in the state with the population of 88,450. They continue to live in a primitive state. "Paniyans are aboriginal agrestic slaves who live at high elevations where there are

plantations and rice cultivation. They resemble the African tribes in their curly hair and thick lips” (Luiz, 1962).

Table 3.13

Paniyan Population (Kerala)

	Male	Female	Total
Rural	41,300	44,035	85,335
Urban	1475	1640	3115
Total	42,775	45,675	88,450

Source: Census, 2011

Table 3.14

Background Information (Paniyan Community)

Sex Ratio	1068
Literacy Rate	63.2
Male Literacy Rate	69.9
Female Literacy Rate	57.0
Work Participation Rate	49.8

Source: Census, 2011

Table 3.15

Highly Populated Districts in Kerala (Paniyan Community)

District		Male	Female	Total
Wayanad	Rural	31,019	32,907	63,926
	Urban	1015	1127	2142
	Total	32,034	34,034	66,068
Kannur	Rural	5409	5751	11,160
	Urban	66	80	146
	Total	5475	5831	11,306
Malappuram	Rural	3235	3629	6864
	Urban	241	267	508
	Total	3476	3896	7372

Source: Census, 2011

Table 3.16*Paniyan Tribal Community in Wayanad*

Paniyan Population(Kerala)	88,450
% to total tribal population (Kerala)	18.24
Paniyan Population (Wayanad)	66,068
% to total Paniyan population (Kerala)	74.69

Source: Census, 2011

Adiyan

The Adiya community is referred to as PanjariYerava in Karnataka and Adiyan in Kerala. Adiyar is another name of the Adiyan. In Malayalam, the word Adiyan means "slave" or "serf." The Adiyan community is dispersed throughout Wayanad, the adjoining areas of Kannur district and Kodagu (Coorg) in Karnataka. They believe in the presence of the soul after death and worship the spirits of their ancestors. Thirunelli and Valliyoorkavu are considered sacred places of worship (Singh, 2002). In the past, landlords viewed this group as slaves for doing work in their lands. Since then, they have been referred to as Adiyan. Their primary language is Ravula, which is a combination of Tamil and Kannada. In between the community they only speak Ravula language and with others they use Malayalam language (Mini & Suresh, 2022). The main occupation of Adiyan is the agricultural labour in the lands of other people. This community is also impacted by the current shifts in the state's social and political landscape. Four GramaPanchayats, namely Thrunelly, Mananthavady, Panamaram, and Pulpally shows their substantial population. Prior to the Abolition of Bonded Labor Act of 1976, Adiyans were bonded to their landowners.

Table 3.17*Adiyan Population (Kerala)*

	Male	Female	Total
Rural	5459	5924	11,383
Urban	56	87	143
Total	5515	6011	11,526

Source: Census, 2011

Table 3.18*Background Information (Adiyan Community)*

Sex Ratio	1090
Literacy Rate	66.8
Male Literacy Rate	73.6
Female Literacy Rate	60.7
Work Participation Rate	50.7

Source: Census, 2011

Table 3.19*Highly Populated Districts in Kerala (Adiyan Community)*

District		Male	Female	Total
Wayanad	Rural	5261	5723	10,984
	Urban	1	11	12
	Total	5262	5734	10996
Kannur	Rural	144	138	282
	Urban	12	17	29
	Total	156	155	311
Kasargod	Rural	31	33	64
	Urban	25	25	50
	Total	56	58	114

Source: Census, 2011

Table 3.20*Adiyan Tribal Community in Wayanad*

Adiyan Population(Kerala)	11,526
% to Total Tribal Population (Kerala)	2.37
Adiyan Population (Wayanad)	10,996
% to total Adiyan Population (Kerala)	95.40

Source: Census, 2011

Kurichiyan

The kurichiyan themselves claim that they are descendants of the ‘thekkuperumbadan Karinairs’ who were brought from Perumbadan in south by the Raja of Kottayam in

his fight against Veda Kings. They were experts in archery and hence were known as VillaliKarinairs (Singh, 2002). The Kurichiyan community has become politically conscious and formed their own affiliations with political parties. In the Kerala assembly elections, a few people have contested and were elected to assembly. They were the devoted warriors who staged a historic resistance against the Britishers in the 19th Century under the Pazhassi Raja. Kurichiyans are the second largest community among Scheduled Tribes about 99.96 per cent of the Kurichiyans are concentrated in 3 districts; namely Wayanad, Kannur, and Kozhikode.

In the wayanad district they are mainly seen in the Vellamunda, Edavaka, Kotathara, Thondarnad, Kaniyambatta, Tavinjaal, Vengapally, Panamaram, Padinjarathara, Poyutana, Thariyod Gramapanchayats and in the Mananthavady and Kalpetta municipality. They live a neat and well-organized life. Their primary source of income is agriculture. Kurichiyan tharavads are mainly located in the velad, perya, Thalappuzha in the Mananthavady Municipality.

Table 3.21

Kurichiyan Population (Kerala)

	Male	Female	Total
Rural	16,772	16,582	33,354
Urban	871	946	1817
Total	17,643	17,528	35,171

Source: Census, 2011

Table 3.22

Background Information (Kurichiyan Community)

Sex Ratio	993
Literacy Rate	83.6
Male Literacy Rate	89.4
Female Literacy Rate	77.8
Work Participation Rate	48.3

Source: Census, 2011

Table 3.23*Highly Populated Districts in Kerala (Kurichiyan Community)*

District		Male	Female	Total
Wayanad	Rural	12,675	12,240	24,915
	Urban	71	107	178
	Total	12,746	12,347	25,093
Kannur	Rural	3700	3940	7640
	Urban	501	514	1015
	Total	4201	4454	8655
Kozhikode	Rural	360	358	718
	Urban	230	237	467
	Total	590	595	1185

Source: Census, 2011

Table 3.24*Kurichiyan Tribal Community in Wayanad*

Kurichiyan Population(Kerala)	35,171
% to Total Tribal Population (Kerala)	7.25
Kurichiyan Population (Wayanad)	25,093
% to total Kurichiyan Population (Kerala)	71.34

Source: Census, 2011

Mala Arayan

Mala Arayan is also known in the name Malayaryar and Malai Arayan. According to Iyer (1937) the word 'Mala Arayan' is derived from the Mala Arachan or the lord of the hills. Where mala means hills and Arachan means lord. Both among themselves and with outsiders, they communicate and write in Malayalam. Women with higher levels of education hold better positions in their families and work in government offices, public companies, etc. Women contribute to household income and engage in economic activities. Mala Arayan is currently engaged in a variety of occupations, including white-collar jobs, agriculture, and agriculture labour and business field (Singh, 2002). To organize and carry out development initiatives among them, they have the Mala Arayan Mahasabha. Both boys and girls are encouraged to pursue

higher education. Through education, the Mala Arayan have been able to engage with more developed communities and get white-collar jobs in both public and private institutions. There are administrators, doctors, engineers, lecturers, businesspeople, and teachers among them. They actively participate in the political activities and leadership has emerged at the panchayath level (Singh, 2002). Tribal communities like Mala Arayan in the central Kerala do not have moopans. If there is moopan they do not have any control on this community (Narayan & Narayanan, 2011). The Mala Arayans are mostly found in the districts of Kottayam and Idukki. In Kerala, this is the first Scheduled Tribe community to convert to Christianity. Mala Arayans have become settled agriculturists. It is found that sizable portions of their land holdings have been converted into rubber plantations. Despite being dispersed throughout 13 districts, Kottayam and Idukki districts are home to 92.16 percent of the Mala Arayan population. Among the Scheduled Tribes, they are the second-most community which has representation in the largest number of local bodies. Melukavu, Moonnilavu, Mundakkayam, Koruthodu, and Erumeli Gram Panchayat consist of majority of Mala Arayans in the Kottayam district.

Table 3.25*Mala Arayan Population (Kerala)*

	Male	Female	Total
Rural	15,041	14,983	30,024
Urban	1581	1611	3192
Total	16,622	16,594	33,216

Source: Census, 2011

Table 3.26*Background Information (Mala Arayan Community)*

Sex Ratio	998
Literacy Rate	96.3
Male Literacy Rate	97.2
Female Literacy Rate	95.4
Work Participation Rate	45.1

Source: Census, 2011

Table 3.27*Highly Populated Districts in Kerala (Mala Arayan Community)*

District		Male	Female	Total
Idukki	Rural	8171	8088	16,259
	Urban	131	152	283
	Total	8302	8240	16,542
Kottayam	Rural	5570	5585	11,155
	Urban	150	164	314
	Total	5720	5749	11,469
Ernakulam	Rural	491	524	1015
	Urban	600	601	1201
	Total	1091	1125	2216

Source: Census, 2011

Table 3.28*Mala Arayan Tribal Community in Kottayam*

Mala Arayan Population(Kerala)	33,216
% to Total Tribal Population (Kerala)	6.85
Mala Arayan Population (Kottayam)	11,469
% to total Mala Arayan Population (Kerala)	34.52

Source: Census, 2011

Ulladan

Ulladan is also known in the name Ullatan. It is thought that their original settlements were in forest areas before moving down and settling in plains areas. They presently communicate in Malayalam and hardly ever use their old dialect. The Ulladan community's head man is typically referred to as "Kanikaran". Although the community's population is spread among many GramaPanchayats, only a small number of them have reported having a population of 500 or more. Their indigenous knowledge includes gathering of medicinal herbs which they sell in the local markets.

Table 3.29*Ulladan Population (Kerala)*

	Male	Female	Total
Rural	5458	5652	11,110
Urban	2419	2701	5120
Total	7877	8353	16,230

Source: Census, 2011

Table 3.30*Background Information(Ulladan Community)*

Sex Ratio	1060
Literacy Rate	88.4
Male Literacy Rate	91.2
Female Literacy Rate	85.8
Work Participation Rate	42.8

Source: Census, 2011

Table 3.31*Highly Populated Districts in Kerala (Ulladan Community)*

District		Male	Female	Total
Ernakulam	Rural	799	820	1619
	Urban	1018	1153	2171
	Total	1817	1973	3790
Kottayam	Rural	1331	1359	2690
	Urban	274	296	570
	Total	1605	1655	3260
Idukki	Rural	1466	1520	2986
	Urban	27	32	59
	Total	1493	1552	3045

Source: Census, 2011

Table 3.32*Ulladan Tribal Community in Kottayam*

Ulladan Population(Kerala)	16,230
% to Total Tribal Population (Kerala)	3.34
Ulladan Population (Kottayam)	3260
% to total Ulladan Population (Kerala)	20.08

Source: Census, 2011

Malavedan

Malavedans are regarded as members of the "Pre Dravidian Race." They speak a dialect of Malayalam and Tamil. Another name of Malavedan is MalaiVedan. The districts of Kollam, Pathanamthitta, and Kottayam are where they are primarily found. In social organisation, they are divided into five endogamous sub-divisions, viz; 'Tolvedans', 'Cheenkannivedans', 'Cheruvedans', 'Elichathvedans' and 'Valiyavedans'. When it comes to gathering medicinal herbs, both men and women are experts. They rely largely on external assistance because they have lost all of their traditional resources.

Table 3.33*Malavedan Population (Kerala)*

	Male	Female	Total
Rural	3507	3781	7288
Urban	394	467	861
Total	3901	4248	8149

Source: Census, 2011

Table 3.34*Background Information(Malavedan Community)*

Sex Ratio	1089
Literacy Rate	81.9
Male Literacy Rate	85.9
Female Literacy Rate	78.3
Work Participation Rate	44.0

Source: Census, 2011

Table 3.35*Highly Populated Districts in Kerala (Malavedan Community)*

District		Male	Female	Total
Kottayam	Rural	995	1059	2054
	Urban	66	94	160
	Total	1061	1153	2214
Kollam	Rural	762	841	1603
	Urban	163	208	371
	Total	925	1049	1974
Pathanamthitta	Rural	899	1010	1909
	Urban	1	0	1
	Total	900	1010	1910

Source: Census, 2011

Table 3.36*Malavedan Tribal Community in Kottayam*

Malavedan Population(Kerala)	8149
% to Total Tribal Population (Kerala)	1.68
Malavedan Population (Kottayam)	2214
% to total Malavedan Population (Kerala)	27.16

Source: Census, 2011

Eravalan

In the past, the Eravalans were referred to as "VilluVedan", which means hunters using bow-and-arrows. They can speak Malayalam to others, but they speak a rough form of Tamil among themselves. Eravalans are landless agricultural labourers who work for the local landlords. They are experts in ploughing dry lands for the cultivation of various crops.

Table 3.37*Eravalan Population (Kerala)*

	Male	Female	Total
Rural	2349	2427	4776
Urban	13	8	21
Total	2362	2435	4797

Source: Census, 2011

Table 3.38

Background Information(Eravaian Community)

Sex Ratio	1031
Literacy Rate	53
Male Literacy Rate	56.7
Female Literacy Rate	49.4
Work Participation Rate	58.4

Source: Census, 2011

Table 3.39

Highly Populated Districts in Kerala (Eravaian Community)

District		Male	Female	Total
Palakkad	Rural	2336	2419	4755
	Urban	0	0	0
	Total	2336	2419	4755
Ernakulam	Rural	0	0	0
	Urban	11	7	18
	Total	11	7	18
Wayanad	Rural	6	4	10
	Urban	0	0	0
	Total	6	4	10

Source: Census, 2011

Table 3.40

Eravaian Tribal Community in Palakkad

Eravaian Population(Kerala)	4797
% to Total Tribal Population (Kerala)	0.98
Eravaian Population (Palakkad)	4755
% to total Eravaian Population (Kerala)	99.12

Source: Census, 2011

Malasar

Members of the Malasar community can be found in the surrounding regions of Tamil Nadu as well as in the plains and valleys of the Palakkad District. They had lost their control over resources, and they now rely on manual labour to lead their daily life.

Table 3.41*Malasar Population (Kerala)*

	Male	Female	Total
Rural	1593	1584	3177
Urban	14	4	18
Total	1607	1588	3195

Source: Census, 2011

Table 3.42*Background Information (Malasar Community)*

Sex Ratio	988
Literacy Rate	48.7
Male Literacy Rate	52.1
Female Literacy Rate	45.4
Work Participation Rate	55.3

Source: Census, 2011

Table 3.43*Highly Populated Districts in Kerala (Malasar Community)*

District		Male	Female	Total
Palakkad	Rural	1577	1562	3139
	Urban	1	1	2
	Total	1578	1563	3141
Ernakulam	Rural	4	3	7
	Urban	4	1	5
	Total	8	4	12
Kottayam	Rural	5	7	12
	Urban	0	0	0
	Total	5	7	12

Source: Census, 2011

Table 3.44*Malasar Tribal Community in Palakkad*

Malasar Population(Kerala)	3195
% to Total Tribal Population (Kerala)	0.65
Malasar Population (Palakkad)	3141
% to total Malasar Population (Kerala)	98.30

Source: Census, 2011

Malayan

Malayan community (excluding the areas comprising Kasaragod, Kannur, Wayanad and Kozhikod districts) recognised as Scheduled Tribes have two sub divisions, viz; ‘Nattu Malayan’ who are the original inhabitants in the hill areas of Kerala and ‘Konga Malayan’ who appears to have migrated from the forests of Coimbatore district in Tamil Nadu. Malayan community is mainly settled in Ernakulam, Thrissur and Palakkad Districts. The collection of non-timber forest products and forest labour are the main jobs of the Malayan community. However, much of their cultivation has been restricted by the Forest Laws. Area restrictions had been imposed in the case of Malayan community.

Table 3.45*Malayan Population (Kerala)*

	Male	Female	Total
Rural	2806	2935	5741
Urban	84	92	176
Total	2890	3027	5917

Source: Census, 2011

Table 3.46*Background Information (Malayan Community)*

Sex Ratio	1047
Literacy Rate	64.4
Male Literacy Rate	69.7
Female Literacy Rate	59.3
Work Participation Rate	49.2

Source: Census, 2011

Table 3.47*Highly Populated Districts in Kerala (Malayan Community)*

District		Male	Female	Total
Trissur	Rural	1110	1304	2414
	Urban	16	34	50
	Total	1126	1338	2464
Palakkad	Rural	1098	1091	2189
	Urban	40	33	73
	Total	1138	1124	2262
Idukki	Rural	324	301	625
	Urban	1	1	2
	Total	325	302	627

Source: Census, 2011

Table 3.48*Malayan Tribal Community in Palakkad*

Malayan Population(Kerala)	5917
% to Total Tribal Population (Kerala)	1.22
Malayan Population (Palakkad)	2262
% to total Malayan Population (Kerala)	38.22

Source: Census, 2011

3.5 Conclusion

With a particular emphasis on Scheduled Tribes in Kerala, the chapter has given a thorough outline of financial inclusion and financial literacy. It has also been discovered that financial literacy is a fundamental requirement for meaningful interaction with the contemporary complicated financial system, in addition to being a skill. In order to prevent exploitation and promote economic empowerment, financial literacy is essential for historically marginalised groups such as Scheduled Tribes. Scheduled Tribes continue to face institutional obstacles that prevent them from effectively accessing and using financial services, despite regulatory interventions and inclusion initiatives. These obstacles include geographic isolation, sociocultural marginalisation, and infrastructure deficiencies. In order to address these

disparities, inclusive financial ecosystems that are sensitive to cultural differences and context-specific must be adopted in addition to focused financial education. To create financially empowered societies, developed countries have adopted a variety of financial literacy strategies, including digital financial education platforms, national campaigns, and school-based curriculum. Such strategies provide valuable insight for India as it improves its own financial literacy framework, particularly for the underprivileged population. Through organized programs, policy directives, and cooperative efforts with banks, non-governmental organizations, and academic institutions, financial sector regulators like the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority of India (IRDAI), and Pension Fund Regulatory and Development Authority (PFRDA) have been leading the charge to promote financial literacy and inclusion. But assuring last-mile delivery especially to isolated and tribal areas remains a persistent concern. A multifaceted and collaborative strategy that combines regulatory assistance, international best practices, grassroots level outreach, and culturally appropriate financial education is needed to integrate financial literacy and inclusion policies with the developmental needs of Scheduled Tribes. This alignment is essential for all segments of society to have sustainable and fair economic growth.

References

- Amagir, A., Groot, W., Brink, H. M., & Wilschut, A. (2018). A Review of Financial Literacy Education Programs for Children and Adolescents. *Citizenship, Social and Economics Education*, 17(1), 56-80.
- BRICS.(2021). *BRICS digital financial inclusion report 2021*.
- Chakrabarty, K. C. (2011). *Financial inclusion: A road India needs to travel* [Speech]. Finance Inclusion Summit 2011, organised by SKOCH Development Foundation, New Delhi. Reserve Bank of India.
- Collard, S., Kempson, E., & Whyley, C. (2001). *Tackling financial exclusion: An area-based approach*. The Policy Press.
- Committee on Financial Inclusion (2008). *Report of the Committee on Financial Inclusion* (Chair: C. Rangarajan). Government of India, Ministry of Finance.
- Committee on Financial Sector Reforms. (2008). *A hundred small steps: Report of the Committee on Financial Sector Reforms* (Chair: Raghuram G. Rajan). Government of India, Planning Commission.
- CRISIL.(2018, February). *CRISIL Inclusix: Financial inclusion surges, driven by Jan-Dhan Yojana* (Vol.4).
- Das, R. (2011). An empirical analysis on preferred investment avenues among rural and semi-urban households. *Journal of Frontline Research in Arts and Science*, 1, 26–36.
- Das, S. (2021, July 15). *Inaugural address at Economic Times Financial Inclusion Summit* [Speech]. Economic Times Financial Inclusion Summit, New Delhi. Reserve Bank of India.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://www.worldbank.org/en/publication/globalfindex>

- Elonge, M. (2013). An evaluation of financial literacy in elementary schools towards financial education enhancement: A case study of Baltimore public school. *Literacy Information and Computer Education Journal*, 4(4).
- Iyer, L. A. K. (1937). *The Travancore tribes and castes* (pp. 161–201). Government Press.
- Kempson, E., & Whyley, C. (1999). *Kept out or opted out? Understanding and combating financial exclusion*. The Policy Press/Joseph Rowntree Foundation.
- Kerala Institute for Research, Training and Development Studies of Scheduled Castes and Scheduled Tribes. (2018, March). *A comparative study on the influence of developmental projects among Paniya and Kurichiya tribal communities in the Wayanad district*. Department of Developmental Studies, KIRTADS.
- Kerala State Planning Board. (2022, March). *Fourteenth Five-Year Plan (2022–2027): Working Group report on scheduled tribes development*. Government of Kerala.
- Kerala State Planning Board. (2024, January). *Economic review 2023* (Vol. 1). Kerala State Planning Board. https://spb.kerala.gov.in/sites/default/files/2024-02/ER_English_Vol_1_2023.pdf
- Kerala State Planning Board. (2025, January). *Economic review 2024* (Vol. 1). Government of Kerala.
- Klapper, L., Singer, D., Starita, L., & Norris, A. (2025). *The Global Findex Database 2025: Connectivity and financial inclusion in the digital economy*. World Bank. <https://doi.org/10.1596/978-1-4648-2204-9>.
- Leyshon, A., & Thrift, N. (1995). Geographies of financial exclusion: Financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers*, 20(3), 312–341.
- Luiz, A. A. D. (1962). *Tribes of Kerala*. Bharatiya Adimajati Sevak Sangh.
- Mathur, P. R. G. (1977). *Tribal situation in Kerala*. Kerala Historical Society.

- Mini, P. V., & Suresh, K. P. (2022). *Documentation of tangible and intangible heritage of scheduled tribes of Kerala: Wayanad district*. Kerala Institute for Research, Training and Development Studies of Scheduled Castes and Scheduled Tribes (KIRTADS).
- Mohanty, D., Dongare, A., & Singh, P. (2022). *Pension for the common person: Progress of Atal Pension Yojana* (PFRDA Working Paper Series No. 2022-23(2)). Pension Fund Regulatory and Development Authority.
- National Bank for Agriculture and Rural Development.(2024). *Annual report 2023–24*.NABARD.<https://www.nabard.org/annual-report/index.html>
- National Centre for Financial Education. (2019). *National Financial Literacy and Inclusion Survey (NCFE-FLIS) 2019: Main report* (June 2018 – October 2019). <https://www.ncfe.org.in>
- Organisation for Economic Co-operation and Development. (2005). *Improving financial literacy: Analysis of issues and policies*. OECD Publishing.
- Organisation for Economic Co-operation and Development.(2017). *G20/OECD INFE report on adult financial literacy in G20 countries*. OECD Publishing. <https://www.oecd.org/financial/education/G20-OECD-INFE-Report-Adult-Financial-Literacy-G20-Countries.pdf>.
- Organisation for Economic Co-operation and Development.(2023). *OECD/INFE 2023 international survey of adult financial literacy*. OECD Publishing. <https://www.oecd.org/financial/education/oecd-infe-2023-international-survey-of-adult-financial-literacy.pdf>
- Panoor, K. (1971). *Keralathile Africa* [In Malayalam].SahityaPravarthaka Co-operative Society Ltd./Rawat Publications.
- Patra, M. D. (2021). *Financial technology: Opportunities and challenges* [Speech]. 7th IBA Banking Technology Awards.Reserve Bank of India.

Reserve Bank of India. (2019). *National strategy for financial inclusion 2019–2024: An approach paper to accelerate financial inclusion*. Reserve Bank of India.<https://www.rbi.org.in>

Reserve Bank of India. (2019). *National strategy for financial inclusion 2019–2024: An approach paper to accelerate financial inclusion*. Reserve Bank of India.<https://www.rbi.org.in>

Reserve Bank of India.(2025). *Annual report 2024–25*.Reserve Bank of India.<https://www.rbi.org.in>

Rutledge, S. L. (2010). *Consumer protection and financial literacy: Lessons from nine country studies* (Policy Research Working Paper No. 5326). World Bank.

Scheduled Tribes Development Department, Government of Kerala.(2013, November).*Scheduled tribes of Kerala: Report on the socio-economic status*. Government of Kerala.

Servon, L. J., &Kaestner, R. (2008).Consumer financial literacy and the impact of financial education programs.*The Journal of Consumer Affairs*, 42(2).

Shanthudu, D. (1993). *Institutional finance and tribal development*.Manak Publications Pvt. Ltd.

Sharma, A. K., Sengupta, S., Roy, I., &Phukan, S. (2021). Financial inclusion index for India.*RBI Bulletin, September 2021*, 89–96. Reserve Bank of India.

Singh, K. S. (Ed.). (2002). *People of India: Kerala* (Vol. XXVII, Part 1). Anthropological Survey of India; East-West Press Pvt. Ltd.

Subbarao, D. (2010, March 22–23). *Delivering financial literacy – Challenges, approaches and instruments* [Speech]. RBI–OECD Workshop, Bangalore. Reserve Bank of India &Organisation for Economic Co-operation and Development.

Sun, S., chen, Y., Ansong, D., Huang, J., & Sherraden, M. S. (2022). Households Financial Capability and Economic Hardship: An Empirical Examination of

the Financial Capability Framework. *Journal of Family and Economic Issues*, 716-729.

Thurston, E. (1975). *Castes and tribes of southern India* (Vol. 15). Cosmo Publications. (Original work published 1909)

United Nations Secretary-General's Special Advocate for Inclusive Finance for Development. (2024). *Foundational building blocks for financial inclusion: Insights and call to action to reach the last mile*. <https://www.unsgsa.org>

United Nations. (2006). *Building inclusive financial sectors for development*. United Nations Publications.

World Bank. (2014). *Global financial development report 2014: Financial inclusion*. World Bank.

References (Websites)

- <https://www.rbi.org.in/Scripts/AnnualReportPublications>
- <https://www.gpfi.org/publications/global-partnership-financial-inclusion-gpfi-china-2016-priorities-paper>.
- <https://dbtbharat.gov.in/>
- <https://financialservices.gov.in/beta/en>
- <https://www.pmjdy.gov.in/>
- <https://collegiateedu.kerala.gov.in/?lang=en>
- <https://slbckerala.com/>

Chapter 4

ANALYSIS AND DISCUSSION

4.1	Introduction	183
4.2	Profile of the Sample	184
4.3	Financial Literacy among the Tribal Communities	194
4.4	Financial Inclusion among the Tribal Communities	236
4.5	Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities	252
4.6	Status of Financial Planning, Financial Anxiety and Financial Confidence among the Tribal Households	259
4.7	Financial Development of Tribal Communities	287
4.8	Conclusion	291
	References	293

4.1 Introduction

Data analysis is a critical stage of the research as it transforms raw data into meaningful information relevant to the research objectives and hypotheses. This chapter provides a structured examination of the data collected by employing appropriate statistical techniques and methodologies. The analysis is guided by research questions and structured to provide clear, evidence-based explanations of the outcomes. This chapter discusses the analysis of primary data collected for the purposes of assessing the level of financial literacy and the extent of financial inclusion among the tribal communities in Kerala. The analysis aims to provide a critical insight into the trends, determinants and gap of financial literacy, financial inclusion and financial environment in addition to providing workable recommendations for the financial development of the tribal communities. Descriptive statistical techniques and methods as well as inferential statistical techniques and methods are used for the purposes of analyzing the data according to the research objectives. Descriptive statistics such as frequencies, percentages, mean and standard deviation are used for the purposes of summarising socio-demographic characteristics and for displaying the status of financial landscape of the Scheduled Tribes in Kerala. Inferential statistical methods including One-sample t-tests, Independent samples t-test, Chi-square tests, One-Way Analysis of variance (One-Way ANOVA), Friedman test, Scheffe test, Sobel test, Pearson correlation, Simple linear regression, Multiple linear regression and Structural Equation Modeling are used for the purposes of analyzing significant gaps between socio-demographic groups, identifying influencing factors and assessing the relationship between financial literacy and financial inclusion. The data are examined in accordance with the conceptual framework and the theoretical base of the study so as to align the

research design and outcome interpretation. Tables, figures, and charts were used wherever necessary for clarity and comprehension.

4.2 Profile of the Sample

The description of the sample provides a close analysis of the socio-demographic attributes of the persons selected for the study. It highlights significant factors such as geographic area, community, age, gender, educational level, occupation, level of income and other relevant indicators.

Table 4.1

Region Wise Distribution of Respondents

Region	n	%
North	150	33.33
Central	150	33.33
South	150	33.34
Total	450	100.00

Source: Primary Data

Distribution of the sample over three various regions are presented in Table 4.1 and all the three regions contain the same proportion of the sample. The cumulative sample consists of 450 respondents and the data were obtained from 150 respondents (33.33% of the cumulative sample) from each of the three regions. The districts chosen from each region were Wayanad from the north region, Palakkad from the central region and Kottayam from the south region respectively.

Table 4.2

Community Wise Distribution of Respondents

Community	n	%
Adiyan	50	11.11
Eravalan	50	11.11
Kurichiyan	50	11.11
Mala Arayan	50	11.11
Malasar	50	11.11

Community	n	%
Malavedan	50	11.11
Malayan	50	11.11
Paniyan	50	11.11
Ulladan	50	11.11
Total	450	100.00

Source: Primary Data

Table 4.2 depicts the proportion of the participants sampled from nine tribal communities. The study included 50 respondents from each of the following communities: Adiyen, Eravalan, Kurichiyan, Mala Arayan, Malasar, Malavedan, Malayan, Paniyan and Ulladan which individually forms 11.11% of the total sample size. This equal division guarantees adequate representation of all the nine communities and makes for a good comparison between the sampled tribal groups.

Table 4.3

Gender Wise Distribution of Respondents

Gender	n	%
Male	359	79.78
Female	91	20.22
Total	450	100.00

Source: Primary Data

The gender wise distribution of the respondents given in Table 4.3 indicates that out of the total of 450 participants, 359 participants (79.78%) are male and 91 (20.22%) are females. This information clearly shows a significant gender imbalance in the sample with the male participants making up a vast majority.

Table 4.4

Age Wise Distribution of Respondents

Age	n	%
Below 35	34	7.57
35-39	91	20.22
40-44	109	24.22
45-49	110	24.44

Age	n	%
50-54	45	10.00
55-59	32	7.11
60 and above	29	6.44
Total	450	100.00

Source: Primary Data

The age-wise distribution of the respondents shown in Table 4.4 indicates that 24.44% of respondents belong to the age group 45–49, followed by the age group of 40–44 (24.22%). The respondents belong to the age group 35–39 comes to 20.22%.

Conversely, the age groups of 50–54 (10 %), less than 35 (7.57%), 55–59 (7.11%), and the age group of 60 years and older (6.44%) record lower figures. Altogether, the result shows that a maximum number of the respondents from the mid-adult segment of the age group of 35 to 49 years, which covers a total of 68.88%.

Table 4.5

Educational Qualifications of the Respondents

Education	N	%
No Education	67	14.89
Lower Primary	119	26.44
Upper Primary	83	18.44
High School	134	29.78
Higher Secondary	29	6.44
College or Higher Level of Education	18	4.00
Total	450	100.00

Source: Primary Data

Table 4.5 shows the educational qualification of the respondents. Nearly one-third of the respondents (29.78%) have high school education, followed by lower primary education (26.44%). Respondents with Upper Primary education comes to 18.44%. Only 14.89% are not educated. Education up to the higher secondary level comes only 6.44% and only negligible percentage (4.00%) have been educated up to the

College or higher level of education. The overall data indicates that a majority of the respondents have a high school level of education.

Table 4.6

Occupation of the Respondents

Occupation	n	%
Unskilled Labour	346	76.89
Transport	38	8.44
Low Skilled Service	14	3.11
Agriculture	26	5.79
Business/Retail	3	0.67
Government Service	7	1.56
Technical/Clerical	6	1.33
Retired	6	1.33
Community/Household Work	2	0.44
Healthcare	2	0.44
Total	450	100.00

Source: Primary Data

From Table 4.6 it is clear that the vast majority of the population, which makes up 76.89%, is occupied as unskilled labour. Coming next are those involved in the transport sector (8.44%) and those involved in agricultural jobs (5.79%). Low-skilled service jobs represent 3.11% of the population sampled. A smaller segment includes those working for government service (1.56%), technical/clerical (1.33%), and retired employees (1.33%). A negligible number of respondents work for business/retail (0.67%), Household/community work (0.44%) and health care (0.44%). On the whole, it can be stated that a large segment of the tribal workforce are occupied in unskilled jobs and a few number of respondents are engaged in formal or skilled jobs.

Table 4.7*Participation of Respondents in the MGNREGA*

Participation in the MGNREGA	n	%
Yes	248	55.11
No	202	44.89
Total	450	100.00

Source: Primary Data

Table 4.7 shows the level of the respondents' engagement in the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). A good majority (55.11%) of respondents are participating in the MGNREGA Programme whereas 44.89% of the respondents are not involved in MGNREGA Programme. This demonstrates the notable importance of the approach of the respondents as a job and livelihood support strategy. The significant level of the uninvolved population demonstrates the potential for barriers or other avenues for employment as factors for their absence of involvement.

Table 4.8*Monthly Income of the Respondents*

Monthly Income	n	%
Up to ₹2500	24	5.33
₹2501-₹5000	234	52.00
₹5001-₹7500	119	26.44
₹7501-₹10000	40	8.90
Above ₹10000	33	7.33
Total	450	100.00

Source: Primary Data

The breakup of monthly income of the respondent given in Table 4.8 shows that a majority (52%) of the respondents belonging to the monthly income level ₹2,501 and ₹5,000.

Further, 26.44% of respondents have incomes between ₹5,001 and ₹7,500, and another 8.90% have incomes between ₹7,501 and ₹10,000. Only 7.33% of

respondents have incomes of more than ₹10,000 each month. The rest, a mere 5.33%, come in the lowest income group, i.e., up to ₹2,500. Overall, a vast majority of respondents earn meager salaries per month, with a few turning up for the higher income groups.

Table 4.9

Total Number of Family Members

Total Family Members	n	%
1	5	1.11
2	28	6.22
3	68	15.12
4	100	22.22
5	100	22.22
6	77	17.11
7	37	8.22
8	34	7.56
9	1	0.22
Total	450	100.00

Source: Primary Data

Table 4.9 depicts the distribution of the participants based on the number of people living in their households. The most commonly reported family sizes include those with 4 and those with 5 members, each taking up a share of 22.22% of the total sample. Families with 6 members come to 17.11%, followed by families with 3 members (15.12%). Families with two, 7 and 8 members come to 6.22%, 8.22% and 7.56% respectively. Households with a single member come to 1.11% and those with nine members come to 0.22% that is extremely uncommon. Overall, it can be stated that a majority of respondents belong to medium-sized families having number of members falling between 3 and 6.

Table 4.10*Total Number of Members below 15 Years of Age*

Number of Members Below 15 Years of Age	n	%
0	178	39.56
1	128	28.44
2	123	27.33
3	19	4.22
4	2	0.44
Total	450	100.00

Source: Primary Data

The figures given in Table 4.10 indicate that 39.56% of the households are not having any member below the age of 15. Families with one child or two children below the age of 15 years come to 28.44% and 27.33% respectively. The families with three or four members below the age of 15 years are 4.22% and 0.44% respectively. The overall figures indicate that even though many families had one or more dependents below the age of fifteen years, a large percent do not have young dependents.

Table 4.11*Total Number of Members above 65 Years of Age*

Number of Members Aged 65 Years and Above	n	%
0	215	47.78
1	114	25.33
2	121	26.89
Total	450	100.00

Source: Primary Data

The Table 4.11 provides a snapshot of the number of members above 65 years of age. Nearly one-half of the families (47.78%) have no members above 65 years of age. Approximately one-quarter (25.33%) have a single elderly member, while

26.89% of the families have two members above 65 years of age. On the whole it can be stated that almost one-half the families lack members above 65 years of age.

Table 4.12

Total Number of Earning Members in the Household

Total Number of Earning Members	n	%
1	110	24.44
2	184	40.90
3	128	28.44
4	25	5.56
6	1	0.22
7	2	0.44
Total	450	100.00

Source: Primary Data

In Table 4.12, a very good proportion of households (40.90%) have two earning members while 28.44% of households have three earning members and 24.44% have only one earning member. Only 5.56% of households have four wage earning members followed by 6 earning members (0.22%) and seven earning members (0.44%). The result clearly indicates that economic responsibilities are moderately shared among family members because most households rely on two or three income earners for sustaining their financial needs.

Table 4.13

Total Income of the Household

Monthly Income	n	%
Up to ₹5000	72	16.00
₹5001-₹10000	263	58.44
₹10001-₹15000	76	16.89
Above ₹15000	39	8.67
Total	450	100.00

Source: Primary Data

The monthly income of households given in Table 4.13 indicates that a good majority (58.44%) fall into the income group ₹5,001-₹10,000. Respondent with monthly income ₹10,001-₹15,000 comes to 16.89% and 16% fall into the monthly income ₹5,000 and below. Only 8.67% of the respondents state that their household earn over ₹15,000 a month. This reflects the fact that a significant number of the households interviewed fall into the lower income bracket.

Table 4.14

Average Daily Expenses of the Household

Average Daily Expenses	n	%
Up to ₹500	112	24.89
₹501-₹1000	148	32.89
₹1001-₹1500	112	24.89
Above ₹1500	78	17.33
Total	450	100.00

Source: Primary Data

Table 4.14 shows that 32.89% of the households fall between a daily spending of ₹501 and ₹1,000 followed by 24.89% fall into one of the two classes: up to ₹500 or ₹1,001-₹1,500. The daily spending of households over ₹1,500 comes to 17.33%. The pattern for this distribution should be considered seriously as a trend since a majority of the respondents spent more than Rs.500 a day. Their income should be compared with their spending for ascertaining the state of the financial stability.

4.2.1 Relationship between Income and Expenses of the Scheduled Tribes

The relationship between Income and expenses reflects the financial stability of the Scheduled Tribes. An estimation of the relationship tells us whether their income is sufficient for meeting household requirements, the quantum of saving/deficit and the pattern of expenses. Such an analysis would be helpful in assessing financial vulnerabilities and for making planning policies for increasing their economic well-being and financial inclusion.

Ho: There is no significant relationship between income and expenses of the Scheduled Tribes

Table 4.15

Relationship between Income and Expenses

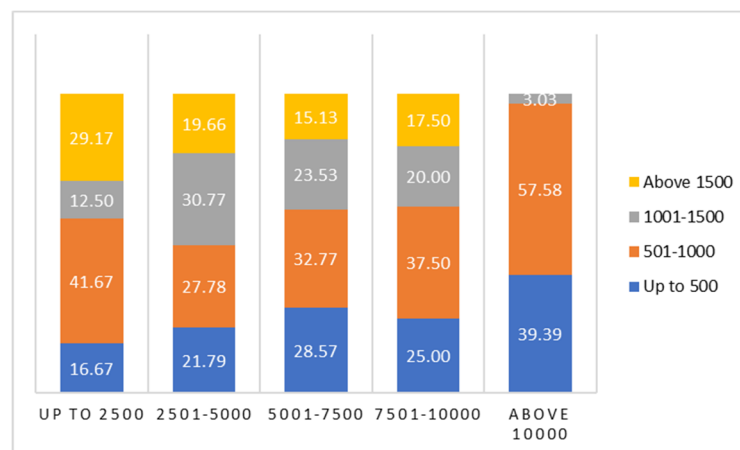
Monthly Income	Average Expenses							
	Up to ₹500		₹501-₹1000		₹1001-₹1500		Above ₹1500	
	n	%	n	%	n	%	n	%
Up to ₹2500	4	16.67	10	41.67	3	12.50	7	29.17
₹2501-₹5000	51	21.79	65	27.78	72	30.77	46	19.66
₹5001-₹7500	34	28.57	39	32.77	28	23.53	18	15.13
₹7501-₹10000	10	25.00	15	37.50	8	20.00	7	17.50
Above ₹10000	13	39.39	19	57.58	1	3.03	0	0.00
Pearson r	-0.197							
Correlation Sig.	0.000							

Source: Primary Data

The analysis of the relationship between income and expense given in Table 4.15 indicates that the p-value is less than 0.05 and the r value is negative. The Pearson correlation test reveals a significant negative relationship between income and expenses. Hence it can be stated that the increased monthly income is matched with reduced expenses.

Figure 4.1

Relationship between Income and Expenses



Source: Primary Data

In Figure 4.1, the lower income respondents (Up to ₹2500) mainly spend ₹501– ₹1000 a day. As income increases, the proportion of households incurring higher expenses (₹1001–₹1500 and above ₹1500) generally declines except for a slight rise in the ₹7501–₹10,000 income group. In the top income group (above ₹10,000) more than one-half of the households (57.58%) spend between ₹501 and ₹1000, a substantial share (39.39%) spend up to ₹500 and none spend more than ₹1500. This pattern supports the negative Pearson correlation indicating that higher income levels are moderately associated with lower expenditure.

4.3 Financial Literacy among the Tribal Communities

Financial literacy of the tribal communities is measured using four critical components: financial knowledge, financial behaviour, financial attitude and financial awareness. Most of the questions for assessing financial knowledge, behaviour and attitude were modified versions of the OECD/INFE International Survey of Adult Financial Literacy (Organisation for Economic Co-operation and Development, 2023) by considering it in the context of local population.

The level of financial literacy of the respondent is independently ascertained by the Individual Financial Literacy Score (IFLS) where the maximum attainable score is 100 and minimum score is 0. The minimum score of 70 (or 70%) would qualify a person as a financial literate. The minimum target level score for the financial literacy is specified as a score of at least 70 points out of a maximum attainable score of 100 points (Organisation for Economic Co-operation and Development, 2023). The allocation of scores appears as follows: Financial Knowledge – 12 score, Financial Behaviour – 32 score, Financial Attitude – 20 score and Financial Awareness – 36 score.

4.3.1 Financial Knowledge

Financial knowledge is commonly defined as the cornerstone of financial literacy, facilitating the effective interpretation and use of financial information for everyday purposes. It encompasses the capability of comprehending basic concepts including

interest rates, inflation, risk diversification and the operations of financial products and financial services.

Table 4.16

Financial Knowledge of the Respondents

Aspects	Response	n	%
Inflation knowledge	Less than today	191	42.44
	More than today	123	27.33
	The same as today	102	22.67
	Don't Know	34	7.56
Interest Rate	0%	245	54.44
	5%	55	12.22
	10%	113	25.11
	25%	37	8.22
Diversified Investment	TRUE	255	56.67
	FALSE	119	26.44
	Don't know	76	16.89
Total		450	100.00

Source: Primary Data

Table 4.16 depicts the level of understanding of respondents regarding inflation, interest rates and diversified investments. At the beginning, considering the level of understanding of inflation, 42.44% of the respondents stated that the value of the money would be lower than today which depicts the right answer for the given question. The respondents went wrong in providing the right answer for the questions involving inflation by a margin of 57.56%, of which 27.33% forecast the value of the money to be higher than today. Approximately 22.67% forecast the value would be the same as today and 7.56% stated that they do not know. This reflects a moderate level of awareness among the respondents with the larger share underestimating the future trends of inflation. Regarding the computation of interest rate, a good majority (54.44%) got the right interest rate as 0% for the scenario presented. This shows a fair level of comprehension among the respondents regarding this specific financial concept. Nevertheless, 25.11% picked 10%, 12.22% picked 5%, and 8.22% picked

25%, demonstrating that almost 50% of the respondents did not have the right knowledge in this regard. Such misunderstandings may negatively impact their future financial choices, particularly regarding the aspect of borrowing, saving and investment planning.

Regarding the diversified investment knowledge, where the correct answer is "True," a majority of respondents (56.67%) accurately indicated that diversified investment helps to lower risk in the investment. This shows that more than 50% of the respondents understand the principle of diversification to some extent which forms the cornerstone for reducing the investment risk and generating stable returns. However, 26.44% of the respondents incorrectly opined that diversification does not help to lower the risk by stating their response as False while 16.89% stated that they do not know. This suggests that almost 43% of the respondents neither understand the concept nor the effect of diversification. Thus potentially constraining them from making effective investment decisions and managing financial risk.

4.3.2 Financial Behaviour

Financial behaviour involves the actions, choices, and practices undertaken by individuals during management of their financial resources. Financial behaviour embodies regular financial management activities such as saving, spending, borrowing, budgeting and investing. Sound financial behaviour is usually characterized by the financial knowledge, attitudes and socio-economic status of a person and it plays critical role in determining financial well-being and future stability.

4.3.2.1 Person Making Household Financial Decision

The decision-maker for financial matters of the household unit occupies the focal position for allocating, saving or investing the incomes and resources of the family. Understanding the decision-maker of a household unit also figures importantly since the decisiveness of the member substantially influences the financial stability, wellbeing and access to the formal financial system within the household.

Table 4.17*Person Making Household Financial Decision*

Person	n	%
Self	185	41.11
Jointly	249	55.33
Friends	1	0.22
Relatives	7	1.56
Others	8	1.78
Total	450	100.00

Source: Primary Data

Table 4.17 shows the distribution of respondents according to those who mainly decide financial matters in their households. It becomes evident that the greatest number of respondents (55.33%) take financial decisions jointly. This further reveals the sharing of financial decision-making between spouses or members of a household thereby indicating the participatory financial management practice. Conversely, 41.11% indicated independent financial decision-making (Self), revealing a significant number of individuals exercising control over household financial matters. The lower percentage solely depended on others with a mere 1.78% indicating 'Others', 1.56% indicating 'Relatives' and a meagre 0.22% depending on 'Friends' for making financial decisions in the household. This prevalence indicate negligible leaning towards external individuals for financial administration of the household.

4.3.2.2 Status of Making Personal Financial Decision

Table 4.18 shows the distribution of the respondents based on their role in personal financial decision-making. The table captures whether the individuals take decisions by themselves or leave financial decisions to other external individuals.

Table 4.18*Status of Making Personal Financial Decision*

Status	n	%
Yes	394	87.56
No	56	12.44
Total	450	100.00

Source: Primary Data

The results given in Table 4.18 confirm that a vast majority (87.56%) of the participants are independently making their personal finance decisions. This reflects a high level of self-reliance and responsibility among the respondents in the administration of their financial matters which may correspondingly be attributed to heightened self-confidence in financial matters. Conversely, only 12.44% of the participants stated that they are not making personal financial decisions independently, which implies a negligible proportion leaving the management of financial matters to the external forces. This group may contain individuals depending upon family members or other trusted persons due to the reasons such as age, lack of adequate financial knowledge or traditional household structures.

4.3.2.3 Financial Management Practices

Table 4.19 shows the prevalence and percentage of respondents following particular core financial management practices. The answers fall into one of two categories: "Yes" or "No," across six key practices

Table 4.19*Financial Management Practices*

	Yes		No		Total	
	n	%	n	%	n	%
Create a plan to manage your income and expenses	132	29.33	318	70.67	450	100.00
Keep a record of your spending	174	38.67	276	61.33	450	100.00
Keep money for bills separate from your day-to-day spending money	152	33.78	298	66.22	450	100.00
Make a note of upcoming bills to ensure you don't miss any payments	101	22.44	349	77.56	450	100.00
Use a banking app or money management tool to track your expenses	1	0.22	449	99.78	450	100.00
Set up automatic payments for regular bills	0	0.00	450	100.00	450	100.00

Source: Primary Data

In Table 4.19, up to 29.33% of the respondents stated that they create a financial planning for managing incomes and expenses, whereas a staggering 70.67% of them did not create a proper financial planning.

Around 38.67% of them record their spending, which reflects a moderate level of consciousness for tracking spending but a high majority (61.33%) did not maintain records for spending.

Approximately one-third (33.78%) of the respondents adopt the good practice of keeping money for bills from the regular expenditure, but 66.22% did not maintain any sort of reserve for future payment from the regular expenses.

Only 22.44% of them record bill payment due date for the purpose of avoiding the missing of the bill payment. A high majority (77.56%) do not do this which shows a huge gap in financial planning discipline.

Digital usage does not exist and only 0.22% of respondents make use of a money management or a banking app while the overwhelming majority (99.78%) of the

respondents stated that they are not making use of any money management or banking app for tracking their spending.

None of the participants employs automated payment systems for payment of bills. This indicates the non-existence of automated financial management strategies.

4.3.2.4 Saving and investment Behaviour

The formal and informal saving and investment activities followed by the respondents are presented in Table 4.20.

Table 4.20

Saving Behaviour of the Respondents

	Yes		No		Total	
	n	%	n	%	n	%
Saving cash at home or in your wallet	160	35.56	290	64.44	450	100.00
Paying money into a savings/deposit account	86	19.11	364	80.89	450	100.00
Giving money to family to save on your behalf	173	38.44	277	61.56	450	100.00
Saving in an informal savings club/ Chits	150	33.33	300	66.67	450	100.00
Buying bonds or time deposits'	0	0.00	450	100.00	450	100.00
Investing in crypto-assets	0	0.00	450	100.00	450	100.00
Investing in stocks and shares	4	0.89	446	99.11	450	100.00
Saving or investing in some other way	57	12.67	393	87.33	450	100.00

Source: Primary Data

Table 4.20 shows that, the saving and investment practices of tribal communities in Kerala includes handing over money to family members for safekeeping (38.44%), followed by saving money at home or a wallet (35.56%) and taking part in informal savings clubs/chits (33.33%). Only 19.11% of respondents keep money in banks through deposit accounts. Investments in more sophisticated financial products such as stocks and shares (0.89%), time deposits or bonds (0%) and crypto-assets (0%) indicates negligible participation. Saving or investing in other ways comes to 12.67%. This implies that a good majority of respondents follow traditional and easily manageable saving and investment habits rather than formal investment avenues.

4.3.2.5 Deficit of Income

Table 4.21 shows that whether the tribal communities in Kerala generates sufficient income for their household needs or whether they earn less than what they needed causing deficiency in their income.

Table 4.21

Deficiency of Income among the Respondents

Status of Occurrence	n	%
Yes	380	84.44
No	70	15.56
Total	450	100.00

Source: Primary Data

Table 4.21 displays that 84.44% of respondents earn less than what they needed, while 15.56% of respondents did not experience it. This indicates that deficiency in income is a reality for the tribal communities which might affect their ability to conserve, level of indebtedness, and financial well-being.

Table 4.22

Strategies Adopted by Respondents to Manage Income Deficit

	Yes		No		Total	
	n	%	n	%	n	%
Used existing savings or resources	31	6.89	419	93.11	450	100.00
Found additional sources of income or support	56	12.44	394	87.56	450	100.00
Accessed credit through personal contacts or existing resources	125	27.78	325	72.22	450	100.00
Borrowed from an existing credit line	82	18.22	368	81.78	450	100.00
Took on new credit or loans	77	17.11	373	82.89	450	100.00
Fell behind on payments or exceeded arranged limits	60	13.33	390	86.67	450	100.00

Source: Primary Data

Table 4.22 reveals how individuals deal with the deficiency of income. They employ a range of strategies involving the use of own funds or by borrowing and paying later.

The most frequent approach was receiving credit from personal acquaintances or available resources (27.78%), followed by taking credit from a pre-existing credit line (18.22%) and taking up fresh loans (17.11%). A few segments used additional income or assistance (12.44%) or fell behind on payments (13.33%). A smaller proportion used their savings (6.89%), indicating that a few individuals have much financial support. The prevalence of using borrowing and credit reveals high dependence on debt to manage shortfalls. This practice without making adequate provision for saving may result in enhanced financial vulnerability.

4.3.2.6 Opinion Regarding Personal Financial Aspects

The opinion of the respondents regarding their personal finance aspect is given in Table 4.23. Here opinion is gauged over four central statements by using a five-point Likert scale ranging from Strongly Disagree to the Strongly Agree.

Table 4.23

Opinions Regarding Personal Financial Aspects

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
I keep a close watch on my personal financial affairs.	n	39	75	41	215	80	3.49	1.21	8.655	0.000
	%	8.67	16.67	9.11	47.78	17.78				
I set long-term financial goals and strive to achieve them.	n	89	92	55	125	89	3.07	1.44	1.083	0.279
	%	19.78	20.44	12.22	27.78	19.78				
Before I make a purchase, I carefully consider whether I can afford it.	n	35	112	52	139	112	3.40	1.31	6.532	0.000
	%	7.78	24.89	11.56	30.89	24.89				
I pay my bills on time.	n	62	105	70	102	111	3.21	1.40	3.201	0.001
	%	13.78	23.33	15.56	22.67	24.67				

Source: Primary Data

In Table 4.23, regarding assertion “I keep a close watch on my personal financial affairs” precisely, 47.78% agreed and 17.78% strongly agreed whereas only 8.67% strongly disagreed and 16.67% disagreed. This implies that nearly two-thirds (65.56%) keep a close eye on their financial affairs. The responses were also converted into scores and this gave a mean value of 3.49. A one-sample t- test using a test value reveals that the mean significantly higher than the midpoint of the response scale 3. The p-value (0.000) is less than 0.05 which means that there exists a significant variation between the agreement and disagreement with the aspect of keeping a close watch on personal financial affairs of the respondents. This implies that, statistically, on an average, tribal communities pay close attention to their personal financial affairs because a significant number of respondents are agreeing or strongly agreeing with the proposed statements.

Responses to setting long-term financial goals were more evenly distributed. While 27.78% agreed and 19.78% strongly agreed with the statement, indicating a proactive approach. A notable proportion disagreed (20.44%) or strongly disagreed (19.78%), suggests that there is a lack of orientation towards long-term financial planning. Additionally, 12.22% neither agreed nor disagreed indicating neutrality. The responses when converted into scores yielded a mean value of 3.07. A one-sample t- test using a test value of 3 indicates that the observed mean did not significantly differ from the midpoint of the response scale because the p-value (0.279) is greater than 0.05. This suggests that the proportion of individuals who set and strive to achieve long-term financial goals is approximately equal to those who do not or there is no significant difference between the agreement and disagreement with regards to setting long-term financial goals.

Responses indicate that a substantial proportion of respondent act prudently before making purchases. 30.89% agreed and 24.89% strongly agreed that they carefully consider whether they can afford a purchase. While 24.89% disagreed and 7.78% strongly disagreed and only 11.56% were neutral. The responses when converted into scores gave a mean value of 3.40. A one-sample t-test using a test value indicates that the mean is significantly higher than the midpoint of the response scale. The p-value

(0.000) is less than 0.05, which indicate that there is significant difference between the agreement and disagreement with regards to considering affordability before making purchases. This suggests that, on an average, tribal communities tend to consider their affordability before making purchases because a considerable number of respondents are agreeing or strongly agreeing with the given statements.

With respect to payment of bills on time, 22.67% agreed and 24.67% strongly agreed, indicating that 47.34% of the respondents pay their bills promptly. Yet, 23.33% disagreed and 13.78% strongly disagreed and 15.56% remained neutral. The responses when converted into scores gave a mean value of 3.21. A one-sample t-test with a test value shows that the mean significantly higher than the midpoint of the response scale. The p-value (0.001) is lower than the value of 0.05, which indicate the existence of significant difference between agreement and disagreement with respect to payment of bill on time. This point out that, on an average, tribal communities were aware about the payment of bill on time because a significant number of the respondents are agreeing or strongly agreeing with the statements.

4.3.3 Financial Attitude

Financial attitude refers to psychological and emotional orientation that the individuals hold towards money and financial matters. The concept of financial attitude may not only be critical for determining the financial capability of an individual but also for formulating appropriate financial education programs and financial policy measures for enhancing the financial resilience of households.

4.3.3.1 Personal Financial Attitude

Table 4.24 presents attitude of the respondents towards personal financial matters assessed across five statements using a five-point Likert scale ranging from Strongly Disagree to Strongly Agree.

Table 4.24*Personal Financial Attitude*

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
I find spending money more satisfying than saving it for the future.	n	122	130	38	125	35	2.60	1.34	-6.275	0.000
	%	27.11	28.89	8.44	27.78	7.78				
I tend to focus on living for today and worry less about tomorrow.	n	93	149	71	93	44	2.66	1.28	-5.665	0.000
	%	20.67	33.11	15.78	20.67	9.78				
I believe money is meant to be spent.	n	85	124	94	93	54	2.79	1.30	-3.384	0.001
	%	18.89	27.56	20.89	20.67	12.00				
I don't feel stressed during financial difficulties.	n	40	94	133	117	66	3.17	1.18	3.003	0.003
	%	8.89	20.89	29.56	26.00	14.67				
Financial planning is only for people with a lot of money.	n	61	97	68	78	146	3.34	1.46	4.888	0.000
	%	13.56	21.56	15.11	17.33	32.44				

Source: Primary Data

In Table 4.24, a good majority of the respondents (27.11% strongly disagreed and 28.89% disagreed) find spending money more satisfying than saving it for the future. But 27.78% agreed and 7.78% strongly agreed that they find spending money more satisfying than saving it for the future. Only 8.44% of the respondents stood neutral to this view point. Overall, the majority of respondents prefer saving for the future. This indicates that there is a sensible financial attitude among the respondents even though a sizable fraction finds satisfaction in spending. A mean value of 2.60 was obtained by converting the responses into scores. A one-sample t-test using a test value revealed that the mean is significantly lower than the midpoint of the response scale. The p-value ($0.000 < 0.05$) shows a significant difference between agreement and disagreement levels. This suggests that, on average, tribal communities are less satisfied with spending money than saving it for the future, as a substantial number of

respondents disagreed or strongly disagreed with the statement, 'I find spending money more satisfying than saving it for the future'.

A present-focused financial mindset was rejected by more than one-half of the respondents as 33.11% disagreed and 20.67% strongly disagreed to the statement 'I tend to focus on living for today and worry less about tomorrow'. At the same time, 20.67% agreed and 9.78% strongly agreed (30.45%). Only 15.78% of the respondents neither agreed nor disagreed. A mean value of 2.66 was obtained by converting the responses into scores. A one-sample t-test using a test value indicates that the mean is significantly less than the midpoint of the response scale. The p-value (0.000) is less than 0.05 which indicates that there is significant difference between the agreement and disagreement. This suggests that, on average, tribal communities is not satisfied in living a present focused life by forgetting the future because a considerable number of respondents disagreed or strongly disagreed.

Regarding the variable 'Money is to be spent', 18.89% strongly disagreed and 27.56% disagreed. This indicates that respondents reject this belief. However, 20.67% agreed and 12.00% strongly agreed to this belief that money is to be spent. Only 20.89% stood neutral in this belief. The responses when converted into scores gave a mean value of 2.79. A one-sample t-test using a test value indicates that the mean is significantly less than the midpoint of the response scale. The p-value (0.001) is less than 0.05, which point out that there is significant difference between the agreement and disagreement. This suggests that, on an average, tribal communities do not believe that money is primarily meant for spending because a substantial proportion of respondents disagree or strongly disagree with the statement "I believe money is meant to be spent".

The responses given in Table 4.24 indicate variations in stress perception among participants. A total of 40.67% of respondents (26.00% agree and 14.67% strongly agree) did not feel stress during financial difficulties, reflects a certain degree of financial resilience. In contrast, the responses of 29.78% (8.89% strongly disagree and 20.89% disagree) acknowledged experiencing stress during financial difficulties. While 29.56% remained neutral. The responses when converted into scores gave a

mean value of 3.17. Results from a one-sample t-test using a test value revealed that the mean is significantly higher than the midpoint of the response scale. The p-value (0.003) is lower than 0.05 which indicates a significant difference between agreement and disagreement levels regarding the absence of stress during financial hardships. This finding shows that, on average, tribal communities tend not to experience stress during financial difficulties, since a considerable proportion of respondents agreed or strongly agreed with the statement “I don’t feel stressed during financial difficulties”.

According to the results, a total of 49.77% of respondents (32.44% strongly agree and 17.33% agree) found financial planning was appropriate only for those with significant wealth. While a total of 35.12% of respondents (13.56% strongly disagree and 21.56% disagree) rejected this view and 15.11% were in neutral in their perception. A mean value of 3.34 was obtained by converting the responses into scores. The mean is considerably higher than the midpoint of the response scale based on the results of a one-sample t-test using a test value. Since the p-value (0.000) is less than 0.05, there is a significant difference between agreement and disagreement. This indicates that a sizable percentage of respondents agreed or strongly agreed with this statement ‘Financial planning is only for people with a lot of money’ and it appears that tribal groups generally view financial planning as primarily important to individuals with higher incomes.

4.3.4 Financial Awareness

Financial awareness refers to the extent to which individuals are conscious of financial concepts, available services and opportunities that influence their economic well-being. Unlike financial knowledge which requires a deeper understanding of concepts, financial awareness emphasizes recognition, familiarity and the ability to identify relevant financial options in everyday life (Huston, 2010).

4.3.4.1 Personal Financial Awareness

The awareness about various personal financial services and products among the Scheduled Tribe is shown in Table 4.25. The data illustrate the proportion of

individuals who are familiar with the traditional banking operations, digital financial tools and other financial services.

Table 4.25

Personal Financial Awareness

	Yes		No		Total	
	n	%	n	%	n	%
Bank Passbook	416	92.44	34	7.56	450	100.00
Depositing/Withdrawing Cash	338	75.11	112	24.89	450	100.00
Debit card/ Credit Card	219	48.67	231	51.33	450	100.00
Cheques	92	20.44	358	79.56	450	100.00
Bank Charges	88	19.56	362	80.44	450	100.00
Mobile Banking/ Internet Banking	45	10.00	405	90.00	450	100.00
UPI/Digital Payments	95	21.11	355	78.89	450	100.00
Insurance Services	143	31.78	307	68.22	450	100.00
Loan Facilities	156	34.67	294	65.33	450	100.00

Source: Primary Data

From Table 4.25, it is evident that a very high majority (92.44%) of respondents have awareness about bank passbook and about cash deposits/withdrawals (75.11%), highlighting strong familiarity of traditional banking operations. Conversely, the respondents have a very low awareness about mobile/internet banking (10.00%) and UPI/digital payment facilities (21.11%). This indicates that respondents have a substantial gap in adopting digital measures. Awareness about the use of debit/credit cards is moderate (48.67%). The awareness about cheques (20.44%) and bank charges (19.56%) are low. Similarly, awareness about financial products like insurance (31.78%) and loans (34.67%) are relatively low. Most of the respondents feel comfortable with simple, traditional banking operations and there exists a significant lag in the awareness about digital financial products and formal financial products which may restrict them from taking full advantage of a modern, technology-based financial system.

4.3.5 Individual Financial Literacy Score

The Individual Financial Literacy Score (IFLS) is a composite measure designed to assess the level of financial knowledge, behaviour, attitude and awareness of persons. This score provides a standardized way to quantify financial literacy at the individual level, enabling comparisons across demographic groups, regions or communities. Table 4.26 summarises the descriptive statistics of individual financial literacy scores of respondents along with the classification of individuals as financially literate or illiterate based on a cut-off score of 70.

Table 4.26

Individual Financial Literacy Score

Statistics	Value	Financial Literate ≥ 70		Financial Illiterate < 70	
		n	%	n	%
Mean	47.79				
Median	44.00				
Std. Deviation	26.15				
Skewness	0.24	145	32.2	305	67.8
Kurtosis	-1.21				
Minimum	0.00				
Maximum	100.00				

Source: Primary Data

In Table 4.26, the mean financial literacy score is 47.79 with a median of 44.00. This indicates that the average respondent falls well below the literacy threshold. The standard deviation of 26.15 shows wide variation in literacy levels across the sample. Scores range from 0 to 100 showing the presence of both extremely low and high literate individuals. Based on the threshold, only 32.2% are financially literate while a majority of respondents (67.8%) are financially illiterate. The skewness and Kurtosis are very much lower than the threshold value of 2.5 which indicates that the financial literacy score is almost normally distributed among the tribal population. Overall, the results highlight a significant literacy gap, underlining the need for targeted financial education initiatives.

4.3.5.1 Variation in Financial Literacy across Socio Demographic Variables

Table 4.27 shows the variation in financial literacy across different socio-demographic variables, emphasizing how factors such as gender, age, education, income, occupation and participation in the MGNREGA influences financial literacy level of the Scheduled Tribes. One-Way ANOVA test is used to evaluate the differences in the financial literacy level across socio demographic variables and the results are given in Table 4.27. By comparing mean scores and testing statistical significance through One-Way ANOVA, the table assists in determining whether disparities in financial literacy are associated with specific demographic characteristics.

Ho: There is no significant difference in the level of financial literacy across socio demographic variables.

Table 4.27

Financial Literacy Variation across Socio Demographic Variables

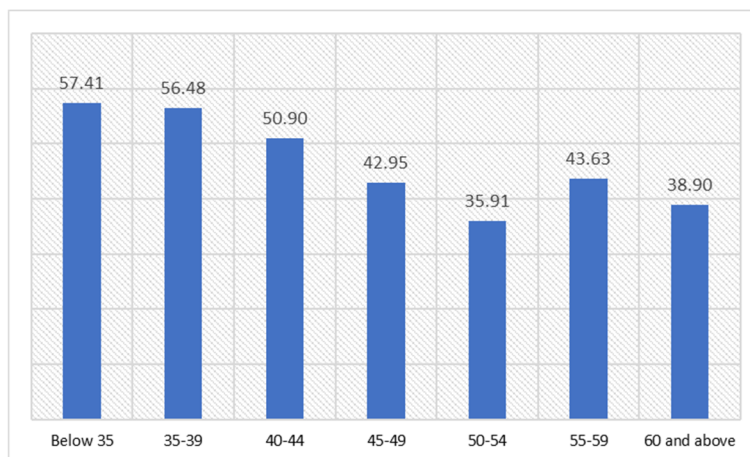
IFLS					
Variable	Category	Mean	S.D.	F	p
Gender	Male	46.58	26.40	3.771	0.053
	Female	52.53	24.73		
Age	Below 35	57.41	29.93	5.937	0.000
	35-39	56.48	24.40		
	40-44	50.90	27.99		
	45-49	42.95	23.24		
	50-54	35.91	20.17		
	55-59	43.63	24.75		
	60 and above	38.90	27.21		
Education	No Education	34.45	21.94	42.061	0.000
	Lower Primry	34.39	19.59		
	Upper Primary	41.88	23.53		
	High School	59.16	23.21		
	Higher Scondary	77.10	17.27		
	College	81.33	18.76		

IFLS					
Variable	Category	Mean	S.D.	F	p
Occupation	Unskilled Labour	44.05	24.18	6.198	0.000
	Transport	51.89	28.25		
	Low Skilled Service	59.43	32.34		
	Agriculture	59.08	29.55		
	Business/Retail	85.33	2.31		
	Government Service	78.29	15.64		
	Technical/Clerical	70.67	28.92		
	Retired	80.00	6.20		
	Community/ Household Work	84.00	11.31		
	Healthcare	24.00	0.00		
Participation in the MGNREGA	Yes	47.82	26.66	0.001	0.974
	No	47.74	25.59		
Monthly income	Up to 2500	34.50	22.00	29.171	0.000
	2501-5000	40.26	24.31		
	5001-7500	51.19	21.92		
	7501-10000	62.20	27.90		
	Above 10000	81.09	15.24		

Source: Primary Data

In Table 4.27, the mean financial literacy score is slightly higher among females ($M = 52.53$) compared to males ($M = 46.58$). However, the difference is statistically insignificant because the p-value ($p = 0.053$) is greater than 0.05. So, the null hypothesis stating that ‘there is no significant difference in the level of financial literacy across gender’ is accepted. Hence, there is no significant difference in the financial literacy level across gender.

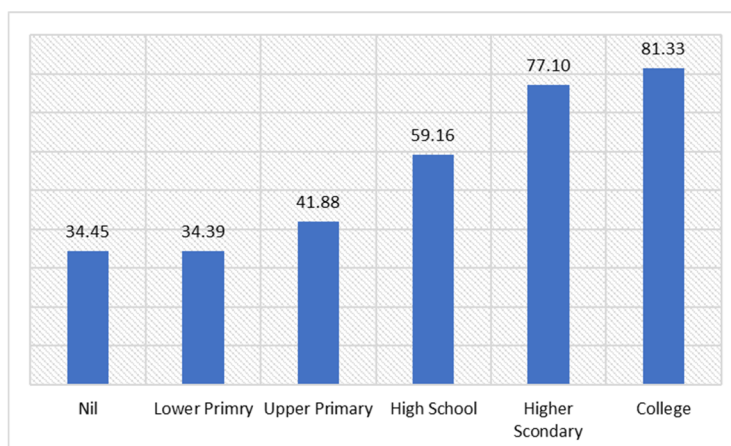
From Table 4.27, the p-value ($p=0.000$) for the variable age is less than 0.05, so the null hypotheses is rejected, which indicates that there is significant differences in financial literacy level across age groups.

Figure 4.2*Differences in Financial Literacy Level across Age Groups*

Source: Primary Data

Figure 4.2 shows that respondents below 35 years exhibit the highest mean financial literacy score ($M = 57.41$), followed closely by the 35–39 age group ($M = 56.48$). Scores decline progressively with increasing age, dropping to $M = 50.90$ in the 40–44 group and reaching the lowest in the 50–54 category ($M = 35.91$). A slight improvement is observed among respondents aged 55–59 ($M = 43.63$) and those 60 and above ($M = 38.90$).

Regarding the variable education, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which indicates that there is significant differences in financial literacy level across the level of education.

Figure 4.3*Differences in Financial Literacy Level across Education*

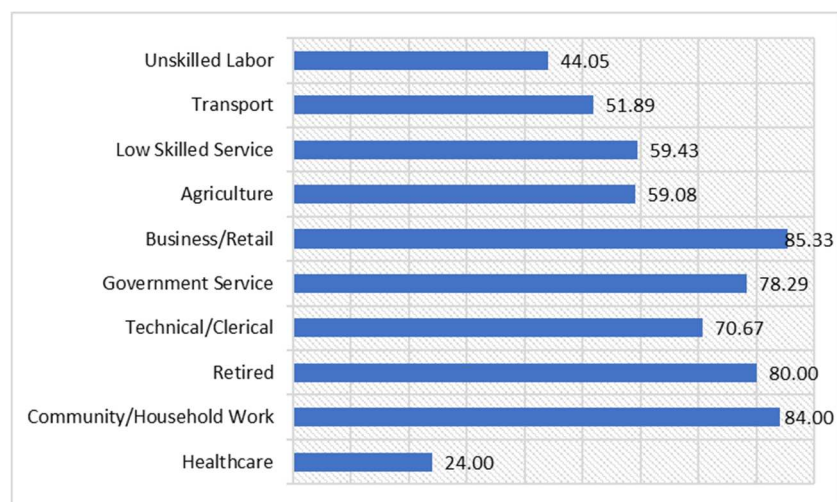
Source: Primary Data

The analysis given in Figure 4.3 demonstrates a significant positive relationship between educational level and financial literacy. The financial literacy scores improve continuously with educational level, starting from no formal education ($M = 34.45$) and up to the college level ($M = 81.33$). The lowest scores are recorded by those who have completed only lower primary school ($M = 34.39$) and those who have no formal education ($M = 34.45$). There is a moderate improvement for those with Upper Primary education ($M = 41.88$). The Financial literacy scores improve significantly at the High School level ($M = 59.16$). The greatest improvement comes for those with Higher Secondary ($M = 77.10$) as well as for those with College education ($M = 81.33$). This result indicates that a lower level of education is a prominent hurdle to financial literacy among tribal populations whereas higher education significantly reinforces financial literacy. This progressive improvement calls attention to the paramount importance of formal education in the development of financial literacy among the tribal population.

Regarding the variable occupation, p value is less than 0.05 ($p=0.000$), so the null hypothesis is rejected indicating that there is notable variations in financial literacy levels across occupations.

Figure 4.4

Differences in Financial Literacy Level across Occupation

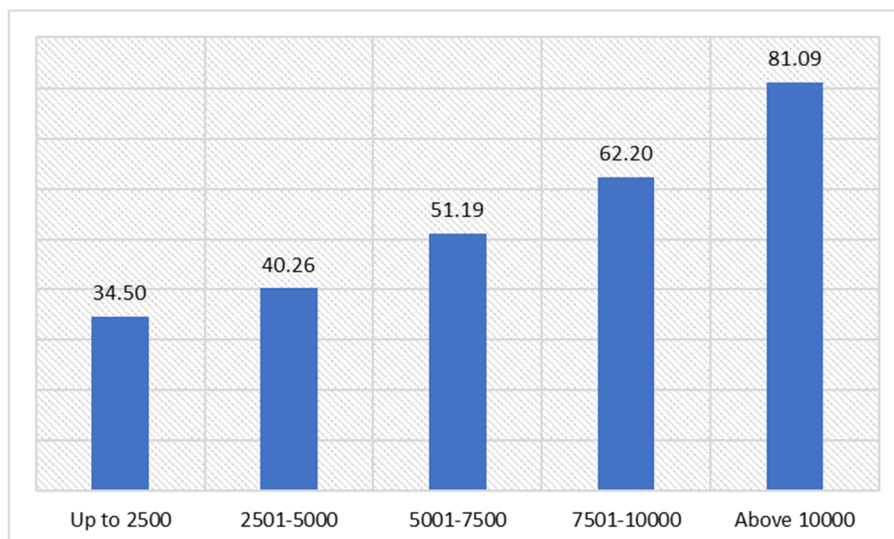


Source: Primary Data

In Figure 4.4, the highest level of financial literacy is demonstrated in the case of business/retail (85.33%), which reflects regular involvement in financial transactions and decision-making pertaining to business activities. Community/Household Work (84.00%), Retired persons (80.00%) and workers in the Government Service (78.29%) also exhibit high literacy rates, which may result from structured financial exposure, savings cultures or pension-based systems. Technical/Clerical workers (70.67%) fall into the mid-high level. In Agriculture (59.08%) and Low-Skilled Service (59.43%) workers exhibit medium levels of financial literacy, indicating partial but not adequate exposure to financial practices. Transport (51.89%) and Unskilled Labour (44.05%) express lower financial literacy, possibly reflecting erratic incomes, limited access to financial services or fewer educational support. Healthcare (24.00%) reports the lowest financial literacy which raises concern. This may depict a smaller or less active financial cohort in the sample or unawareness of financial products by workers from this sector.

Regarding Participation in the MGNREGA, the p-value ($p=0.974$) is greater than 0.05, thus the null hypothesis is accepted, which shows that there is no significant difference between level of financial literacy and Participation in the MGNREGA. There is no significant difference between participants ($M = 47.82$) and non-participants ($M = 47.74$) of MGNREGA which is clear from the Table 4.27. This also means participation in MGNREGA does not affect financial literacy.

In the case of respondents with Monthly Income, the p-value is less than 0.05 ($p = 0.000$), so the null hypotheses is rejected, indicating financial literacy level differs significantly within income group.

Figure 4.5*Differences in Financial Literacy Level across Income Group*

Source: Primary Data

Figure 4.5 shows that financial literacy increases gradually from the lowest income group ($M = 34.50$) to the highest ($M = 81.09$) income groups. This Confirms that evidence for higher financial literacy is associated with higher income groups.

4.3.5.2 Variation in Financial Literacy across Tribal Communities

The variation in financial literacy among nine tribal communities can be estimated by comparing the mean scores of the groups and through determining statistical significance. This comparison allows the presentation of community wise financial literacy level differences and the results are given in Table 4.28.

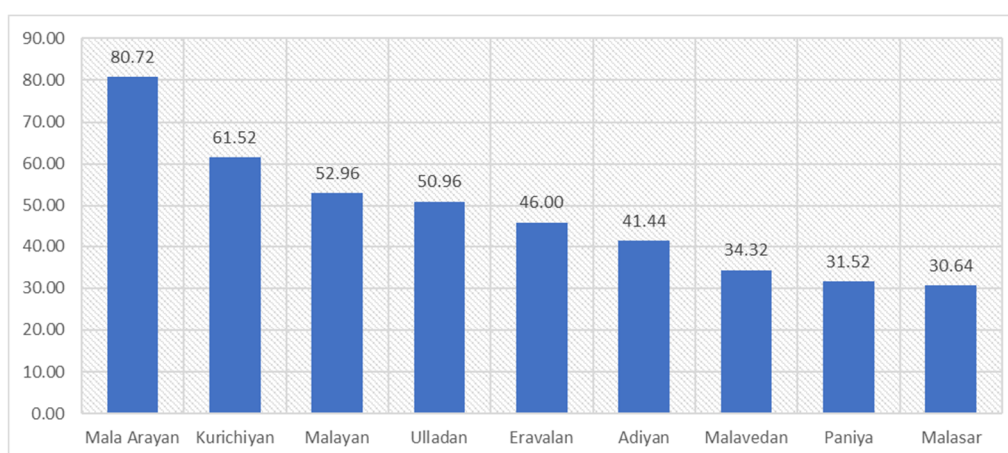
Ho: There is no significant difference in the level of financial literacy across tribal communities.

Table 4.28*Financial Literacy Variation across Tribal Communities*

Community	Mean	S.D.	ANOVA	
			F	p
Adiyan	41.44	22.19	28.503	0.000
Eravalan	46.00	20.43		
Kurichiyan	61.52	23.72		
Mala Arayan	80.72	12.90		
Malavedan	34.32	19.75		
Malasar	30.64	21.93		
Malayan	52.96	25.10		
Paniya	31.52	20.26		
Ulladan	50.96	24.11		

Source: Primary Data

In Table 4.28, the variation in financial literacy among tribal communities is examined by using the One-Way ANOVA test. The result of One-Way ANOVA test found significant variation in the financial literacy among the tribal communities as the p value ($p=0.000$) is less than 0.05

Figure 4.6*Differences in Financial Literacy Level across Tribal Communities*

Source: Primary Data

Figure 4.6 shows a substantial variation in financial literacy scores across the surveyed tribal communities. Mala Arayan community reported highest mean score ($M = 80.72$), reflecting high knowledge and proficiency regarding financial matters, that is most likely due to their relatively better socio-economic standing and higher integration into mainstream society. Kurichiyan ($M = 61.52$), Malayan ($M = 52.96$), Ulladan ($M = 50.96$) and Eravalan ($M = 46.00$) are next in line. Adiyani ($M = 41.44$), Malavedan ($M = 34.32$), Paniyan ($M = 31.52$) and Malasar ($M = 30.64$) have lower literacy. This distribution indicates the occurrence of high inter-community variances in financial literacy among the tribal communities in Kerala. In order to determine the nature of variation of the score, Post-hoc test (Scheffe test) was conducted and the results are given in Table 4.29.

Table 4.29

Financial Literacy Variation across Tribal Communities (Post-hoc test)

Community	N	Subset for alpha = 0.05				
		1	2	3	4	5
Malasar	50	30.64				
Paniyan	50	31.52				
Malavedan	50	34.32	34.32			
Adiyani	50	41.44	41.44	41.44		
Eravalan	50	46.00	46.00	46.00	46.00	
Ulladan	50		50.96	50.96	50.96	
Malayan	50			52.96	52.96	
Kurichiyan	50				61.52	
Mala Arayan	50					80.72

Source: Primary Data

In Table 4.29, the scores of the communities are arranged in five subsets. Malasar ($M = 30.64$) and Paniyan ($M = 31.52$) form the lowest homogeneous subset, indicating no significant difference between them but significantly lower scores compared to most of the other communities. Malavedan ($M = 34.32$) forms a separate subset, slightly higher but still in the low literacy range. Adiyani ($M = 41.44$), Eravalan ($M = 46.00$) Ulladan ($M = 50.96$) followed by Malayan ($M = 52.96$) cluster together forms an intermediate subset. Kurichiyan ($M = 61.52$) appears in a high literacy subset and

Mala Arayan ($M = 80.72$) is in the topmost subset, with scores significantly higher than all other communities. Overall, the statistical grouping indicate that there is a clear stratification of financial literacy across communities, ranging from very low in Malasar and Paniyan to very high in Mala Arayan.

The post-hoc analysis confirms that statistically significant disparities exist in financial literacy scores among the tribal communities.

4.3.5.3 Variation in Financial Literacy across Region

The variation in financial literacy scores across different regions are assessed by comparing the mean scores and testing for statistical significance. This analysis aids in identifying regions that may require targeted financial literacy initiatives. The results are given in Table 4.30.

Ho: There is no significant difference in the level of financial literacy across region.

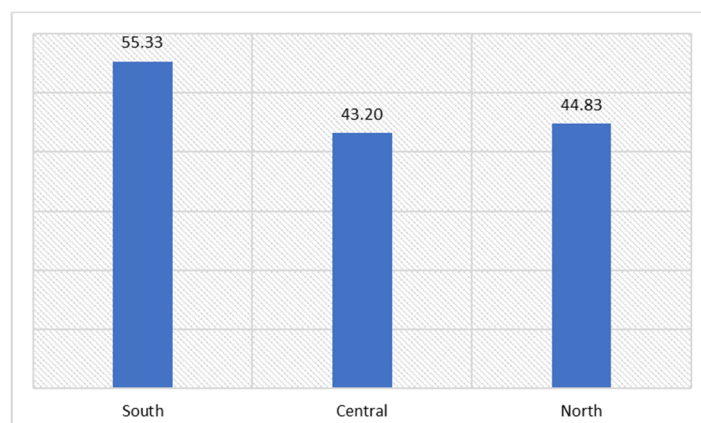
Table 4.30

Financial Literacy Variation across Region

	Mean	S.D.	F	p
South	55.33	27.29	9.889	0.000
Central	43.20	24.29		
North	44.83	25.27		
Total	47.79	26.15		

Source: Primary Data

In Table 4.30, the One-Way ANOVA test yields a statistically significant result ($F = 9.889$, $p < 0.05$), consequently the null hypothesis is rejected, confirming that financial literacy varies significantly across regions. On the whole, it can be concluded that regional location has a significant effect on financial literacy level of the Scheduled Tribes.

Figure 4.7*Differences in Financial Literacy Level across Region*

Source: Primary Data

The differences in financial literacy level across region given in Figure 4.7 indicates that the mean financial literacy score differs notably across the all the three regions. Respondents from the South report the highest average score ($M = 55.33$), followed by the North ($M = 44.83$) and the Central region ($M = 43.20$). There is no significant difference between North and Central. As sample size increases the mean values tend to be same for both districts, the difference in the score of these two regions (43.20 and 44.83) is not the real difference but it is the result of the random sampling error. In order to determine the nature of variation of the score, Post-hoc test (Scheffe test) was conducted and the results are given in Table 4.31.

Table 4.31*Financial Literacy Variation across Region (Post-hoc test)*

District	Subset for alpha = 0.05	
	1	2
Central	43.20	
North	44.83	
South		55.33

Source: Primary Data

Post-hoc analysis (Scheffe test) given in Table 4.31 reveals that the Central ($M = 43.20$) and North ($M = 44.83$) regions belong to the same homogeneous subset and

there is no significant difference in their financial literacy score. Nevertheless, the South region ($M = 55.33$) represents a different subset with considerably greater mean financial literacy compared with the Central and North regions. It implies that individuals from the South region demonstrate higher financial literacy, while the Central and North regions stand at a comparable low level.

4.3.6 Basic Digital Financial Literacy

The basic digital financial literacy of tribal communities was assessed across four core components: digital financial knowledge, digital financial behaviour, digital financial attitude and digital financial awareness. The items used to measure these components were adapted with minor contextual modifications from the OECD/INFE International Survey of Adult Financial Literacy (Organisation for Economic Co-operation and Development, 2023) to suit the local socio-economic context. The level of digital financial literacy of each respondent was evaluated using the Individual Basic Digital Financial Literacy Score (IBDFLS) which ranges from 0 to 100. A score of 70 (70%) or above was established as the benchmark for digital financial literacy. The total score was distributed among the components as follows: digital financial knowledge (20 score), digital financial behaviour (20 score), digital financial attitude (40 score) and digital financial awareness (20 score).

4.3.6.1 Requirement of Physical Signature for Validity of Digital Financial Contracts

Table 4.32 shows the opinion of respondents on whether a physical signature is necessary to ensure the validity and authenticity of digital financial contracts.

Table 4.32

Requirement of Physical Signature for Validity of Digital Financial Contracts

	n	%
TRUE	288	64.00
FALSE	111	24.67
Don't know	51	11.33
Total	450	100.00

Source: Primary Data

In Table 4.32, a clear majority (64.00%) of the respondents are of the opinion that a digital financial contract needs a physical signature to become legally binding. Around one-fourth (24.67%) accurately understands that requirement of a physical signature is not necessary, reflecting awareness of the legality of fully digital agreements under current regulations. The response of 11.33% indicates that they did not know whether digital financial contract needs a physical signature to become legally binding.

4.3.6.2 Opinion about Digital Financial Aspects

Attitudes of the Scheduled Tribe towards digital financial practices, measured across three statements using a five-point Likert scale from Strongly Disagree to Strongly Agree are given in Table 4.33.

Table 4.33

Opinion about Digital Financial Aspects

Aspects		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
I share the passwords and PINs of my bank account with close friends.	n	133	106	71	113	27	2.54	1.31	-7.401	0.000
	%	29.56	23.56	15.78	25.11	6.00				
It's important to pay attention to security issues before making online transactions.	n	21	98	81	132	118	3.51	1.22	8.795	0.000
	%	4.67	21.78	18.00	29.33	26.22				
I don't think it's important to read the terms and conditions before making digital transactions.	n	51	64	127	151	57	3.22	1.18	3.955	0.000
	%	11.33	14.22	28.22	33.56	12.67				

Source: Primary Data

Table 4.33 indicates that 29.56% strongly disagreed and 23.56% disagreed about disclosing their bank account passwords or PINs. However, 25.11% agreed and 6.00% strongly agreed that they will share their passwords and PINs of their bank account with their close friends while 15.78% remained neutral. These responses when

converted into scores gave a mean value of 2.54. A one-sample t-test with a test value reveals that the mean is significantly less than the midpoint of the response scale. Since the p- value (0.000) is less than 0.05, there is significant difference in their opinions. This indicates that the tribal population is not willing to disclose their passwords and PINs of bank accounts with their close friends.

The vast majority acknowledged the importance of security in online transactions. 29.33% agreed and 26.22% strongly agreed (55.55%). Only 4.67% strongly disagreed and 21.78% disagreed (26.45%). Only 18.00% of the respondents remained neutral. The responses when converted into scores resulted in a mean value of 3.51. A one-sample t-test using a test value indicates that the mean is significantly higher than the midpoint of the response scale. Since the p value (0.000) is less than 0.05, there is significant difference between the agreement and disagreement in this matter. This indicates that most of the respondents gave importance to security issues while dealing with online transactions because a considerable number of respondents either agree or strongly agree that it is important to pay attention to security issues before making online transactions.

Regarding the importance of reading the terms and conditions before making digital transactions, 11.33% strongly disagreed and 14.22% disagreed. In contrast, 33.56% agreed and 12.67% strongly agreed (46.23%). This indicates that nearly one-half of the total respondents did not give importance in reading such information. Of the total respondents, 28.22% of them remained neutral regarding giving importance in reading the terms and conditions before making digital transactions. The responses were converted into scores, resulting in a mean value of 3.22. A one-sample t-test using a test value indicates that the mean is significantly higher than the midpoint of the response scale. The p-value (0.000) is less than 0.05, which indicates that there is significant difference between the agreement and disagreement. This suggests that, on average, it is not important to read the terms and conditions before making digital transaction, because a considerable number of respondents agree or strongly agree with the given statement.

4.3.6.3 Individual Basic Digital Financial Literacy Score

The Individual Basic Digital Financial Literacy Score (IBDFLS) is a standardized indicator that describes the capability of an individual in efficiently utilizing the basic digital financial products and services. It not only denotes the knowledge and familiarity with digital platforms but also deals with the safe usage measures such as management of passwords, fraud prevention and responsible digital transactions. By conjunction of digital financial knowledge, behaviour, attitudes and awareness with respect to digital finance, the IBDFLS offers a clear image of digital preparedness and resilience of an individual.

Table 4.34 represents the Individual Basic Digital Financial Literacy Score (IBDFLS) of the respondents which is developed with the use of OECD/INFE framework that takes into consideration four fundamental dimensions: knowledge, behavior, attitude and awareness. The 70% threshold was used to classify the respondents into the literate and the illiterate. The table therefore gives a clear view of the overall digital financial competence of the respondents and at the same time allows comparisons across the socio-demographic variables for making a comprehensive analysis.

Table 4.34

Individual Basic Digital Financial Literacy Score

Statistics	Value	Digital Financial Literate ≥ 70		Digital Financial Illiterate < 70	
		n	%	n	%
Mean	39.72				
Median	25.00				
Std. Deviation	31.77				
Skewness	0.52	105	23.3	345	76.7
Kurtosis	-0.74				
Minimum	0.00				
Maximum	100.00				

Source: Primary Data

The basic digital financial literacy scores of the respondents provided in Table 4.34 have a mean of 39.72 and a median of 25 which represent relatively low literacy level. The standard deviation 31.77 indicates that the scores of the respondents are considerably varied. The skewness and the kurtosis are quite below the threshold value of 2.5 implies that the basic digital financial literacy score is normally distributed among tribal population. The minimum score is 0 and the maximum is 100 which show the entire spectrum of potential literacy levels. Categorically, 23.3% of the respondents are digitally financially literate (score ≥ 70) and a large proportion (76.7%) of the respondents are illiterate. This difference demonstrates a Substantial digital financial literacy disparity in the respondents, signifying the necessity of focused awareness and capability-building efforts within the Scheduled Tribes in Kerala.

4.3.6.3.1 Variation in Basic Digital Financial Literacy across Socio Demographic Variables

This section depicts the variation in basic digital financial literacy across socio-demographic variables by accentuating how factors such as gender, age, education, income, occupation and participation in the MGNREGA influences Individual basic digital financial literacy level of the Scheduled Tribes. Comparing the mean scores and testing statistical significance through One-Way ANOVA test, the table helps to identify whether disparities in basic digital financial literacy exist within specific demographic variables.

Ho: There is no significant difference in the level of basic digital financial literacy across socio demographic variables.

Table 4.35*Variation in Basic Digital Financial Literacy across Socio Demographic Variables*

IBDFLS					
Variable	Category	Mean	S.D.	F	p
Gender	Male	38.58	31.91	2.304	0.130
	Female	44.23	30.97		
Age	Below 35	45.59	33.97	5.451	0.000
	35-39	48.90	34.94		
	40-44	44.27	31.48		
	45-49	38.41	27.86		
	50-54	24.44	25.83		
	55-59	32.81	24.13		
	60 and above	23.28	35.31		
Education	Nil	25.00	26.11	32.112	0.000
	Lower Primry	26.89	24.39		
	Upper Primary	34.64	27.84		
	High School	47.57	31.09		
	Higher Scondary	77.59	25.31		
	College	83.33	21.00		
Occupation	Unskilled Labour	33.53	27.90	11.745	0.000
	Transport	46.71	31.39		
	Low Skilled Service	57.14	38.52		
	Agriculture	64.42	36.86		
	Business/Retail	100.00	0.00		
	Government Service	85.71	24.40		
	Technical/Clerical	75.00	22.36		
	Retired	87.50	13.69		
	Community/ Household Work	75.00	0.00		
Participation in the MGNREGA	Healthcare	0.00	0.00	0.136	0.712
	Yes	40.22	31.70		
Monthly income	No	39.11	31.92	32.128	0.000
	Up to 2500	26.04	29.00		
	2501-5000	31.62	27.87		
	5001-7500	39.50	28.47		
	7501-10000	58.75	32.30		
	Above 10000	84.85	21.60		

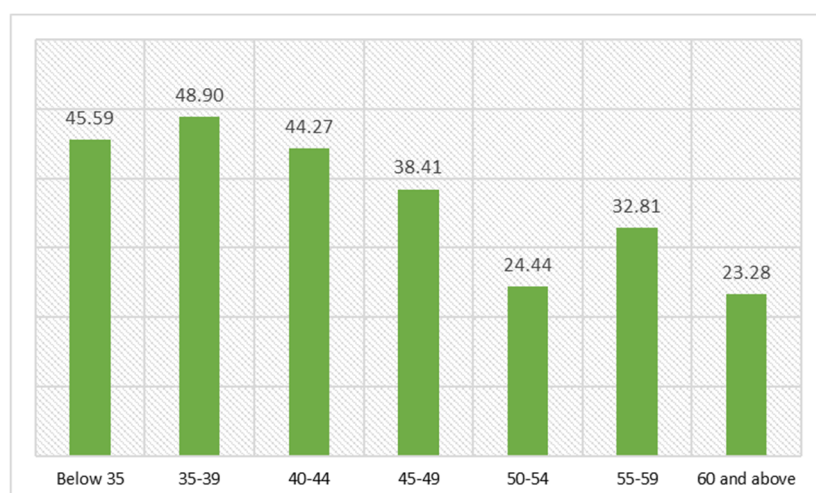
Source: Primary Data

From Table 4.35, the mean financial literacy score is slightly higher among females ($M = 44.23$) compared to males ($M = 38.58$). However, the difference is statistically insignificant because the p-value ($p = 0.130$), is higher than 0.05, which fail to reject the null hypotheses. This indicates that there is no significant difference in the basic digital financial literacy level within the gender.

Regarding the variable age, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which denotes that there is significant differences in basic digital financial literacy level within age groups.

Figure 4.8

Differences in Basic Digital Financial Literacy Level across Age Groups



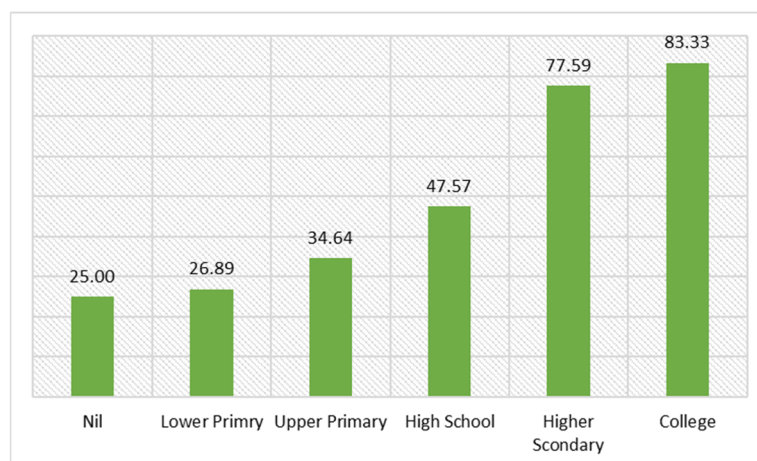
Source: Primary Data

In Figure 4.8, individuals aged between 35 and 39 years display the highest mean digital financial literacy score ($M = 48.90$) followed by individuals below 35 age group ($M = 45.59$) and those aged 40-44 ($M = 44.27$). Figure depicts a noticeable decline in scores as age increases in the case of 50–54 age bracket reflecting a drop in mean score ($M = 24.44$). The lowest scores occurs within the 60 and above category ($M = 23.28$). However, a modest enhancement is noted among respondents in the 55–59 age range ($M = 32.81$) compared to the 50-54 group. These results point out that younger and middle-aged individual typically exhibits greater digital financial literacy than their older sections.

Regarding education, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which signals that there is significant differences in basic digital financial literacy level across the level of education.

Figure 4.9

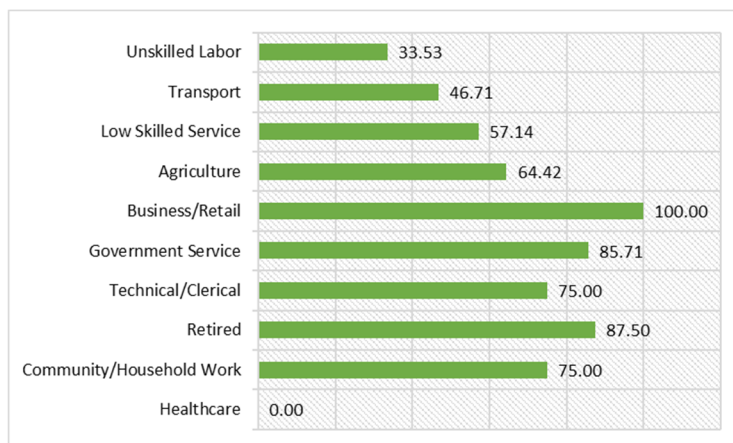
Differences in Basic Digital Financial Literacy Level across Education



Source: Primary Data

Figure 4.9 exhibits a strong positive association between educational attainment and digital financial literacy. Scores are consistently increasing with educational attainment from no formal education ($M = 25.00$) to college level ($M = 83.33$). Respondents with no formal education ($M = 25.00$) and those with only lower primary schooling ($M = 26.89$) record the lowest scores. There is a miniscule level of improvement in those who have upper primary education ($M = 34.64$). The needle of financial literacy score increases drastically at high school level ($M = 47.57$). The notable improvements are observed among higher secondary level ($M = 77.59$) and college level ($M = 83.33$). This positive trend supports the importance of formal education in improving basic digital financial literacy.

Regarding occupation, the p-value ($p=0.000$) does not exceed 0.05, indicates that the null hypothesis is rejected. This demonstrates that the basic digital financial literacy level differs significantly between occupational groups.

Figure 4.10*Differences in Basic Digital Financial Literacy Level across Occupation*

Source: Primary Data

This is by virtue of the fact that according to Figure 4.10, as far as Business/Retail workers are concerned, the percentage of basic digital financial literacy is in its maximum (100%). This indicates that there is very active participation of members of this group in financial transactions and practices. Respondents coming under the Retired (87.50%) and Government Service (85.71%) category exhibit very high literacy level, which may be as a result of financial experience accumulated over the years or due to exposure to financial systems and reliance on formal retirement or pension plans. Technical/Clerical (75.00%) and Community/Household Work (75.00%) groups also scored well. Agricultural workers (64.42%) and those in Low Skilled Services (57.14%) fall in the mid-range. Workers in Transport (46.71%) and Unskilled Labour (33.53%) exhibit considerably lower basic digital financial literacy. Healthcare workers (0.00%) present the most concerning figure, with no reported basic digital financial literacy. This disparity may reflect a considerably constrained or poorly represented size of the sample in this occupation group and a lack of involvement in financial decision-making practices.

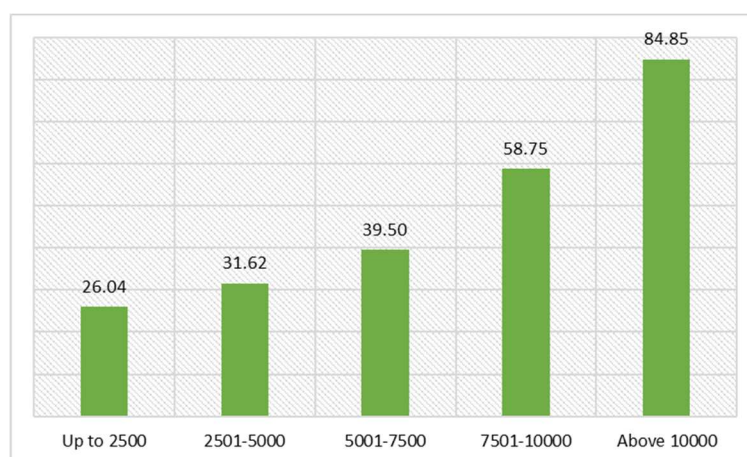
Regarding Participation in the MGNREGA, the p-value ($p=0.712$) is greater than 0.05, so the null hypotheses is accepted, which indicates that there is no significant differences in basic digital financial literacy level and Participation in the MGNREGA. There is no difference between participants ($M = 40.22$) and non-

participants ($M = 39.11$) in MGNREGA. The result depicts that participation in MGNREGA does not affect basic digital financial literacy.

Regarding Monthly Income, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which indicate that there is significant differences in the level of basic digital financial literacy within the income group.

Figure 4.11

Differences in Basic Digital Financial Literacy Level across Income Group



Source: Primary Data

Digital financial literacy increased steadily from the lowest income group ($M = 26.04$) to the highest ($M = 84.85$). Congruent with the observation that higher income groups are related to higher basic digital financial literacy.

4.3.6.3.2 Variation in Basic Digital Financial Literacy across Tribal Communities

Efforts were made to understand the variations in basic digital financial literacy among nine tribal communities. Comparison of mean scores among groups and assessment of statistical significance helps in identifying the variations in basic digital financial literacy among the tribal communities. This analysis assists in the identification of communities which require special interventions.

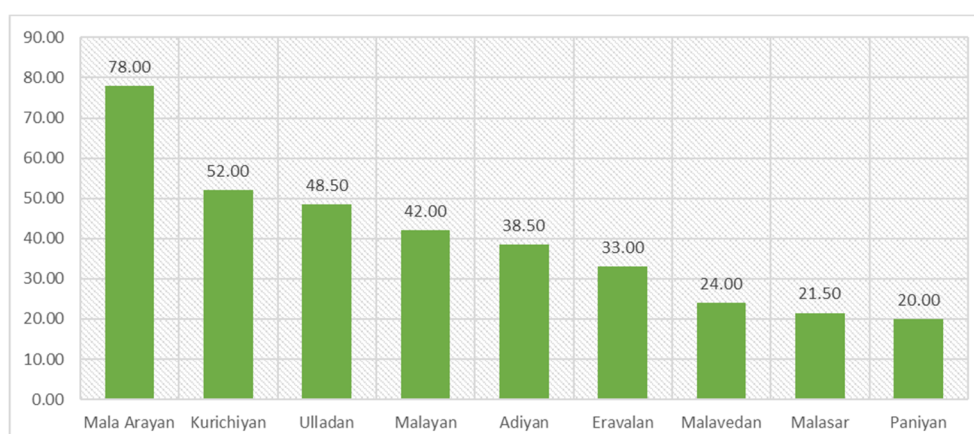
Ho: There is no significant difference in the level of basic digital financial literacy across tribal communities.

Table 4.36*Variation in Basic Digital Financial Literacy across Tribal Communities*

Community	Mean	S.D.	ANOVA	
			F	p
Adiyan	38.50	23.26	23.557	0.000
Eravalan	33.00	24.45		
Kurichiyan	52.00	30.66		
Mala Arayan	78.00	25.58		
Malavedan	24.00	21.99		
Malasar	21.50	25.76		
Malayan	42.00	32.51		
Paniyan	20.00	20.82		
Ulladan	48.50	33.28		

Source: Primary Data

One-Way ANOVA test is used to find out the variation in basic digital financial literacy among tribal Communities and the result is portrayed through Table 4.36. The result of the test identified significant variation in the basic digital financial literacy among the tribal communities as the p-value ($p=0.000$) is less than 0.05.

Figure 4.12*Differences in Basic Digital Financial Literacy Level across Tribal Communities*

Source: Primary Data

Figure 4.12 reveals substantial variation in basic digital financial literacy level among the tribal communities. Mala Arayan community record the highest mean score ($M = 78.00$), indicating strong knowledge and capability in digital financial matters. Followed by Kurichiyan ($M = 52.00$) Ulladan ($M = 48.50$), Malayan ($M = 42.00$) and Adiyan ($M = 38.50$) with moderate literacy level. Lower literacy are observed among Eravalan ($M = 33.00$), Malavedan ($M = 24.00$), Malasar ($M = 21.50$) and Paniyan ($M = 20.00$). These distributions notice the presence of significant inter-community disparities in basic digital financial literacy level.

Table 4.37

Variation in Basic Digital Financial Literacy across Tribal Communities (Post-hoc test)

Community	N	Subset for alpha = 0.05			
		1	2	3	4
Paniyan	50	20.00			
Malasar	50	21.50	21.50		
Malavedan	50	24.00	24.00		
Eravalan	50	33.00	33.00	33.00	
Adiyan	50	38.50	38.50	38.50	
Malayan	50		42.00	42.00	
Ulladan	50			48.50	
Kurichiyan	50			52.00	
Mala Arayan	50				78.00

Source: Primary Data

To determine the nature of the variation in scores Post-hoc test (Scheffe test) was carried out. The post-hoc test establishes that the differences among the basic digital financial literacy scores among the tribal communities are statistically significant. Based on the outcome of the test presented in Table 4.37, one can observe that the scores of the communities were grouped into four subsets. The post-hoc comparison shows that there is significant difference in mean financial literacy score among the various tribal communities. Paniyan community has the lowest mean score ($M =$

20.00) is followed by Malasar ($M = 21.50$) and Mala vedan ($M = 24.00$). On the contrary, the greatest mean is visible in the Mala Arayan ($M = 78.00$), then Kurichiyan ($M = 52.00$), and Ulladan ($M = 48.50$) communities.

These groupings indicate that certain communities such as Paniyan, Malasar and Mala Vedan are similar with low-level of literacy and are grouped on the lowest subset, whereas others such as Mala Arayan are positioned on the top subset. Overall, the statistical classification presents a clear-cut stratification of digital financial literacy across different communities with the level of literacy ranging from very low among Paniyan to very high among Mala Arayan community.

4.3.6.3.3 Variation in Basic Digital Financial Literacy across Region

The variation in basic digital financial literacy scores across different regions are assessed by comparing the mean scores and testing for statistical significance. This analysis leads to identify the regions that may require targeted digital financial literacy attention.

Ho: There is no significant difference in the level of basic digital financial literacy across region

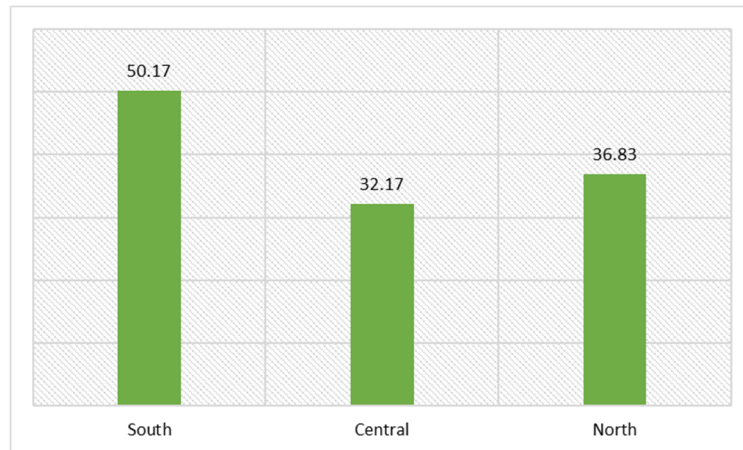
Table 4.38

Variation in Basic Digital Financial Literacy across Region

	Mean	S.D.	F	p
South	50.17	35.06		
Central	32.17	28.87	13.705	0.000
North	36.83	28.33		
Total	39.72	31.77		

Source: Primary Data

In Table 4.38, the One-Way ANOVA test yields a statistically significant result ($F = 13.705$, $p < 0.05$), consequently the null hypothesis is rejected, confirming that basic digital financial literacy varies significantly across regions. This depicts that regional location has a significant effect on basic digital financial literacy level of the Scheduled Tribe.

Figure 4.13*Region wise Differences in Basic Digital Financial Literacy Level*

Source: Primary Data

Figure 4.13 shows the mean basic digital financial literacy score which differs notably across the three regions. Respondents from the South report the highest average score ($M = 50.17$), followed by the North ($M = 36.83$) and the Central region ($M = 32.17$). There is no significant difference between North and Central region.

Table 4.39*Basic Digital Financial Literacy Variation across Region (Post-hoc test)*

District	N	Subset for alpha = 0.05	
		1	2
Central	150	32.17	
North	150	36.83	
South	150		50.17

Source: Primary Data

The result of the Post-hoc test (Scheffe test) shown in Table 4.39 indicates that Central ($M = 32.17$) and North ($M = 36.83$) regions belong to the same homogeneous subset showing no statistically significant difference in their basic digital financial literacy. However, South region ($M = 50.17$) forms a separate subset with significantly higher mean in basic digital financial literacy compared to both Central and North region. This trend indicates that respondents from the South district demonstrate stronger

basic digital financial literacy levels, while Central and North remain at a comparable lower range.

4.3.6.4 Relationship between Financial Literacy and Basic Digital Financial Literacy

Pearson correlation coefficient is used to estimate the relationship between financial literacy and basic digital financial literacy among tribal communities. The figures demonstrate the way in which the expertise in general financial concepts correlates with the literacy in the digital financial platforms. The analysis of this correlation aids in comprehending whether greater degrees of financial literacy are linked to digital financial practices which is highly relevant in the technological-driven financial setting.

Ho: There is no significant relationship between financial literacy and basic digital financial literacy among tribal communities.

Table 4.40

Relationship between Financial Literacy and Basic Digital Financial Literacy

Community	Correlation (r)	p
Adiyan	0.725	0.000
Eravalan	0.466	0.001
Kurichiyan	0.664	0.000
Mala Arayan	0.655	0.000
Malavedan	0.659	0.000
Malasar	0.808	0.000
Malayan	0.830	0.000
Paniyan	0.628	0.000
Ulladan	0.677	0.000
Total	0.777	0.000

Source: Primary Data

The Pearson correlation coefficient determines the strength and direction of the linear relationship that exists between the financial literacy and basic digital financial

literacy. Values stand between -1 and +1 with positive values signifying a direct relationship and absolute values go higher the stronger the associations. In Table 4.40, p-value (0.000) is not greater than 0.05, which means that financial literacy and basic digital financial literacy have a significant correlation. The total correlation ($r = 0.777$) proves a high positive significant relation between the two variables among all communities. It depicts that with the increase of one variable, the other variable is likely to increase proportionately.

Malayan ($r = 0.830$) and Malasar ($r = 0.808$) communities exhibit the highest correlation coefficients, suggesting that improvements in one variable are most consistently associated with proportional improvements in the other. Adiyan ($r = 0.725$), Kurichiyan ($r = 0.664$), Mala Arayan ($r = 0.655$), Malavedan ($r = 0.659$), Paniyan ($r = 0.628$) and Ulladan ($r = 0.677$) all show strong statistically significant relationships. These communities probably demonstrate predictable trends where variations on one factor are highly reflective in the variations of the other. The weakest correlation among the groups is visible among Eravalan ($r = 0.466$), however still statistically significant. The relationship in this case is less tightly coupled, implying more variability in the effect of an individual variable on the other.

Summary of the Analysis Based on Financial Literacy among the Tribal Communities

Financial literacy and basic digital financial literacy of the tribal communities are low in general and there are significant differences between the socio-demographic groups. The mean score of the financial literacy is 47.79 which depicts that the majority of the respondents are below the literacy threshold with 32.2% of the respondents being literate. Basic digital financial literacy is low with the mean score of 39.72 and merely 23.3% of the respondents are only considered as digital financial literate.

Education, occupation, age, and income were established to have significant influence in determining the financial and digital financial literacy. The more educated and younger the respondents better the scores, which represent the positive influence of education and exposure to literacy level.

Occupational variations also occurred, persons engaged in business, government service and community or household work yield higher literacy but agricultural and unskilled labour depicts relatively lower levels.

Income also showed a strong positive relationship with both forms of literacy which confirms that a higher economic standing is associated with better financial capabilities.

Mala Arayan and Kurichiyan communities showed the highest financial and digital literacy scores while the Malavedan, Paniyan and Malasar scored the lowest reflecting inter-community disparities.

Regionally, the south district showed a higher mean score compared to the north and central regions. The correlation analysis further revealed that the relationship between financial literacy and basic digital financial literacy is strong, positive, and statistically significant at $r = 0.777$ and $p < 0.05$.

4.4 Financial Inclusion among the Tribal Communities

The Individual Financial Inclusion Index (IFII) which is developed by Varkey (2019), Varkey et al., (2025) is used to measure financial inclusion among tribal communities. The IFII is a composite index that is meant to understand the level of access and usage of financial services at the individual level. It has three important dimensions which include deposits, debit and insurance. The deposit dimension measures the ownership and active use of bank accounts; the debit dimension measures the access to or utilisation of debit facilities for the withdrawal of cash and the insurance dimension assess the extent financial protection a person has through life, health or other insurance products. The IFII methodologically brings these dimensions together to a single score that captures two fundamental elements of financial inclusion: (i) the capacity to make hassle-free, secure and safe primary financial transactions and (ii) the access to mechanisms that are designed to offer financial and social security. The index thus provides a holistic indicator of financial inclusion in accordance with the socio-economic realities of the Tribal communities.

4.4.1 Status of Bank Account

The status of holding formal savings or deposit accounts is presented in the Table 4.41, along with the type of account held and the form of banking institution.

Table 4.41

Bank Account Status of the Respondents

		n	%
Status of holding formal savings/deposit account	Yes	419	93.11
	No	31	6.89
	Total	450	100
Type of account	Zero balance Savings Account	150	35.80
	Normal Savings Account	269	64.20
	Fixed Deposit	0	0
	Credit Account	0	0
	Recurring Deposit	0	0
	Total	419	100
Form of bank	Nationalised Bank	345	82.34
	Scheduled Private Bank	33	7.88
	Cooperative Bank	35	8.35
	Grameen Bank	6	1.43
	Total	419	100

Source: Primary Data

Table 4.41 shows that most of the respondents (93.11%) own a formal savings or a deposit account and only 6.89% do not have any of them. This indicates that the respondents are highly financially included with regard to formal banking accessibility.

According to the type of the account held by the 419 account holders, 64.20% of the respondents are holders of normal savings accounts. This implies that traditional savings facilities are still the preferred option for Safeguarding money and carrying out the financial transaction. Over one-third (35.80%) of the respondents have zero balance savings accounts, point out the usage of basic or no-frills accounts, which are typically encouraged through the financial inclusion initiatives such as: PMJDY in

India. Notably, the entire respondents of the study did not hold fixed deposits, credit, or recurring deposits accounts.

Regarding the type of bank in which the respondent holds account, an overwhelming majority (82.34%) deal with nationalised banks. This reflects high dependency on public sector banking institutions, a probable outcome of wider geographical coverage, reliability and inclusion policies. Only 8.35% of respondents keep their accounts in cooperative banks followed by 7.88% holding accounts in scheduled private banks, reflecting comparatively low penetration of these institutions among the tribal people. Only a miniscule proportion (1.43%) has bank accounts with Grameen Banks.

4.4.2 Frequency of Deposit and Withdrawal

The frequency of deposit and withdrawal transaction performed by the respondents is presented in the following table:

Table 4.42

Frequency of Deposit and Withdrawal

	Number of Times	n	%
Deposit	0	271	60.22
	1	91	20.22
	2	49	10.89
	3	22	4.89
	4	15	3.33
	5	2	0.44
	Total	450	100
Withdrawal	0	141	31.33
	1	116	25.78
	2	77	17.11
	3	41	9.11
	4	54	12.00
	5	11	2.44
	6	6	1.33
	8	4	0.89
	Total	450	100

Source: Primary Data

The findings from Table 4.42 indicates that the largest proportion of respondents (60.22%) made no deposit at all and thus indicate limited utilization of formal banking facilities for savings purposes. Only 20.22% of respondents made a single deposit while another 10.89% respondents made two deposit transactions and lesser percentages making three deposit transactions (4.89%), four deposit transactions (3.33%) and five deposit transactions (0.44%) during the past two months. These patterns indicate low deposit activity with more than half of the respondents making no deposit transactions at all and thus indicate low active utilization of their accounts.

The data regarding the withdrawals indicate that 31.33% of respondents with no withdrawals were the largest group followed by respondents with a single withdrawal (25.78%) and respondents with two withdrawals (17.11%). Smaller percentages carried out three (9.11%), four (12.00%), five withdrawals (2.44%), with a few reporting six (1.33%) and eight withdrawals (0.89%). A comparatively much higher number of withdrawals as against deposit indicates that the accounts are being utilized more as a channel for receiving funds as opposed to savings tools, with little subsequent deposit action with the aim of building balances. The data depicts a pattern of low deposit-based transactional activity with somewhat higher prevalence of withdrawals. It reveals that although formal financial inclusion in terms of account ownership is high, account utilisation remains low.

4.4.3 Status of Having Insurance Coverage

Table 4.43 and 4.44 depicts the insurance status of the respondents along with the extent of their coverage under different types of insurance schemes. Exploring the status of insurance coverage among respondents is therefore crucial for assessing their financial resilience and risk-management behaviour.

Table 4.43

Status of Insurance

Status	n	%
Yes	205	45.56
No	245	54.44
Total	450	100

Source: Primary Data

Table 4.43 demonstrates that less than one-half of the respondents (45.56%) marked having insurance coverage while a majority (54.44%) does not hold any form of insurance. This point out that despite increasing awareness and policy initiatives promoting insurance penetration in recent years, more than one-half of the respondents stands uninsured.

Table 4.44

Types of Insurance Coverage

	Yes		No		Total	
	n	%	n	%	n	%
Life Insurance	14	3.11	436	96.89	450	100.00
Health Insurance/ Medical Insurance	164	36.44	286	63.56	450	100.00
General Insurance	96	21.33	354	78.67	450	100.00

Source: Primary Data

Table 4.44 indicates that penetration of insurance products among the respondents is low. There is minimal coverage of life insurance whereby only 14 respondents (3.11%) are covered, which depicts a major gap in protection aspects. The coverage of health or medical insurance is relatively high at 36.44% but a large section (63.56%) is not covered in this category and therefore they are exposed to financial risks related to healthcare. Coverage in general insurance is also low. Only 21.33% of respondents are insured and the rest 78.67% are not. These statistics indicate that the population has a poor risk mitigation strategy and highlight the need to improve the access, awareness and affordability regarding insurance products.

4.4.4 Individual Financial Inclusion Index

Table 4.45 shows Individual Financial Inclusion Index (IFII) which is a combination of the deposit, debit and insurance dimensions to measure the financial inclusion level of the respondents. The index offers a transparent path to assess the effectiveness of integration in to the formal financial system and identify the disparities between the samples.

Table 4.45*Individual Financial Inclusion Index*

Statistics	Value	Perfect Financial Exclusion	Very Low Financial Inclusion	Medium Financial Inclusion	High Financial Inclusion	very High Financial Inclusion	Perfect Financial Inclusion
Mean	0.176						
Median	0.139						
Std. Deviation	0.185						
Skewness	1.006	126	202	90	32	0	0
Kurtosis	0.094	(28.00%)	(44.89%)	(20.00%)	(7.11%)	(0.00%)	(0.00%)
Minimum	0.000						
Maximum	0.720						

Source: Primary Data

According to the results of the Individual Financial Inclusion Index (IFII), the overall level of financial inclusion is quite low as the mean score is 0.176 and the median is 0.139 which exhibits a low level of engagement with formal financial services. The distribution is positively skewed (Skewness = 1.006) and this implies that majority of respondents will be in a range of lower inclusion and a small group will have a higher score. The standard deviation value of 0.185 represents an average level of variability on inclusion levels. Category wise, a majority are in the group of the “very low financial inclusion” (44.89%) or are in the group of the “perfect financial exclusion” (28.00%) with 20.00% being in the “medium financial inclusion” and only 7.11 being in the “high financial inclusion” level. It is surprising to note that the financial inclusion is not “very high” or “perfect” among the respondents. These findings highlight the continuity of considerable barriers related to access and usage of financial services which compels specific interventions to reduce the inclusion gap.

4.4.4.1 Variation in Financial Inclusion across Socio Demographic Variables

Financial inclusion levels differ across socio-demographic groups due to variations in access, awareness and usage of financial services. Analysis of these differences would

be helpful to identify the gaps and to undertake target interventions for promoting equitable participation in the formal financial system.

Ho: There is no significant difference in the level of financial inclusion across socio demographic variables.

Table 4.46

Variation in Financial Inclusion across Socio Demographic Variables

Variable	Category	Mean	S.D.	F	p
Gender	Male	0.179	0.190	0.646	0.422
	Female	0.162	0.162		
Age	Below 35	0.275	0.271	7.031	0.000
	35-39	0.233	0.190		
	40-44	0.195	0.187		
	45-49	0.140	0.157		
	50-54	0.081	0.114		
	55-59	0.144	0.156		
	60 and above	0.121	0.142		
Education	Nil	0.071	0.114	48.505	0.000
	Lower Primry	0.100	0.118		
	Upper Primary	0.118	0.101		
	High School	0.241	0.184		
	Higher Scondary	0.409	0.192		
	College	0.471	0.247		
Occupation	Unskilled Labor	0.144	0.158	7.975	0.000
	Transport	0.245	0.205		
	Low Skilled Service	0.228	0.192		
	Agriculture	0.293	0.256		
	Business/Retail	0.481	0.032		
	Government Service	0.460	0.235		
	Technical/Clerical	0.352	0.308		
	Retired	0.333	0.161		
	Community/ Household Work	0.188	0.147		
	Healthcare	0.042	0.000		

Variable	Category	Mean	S.D.	F	p
Participation in the MGNREGA	Yes	0.172	0.185	0.246	0.620
	No	0.180	0.185		
Monthly income	Up to 2500	0.138	0.149	28.140	0.000
	2501-5000	0.136	0.157		
	5001-7500	0.162	0.162		
	7501-10000	0.244	0.186		
	Above 10000	0.450	0.221		

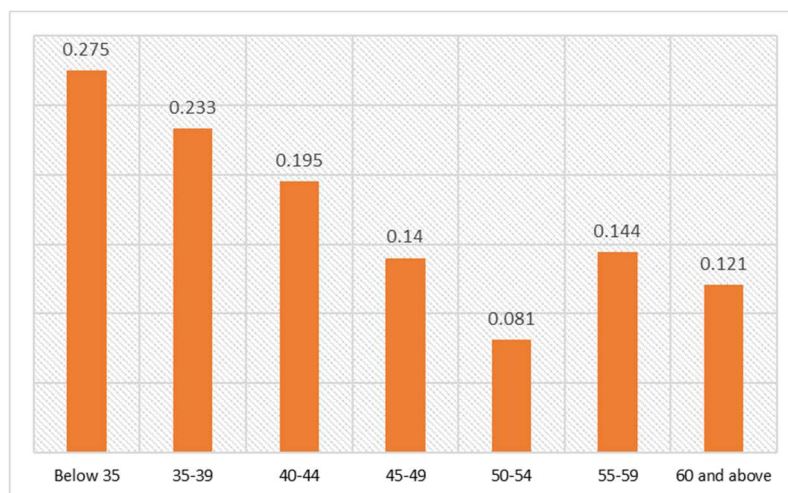
Source: Primary Data

Table 4.46 shows slightly higher mean financial inclusion score among males ($M = 0.179$) compared to females ($M = 0.162$). However, the difference is statistically insignificant because the p-value ($p = 0.422$) is greater than 0.05. Thus there is no significant difference in the financial inclusion level across gender.

Regarding the variable Age, the p-value ($p = 0.000$) is less than 0.05, so the null hypotheses is rejected, which indicates that there is significant differences in financial inclusion level across age groups.

Figure 4.14

Differences in Financial Inclusion across Age Groups



Source: Primary Data

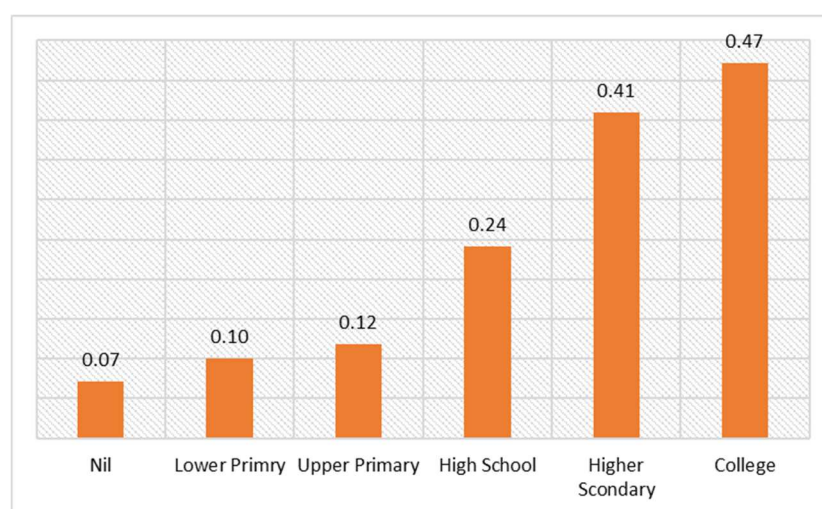
From Figure 4.14, participants below 35 years exhibit the highest average score ($M = 0.275$) followed by those aged 35–39 ($M = 0.233$). Scores decline progressively with

increasing age with the lowest score recorded among the 50–54 age group ($M = 0.081$) and those aged 60 and above ($M = 0.121$). A slight improvement is observed among participants aged 55–59 ($M = 0.144$) compared to 50–54 age group.

Regarding the variable education, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which indicates that there is significant differences in financial inclusion across the level of education.

Figure 4.15

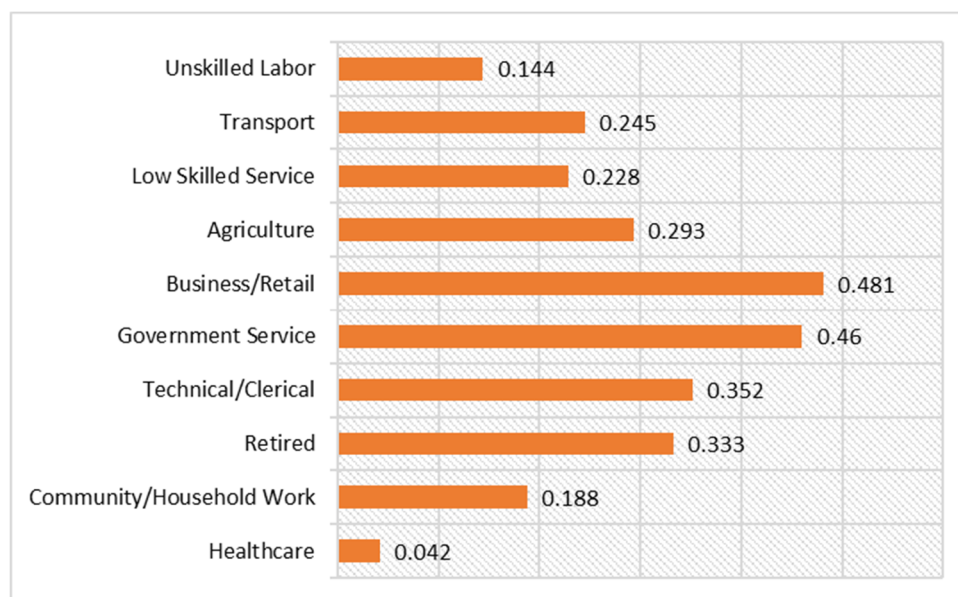
Differences in Financial Inclusion across Education



Source: Primary Data

Figure 4.15 illustrates a high positive association between the level of educational attainment and the level of financial inclusion. Education has a strong and statistically significant association with the financial inclusion. The scores go up steadily with educational attainment. Respondents with no formal education have the least mean score ($M = 0.07$) while inclusion goes up steadily with increasing educational attainment. Maximum mean comes from respondents with college-level education ($M = 0.47$). Such an upward trend underlines the importance of formal education as a means of achieving greater financial inclusion among Scheduled Tribes.

Regarding the variable Occupation, the p-value ($p=0.000$) is less than 0.05, so the null hypotheses is rejected, which depicts that there is significant differences in financial inclusion level across occupation.

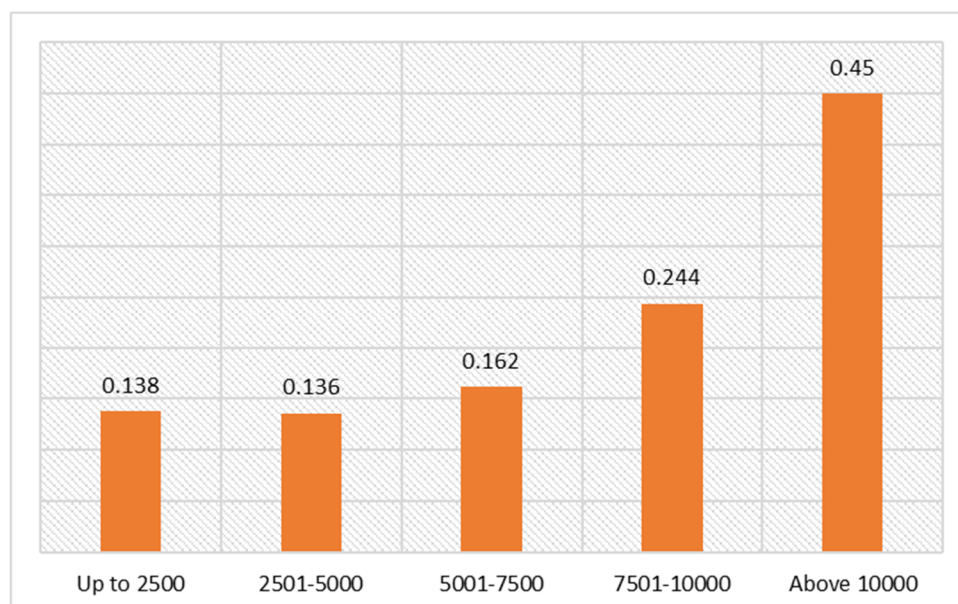
Figure 4.16*Differences in Financial Inclusion across Occupation*

Source: Primary Data

From Figure 4.16, it is clear that financial inclusion varies significantly across the categories of occupations. Lowest scores are achieved by healthcare workers ($M = 0.042$) and unskilled labours ($M = 0.144$), while business/retail respondents ($M = 0.481$) and government service employees ($M = 0.460$) achieve the highest scores

Pertaining to Participation in the MGNREGA, the p-value ($p=0.620$) is greater than 0.05, hence the null hypotheses is accepted and it implies that there is no significant difference in financial inclusion level and Participation in the MGNREGA. There is no difference among participants ($M = 0.172$) and non-participants ($M = 0.180$) of MGNREGA. The result shows that participation in MGNREGA does not affect financial inclusion.

Regarding Monthly Income, the p-value ($p=0.000$) is lower than 0.05, so the null hypotheses is rejected. This indicates that there is significant difference in financial inclusion level across income group.

Figure 4.17*Differences in Financial Inclusion across Income Group*

Source: Primary Data

Financial inclusion is significantly associated with income level. Even those earning more than ₹10,000 a month show the highest mean inclusion ($M = 0.450$), while lowest inclusion scores are registered among those earning between ₹2,500-₹5,000 ($M = 0.136$). Figure 4.17 Confirms that higher income levels are associated with higher financial inclusion, whereas financial inclusion increases with a rise in income level of Schedule Tribes.

4.4.4.2 Variation in Financial Inclusion across Tribal Communities

Attempt has been made to identify the variation in the level of financial inclusion across nine tribal groups. Comparing mean scores of groups and determining statistical significance helps to bring out community wise variations in the level of financial inclusion. Evaluation of inter-community variations is necessary to locate the groups that are less financially included and enables the creation of target specific intervention that encourage equitable participation in the formal financial system.

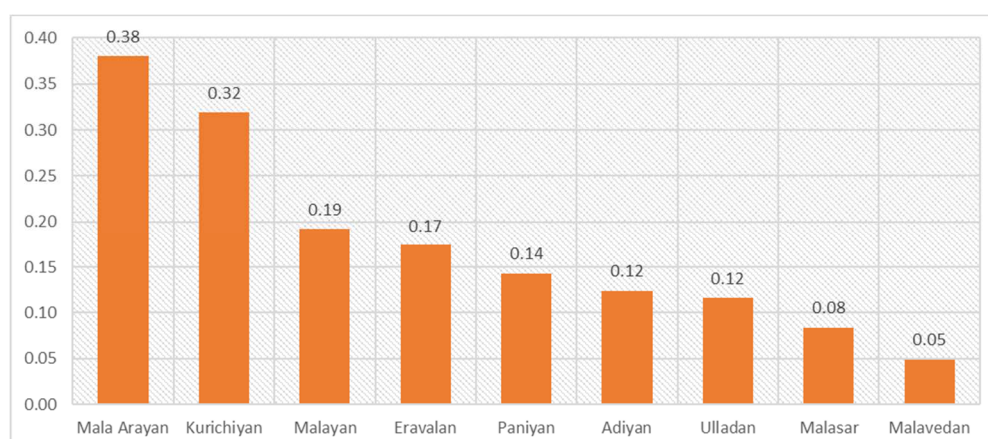
Ho: There is no significant difference in the level of financial inclusion across tribal communities.

Table 4.47*Variation in Financial Inclusion across Tribal Communities*

Community	Mean	S.D.	ANOVA	
			F	p
Adiyan	0.124	0.122	24.466	0.000
Eravalan	0.174	0.180		
Kurichiyan	0.319	0.170		
Mala Arayan	0.380	0.197		
Malavedan	0.049	0.081		
Malasar	0.084	0.142		
Malayan	0.192	0.192		
Paniyan	0.143	0.142		
Ulladan	0.116	0.134		

Source: Primary Data

One-Way ANOVA test helps to determine the variation in financial inclusion among the tribal communities. Result from the Table 4.47 indicates that there is significant variation in the financial inclusion among the tribal communities because the p-value ($p=0.000$) is less than 0.05.

Figure 4.18*Differences in Financial Inclusion across Tribal Communities*

Source: Primary Data

Figure 4.18 indicates considerable variations in financial inclusion across the tribal communities. Mala Arayan records the highest score (0.380) and Kurichiyan (0.319), reflecting relatively good access and use of formal financial services. Malayan (0.192), Eravalan (0.174), Paniyan (0.143), Adiyen (0.124) and Ulladan (0.116) indicate relatively low inclusion. Malasar (0.084) and Mala vedan (0.049) with the lowest scores reflect minimal integration with the formal financial system. Such a wide variation indicates the requirement of specially designed community-focused initiatives to combat the hurdles addresses by the least included groups.

Table 4.48

Variation in Financial Inclusion across Tribal Communities (Post-hoc test)

Community	n	Subset for alpha = 0.05		
		1	2	3
Malavedan	50	0.049		
Malasar	50	0.084	0.084	
Ulladan	50	0.116	0.116	
Adiyen	50	0.124	0.124	
Paniyan	50	0.143	0.143	
Eravalan	50		0.174	
Malayan	50		0.192	
Kurichiyan	50			0.319
Mala Arayan	50			0.380

Source: Primary Data

The outcome of the Scheffe test given in Table 4.48 indicates that tribal communities can be classified into three statistically significant clusters. The group with the lowest level of financial inclusion is comprised of Malavedan (0.049), Malasar (0.084), Ulladan (0.116), Adiyen (0.124) and Paniyan (0.143). Within this group, no significant variations are observed regarding financial inclusion but the levels of inclusion of all the members are much lower than those of other communities. The mid-level inclusion group comprise of Eravalan (0.174) and Malayan (0.192) but both of them show a considerably higher score than the lowest category, but they are much lower than the most performing communities. The most financially inclusive group consists

of Kurichiyan (0.319) and Mala Arayan (0.380) whose scores are much higher than the rest of the communities. Jointly the findings emphasize a prominent hierarchy of financial inclusion across the tribal communities as Mala Arayan and Kurichiyan are at the top, Eravalan and Malayan are at the intermediate and the other five communities have low levels of financial inclusion.

4.4.4.3 Variation in Financial Inclusion across Region

The differences in the financial inclusion level across the regions of Kerala demonstrate the discrepancy in the access and use of formal financial services by the households from the North, Central and South parts of the state. Whereas some of the regions indicate increased banking penetration, insurance penetration and digital financial services adoption while others noticeably those with low infrastructural and accessibility are left behind. It is highly significant to study such inter-regional inequalities as it helps to understand structural disparities to implement financial inclusion plans more equitably and to assist the policymakers in designing targeted strategies. This ensures sustainable and balanced financial inclusion across Kerala.

Ho: There is no significant difference in the level of financial inclusion across region.

Table 4.49

Variation in Financial Inclusion across Region

	Mean	S.D.	F	p
South	0.182	0.204	2.357	0.096
Central	0.150	0.178		
North	0.195	0.170		
Total	0.176	0.185		

Source: Primary Data

Table 4.49 highlights minimal variations in financial inclusion across regions since the North region has the highest mean score ($M = 0.195$), followed by the South ($M = 0.182$), and then the Central ($M = 0.150$) region. However, the results of the one-way ANOVA show a p-value ($p = 0.096$), which is greater than 0.05, establishing that the differences observed are not statistically significant. It thus suggests that although

there are minimal variations of mean financial inclusion across the regions, the variations could be due to random variation rather than systematic disparities.

4.4.4.4. Variation in Saving Behaviour across the Levels of Financial Inclusion

The variation in the saving behaviour across the levels of financial inclusion is assessed using Friedman test.

Ho: There is no significant difference between the Saving Behaviour and Financial Inclusion

Table 4.50

Variation in Saving Behaviour across the Levels of Financial Inclusion

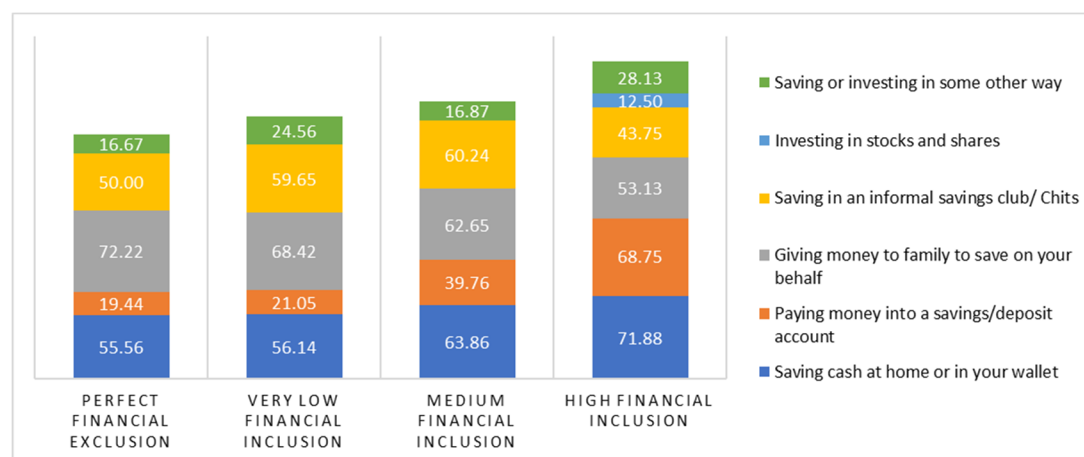
	Financial Inclusion							
	Perfect Financial Exclusion		Very Low Financial Inclusion		Medium Financial Inclusion		High Financial Inclusion	
	n	%	n	%	n	%	n	%
Saving cash at home or in your wallet	20	55.56	64	56.14	53	63.86	23	71.88
Paying money into a savings/deposit account	7	19.44	24	21.05	33	39.76	22	68.75
Giving money to family to save on your behalf	26	72.22	78	68.42	52	62.65	17	53.13
Saving in an informal savings club/ Chits	18	50.00	68	59.65	50	60.24	14	43.75
Investing in stocks and shares	0	0.00	0	0.00	0	0.00	4	12.50
Saving or investing in some other way	6	16.67	28	24.56	14	16.87	9	28.13
Friedman Test	Mean Rank	1.50	3.50		3.00		2.00	
	Chi-Square			9.643				
	p- value			0.022				

Source: Primary Data

Since p-value (0.022) is less than 0.05, there is significant difference in the saving behaviour across the levels of financial inclusion.

Figure 4.19

Difference in the Saving Behaviour across the Levels of Financial Inclusion



Source: Primary Data

From Figure 4.19, saving habit is high among high financial inclusion group and low among financially excluded group. High financial inclusion groups tend to use formal savings accounts more and diversify savings but still maintain high levels of cash savings. Investment in shares and stocks is apparent only among high financial inclusion group and saving through informal saving club is low among high financial inclusion group.

Medium and Very Low Inclusion groups depicts a mix with informal savings clubs being prominent. Perfect Financial Exclusion has heavy dependence on family-centered saving and informal methods with very low use of formal accounts. In all the levels, engagement with stock markets remains very low indicating low use of higher-risk and higher-return instruments.

Summary of the Analysis of Financial Inclusion among the Tribal Communities

Analysis of financial inclusion among the tribal communities shows that formal account ownership is high at 93.11%. A very minimal deposit and withdrawal activities indicates the utilization status of banking services. Most of the respondents have savings accounts in nationalized banks. This indicates that there is trust in public

institutions but there is a limited engagement with diverse financial products such as fixed deposits or credit accounts. Insurance penetration is low because only 45.56% of the respondents are covered by any form of insurance. This indicates that there is a substantial protection gap and low level of awareness among respondents about the management of risk. The mean value of 0.176 in the Individual Financial Inclusion Index represent an overall low level of inclusion with most of them being in either of the categories of “very low financial inclusion” or “perfect financial exclusion”.

The financial inclusion varies considerably within the socio-demographic variables, such as age, education, occupation, and income level. More financially included is younger, better-educated, higher-income, respondents who are involved in business activities and mostly excluded are the unskilled and low-income groups. The highest inclusion is visible among Mala Arayan and Kurichiyan communities and lowest inclusion is among the Malasar and Mala Vedan communities, depicting severe inter-community differences. The level of inclusion shows minimal regional differences and these differences are not statistically significant. There is a significant positive relation between saving behaviour and the level of financial inclusion: were the highly-included groups portray higher formal saving propensity and greater diversification in financial practices.

4.5 The Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities

4.5.1 Association between Financial Literacy and Financial Inclusion

The association between financial literacy and financial inclusion is analyzed using the Chi-square test. It is a suitable non-parametric statistical method applied to analyze whether a significant association exists between two categorical variables: the financial literacy and the extent of financial inclusion.

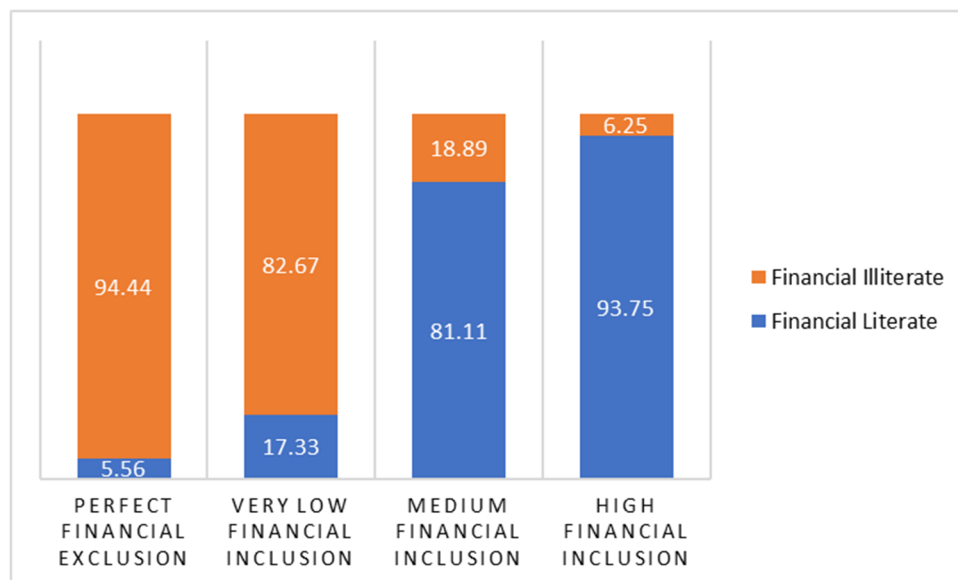
Ho: There is no significant association between financial literacy and financial inclusion

Table 4.51*Association between Financial Literacy and Financial Inclusion*

	Financial Literacy				Total	
	Financial Literate		Financial Illiterate			
	n	%	n	%	n	%
Perfect Financial Exclusion	7	5.56	119	94.44	126	100.00
Very Low Financial Inclusion	35	17.33	167	82.67	202	100.00
Medium Financial Inclusion	73	81.11	17	18.89	90	100.00
High Financial Inclusion	30	93.75	2	6.25	32	100.00
Chi-square	215.514					
Sig.	0.000					

Source: Primary Data

In Table 4.51, p value (0.000) which is less than 0.05, indicating a significant association between financial literacy and financial inclusion. The results reveals a highly significant relationship between the two variables (Chi-square = 215.514).

Figure 4.20*Association between Financial Literacy and Financial Inclusion*

Source: Primary Data

Figure 4.20 clearly displays that financial literacy has a strong positive impact on financial inclusion. In the perfect financial exclusion group, only 5.56% are financial literates, while 94.44% are financial illiterates. In very low financial inclusion, literacy improves slightly to 17.33%, but a very high majority (82.67%) remains financial illiterates. There is an acute turnaround change in the medium financial inclusion group where 81.11% are financially literate and 18.89% are financially illiterate. The supreme impact is visible among the high financial inclusion group where 93.75% are financial literates and only 6.25% of the respondents are financial illiterates. The trend shows that as the level of financial literacy rises, the chances of being in a higher category of financial inclusion are also high. The findings of the Chi-square test prove that such relationship is statistically significant and financial literacy is one of the driving forces behind financial inclusion.

4.5.2 The effect of Gender and Age on the relationship between Financial Literacy and Financial Inclusion

The influence of the age and gender on the relationship between financial literacy and financial inclusion has to be examined. This would be useful to perceive the role of the socio-demographic variables in the translation of financial literacy into the actual participation in the formal financial systems. It can also be used to obtain valuable insights on how financial education programs could be tailored according to the needs and to come up with inclusion oriented policies that meet the desire of every socio-demographic group.

It is detected that gender difference is frequently caused by income inequality, socio-cultural roles and disparity in access to financial resources. This can either restrict or expand the effect of financial literacy on inclusion. In the same way, age is also a significant predictor as young individuals show a stronger capacity to adapt to digitalized financial tools and older individuals may be more dependent on the conventional financial practices.

Table 4.52*Effect of Financial Literacy on Financial Inclusion*

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
(Constant)	-0.074	0.012		-6.051	0.000
Financial Literacy	0.005	0.000	0.739	23.216	0.000
R Square			0.545		
F			538.968		
Sig.			0.000		

Source: Primary Data

A simple linear regression was performed in order to investigate the impact of the financial literacy on financial inclusion and the findings are presented in Table 4.52. This model was statistically significant ($F = 538.968$, $p < 0.05$) and it demonstrates 54.5% of the variance in financial inclusion ($R \text{ square} = 0.545$). The financial literacy coefficient ($B = 0.005$, $Beta = 0.739$, $t = 23.216$, $p < 0.05$) represents a high positive correlation. It indicates that one unit increase in financial literacy leads to 0.005 unit increase in the financial inclusion, keeping other factors constant.

The high standardized beta value (0.739) suggests that financial literacy is a substantial predictor of financial inclusion in the model. Overall, the results confirm that financial literacy significantly and positively influences financial inclusion, by over half of the variation in inclusion levels. The Sobel test was used to examine the mediation effect of age and gender on the relationship between financial literacy and financial inclusion.

Sobel Test

$$z = \frac{ab}{\sqrt{(b^2 SE_a^2) + (a^2 SE_b^2)}}$$

4.5.2.1 Effect of Gender on the Relationship between Financial Literacy and Financial Inclusion

The effect of gender on the relationship between financial literacy and financial inclusion was examined by using Sobel test. Gender was included in the regression model alongside financial literacy and the Sobel test was employed to assess mediation effects.

Ho: There is no significant effect of gender on the relationship between financial literacy and financial inclusion.

Table 4.53

Effect of Gender on the Relationship between Financial Literacy and Financial Inclusion

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
(Constant)	-0.116	0.017		-6.671	0.000
Financial Literacy	0.005	0.000	0.749	23.691	0.000
Gender (Male=1, Female = 0)	0.049	0.015	0.106	3.365	0.001
R Square			0.557		
F			281.358		
p			0.000		

Source: Primary Data

$$a = 0.005$$

$$b = 0.049$$

$$SE_a = 0$$

$$SE_b = 0.015$$

$$Z = 3.267$$

$$p = 0.001$$

A multiple linear regression was conducted to assess whether gender influences financial inclusion alongside financial literacy. Table 4.53 reveals that the model was statistically significant ($F = 281.358$, $p < 0.05$) and explained 55.7% of the variance in financial inclusion ($R^2 = 0.557$). Financial literacy emerged as the strongest

predictor ($B = 0.005$, $Beta = 0.749$, $t = 23.691$, $p < 0.05$), indicating that higher literacy levels are strongly associated with higher inclusion. Gender also had a significant positive effect ($B = 0.049$, $Beta = 0.106$, $Z = 3.267$, $t = 3.365$, $p < 0.05$). This shows that, after controlling financial literacy, males scored on average 0.049 units higher in financial inclusion than females. These results point out that while financial literacy is the main driver, gender differences persist, with males having slightly higher inclusion even at equivalent literacy levels.

4.5.2.2 The effect of Age on the Relationship between Financial Literacy and Financial Inclusion

The effect of age on the relationship between financial literacy and financial inclusion was examined using Sobel test. Age was included in the regression model alongside financial literacy, and the Sobel test was employed to assess the mediation effects.

Ho: There is no significant effect of age on the relationship between financial literacy and financial inclusion.

Table 4.54

Effect of Age on the Relationship between Financial Literacy and Financial Inclusion

Variable	Unstandardized Coefficients		Standardized Coefficients	t	p
	B	Std. Error	Beta		
(Constant)	-0.006	0.037		-0.161	0.872
Financial Literacy	0.005	0.000	0.724	22.163	0.000
Age (continuous)	-0.001	0.001	-0.063	-1.926	0.055
R Square			0.550		
F			272.969		
p			0.000		

Source: Primary Data

a =	0.005	
b =	-0.001	Z = -1
SE _a =	0.000	p = 1.683
SE _b =	0.001	

A multiple linear regression was conducted to evaluate whether age influences financial inclusion alongside financial literacy. Table 4.54 reveals that the model was statistically significant ($F = 272.969$, $p < 0.05$) and explained 55.0% of the variance in financial inclusion ($R^2 = 0.550$). Financial literacy remained the dominant predictor ($B = 0.005$, $Beta = 0.724$, $t = 22.163$, $p < 0.05$), indicating that higher literacy is strongly associated with greater inclusion. There is no mediation effect of age on the relationship between financial literacy and financial inclusion as the p-value (1.683) is greater than 0.05. Age had a small, negative effect ($B = -0.001$, $Beta = -0.063$) which approached, but did not reach the conventional significance ($t = -1.926$, $p = 0.055$). This result reveals that, when controlling for financial literacy, age does not significantly predict financial inclusion, although there is a slight tendency for inclusion levels to decrease as age increases.

Summary of the Analysis of the Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities

The financial literacy plays a central role in improving the status of financial inclusion among the tribal communities. The correlation between the two variables is strong and positive. The higher the financial literacy, the higher the state of financial inclusion. Among the perfect financial exclusion group only 5.56% were observed to be financial literates, while the literacy rate improves substantially to 81.11% and 93.75% respectively in the medium and high levels of financial inclusion. This statistically significant relationship is confirmed by the Chi-square test, establishing financial literacy as one of the most important determinants of inclusion. This relation is further highlighted by regression analysis: financial literacy is a significant predictor of financial inclusion ($R^2 = 0.545$, $F = 538.968$, $p < 0.05$) which explains more than half of the variance in the levels of inclusion. Financial literacy is also extremely important as it raises financial inclusion by 0.005 units with increase in its each additional unit. Adding gender into the model, both variables remain significant predictors ($R^2 = 0.557$, $p < 0.05$) with males having slightly higher inclusion levels than females, even at equivalent literacy levels. The Age, however, fails to

significantly predict financial inclusion although there is a slight tendency for the level of inclusion to decrease as age increases.

4.6 Status of Financial Planning, Financial Anxiety and Financial Confidence among the Tribal Households

Tribal households often rely on agriculture, daily wage labour or traditional occupations as their primary sources of income, which are typically irregular and seasonal in nature (Nair, 2010). Understanding the financial confidence, financial planning and financial anxiety is essential to assess the challenges faced by tribal communities in achieving inclusive growth and aids the authorities to design policies that strengthen the financial resilience in tribal Unnathis.

4.6.1 Confidence Regarding the Financial Matters

Financial confidence of an individual implies a measure of their own assessment of beliefs regarding their capacity to comprehend, control, and make right choices regarding financial issues. It is a psychological aspect of financial capability beyond the knowledge that one possesses. It indicates a person's perception of their capacity to handle both day to day and long term financial decisions. Table 4.55 displays the respondents' self-reported confidence regarding various financial matters, assessed through six statements with a five-point Likert scale ranging from Strongly Disagree to Strongly Agree.

Table 4.55*Confidence Regarding the Financial Matters*

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	P
I am confident in making financial decisions for my family.	n	67	113	55	142	73				
	%	14.89	25.11	12.22	31.56	16.22	3.09	1.34	1.438	0.151
I understand bank statements well.	n	90	155	57	97	51				
	%	20.00	34.44	12.67	21.56	11.33	2.70	1.31	-4.880	0.000
I can confidently fill out forms at the bank.	n	86	163	51	98	52				
	%	19.11	36.22	11.33	21.78	11.56	2.70	1.31	-4.776	0.000
I can make money transfers (e.g., paying bills, loans, etc.) with ease.	n	122	175	51	72	30				
	%	27.11	38.89	11.33	16.00	6.67	2.36	1.22	-11.059	0.000
I monitor my account balance regularly with confidence.	n	135	145	51	70	49				
	%	30.00	32.22	11.33	15.56	10.89	2.45	1.35	-8.640	0.000
I can gather necessary information from available sources before making financial decisions.	n	105	120	55	97	73				
	%	23.33	26.67	12.22	21.56	16.22	2.81	1.43	-2.877	0.004

Source: Primary Data

Table 4.55 depicts that 31.56% of respondents agreed and 16.22% strongly agreed (47.78%) that they are confident in making financial decisions for their family. However, 25.11% disagreed and 14.89% strongly disagreed, while 12.22% were neutral. One samples t-test identified mean score close to the neutral point (Mean = 3.09), with no significant difference ($t = 1.438, p = 0.151$). This statistical result point out that while some respondents feel capable, overall confidence in managing household financial decisions is not strongly established.

A sizable percentage of respondents (34.44% disagreed and 20.00% strongly disagreed) opined that they understand bank statements well. Only 21.56% agreed and 11.33% strongly agreed while 12.67% of respondents were having neutral response in this matter. Similarly, 36.22% disagreed and 19.11% strongly disagreed that they feel confident in filling out bank forms, whereas only 21.78% agreed and 11.56% strongly agreed. Only 11.33% of respondents were neutral.

The responses when converted into scores gave a mean value of 2.70 each in understanding bank statements and confidence in filling bank forms respectively. Both are significantly below the neutral value, highlighting gaps in the confidence of the respondents.

More than one-half of the respondents do not express confidence in their ability to accomplish the banking documentation independently, which demonstrates a deficit in their practical financial skills.

A good majority (38.89%) disagreed and 27.11% strongly disagreed with the statement that they can make money transfers (e.g., paying bills, loans, etc.) with ease. Only 16.00% agreed and 6.67% strongly agreed while 11.33% remained neutral. This indicates that there exist substantial barriers or low confidence in using banking services for bill payments or fund transfers, which could limit financial inclusion and digital banking usage.

Regarding regular monitoring of account balances with confidence, 32.22% disagreed and 30.00% strongly disagreed. Only 15.56% agreed and 10.89% strongly agreed while 11.33% were neutral. This reflects low confidence in routine financial monitoring, potentially leading to ineffective management of available financial resources.

Responses regarding gathering necessary information from available sources before making financial decisions indicate that 21.56% of respondents agreed and 16.22% strongly agreed. However, 26.67% disagreed and 23.33% strongly disagreed while 12.22% remained neutral. This result point out that more than one-third of respondents

are confident and one- half of the respondents lack confidence in gathering information before the financial decision-making.

The analysis of different variables related to confidence regarding the financial matters gave mixed responses. The opinion of respondents regarding all the variables except against the statement ‘I am confident in making financial decisions for my family’, mean scores fall below 3 and found statistically significant negative t-values ($p < 0.05$). In this case, confidence levels are significantly lower than the neutral benchmark. Regarding the variable ‘I am confident in making financial decisions for my family’, the mean value comes to 3.09, where $p > 0.05$ indicating no statistically significant difference from the neutral level of confidence.

The lowest confidence was observed in performing money transfers with ease (Mean = 2.36), followed by monitoring account balances regularly (Mean = 2.45). Similarly, respondents showed limited confidence in understanding bank statements (Mean = 2.70) and filling out bank forms (Mean = 2.70). The ability to gather necessary financial information before decision-making also scored below the neutral point (Mean = 2.81).

4.6.2 Financial Planning

Financial planning among Scheduled Tribes is defined as how the tribal households organise, manage and allocate their scarce financial resources to take care of current needs while keeping in view the future goals such as education, health care, housing, and old-age security. Due to their socio-economic vulnerable conditions, occurrence of irregular income earning activities and over-reliance on informal financial networks many tribal communities face hurdle in systematic saving, investing and risk management. Systematic financial planning in the tribes is essential for building household resilience, diminishing financial insecurity and improving long-term well-being. Studying financial planning practices provides insights into the effectiveness of financial literacy initiatives, inclusion policies and government welfare schemes in addressing the unique needs of Scheduled Tribes in Kerala. Table 4.56 reveals respondents views regarding retirement planning and financial goal-setting on a five-point Likert scale from strongly disagree to strongly agree.

Table 4.56*Retirement Planning and Financial Goal Setting*

		Strongly Disagree	Disagree	Neither Agree nor	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
Retirement planning should be started at an early working age.	n	61	103	83	142	61				
	%	13.56	22.89	18.44	31.56	13.56	3.09	1.27	1.442	0.150
I set financial goals and objectives in my life.	n	128	132	52	73	65				
	%	28.44	29.33	11.56	16.22	14.44	2.59	1.42	-6.157	0.000

Source: Primary Data

In Table 4.56, almost one-third of the respondents (31.56%) agreed and 13.56% strongly agreed regarding the statement ‘retirement planning should start at the initial stage of employment’. However, 22.89% were not agreed and 13.56% strongly disagreed (36.45%) and 18.44% were in a neutral stand.

Responses regarding setting financial goals and objectives in life depict strong disagreement of 28.44% and disagreement of 29.33%. Whereas only 16.22% agreed, 14.44% strongly agreed and 11.56% were in a neutral position.

The status of financial planning among respondents reveals disparities in the levels of awareness and practice. The statement “Retirement planning should be started at an early working age” indicates a mean score slightly over neutral (Mean = 3.09, $p > 0.05$), reflecting no statistically significant deviation from the neutral benchmark. This implies a moderate and non-conclusive agreement with the statement. Conversely, the score of the statement “I set financial goals and objectives in my life” was considerably less than the neutral score (Mean = 2.59, $p < 0.05$) indicating the lack of active goal-setting behavior among the respondents. These results denote that while there is general conceptual recognition of the importance of early retirement planning, actual financial goal-setting practices are notably weaker. This indicates that there is a gap between awareness and implementation in personal financial planning.

4.6.3 Financial Anxiety and Financial Satisfaction

Financial anxiety is referred to as stress, uneasiness or worry that people feel when facing money related issues. It indicates the feeling of emotional pressure related with financial insecurity or absence of confidence about financial capabilities. Financial satisfaction is defined as the subjective feeling of contentment and well-being that a person experience regarding their current financial situation and the ability to achieve future goals. Table 4.57 reports financial stress and satisfaction status among respondents based on three statements on a five-point Likert scale ranging from strongly disagree to strongly agree.

Table 4.57

Financial Anxiety and Financial Satisfaction

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
Discussing my finances makes me nervous or stressed.	n	19	77	45	255	54	3.55	1.04	11.222	0.000
	%	4.22	17.11	10.00	56.67	12.00				
I feel stressed while opening my bank statements/passbook.	n	63	69	36	196	86	3.38	1.33	6.131	0.000
	%	14.00	15.33	8.00	43.56	19.11				
I am satisfied with my current financial situation.	n	81	75	59	99	136	3.30	1.49	4.228	0.000
	%	18.00	16.67	13.11	22.00	30.22				

Source: Primary Data

Table 4.57 depicts that 56.67% agreed and 12.00% strongly agreed regarding discussing their finances makes them feel nervous or stressed. In contrast, only 4.22% strongly disagreed and 17.11% disagreed while 10.00% remained neutral.

Responses Portray that 43.56% agreed and 19.11% strongly agreed that they feel stressed when opening their bank statements or passbook. Conversely, 14.00% strongly disagreed and 15.33% disagreed while 8.00% were neutral.

With respect to financial satisfaction, 22.00% agreed and 30.22% strongly agreed (52.22%), indicating that more than one-half of the respondents are satisfied with their current financial situation. In contrast, 18.00% of the respondents strongly disagreed and 16.67% disagreed (34.67%), while 13.11% remained neutral.

The findings indicate that the emotional responses to financial issues are overwhelmingly dominated by stress and concern. The highest mean (Mean = 3.55, $p < 0.05$) was marked around the statement “Discussing my finances makes me nervous or stressed”, with more than two-third respondents indicated agreement or strong agreement. This depicts financial discussions has a greatest sources of anxiety. In the same manner, “I feel stressed when opening my bank statements/pass book” demonstrates a strong positive deviation from neutrality (Mean = 3.38, $p < 0.05$), which indicates that respondents are fear of looking his or her personal financial records. Remarkably, despite the presence of stress, a considerable percentage of the participants expressed that they were satisfied with their financial situation (Mean = 3.30, $p < 0.05$), which point towards a complex relationship between two variables where an individual may feel satisfied with the current position but still confronting financial anxiety, because of fear of what may arise in the future or due the absence of confidence in financial management.

4.6.3.1 Variation in Financial Satisfaction across Tribal Communities

The difference in the financial satisfaction between tribal communities indicates the variation in the way individual and households in different tribal groups perceive and assess their financial well-being. These disparities emerge due to the variation in the income level, availability of job opportunities, financial services accessibility, education level and the socio-cultural practices. Comprehending these differences provides useful insight about the financial strength and weaknesses of tribal population, hence assists in formulating specific interventions aimed at improving financial well-being in a culturally-sensitive and inclusive way.

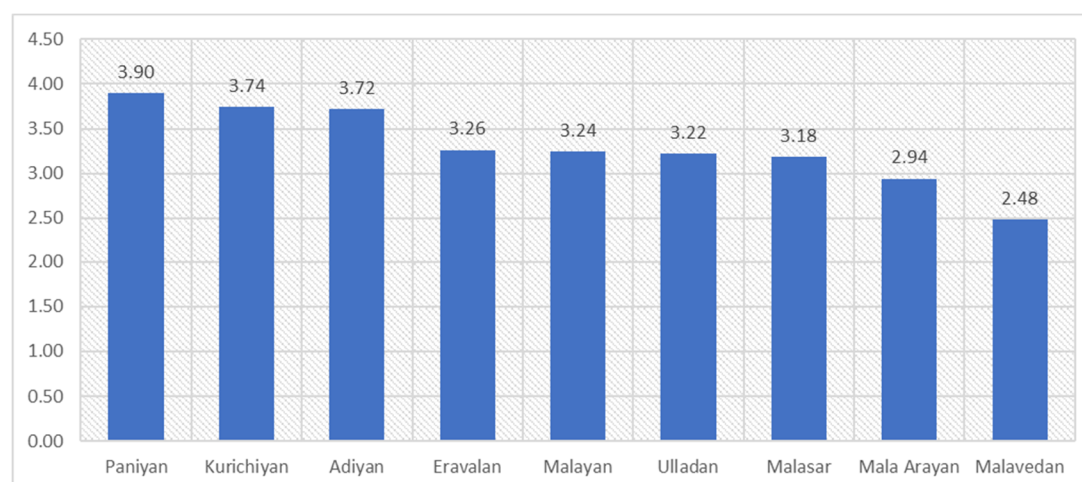
Ho: There is no significant difference in financial satisfaction across tribal communities

Table 4.58*Variation in Financial Satisfaction across Tribal Communities*

	Mean	S.D.	F	p
Adiyan	3.72	1.36		
Eravalan	3.26	1.47		
Kurichiyan	3.74	1.45		
Mala Arayan	2.94	1.53		
Malavedan	2.48	1.42	4.646	0.000
Malasar	3.18	1.57		
Malayan	3.24	1.62		
Paniyan	3.90	1.17		
Ulladan	3.22	1.39		
Total	3.30	1.49		

Source: Primary Data

The one-way ANOVA result from Table 4.58 exhibit the p-value ($p = 0.000$), which is less than 0.05. So there is statistically significant difference in financial satisfaction across tribal communities. This result proposes that community-specific factors may play a significant role in the financial satisfaction of the Scheduled Tribes.

Figure 4.21*Variation in Financial Satisfaction across Tribal Communities*

Source: Primary Data

From Figure 4.21, mean scores differ significantly among the tribal communities ranging from a low of 2.48 for Malavedan to a high of 3.90 for Paniyan. Communities such as Adiyen (M = 3.72), Kurichiyan (M = 3.74) and Paniya (M = 3.90) report relatively higher scores compared to the overall mean (M = 3.30). Mid-range scores are observed for Eravalan (M = 3.26), Malayan (M = 3.24), Ulladan (M = 3.22) and Malasar (M = 3.18), while Mala Arayan (M = 2.94) falls slightly below the total mean. The lowest mean score is for Malavedan (M = 2.48).

Table 4.59

Variation in Financial Satisfaction across Tribal Communities (Post hoc test)

Community	n	Subset for alpha = 0.05	
		1	2
Malavedan	50	2.48	
Mala Arayan	50	2.94	2.94
Malasar	50	3.18	3.18
Ulladan	50	3.22	3.22
Malayan	50	3.24	3.24
Eravalan	50	3.26	3.26
Adiyen	50		3.72
Kurichiyan	50		3.74
Paniyan	50		3.90

Source: Primary Data

The post hoc test (Scheffe test) sorts the communities into two different subsets, which is exhibited in Table 4.59. The first subset, which includes Malavedan (2.48), Mala Arayan (2.94), Malasar (3.18), Ulladan (3.22), Malayan (3.24) and Eravalan (3.26) indicates low mean scores. There is also a second subset consisting of Adiyen (3.72), Kurichiyan (3.74) and Paniyan (3.90) which have much higher scores than the first subset. These results reveal that there is a significant difference in financial satisfaction between communities where Paniyan, Kurichiyan and Adiyen achieve higher, as compared to Malavedan who attains the lowest level of financial satisfaction.

4.6.4 Access Barriers

The barriers to accessing financial services means to the hurdles that prevent individuals and households, especially those from marginalised or vulnerable section to engage actively in the formal financial system. The barriers may be in different forms, yet discovery and reduction of these barriers are crucial for attaining inclusive growth, financial literacy and equitable financial development among distinct communities. Table 4.60 illustrates the perception of respondents regarding the barriers faced while accessing financial services, estimated through eight statements using a five-point Likert scale from strongly disagree to strongly agree.

Table 4.60

Barriers Faced in Accessing Financial Services

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
I experience language problems when dealing with financial services.	n	52	112	33	196	57	3.21	1.27	3.489	0.001
	%	11.56	24.89	7.33	43.56	12.67				
I face inequality in accessing financial services.	n	77	104	53	123	93	3.11	1.42	1.697	0.090
	%	17.11	23.11	11.78	27.33	20.67				
I don't receive enough attention from authorities when seeking financial help.	n	63	121	46	140	80	3.12	1.36	1.841	0.066
	%	14.00	26.89	10.22	31.11	17.78				
Documentation requirements are a barrier for me when using financial services.	n	32	60	50	181	127	3.69	1.21	12.073	0.000
	%	7.11	13.33	11.11	40.22	28.22				
Procedural formalities in financial services are cumbersome for me.	n	33	55	43	157	162	3.80	1.25	13.553	0.000
	%	7.33	12.22	9.56	34.89	36.00				
Inappropriate branch timing makes it difficult for me to access services.	n	38	130	71	139	72	3.17	1.24	2.916	0.004
	%	8.44	28.89	15.78	30.89	16.00				

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
Geographical location creates problems in accessing financial services.	n	50	161	75	100	64				
	%	11.11	35.78	16.67	22.22	14.22	2.93	1.26	-1.233	0.218
I find the behavior of bank staff unfriendly.	n	109	113	96	80	52				
	%	24.22	25.11	21.33	17.78	11.56	2.67	1.33	-5.228	0.000

Source: Primary Data

Table 4.60 outline that 43.56% agreed and 12.67% strongly agreed (56.23%) that they experience language problems while dealing with the financial services. Conversely, 11.56% strongly disagreed and 24.89% disagreed (36.45%) and 7.33% of respondents was in a neutral stand.

Nearly one-third of respondents (27.33%) agreed and 20.67% strongly agreed that they face inequality in accessing financial services. Meanwhile, 17.11% strongly disagreed, 23.11% disagreed and 11.78% of respondents were neutral.

Responses exhibit that 31.11% agreed and 17.78% strongly agreed (48.89%) that they do not receive enough attention from authorities when seeking financial help, while 14.00% strongly disagreed and 26.89% disagreed and 10.22% were neutral.

A considerable 40.22% of respondents agreed and 28.22% strongly agreed that documentation requirements are a barrier. Only 7.11% strongly disagreed and 13.33% disagreed and 11.11% of the respondents were neutral.

Similarly, 34.89% agreed and 36.00% strongly agreed that they found procedural formalities cumbersome, while only 7.33% strongly disagreed and 12.22% disagreed. Only 9.56% of the respondents were neutral.

Regarding the variable, 'Inappropriate branch timing makes it difficult for me to access services' 30.89% agreed and 16.00% strongly agreed while 8.44% strongly disagreed, 28.89% disagreed and 15.78% were neutral.

Regarding the variable ‘Geographical location creates problems in accessing financial services’ 22.22% of the respondents agreed and 14.22% strongly agreed. However, 11.11% strongly disagreed, 35.78% disagreed and 16.67% of the respondents were neutral.

Nearly one half of the respondents strongly disagreed (24.22%) and disagreed (25.11%) that behavior of the bank staff is unfriendly. Whereas 17.78% agreed, 11.56% strongly agreed and 21.33% were neutral.

The analysis given in Table 4.60 portrays that certain procedural and administrative aspects pose the most significant barriers to access financial services. The statements such as: “Procedural formalities in financial services are cumbersome for me” (Mean = 3.80, $t = 13.553$, $p < 0.05$) and “Documentation requirements are a barrier for me” (Mean = 3.69, $t = 12.073$, $p < 0.05$) are emerged as the most prominent challenges. Since a good majority of respondents agree or strongly agree confirms this.

Language barriers were also notable, suggesting that communication issues continue to limit effective participation in financial activities. Issues such as inappropriate branch timing (Mean = 3.17, $p < 0.05$) and inequality in access (Mean = 3.11, $p > 0.05$) and lack of attention from authorities (M=3.12, $p > 0.05$) were moderately experienced, indicating that there are concerns for a segment of the population but not universal obstacles. Interestingly, geographical location (Mean = 2.93, $p > 0.05$) was not found to be a statistically significant barrier, possibly due to proximity of financial institutions. The lowest mean score was observed for the statement - “I find the behavior of bank staff unfriendly” (Mean = 2.67, $p < 0.05$) since most of the respondents disagree with this statement. This implies positive interpersonal interaction with staff in the banking premises. The results portrays that bureaucratic and procedural barriers are more restricting the financial access than geographic or interpersonal factors.

4.6.4.1 Effect of Language Problems on Financial Literacy

Language plays a pivotal role in accessing and understanding financial information, as most financial services, documents and digital platforms are created in dominant

national or international languages. For many individuals from tribal communities, language barriers hinder their ability to comprehend banking procedures, financial documents and digital platforms. This trends results in reduced participation in formal financial systems, limited confidence in handling financial tasks and a greater reliance on informal sources. Examining the effect of language problems on financial literacy of the tribal communities is therefore an important concern of the study.

Ho: There is no significant difference in the language problems of Scheduled Tribes across their level of financial literacy

Table 4.61

Effect of Language Problems on Financial Literacy

Financial Literacy	Mean	S.D.	t	p
Financial Literate	2.45	1.23	-9.608	0.000
Financial Illiterate	3.57	1.12		

Source: Primary Data

Independent samples t-test is used to examine the effect of language problem on financial literacy. In Table 4.61, the p value is less than the 0.05, so the null hypothesis is rejected and there is a significant difference of language problem across the financial literacy level of the respondents. Financially illiterate individual depicts higher language problem with mean value 3.57 and financially literate individual exhibits comparatively low language problem with a mean value 2.45.

4.6.4.2 Influence of Inequality in Access on the Financial Inclusion of Scheduled Tribes

The influence of inequality in access continues to feature among India's developmental concerns regarding financial inclusion of Scheduled Tribes. These disparities directly affect their ability to open bank accounts, access credit, avail insurance and thereby restrict both the depth and quality of financial inclusion.

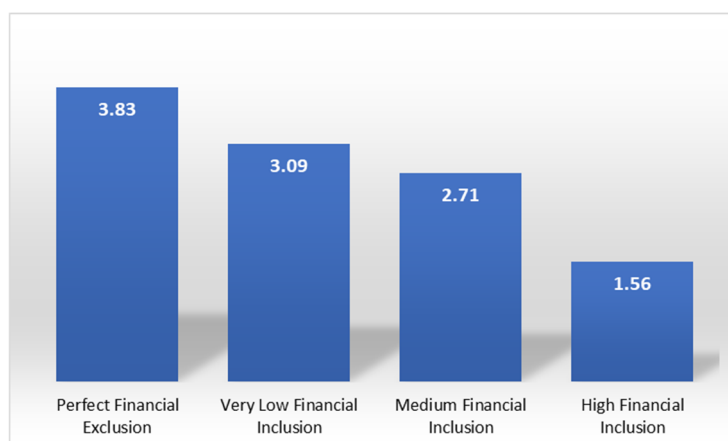
Ho: There is no significant difference on facing inequality in accessing financial services across the level of financial inclusion

Table 4.62*Inequality and Financial Inclusion*

	Mean	S.D.	F	p
Perfect Financial Exclusion	3.83	1.10	30.997	0.000
Very Low Financial Inclusion	3.09	1.41		
Medium Financial Inclusion	2.71	1.38		
High Financial Inclusion	1.56	0.91		
Total	3.11	1.42		

Source: Primary Data

Table 4.62 indicate statistically significant differences in mean scores across the four financial inclusion categories ($p = 0.000$).

Figure 4.22*Inequality and Financial Inclusion*

Source: Primary Data

In Figure 4.22, respondents in the perfect financial exclusion group mark the highest mean score ($M = 3.83$), followed by those in the very low financial inclusion group ($M = 3.09$) and the medium financial inclusion group ($M = 2.71$). The lowest mean score is observed among respondents in the high financial inclusion category ($M = 1.56$). A clear downward trend Inequality and Financial Inclusion suggests that decrease in inequality in accessing financial services will lead to substantial increase financial inclusion.

Table 4.63*Inequality and Financial Inclusion (Post hoc test)*

Financial Inclusion	n	Subset for alpha = 0.05		
		1	2	3
High Financial Inclusion	32	1.56		
Medium Financial Inclusion	90		2.71	
Very Low Financial Inclusion	202		3.09	
Perfect Financial Exclusion	126			3.83

Source: Primary Data

Table 4.63 illustrates the result of the post hoc test (Scheffe test) which groups financial inclusion categories into three distinct subsets: High financial inclusion stands alone with the lowest mean ($M=1.56$), medium financial inclusion ($M=2.71$) and very low financial inclusion ($M=3.09$) form an intermediate subset and perfect financial exclusion occupies the highest mean score subset ($M=3.83$). These findings display a clear inverse relationship between facing inequality in accessing financial services and financial inclusion.

4.6.5 Attitude towards Informal Financial Sources

The attitude of Scheduled Tribes towards informal financial sources reflects their perceptions, preferences and dependence on non-institutional systems such as moneylenders, friends, relatives and informal community-based lending practices. To the majority of tribal households, informal sources are still more accessible than formal institutions because of the instant availability of money, less complicated procedures and flexible repayment methods. Nevertheless, such dependency subjects them to high-interest rates, debt traps and financial instability. Assessing the attitude of tribal communities to informal finance is also useful in understanding the structural factors which could influence the financial decisions of the tribal communities and assist in the development and implementation of strategies that can be used to change the current borrowing behaviour towards the safer, cheaper, and sustainable formal financial services. Table 4.64 illustrates the attitude of the respondents towards the

informal sources of finance, measured through four statements on a five-point Likert scale from strongly disagree to strongly agree.

Table 4.64*Attitude towards Informal Financial Sources*

		Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Mean	S.D.	One-sample t-test with test value 3	
									t	p
I find the approach of informal financial sources (e.g., moneylenders) friendly.	n	32	37	90	168	123				
							3.70	1.16	12.687	0.000
	%	7.11	8.22	20.00	37.33	27.33				
Informal financial sources offer flexible timing, which I prefer.	n	38	57	80	132	143				
							3.63	1.28	10.519	0.000
	%	8.44	12.67	17.78	29.33	31.78				
Informal financial sources have fewer procedural formalities, making them more convenient.	n	24	37	24	174	191				
							4.05	1.13	19.569	0.000
	%	5.33	8.22	5.33	38.67	42.44				
Informal financial sources are easier to access than formal banking institutions.	n	26	29	21	129	245				
							4.20	1.15	21.961	0.000
	%	5.78	6.44	4.67	28.67	54.44				

Source: Primary Data

In Table 4.64, more than one-third (37.33%) agreed and 27.33% strongly agreed that informal financial sources are friendly in their approach. In contrast, only 7.11% strongly disagreed and 8.22% disagreed while 20.00% of respondents remained neutral.

A significant portion, 29.33% agreed and 31.78% strongly agreed with the flexible timing offered by informal financial sources. Conversely, 8.44% strongly disagreed and 12.67% disagreed, while 17.78% of the respondents remained neutral.

A significant proportion of 38.67% agreed and 42.44% strongly agreed that informal financial sources have less procedural requirements, hence they are more convenient.

A miniscule percentage of 5.33% strongly disagreed, 8.22% disagreed and 5.33% of the respondents remained neutral.

Likewise, 28.67% agreed and 54.44% strongly agreed that informal sources of finances are easily accessible than formal banks. A few respondents (5.78%) strongly disagreed and 6.44% disagreed whereas 4.67% of the respondents occupied neutral position.

Respondents have a strong positive preference towards the informal financial sources. The mean scores of all the statements are considerably above the neutral point and the differences are statistically significant ($p < 0.05$). This was confirmed using one sample *t* -tests. The respondents mentioned the approach of informal financial providers as friendly ($M = 3.70$), valued their flexible timing ($M = 3.63$), appreciated their lower procedural formalities ($M = 4.05$) and found easier access than the formal institutions ($M = 4.20$). The greatest level of agreement was witnessed on ease of access (54.44% strongly agree) and less procedural requirements (42.44% strongly agree). These results describe the inclination of the tribal people towards the informal sources because of convenience, perceived user friendliness and accessibility. These factors are possibly becoming a challenge to the adoption of formal financial services.

4.6.6 A Structural Analysis of Financial Literacy and Financial Inclusion of Tribal Communities

Structural Equation Modeling (SEM) was used to create an effective framework for analysing the multiple and intricate interrelationships among the financial literacy, financial inclusion and financial aspects of tribal communities. SEM allows testing both direct and indirect effects simultaneously, thus being able to identify the impact of multiple factors on the financial literacy and financial inclusion. Combining measurement and structural models, SEM is useful to verify latent constructs as well as establishing mediating and moderating relationships that would not be noticeable by using conventional statistical techniques. The method is especially useful when studying tribal population, as their financial landscape is formed through the synthesis of cultural, structural and institutional factors, providing more profound understanding on how the financial aspects influences the levels of financial literacy

and inclusion and vice versa. For analysing the relation between the constructs, Structural Equation Modeling (SEM) is carried out and the following null hypotheses were tested:

Ho: Access barriers have no significant influences on attitude towards informal financial sources.

Ho: Attitude towards informal financial sources has no significant influences on financial inclusion.

Ho: Access barriers have no significant influences on financial inclusion

Ho: Financial literacy has no significant influences on financial anxiety

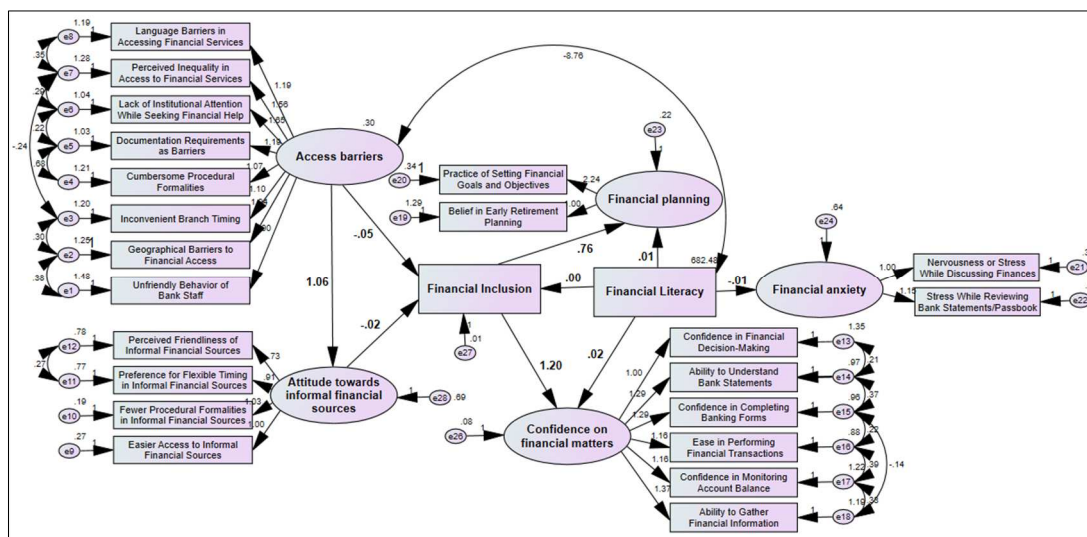
Ho: Financial inclusion has no significant influences on financial planning

Ho: Financial inclusion has no significant influences on confidence on financial matters

Ho: Financial literacy has no significant influences on confidence on financial matters

Figure 4.23

Structural Equation Modeling



Source: AMOS Output

Table 4.65*Regression Weights*

		Estimate	S.E.	C.R.	P
Access Barriers	→ Attitude towards Informal Financial Sources	1.056	0.160	6.579	0.000
Financial Literacy	→ Financial Inclusion	0.004	0.000	13.937	0.000
Attitude towards Informal Financial Sources	→ Financial Inclusion	-0.016	0.008	-2.048	0.041
Access Barriers	→ Financial Inclusion	-0.048	0.022	-2.179	0.029
Financial Literacy	→ Financial Anxiety	-0.010	0.002	-5.549	0.000
Financial Inclusion	→ Financial planning	0.755	0.234	3.230	0.001
Financial Inclusion	→ Confidence on Financial Matters	1.204	0.212	5.690	0.000
Financial Literacy	→ Confidence on Financial Matters	0.016	0.002	8.653	0.000
Access Barriers	→ Language Barriers in Accessing Financial Services	1.193	0.185	6.447	0.000
	→ Perceived Inequality in Access to Financial Services	1.561	0.230	6.788	0.000
	→ Lack of Institutional Attention While Seeking Financial Help	1.647	0.231	7.123	0.000
	→ Documentation Requirements as Barriers	1.189	0.180	6.615	0.000
	→ Cumbersome Procedural Formalities	1.068	0.172	6.202	0.000
	→ Inconvenient Branch Timing	1.098	0.176	6.241	0.000
	→ Geographical Barriers to Financial Access	1.044	0.146	7.146	0.000
	→ Unfriendly Behaviour of Bank Staff	1.000			
Attitude towards Informal Financial Sources	→ Perceived Friendliness of Informal Financial Sources	0.733	0.048	15.345	0.000
	→ Preference for Flexible Timing in Informal Financial Sources	0.909	0.050	18.207	0.000
	→ Fewer Procedural Formalities in Informal Financial Sources	1.026	0.040	25.501	0.000
	→ Easier Access to Informal Financial Sources	1.000			

		Estimate	S.E.	C.R.	P
Confidence on Financial Matters	→ Confidence in Financial Decision-Making	1.000			
	→ Ability to Understand Bank Statements	1.291	0.124	10.441	0.000
	→ Confidence in Completing Banking Forms	1.292	0.136	9.487	0.000
	→ Ease in Performing Financial Transactions	1.160	0.124	9.328	0.000
	→ Confidence in Monitoring Account Balance	1.157	0.132	8.780	0.000
	→ Ability to Gather Financial Information	1.370	0.146	9.369	0.000
Financial Planning	→ Belief in Early Retirement Planning	1.000			
	→ Practice of Setting Financial Goals and Objectives	2.242	0.368	6.092	0.000
Financial Anxiety	→ Nervousness or Stress While Discussing Finances	1.000			
	→ Stress While Reviewing Bank Statements/Passbook	1.152	0.206	5.601	0.000

Source: Primary Data

From Table 4.65 and Figure 4.23, access barrier Construct is estimated from eight indicators. Among the indicators the contribution of ‘Lack of Institutional Attention While Seeking Financial Help’ is the highest with a regression weight of 1.647. This is followed by ‘Perceived Inequality in Access to Financial Services’ with a regression weight of 1.561. The lowest contribution to the access barrier is from ‘Unfriendly Behaviour of Bank Staff’ with a regression weight of 1.000.

The Attitude towards Informal Financial Sources construct is estimated from four indicators. The highest contribution is from “Fewer Procedural Formalities in Informal Financial Sources” with a regression weight of 1.026, followed by “Easier Access to Informal Financial Sources” with a regression weight of 1.000. The lowest contribution is from “Perceived Friendliness of Informal Financial Sources” with a regression weight of 0.733.

Confidence on financial matters construct is estimated from six indicators. Among the indicators the contribution of ‘Ability to Gather Financial Information’ is the highest with a regression weight of 1.370. This is followed by ‘Confidence in Completing Banking Forms’ with a regression weight of 1.292. The lowest contribution to the confidence is from Confidence in Financial Decision-Making’ with a regression weight of 1.000.

The Financial Planning construct is estimated from two indicators. The highest contribution is from “Practice of Setting Financial Goals and Objectives” with a regression weight of 2.242, while the lowest contribution is from “Belief in Early Retirement Planning” with a regression weight of 1.000.

Financial anxiety construct is estimated from two indicators. Among the indicators the contribution of ‘Stress While Reviewing Bank Statements/Passbook’ is the highest with a regression weight of 1.152 and the ‘Nervousness or Stress While Discussing Finances’ is the lowest contributor with a regression weight of 1.000.

From Table 4.65 and Figure 4.23 it can be seen that, access barriers as significant positive effect on the attitude towards informal financial sources. The regression estimate is 1.056, which indicates that one unit increase in the access barriers makes 1.056 unit increases in the favourable attitude of tribal people towards informal financial sources.

From the analysis it can be observed that financial literacy has a significant positive effect on financial inclusion. The regression estimate 0.004 indicates that a one-unit increase in financial literacy leads to a 0.004-unit increase in the financial inclusion of Scheduled Tribes in Kerala.

Evidences suggest that attitude towards informal financial sources and financial inclusion exhibit a significant negative relationship with a regression estimate of - 0.016. This indicates that as the favourable attitude of tribal population towards informal financial sources increases by one unit their chance of financial inclusion decreases by 0.016 units.

Access barriers and financial inclusion exhibit a significant negative relationship, with a regression estimate of -0.048 . This conveys that for every one-unit increase in barriers to accessing formal financial services, the level of financial inclusion decreases by 0.048 units.

Financial literacy and financial anxiety shows a significant negative relationship, with a regression estimate of -0.010 . This point out that for every one-unit increase in the financial literacy level among tribal people, the chance of financial anxiety decreases by 0.010 units.

Analysis reveals that financial inclusion as significant positive effect on the financial planning. The regression estimate is 0.755, which demonstrate that one unit increase in the financial inclusion makes 0.755 unit increase in the financial planning of the Scheduled Tribes in Kerala.

It can be observed that financial inclusion has a significant positive effect on confidence in financial matters. The regression estimate is 1.204, which reveals that a one-unit increase in financial inclusion leads to a 1.204 unit increase on confidence in financial matters.

Results exhibit that financial literacy has a significant positive effect on confidence in financial matters. The regression estimate is 0.016, highlighting that a one-unit increase in financial literacy results in a 0.016-unit increase on confidence in financial matters.

Table 4.66

Model Fit Indices

Fit Indices	RMSEA	NFI	IFI	CFI
Estimate	0.065	0.952	0.982	0.983
Threshold	0.080	0.950	0.950	0.950

Source: Primary Data

The model fit indices shown in Table 4.66 indicate a satisfactory fit to the data. The Root Mean Square Error of Approximation value (0.065) is below the recommended cut-off of 0.080, while the Normed Fit Index (0.952), Incremental Fit Index (0.982),

and Comparative Fit Index (0.983) all exceed the minimum threshold of 0.950. Collectively, these results confirm that the model demonstrates a good overall fit.

Table 4.67

Total Effect of the Constructs

			Effect		
			Direct	Indirect	Total
Access barriers	→	Financial Inclusion	-0.048	$1.056*(-0.016) = -0.017$	-0.065
Financial Literacy	→	Financial planning	0.010	$0.004*(0.755) = 0.003$	0.013
Financial Literacy	→	Confidence on financial matters	0.016	$0.004*(1.204) = 0.005$	0.021

Source: Primary Data

Table 4.67 exhibits the direct effect of access barrier on financial inclusion which is negative (-0.048). This indicates that higher access barriers reduce financial inclusion. The indirect effect, mediated through attitude towards informal sources construct is also negative (-0.017). The total effect (-0.065) confirms that access barriers have an overall adverse influence on financial inclusion.

Financial literacy has a small but positive direct effect on financial planning (0.010), indicating that the more financial literate better the financial planning. The indirect effect (0.003) further substantiate the relationship marginally. The overall effect (0.013) shows that financial literacy has a modest positive impact on financial planning.

The direct impact of financial literacy on confidence in financial matters is positive (0.016), which demonstrates that financial literacy strengthens financial confidence. The relationship is once more supported by the indirect effect (0.005). This overall effect (0.021) indicates that there is a little but significant positive influence of financial literacy on financial confidence.

The results depicts that access barriers have a steadily negative effect on financial inclusion either directly or indirectly. Conversely, financial literacy has a positive

effect on financial planning as well as financial confidence with the intensity of the effects being relatively small. These results highlight the sufficiency of diminishing structural access barriers and simultaneously enhancing financial literacy in order to enhance the overall financial performance.

4.6.7 Consumption of Hazardous Substances

Consumption of hazardous substances relates to habits and use of harmful products like alcohol, smoking and betel chewing which creates severe repercussions in terms of health, social well-being, and economic stability. Such consumption habits among vulnerable groups consisting of Scheduled Tribes are usually affected by the economic pressure, peer influence, socio-cultural practices and insufficient awareness regarding the long-term effects. Overuse or chronic consumption of the hazardous substances not only undermines the physical and mental health but also increase indebtedness, reduces household savings and weakens overall financial resilience. Understanding the prevalence of hazardous substance consumption is therefore necessary in understanding its implications on both community-level, socio-economic development and individual welfare. Table 4.68 shows the distribution of the respondents based on the frequency of consumption of hazardous substances, including alcoholic products, smoking and betel chewing.

Table 4.68

Consumption Frequency of Hazardous Substances

Substances	Frequency	n	%
Consumption of Alcoholic Products	Not consuming	122	27.11
	Occasionally	55	12.22
	Monthly	5	1.11
	Weekly	23	5.11
	Regularly	245	54.44
Smoking Habits	Not consuming	188	41.78
	Occasionally	29	6.44
	Monthly	4	0.89
	Weekly	35	7.78
	Regularly	194	43.11

Substances	Frequency	n	%
Betel Chewing Habits	Not consuming	175	38.89
	Occasionally	31	6.89
	Monthly	1	0.22
	Weekly	31	6.89
	Regularly	212	47.11
Total		450	100

Source: Primary Data

By considering consumption of alcoholic products, Table 4.68 illustrates that 54.44% of the respondents consume alcoholic products regularly, which is more than one-half of the sample. In the meantime, there are 27.11% non-consumers and 12.22% occasional consumers. Fewer segments are drinking weekly (5.11%) or monthly (1.11%).

While looking into the smoking, 43.11% of the respondents indicated regular smoking and 41.78% do not smoke. Smaller segments indicated smoking weekly (7.78%), occasionally (6.44%) or monthly (0.89%).

Regarding betel chewing, 47.11% of respondents indicated regular consumption, while 38.89% do not consume betel products. Occasionally (6.89%) and weekly (6.89%) consumption are also reported, with a negligible 0.22% consuming monthly.

4.6.7.1 Variation in Alcohol Consumption across Tribal Communities

The variation in alcohol consumption among different tribal communities is assessed using One-Way ANOVA test. The data highlight inter-community differences in drinking patterns of the respondents.

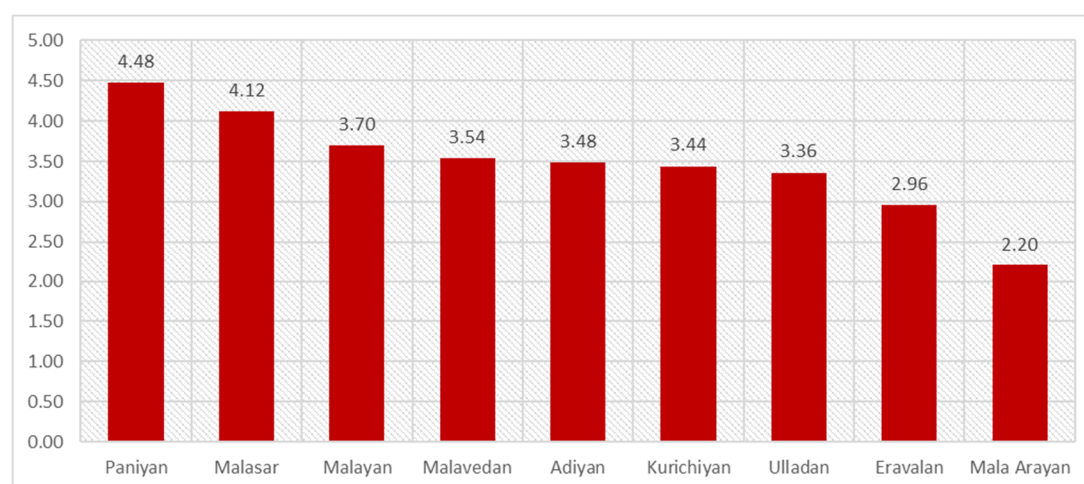
Ho: There is no significant difference in the frequency of alcohol consumption among tribal communities.

Table 4.69*Variation in Alcohol Consumption across Tribal Communities*

	Mean	S.D.	F	p
Adiyan	3.48	1.90		
Eravalan	2.96	1.75		
Kurichiyan	3.44	1.66		
Mala Arayan	2.20	1.56		
Malavedan	3.54	1.86	7.321	0.000
Malasar	4.12	1.60		
Malayan	3.70	1.84		
Paniyan	4.48	1.13		
Ulladan	3.36	1.86		
Total	3.48	1.79		

Source: Primary Data

The result of ANOVA test shown in Table 4.69 reveals significant variation in the frequency of alcohol consumption among the tribal communities as the p value ($p=0.000$) is less than 0.05.

Figure 4.24*Variation in Alcohol Consumption across Tribal Communities*

Source: Primary Data

From Figure 4.24 it is visible that the Paniyan community recorded highest mean score ($M = 4.48$) and higher alcohol consumption, followed by the Malasar ($M =$

4.12), Malayan (M=3.70) and Malavedan (M = 3.54) communities, all of which were above the overall mean (M = 3.48). In contrast, the Mala Arayan (M = 2.20) and Eravalan (M = 2.96) communities scored significantly lower and consume less alcohol as compared to other communities. This result indicates the community wise difference in the consumption of alcohol and point out the communities which need immediate attention to reduce the alcohol consumption.

Table 4.70

Variation in Alcohol Consumption across Tribal Communities (Post hoc test)

Community	n	Subset for alpha = 0.05		
		1	2	3
Mala Arayan	50	2.20		
Eravalan	50	2.96	2.96	
Ulladan	50	3.36	3.36	3.36
Kurichiyan	50	3.44	3.44	3.44
Adiyan	50	3.48	3.48	3.48
Malavedan	50	3.54	3.54	3.54
Malayan	50		3.70	3.70
Malasar	50		4.12	4.12
Paniyan	50			4.48

Source: Primary Data

The result of the post hoc test (Scheffe test) shown in Table 4.70 reveals three distinct groupings of communities based on their alcohol consumption. The Mala Arayan community (M = 2.20) forms a separate group with the lowest consumption of alcohol, significantly different from all other groups. The Eravalan (M = 2.96), Ulladan (M = 3.36), Kurichiyan (M = 3.44), Adiyan (M = 3.48), and Malavedan (M = 3.54) communities cluster together in the middle range, showing no statistically significant differences among themselves. The Malayan (M = 3.70), Malasar (M = 4.12), and Paniyan (M = 4.48) communities form a higher-scoring group, while the Paniyan community stands out with the highest mean score, significantly exceeding most other communities in the consumption of alcohol.

Summary of Analysis of Financial Planning, Financial Anxiety, Financial Confidence and other Financial Aspects among Tribal Households

The level of financial confidence, financial planning and access to formal financial services remain low with continued dependence on informal sources of finance. The respondents have low self-assessed confidence in performing basic financial operations like transfer of money, checking account balances, completing forms at the bank and interpretation of a bank statement. Active financial goal-setting is low, but at the same time, there is the presence of awareness regarding early retirement planning which shows the disparity between financial knowledge and practice. Emotional responses towards the financial issues consist of anxiety and stress. Tribal Communities have vastly different financial satisfaction. Paniyan, Adiyar and Kurichiyar communities have the highest financial satisfaction and Mala Arayan and Malavedan communities exhibit lower financial satisfaction. Geographical and interpersonal barriers were not significant, whereas tedious procedures and documentation became significant issues. Access inequality was seen to be significantly in lower financial inclusion. The language problems were more prevalent among the financially illiterate respondents. The interaction with formal financial institutions is limited by the high level of preference to informal sources of finances because of their friendliness, flexibility and easy accessibility.

The results of Structural Equation Modeling (SEM) reveal that financial literacy positively influences financial inclusion, financial planning, and financial confidence. Financial inclusion is adversely affected by the access constraints both directly and indirectly. Increased access barriers and favourable attitude towards informal sources diminishes the chances of inclusion. Financial literacy increases financial confidence and reduces financial anxiety, although the effects are small. Excessive use of dangerous substances such as alcohol, tobacco and betel products are prevalent among the respondents and the usage varies significantly across communities. The higher level of alcohol drinking habits among the Paniyan, Malasar, and Malayan communities' points to the necessity of implementing targeted social and health intervention programme along with the financial education.

4.7 Financial Development of Tribal Communities

The accessibility and efficient use of formal financial services by tribal communities are closely connected with the financial development of these groups. Financial literacy serves as the foundation, enabling individuals to understand and evaluate financial products, make informed choices and build long-term financial security (Lusardi & Mitchell, 2014; OECD, 2016). Access to formal deposit facilities encourages safe savings and reduces reliance on cash holdings, while the availability of formal credit offers opportunities for investment in agriculture, education and small enterprises, thereby reducing dependence on informal moneylenders who often charge exploitative interest rates (Rangarajan Committee, 2008; NABARD, 2020).

The insurance is critical in protecting tribal families against financial shocks like illness, accidents or crop failure and strengthen their economic resilience (World Bank, 2014). In a similar manner, the propagation of mobile banking and digital financial services have become a transformative tool, overcoming geographical challenges and delivering affordable and convenient access to formal finance (RBI, 2021). The set of dimensions, including financial literacy, formal deposits, formal credit, insurance, and mobile banking help to reduce the financial vulnerability, foster financial inclusion and empower tribal households to take more active role in the mainstream economy. Strengthening these dimension are core building blocks towards the substitution of exploitative informal credit systems with formal banking systems that are transparent and equitable in their operation, hence enhancing financial development of the tribal communities.

The research examined the preference of tribal households in attending financial literacy programs and choosing formal financial services in different scenarios that are driven by incentives. Responses were marked in a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) and assessed against a value of 3 that served as a neutral value and tested with the help of the one sample t-test.

Table 4.71*Preferences for Participating in Financial Development Initiatives*

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One- sample t- test with test value 3	
									t	p
I prefer to attend workshops and seminars that provide financial information.	n	104	92	71	85	98				
	%	23.11	20.44	15.78	18.89	21.78	2.96	1.48	-0.605	0.546
If remuneration is offered for attending workshops and seminars, I would choose to participate in those that offer financial information.	n	25	26	28	204	167				
	%	5.56	5.78	6.22	45.33	37.11	4.03	1.08	20.166	0.000
If the government provides a free or subsidized mobile phone with free recharge and maintenance, I would utilize mobile banking and internet banking services.	n	15	35	68	169	163				
	%	3.33	7.78	15.11	37.56	36.22	3.96	1.06	19.111	0.000
If bank officials are from my community, I believe that my contact with the bank increases.	n	52	71	82	141	104				
	%	11.56	15.78	18.22	31.33	23.11	3.39	1.31	6.269	0.000
If banks provide daily jobs, I would keep a portion of my income in the bank as deposits.	n	11	27	35	200	177				
	%	2.44	6.00	7.78	44.44	39.33	4.12	0.96	24.844	0.000
If the government covers half of my insurance premium and my family's, I would purchase more insurance products.	n	8	23	36	190	193				
	%	1.78	5.11	8.00	42.22	42.89	4.19	0.92	27.656	0.000

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	S.D.	One- sample t- test with test value 3	
									t	p
If the bank's lending environment is similar to that of informal moneylenders or friends, I would prioritize banks for my financial needs.	n	33	30	31	157	199				
	%	7.33	6.67	6.89	34.89	44.22	4.02	1.20	18.028	0.000
If my prompt repayment of previous loans reduces interest on future loans, I would fulfill my credit requirements through formal financial institutions.	n	19	50	85	121	175				
	%	4.22	11.11	18.89	26.89	38.89	3.85	1.18	15.352	0.000

Source: Primary Data

Table 4.71 depicts that 18.89% agreed and 21.78% strongly agreed that they prefer to attend financial workshops and seminars. However, 23.11% strongly disagreed and 20.44% disagreed, while 15.78% remained neutral.

Nearly one-half (45.33%) of respondents agreed and 37.11% strongly agreed that they would attend financial workshops and seminars if remuneration is offered. Only 5.56% strongly disagreed, 5.78% disagreed and 6.22% of respondents remained neutral in this matter.

A considerable proportion of respondents (37.56% agreed and 36.22% strongly agreed) stated that they would utilize mobile banking and internet banking services if provided free. Only 3.33% strongly disagreed, 7.78% disagreed and 15.11% of respondents remained neutral.

Nearly one-half of the respondents (31.33% agreed and 23.11% strongly agreed) that having bank officials from their own community would increase their contact with

banks. Conversely, 11.56% strongly disagreed and 15.78% disagreed, while 18.22% were neutral.

Responses displays that 44.44% agreed and 39.33% strongly agreed that they would save a part of their income in banks, if the bank provides daily jobs. Only 2.44% strongly disagreed and 6.00% disagreed, while 7.78% of respondents remained neutral.

A notable 42.22% of respondents agreed and 42.89% strongly agreed that they would purchase more insurance products if the government subsidises the premium. Only 1.78% strongly disagreed and 5.11% disagreed, while 8.00% of respondents remained neutral.

A good proportion 34.89% agreed and 44.22% strongly agreed that they would prioritise banks if lending conditions are similar to informal moneylenders or borrowing from friends. Only 7.33% strongly disagreed and 6.67% disagreed while 6.89% of respondents remained neutral.

Similarly, 26.89% agreed and 38.89% strongly agreed that they would prefer formal financial institutions for credit requirements, if prompt repayment reduces future interest rates. Only 4.22% strongly disagreed and 11.11% disagreed while 18.89% were neutral.

The results given in Table 4.71 exhibit that, in the absence of incentives, there is no significant preference for attending financial workshops (Mean = 2.96, $p > 0.05$). However, the likelihood of participation and usage of financial services increases substantially when incentives are offered, such as remuneration for attendance (Mean = 4.03, $p < 0.05$) or provision of subsidized mobile phones with free recharge and maintenance for enabling digital banking (Mean = 3.96, $p < 0.05$).

Community-based interventions also appear effective, as respondents expressed moderate agreement that having bank officials from their own community would enhance contact with banks (Mean = 3.39, $p < 0.05$). Additionally, livelihood-linked measures like providing daily wage jobs by banks (Mean = 4.12, $p < 0.05$) and

subsidizing insurance premiums (Mean = 4.19, $p < 0.05$) significantly increased willingness to engage with formal financial environment.

Developing bank lending process similar to informal sources (Mean = 4.02, $p < 0.05$) and providing interest rate reduction on timely loan repayment (Mean = 3.85, $p < 0.05$) turned out to be strong motivators and trust building measure. On the whole, the results point to the fact that a multifaceted approach comprised of financial incentives, culturally sensitive service delivery, livelihood support, and trust-oriented banking practices could play a significant role in improving the financial literacy, financial inclusions and consequent financial developments among tribal communities

Summary of Analysis Based on Financial Development of Tribal Communities

The analysis reveals that livelihood possibilities, community-based initiatives, incentives and trust-building measures significantly influence financial development of the tribal communities. Their attendance at financial workshops and use of digital banking options will be at a very low level in the absence of incentives. But their participation will increase significantly in the presence of monetary rewards or digital tools like subsidized mobile phones with free maintenance and recharge are availed. This indicates that tangible benefits are a powerful tool to improve financial participation. The presence of bank officials from the respective community is a culturally sensitive measure which will enhance accessibility and trust. Similarly, livelihood linked policies consisting of providing daily wage jobs through banks and subsidizing insurance premiums develop interaction with formal financial institutions. Financial participation is further enhanced through trust-focused strategies which comprise of simplifying lending processes similar to informal financial sources and promoting prompt repayment by availing interest reduction.

4.8 Conclusion

The analysis carried out in this chapter has provided succinct and factual insight into the extent of financial literacy, level of financial inclusion and financial development of tribal communities in Kerala. The present study confirmed substantial disparities across socio-demographic variables, detected financial literacy and inclusion

determinants and ascertained the relationship between financial literacy and financial inclusion through the application of descriptive and inferential statistical techniques. The results underscore the trends of income shortfall, dependency on informal sources of finance, disproportionate access to formal services and also pointing to encouraging trends in the adoption of deposits, credit, insurance and mobile banking. Jointly, the results affirm the critical role of financial literacy in developing decision-making and inclusion outcomes. But the structural constraints such as language problems, limited access and socio-economic disparities continue to restrict the progress. The present chapter creates a strong empirical foundation for understanding the financial aspiration of tribal households and provides the basis for developing targeted recommendations.

References

- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296–316.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- NABARD. (2020). *Status of microfinance in India 2019–20*. Mumbai: National Bank for Agriculture and Rural Development. <https://www.nabard.org>
- Nair, T. S. (2010). Financial inclusion and beyond: Issues and challenges. *Economic and Political Weekly*, 45(30), 18–21.
- OECD. (2016). *OECD/INFE International Survey of Adult Financial Literacy Competencies*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2023). *OECD/INFE 2023 international survey of adult financial literacy*.
- Rangarajan Committee. (2008). *Report of the Committee on Financial Inclusion*. Government of India.
- Reserve Bank of India. (2021). *Financial education initiatives by RBI*. Mumbai: RBI. <https://www.rbi.org.in>
- Varkey, J. (2019). *Financial inclusion of scheduled tribes in Kerala: An empirical study* (Doctoral dissertation, University of Kerala). University of Kerala.
- Varkey, J., Mathew, J., & Sujathan, P. (2025). An alternative index for measuring financial inclusion: A study of scheduled tribes in Kerala. *Social Change*.
- World Bank. (2014). *Global financial development report 2014: Financial inclusion*. Washington, DC: World Bank.

Chapter 5

SUMMARY OF FINDINGS AND CONCLUSION

5.1	Introduction	294
5.2	Major Findings.....	297
5.3	Conclusion.....	323

5.1 Introduction

The overall development of a nation cannot be achieved until ensuring the development and growth of each individual in the national territory. Inclusive economic growth of a country aims at providing equitable opportunities to economic participants with benefits incurred by every section of the society. Financial inclusion is one such process which ensures access to affordable and appropriate financial products and services for all individuals and businesses, particularly the vulnerable and underserved. Financial literacy refers to the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources. It is the capacity to have familiarity with and understanding of financial products and services. Financial literacy plays a vital role in the efficient allocation of household savings and the ability of individual to meet their financial goals.

The main financially excluded sections are marginalised communities of the country which includes women, Scheduled Caste, Scheduled Tribe, fisherman etc. Among the marginalised communities, tribal communities are the sections who need serious attention and care while framing the financial inclusion plans and policies.

5.1.1 Statement of the Problem

A majority of the Indian population are poor having lower, irregular and uncertain income concentrated in rural areas. Sustainable development of India is directly related to the inclusive growth of each individual in the territory. This forces them to maintain their meager and uncertain incomes effectively in order to ensure regular cash inflow and to accumulate sufficient money to cover their daily needs. But the occurrence of unexpected expenditure may collapse most of their financial plans and

dreams. Financial exclusion and its resulting poverty are back lifting the growth potential of rural households. A full-fledged financial inclusion of the nation would speed up the inclusive growth and the sustainable development of the nation. Although several financial inclusion programs have been introduced by the government still there are people especially those who belong to tribal communities stand outside the purview of these programs. Tribal communities are found to be one of the major vulnerable groups in the society with respect to resource allocation and income disparity. Scheduled Tribes in India constitute approximately 8.6 percent of population of India. The proportionate gap itself keeps this section far away from enjoying the benefits of government policies and initiatives. The Scheduled Tribes constituting 1.45 percent of the total population in Kerala are mainly identified by their geographic isolation and economic backwardness.

Even though a sizeable portion of the marginalised communities in the country was uplifted through a combined effort of different governments and citizens in the country, the financial environment of the tribal communities in India is very pathetic in all respects. Financial literacy is crucial for the poor because they have trouble in making financial decisions that could have a big impact on their lives Okello (2020). Lack of proper savings, unplanned spending and the improper money management practices of tribal communities necessitates the significance of promoting financial education programs in schools and higher education institutions.

5.1.2 Objectives of the Study

1. To assess the level of financial literacy among the tribal communities in Kerala.
2. To evaluate the level of financial inclusion among the tribal communities in Kerala.
3. To analyse the role of financial literacy in promoting financial inclusion among the tribal communities.
4. To examine the status of financial planning, financial anxiety and financial confidence among the tribal households.

5.1.3 Research Methodology

The present research is both descriptive and inferential in character. It is descriptive because it explains the characteristics and background of the variable based on the available information. The inferential aspects of the research systematically assess the variables and their relationship or association or impact or effect by using the suitable statistical techniques to test hypotheses and draw relevant inferences.

The population of the study consists of Scheduled Tribes in Kerala. The sampling unit for the study consists of the financial heads of households from tribal communities in Kerala and Multistage Random Sampling Method was used in this study. On the basis of the Cochran formula and MaCorr sample size determination formula the minimum required sample size for this study is 384 and the researcher decided to fix the sample size as 450. Based on the convenience of respondents and to reduce errors in responses, the researcher used interview schedule for collecting primary data from the Scheduled Tribe communities.

Geographically, the study is conducted based on data collected from tribal communities living in three districts such as Wayanad, Palakkad, and Kottayam which represent North, Central and South regions of Kerala. From the Selected districts, three tribal communities were randomly selected from each district. The selected communities were Adiyan, Kurichiyan, and Paniyan from Wayanad district, Eravalan, Malasar, and Malayan from Palakkad district, Mala Arayan, Malavedan and Ulladan from Kottayam district respectively.

Descriptive statistics, such as frequencies, percentages, mean and standard deviation were used for the purposes of summarising socio-demographic characteristics and for displaying the general states of financial literacy and inclusion. Inferential statistical methods including One-sample t-tests, Independent samples t-tests, Chi-square tests, One-Way Analysis of variance (One-Way ANOVA), Friedman test, Scheffe's post-hoc test, Sobel test, Pearson correlation, Simple linear regression, Multiple linear regression and Structural Equation Modeling (SEM) were used in accordance with the objectives of the study.

5.2 Major Findings

5.2.1 Socio - Demographic Profile

I. Gender

1. Among the respondents, males constitute 79.78% followed by females (20.22%). It reveals that males constitute the vast majority among the sampled tribal communities. The poor representation of females in the survey indicates that there is a wider gender disparity that still exists among the Scheduled Tribes in steering the household.

II. Age

1. Age profile broadly aligns with the demographic pattern of household heads among Scheduled Tribes in the State of Kerala, where the middle adult age group was found to be assuming the role of prime decision-makers as well as income-earners within households. Findings regarding tribal households suggest that the financial heads were found to be falling in the age group 35-49 years. This is likely to be due to the reason that they are the most economically responsible persons among the different age groups. Relatively minor representation of respondents (6.44%) belonging to the age group 'more than 60 years' indicates that they are less likely to assume the role of financial head and they are not actively participating in livelihood activities. Correspondingly, the under representation among the young adults aged below 35 years (7.57%) shows their transition phase. This indicates that adults falling under the age group 'Below 35 years' are excluded from undertaking the role of financial head within the household.

III. Education

1. Household leaders among the tribal groups in Kerala often reach only the primary or secondary level of schooling (74.66%) with only a 6.44% educated up to higher secondary and 4.00% of the respondents were educated up to the College or higher educational level. Even though, the overall literacy rate in Kerala is high, the tribal communities face significant disparities in pursuing higher education.

As such, the findings highlight the persisting inequality in the educational mobility among the tribal families as the financial heads mostly have only the basic schooling as their qualification.

IV. Occupation

1. The Vast majority (76.89%) of participants are primarily engaged in unskilled labour, frequently in roles characterized by daily wages, such as construction or casual work, exhibiting both insufficient educational credentials and constrained access to stable employment prospects. The minimal number of respondents in professional, technical or administrative roles is a manifestation of long-term barriers faced by the tribal peoples in Kerala, which includes low level of education, vocational training and socio economic vulnerabilities.

V. Participation in MGNREGA

1. Majority of the tribal population (55.11 %) are participating in MGNREGA as a continuation of their survival mechanisms. Since a majority of the respondents engage in unskilled, seasonal or informal jobs, the program acts as a sound backup measure when the agricultural seasons are lean or when other means of livelihood are low. The rest 44.89 % of non-participants, on the other hand, indicate inhibitions due to lack of awareness or affinity to other daily wage opportunities, which feel more urgent or rewarding. Such a two-sided pattern reflects not only the importance of MGNREGA as a kind of safety net among tribal families, but also highlights the obstacles in the way of its universal adoption.

VI. Monthly Personal Income

1. The disaggregation of monthly earnings within the respondents indicates the greater economic frailty of the tribal households. The largest income group consist of those who earns between Rs.2,501- Rs.5,000 per month which represents up to 52.00 % of the respondents. Dependence on temporary daily wages (whether low or paid in erratic ways) and restricted access to regular employment, results into constrained household earnings. The presence of only a small percentage (7.33 %)

that reflects monthly income over Rs.10,000 reveals that economic progress of the tribal population of Kerala is still considered to be exceptional.

VII. Earning Members

1. The number of earning members per household explains that economic obligations are distributed in the family though at different levels. The higher level of dependence on low-paid and unskilled jobs necessitates the household to depend more than one earner to meet their needs. The greatest proportion of households (40.90 %) indicated that they have two earning members, a total of 28.44 % indicated three, and 24.44 % indicated one earner in their households. The limited number of households that have only single earner is a further indication of the vulnerability of these families, as the responsibility is left in the shoulder of the head or the financial decision maker in the household. The pattern of inclination indicates that the majority of tribal households operate with two or three income earners and it is a relatively balanced distribution of economic responsibility.

VIII. Monthly Household Income

1. Household income distribution among the respondents shows that a good majority (58.44%) of the households earn between Rs.5,001 to Rs.10,000 per month. Since most of the household heads are engaged in low paid temporary works, family income is kept modest as well as inadequate to cover their wider needs like education, health and building assets. Even if multiple members contribute to household income, the unskilled nature of the works limits upward ascent. Only 8.67% of the households earn more than Rs.15,000 itself implies that there are systemic limitations which prevent tribal households from approaching better livelihoods. Hence, it can be stated that most of the Scheduled Tribe families in Kerala belong to the low-income groups, where the financial heads struggle to run beyond the threshold of economic insecurity.

IX. Household Expenditure

1. The daily expenditure pattern of the households reflects the financial hardships faced by tribal families. A significant proportion (32.89%) of these households spend daily within the range of Rs.501 to Rs.1,000. In aggregate, a majority (75.11) of families incur daily expenditures exceeding Rs.500, which has direct influence on their financial stability, because majority household have a monthly income between Rs.5,001 and Rs.10,000. Comparing such expenditure pattern to income earned by households, an insightful picture of vulnerability is created. Most tribal households were found to be earning less than ₹10,000 per month. A significant proportion devotes rather high sums to daily spending, ranging from their income being barely sufficient to meet the household needs. This disparity denotes the recurring problem of maintaining scarce and restricted resources with the repetitive expenses for food, health, education, and other livelihood necessities. In addition, wasteful spending on non-essentials was evidenced among the vast number of the households.

X. Relationship between Income and Expenditure

1. Lower income respondents (Up to ₹2500 per month) spend ₹501– ₹1000 a day. As income increases, the proportion of households incurring higher expenses (₹1001–₹1500 and above ₹1500) generally declines. Among the top income group (above ₹10,000 per month), more than one-half of the households (57.58%) spend between ₹501 and ₹1000 per day and 39.39% of the respondents spend up to ₹500 per day and none spend more than ₹1500 per day. This pattern supports the negative Pearson correlation indicating that higher income levels are moderately associated with lower expenditure. Households experiencing very low and unstable income tend to spend disproportionately high amount for their needs, leaving very little potential for savings or investments. Conversely, families experiencing relatively higher and stable income sources tend to be more careful about their spending, likely because they are less dependent on distress-based spending, while the most vulnerable groups are compelled to exert their limited resources to meet their needs. This reflects the fragile financial equilibrium among

the tribal communities, where the families earning lower incomes are more vulnerable to debt as well as economic pressure because of their unconscious spending.

5.2.2 Financial Literacy among the Tribal Communities

I. Financial Knowledge

1. A majority of the respondents (57.56%) underestimate or misinterpret inflationary trends, which could impact their long-term financial planning as well as their capacity to protect purchasing power.
2. Regarding the calculation of interest rate, a slightly better understanding was observed. A good majority of the respondents (54.44%) correctly identified the accurate answer. This shows a satisfactory awareness on the computation of interest rates. The rest 45.56 % of the respondents were unable to determine the interest rate.
3. The fact that a sizeable majority (56.67%) of respondents have a basic knowledge of the concept of “diversification helps to minimise the risk of investment and ensure consistent returns”. The 43.33% of the rest is either ignorant or has a misconception about diversification, which may not allow them to make an informed decision regarding investment and to control financial risks efficiently.

II. Financial Behaviour

1. More than one-half of respondents (55.33 %) indicated that they made household financial decisions collectively, depicts a collaborative strategy in the households. This conveys that there is a high likelihood of financial decision-making being shared between spouses or members of the household, which can be termed in to practices of participatory financial management that brings in inclusiveness and a sense of shared responsibility. At the same time, an important share (41.11 %) said they made financial decisions independently, which means that a large percentage of them are autonomous on household finances and might want to be self-reliant in economic management. It is evident that the tribal households maintain a

balance between individual autonomy and joint decision making, where external reliance in financial aspects is insignificant.

2. Higher percentage of the respondents (87.56 %) stated that they made their own personal financial decisions individually, which shows their self-reliance in handling their financial matters. These forms of self-sufficiency indicate slow shifts from the dependency culture to an increased level of personal autonomy in financial matters within tribal households. A minimal section (12.44 %) of respondents reported that they do not take their own financial decisions and this segment of the population includes those who leave the task of taking care of their financial affairs to spouses, relatives or other trusted individuals due to age, financial incompetence, or as a result of traditional norms. The presence of such group highlights that while autonomy is prevalent, there are still some areas of dependency especially among the vulnerable classes within the tribal communities.
3. Almost one-third (29.33%) of the respondents reported that they formulated a financial plan to manage their earnings and expenses and a staggering 70.67 % did not do so. This is a pointer that most tribal households do not manage their finances through systematic budgeting but instead do it in a temporary basis which may subject them to financial vulnerability. There is moderate level of awareness in spending habits, where 38.67 % keep a record of their expenses and 61.33 % do not keep any records. Likewise, the percentage of those who planned to keep a portion from daily spending for future bill payments was only 33.78 % and the rest 66.22 % did not engage in this apportionment, which depicts limited prevalence of forward-thinking financial habits. The difference is even more evident concerning to specific practices of financial discipline. Only 22.44% of the tribal community claimed to be taking notes about the next pay-outs of bills to prevent default, while the remaining 77.56% disregard this rudimentary precaution. Even digital financial adoption is very poor, as only a single respondent (0.22%) claimed the use of money management or banking apps, leaving the remaining whopping 99.78% outside this system. No respondent

claimed the use of automatic pay-out measures for their bills, showing that the modern financial instruments as well as practices still haven't reached among these communities. Hence it can be stated that the inappropriate money management combined with minimal digital adoption would take tribal community even more susceptible to the debt trap, default on payment as well as irregular savings habits.

4. Respondents predominantly employ traditional, informal saving practices instead of formal financial channels. The most prevalent practice is giving money to family members for safekeeping (38.44%), closely followed by saving cash at home or in a wallet (35.56%) and participation in informal savings clubs or chits (33.33%). It is an indication of the inclination toward easily accessible mechanisms of saving, which are culturally familiar and are seen as reliable to the tribal people. The saving habits are based on trust and household focused instead of institutional or market oriented mechanisms. The dependence on informal savings opportunities leads to low use of formal banking services as well as lack of any exposure to progressive investment products, which underscore their widespread exclusion from the formal financial system.
5. Absence of financial sufficiency is a widespread issue among the tribal population with 84.44% of the respondents making less than the adequate and 15.56% did not confront the insufficiency. The continued gaps in income have significant implications on the economic sustainability of tribal families which directly restrict their ability to save, invest or accumulate assets. The lack of income or deficit of income force households to turn to informal credit, to participate in risky labour or to depend on government welfare programmes to meet even basic consumption needs. This type of chronic shortage undermines financial stability, making households very susceptible to any health crises and other livelihood threats.
6. The most common strategy followed by the tribal community (27.78%) for overcoming the deficit of income is by accessing credit based on personal contacts or existing credit line. This trend highlights a continued reliance on social networks as opposed to institutional credit systems. The predominance of debt-

based responses implies that tribal families are relegated to borrowing as the default option to meet income gaps, putting them into longer-term financial risk. Income deficits among the Scheduled Tribes are managed through informal borrowing instead of sustainable financial planning.

7. Most of the respondents (65.56%) keep alertness on their personal finances. Financial laxity is fairly rare among the respondents. There is no definitive preference either towards or against long-term financial goal-setting among the tribal population. Survival through the present and the meeting of everyday expenditure takes preference over long-term vision in finances. This could be due to various constraints such as unpredictable income, dependency on unskilled labour, prevalence of income gaps as well as borrowings being needed to meet minimum needs. This result suggests that, a majority of tribal communities (55.78 %) weigh their affordability cautiously before making purchases. Though Tribal Communities lack formal financial planning or saving mechanism, yet they exhibit careful consumer behaviour as an adaptation technique to avoid further financial stress. Almost one-half the respondents (47.34%) paid their bills on time indicates that there is financial responsibility among tribal households despite their pervasive income deficits and inadequate utilization of structured financial planning instruments. It is possible that the preference towards timeliness is driven by social pressures or pressures related to services, leaving arrears open to penalty, disconnection of utilities or loss of trustworthiness with service providers.

III. Financial Attitude

1. A majority of Tribal communities (56.00%) do not derive more satisfaction from spending than they do from saving. Concurrently, 35.56% of respondents derive higher satisfaction from spending.
2. More than one-half the respondents (53.78%) denied present focused financial attitude, as they disagreed and strongly disagreed with the statement 'prioritizing current enjoyment at the expense of future security'. Only 30.45% of the tribal community approves the present-oriented outlook.

3. Nearly one-half (46.45%) of tribal communities do not believe that money is primarily meant for spending, as they disagreed or strongly disagreed with this notion. One-third of the respondents (32.67%) agree that money is mainly for spending, while 20.89% remained neutral.
4. A total of 40.67% of the respondents stated that they do not become stressed during financial emergencies, reflecting a strong sense of adaptation and resilience. However, 29.78% confessed to being stressed and 29.56% were neutral, reflecting ambivalence or situational variation in the stress experience.
5. Almost one-half (49.77%) of the tribal community believe that financial planning is only for rich people. This insight demonstrates an important psychological and cultural barrier to financial inclusion.

IV. Financial Awareness

1. Findings indicate high concentration of awareness among respondents around the traditional or conventional banking practices.
2. A very high majority of the tribal community have awareness about passbooks (92.44%) and about cash deposits and withdrawals (75.11%). This shows strong awareness about traditional, face-to-face banking transactions that are simple and widely accessible in tribal as well as rural settings. Only 10.00% of the tribal communities have awareness about mobile or internet banking and 21.11% of the respondents have awareness about UPI/digital payments. This significant digital gap demands that urgent initiatives are needed to make the tribal communities aware about the application of technology in banking.
3. There is only modest awareness about the formal financial instruments like insurance (31.78%) as well as about loans (34.67%). This implies that tribal people lack exposure in the use of financial instruments for managing risks as well as formal credit mechanism.

V. Individual Financial Literacy

1. Only 32.2% of respondents are financially literate, while an overwhelming 67.8% are financially illiterate. This implies that most of the members of the tribal group lack the necessary skills and knowledge needed to handle the financial resources effectively, make sound decisions and to navigate formal banking systems. Financial illiteracy not only reduces the ability of households to accumulate and safeguard wealth but also increases vulnerability to debt traps as well as the exploitation within informal credit markets. The low literacy rates also limit the capability of the tribal groups to tap the benefits of the financial development programs of government. This hinders the tribal community to move into more secure long-term financial landscape.

VI. Variation in Financial Literacy across Socio Demographic Variables

1. The level of financial literacy among tribal communities does not show statistically significant differences between male respondents and female respondents, which implies that both genders face similar predicaments and limitations related to financial education and practices.
2. The highest mean financial literacy score ($M = 57.41$) is observed among the respondents under the age of 35, followed by the age group of 35-39 ($M = 56.48$). Younger tribal generation seems to be better prepared in terms of financial literacy, which may be accounted by higher level of exposure to formal education, awareness campaigns, and rising contact with modern financial systems. Conversely, the literacy levels of older respondents are significantly lower ($M = 38.90$) which may be due to the presence of traditional financial practices, minimal opportunities for education, and limited exposure to digital or institutional financial products
3. Regarding financial literacy and education level of tribal community, it can be seen that those who do not have formal education have the lowest mean score ($M = 34.45$), whereas those are educated up to college level have the highest score (M

= 81.33). The statistical analysis confirms that increase in education level increases the level of financial literacy among the tribal community.

4. It is established upon examination that financial literacy is significantly heterogeneous among occupational groups. Occupations that necessitate regular financial transactions and structured earnings have a positive impact on financial literacy whereas unstable and informal occupations do not have a positive impact on financial literacy and expose such groups to higher financial vulnerability.
5. Engagement in the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) does not have a significant impact on financial literacy of the respondents. While participation in MGNREGA is important in ensuring wage security and protection of livelihoods, it is perhaps not necessarily leads to the development of financial literacy. Hence it can be stated that MGNREGA is important in ensuring economic stability among tribal and rural families but its contribution in improving the financial literacy is only marginal. This necessitates additional financial awareness and capacity development programs.
6. The evidences clearly reveal a positive association between financial literacy and income levels of tribal communities. Tribal communities with higher income have higher financial literacy ($M = 81.09$), perhaps as a result of higher access to financial practice, availability of a wider range of financial products, and greater savings and investment opportunities. Low financial literacy ($M = 34.50$) could be found among people belonging to tribal community with lower income. This trend suggests a two-fold possibility: financial literacy increases income-generating capacity through informed decision-making or higher incomes have superior avenues to acquire and apply financial literacy.

VII. Variation in Financial Literacy across Tribal Communities

1. Regarding inter-community differences in financial literacy among tribal populations in Kerala, Mala Arayan community shows strong understanding and competency to deal with financial matters ($M = 80.72$) followed by Kurichiyan, Malayan, Ulladan, Eravalan, Adiyar, Malavedan and Paniyan. Lower literacy was

found among the Malasar ($M = 30.64$). This distribution reflects intra-tribal disparities in financial literacy. The socio-economic status, access to schooling, patterns of livelihood and entry into formal systems determine the financial literacy status of the tribal communities.

VIII. Variation in Financial Literacy across Region

1. Tribal communities living in southern districts ($M=55.33$) are relatively more financially literate, which can be explained by the increased accessibility to the education, better institutional assistance, and the enhanced participation in to the mainstream economic processes. On the contrary, North ($M=44.83$) and Central ($M=43.20$) regions have lower financial literacy and depicts regional differences due to the geographic seclusion and socio-economic deprivation.

IX. Individual Basic Digital Financial Literacy

1. The analysis of the level of basic digital financial literacy among tribal communities reveals notable gap in the ability to use modern financial technologies. Depending on the scores ranging from 0-100, the overall level of basic digital financial literacy is considerably low; only 23.3% of respondents can be considered digitally financially literate and 76.7% are underperformers in this sphere. This disparity depicts higher level of digital divide among the tribal communities. Considering that the use of digital platforms is becoming more and more important to promote financial inclusion and service delivery. These findings help to highlight the necessity of specific interventions aimed for promoting digital financial literacy.

X. Variation in Basic Digital Financial Literacy across different Socio-Demographic Variables

1. Gender does not establish a statistically significant difference in basic digital financial literacy among the tribal community, although there are numerical differences.

2. The age is found to be a great predictor with younger and middle-aged respondents, specifically those in the 35-39 age bracket showing higher levels of digital financial literacy ($M=48.90$) than older age groups, whose scores drops significantly, especially among those who are above 50 years.
3. The education has a unique and positive effect on basic digital financial literacy, the score is increasing steadily from no formal education ($M= 25.00$) to college education ($M= 83.33$). The significant contribution of formal education in enhancing basic digital financial literacy substantiates this fact.
4. The basic digital financial literacy of tribal communities based on occupational status indicates that business and retail workers stands first (100%) followed by retirees (87.50%) and government employees (85.71%). This could be due to their frequent dealings with organized financial systems and transactions. Conversely, the workers from unskilled, healthcare, transport and agrarian sectors have low digital literacy.
5. Participation in MGNREGA has no significant impact on basic digital financial literacy, where participation ($M = 40.22$) makes trivial difference compared to that of non-participation ($M = 39.11$). Hence it can be stated that participation in MGNREGA has no measurable impact in improving or limiting the basic digital financial literacy among tribal communities.
6. There is clear and statistically significant positive association between income and basic digital financial literacy. Scores rise steadily when it moves from the lowest ($M = 26.04$) to the highest income group ($M = 84.85$). This indicates that tribal communities with higher incomes are associated with higher proficiency in digital financial practices and this may even be a facilitator of higher economic opportunities and financial well-being among tribal people.

XI. Variation in Basic Digital Financial Literacy across Tribal Communities

1. Regarding inter-community disparity in basic digital financial literacy among the tribal communities, the highest mean score is visible among Mala Arayan community ($M = 78.00$) followed by Kurichiyan, Ulladan, Malayan, Adiyar,

Eravalan, Malavedan and Malasar. Paniyan community has the lowest mean score ($M = 20.00$). This trend indicates that certain communities continue to be significantly underprivileged while others are at the forefront in the case of basic digital financial literacy. Hence, there is a critical need for customized intervention among tribal communities to bridge the gaps in basic digital financial literacy.

XII. Variation in Basic Digital Financial Literacy across Region

1. The basic digital financial literacy assessment across the region depicts a sharp disparity amongst the three regions. The respondents from the South ($M = 50.17$) achieve significantly higher scores compared to those of central ($M = 32.17$) and North ($M = 36.83$) regions, where literacy levels are at lower levels. This reflects an uneven dispersion of basic digital financial literacy across diverse geographic settings.

XIII. Relationship between Financial Literacy and Basic Digital Financial Literacy

1. The financial literacy and basic digital financial literacy have a strong positive and statistically significant relationship among all the tribal communities. This result indicates that improvement in general financial literacy is repeatedly associated to improvement in basic digital financial literacy as well and vice versa. At the community point of view, the strength of this relationship varies with Malayan ($r = 0.830$) and Malasar ($r = 0.808$) having the greatest correlation coefficients which reveal most predictable improvements in one form of literacy among these two groups resulting in improvements in the other. Similarly, Adiyen, Kurichiyen, Mala Arayan, Malavedan, Paniyan and Ulladan demonstrate strong associations to reveal predictable patterns of literacy where changes in a particular factor correspond closely to changes in the other. Conversely, Eravalan ($r = 0.466$) reveals a weakest correlation among all groups, although still statistically significant. On the whole, these results indicate that although the relationship is always positive, the strength of the association is not uniform across communities, reflecting both structural and contextual differences.

5.2.3 Financial Inclusion among the Tribal Communities

I. Bank Account Status

1. With regard to access to bank services, a vast majority (93.11%) of the respondents already have formal savings or deposit accounts, whereas a relatively small but significant percentage (6.89%) stands away from the formal banking system.
2. The traditional savings accounts are most prevalent among the account holders as 64.2% of the respondents have normal savings accounts demonstrate that there is a continued emphasis on the use of traditional financial facilities to manage their finances and to transact other financial operations. At the same time, the segment of those with zero-balance savings accounts is 35.8%, indicates the effectiveness of financial inclusion campaigns in encouraging the access of economically weaker groups towards the banking system. The respondents of the study do not have any fixed deposits, credit accounts, or recurring deposits, depicts the constrained usage of more advanced or long-term financial tools.
3. Regarding the selection of financial institution, a vast majority (82.34) of the respondents hold accounts with nationalized banks. This trend reveals the central position of the public sector banks in availing financial access, particularly in tribal-populated locations where accessibility, reliability and government-led inclusion efforts are most essential. Cooperative banks (8.35%) and Scheduled private banks (7.88%) have relatively lower penetrations. Only 1.43% of tribal community holds accounts with Grameen Banks.

II. Frequency of Deposit and Withdrawal

1. A significant majority of respondents (60.22%) reported that they did no deposits at all during the reference period, while only 20.22% made one deposit and progressively lower percentages made two, three, four, or five deposits. The analysis of activities using bank accounts provides evidence of a significant gap between account holding and real usage of banking services.

2. The patterns of withdrawals indicates that 31.33% of the tribal community do not withdraw any money during the reference period, but 25.78% of the respondents do at least once, 17.11% of the respondents withdraw twice and smaller proportion three to six times and a few up to eight times during the reference period. This higher incidence of withdrawals relative to deposits implies that accounts are mostly being utilised as channels for receiving money; probably wages, benefits or transfers, rather than using it as instruments for saving and wealth creation.

III. Status of Insurance Coverage

1. The insurance coverage status among the tribal communities clearly shows the fact that less than one-half (45.56%) have some form of insurance coverage and majority (54.44%) do not have any insurance coverage. There is a huge disparity in financial security regardless of the recent policy interventions to increase insurance penetration.
2. Life insurance coverage is minimal with 3.11%. Only 36.44% of the tribal section is covered by health or medical insurance; it is also notable that a majority (63.56%) is not covered and this exposes them to massive financial risks in case of medical emergencies. Only a minor section (21.33%) of respondents secures general insurance coverage, which indicates 78.67% of respondents do not have insurance coverage. Despite the attempts to raise the insurance coverage, it is still found limited in all forms of insurance. The lack of awareness, affordability and access disincentive are some of the factors that still obstruct insurance products uptake by tribal communities, leaving them exposed to financial shocks and thus weaken the extensive goal of inclusive risk management.

IV. Individual Financial Inclusion

1. Individual Financial Inclusion Index (IFII) exhibits that the level of financial inclusion is pervasively low among the tribal community. A categorical analysis shows that almost three-fourth of the respondents are having inadequate inclusion, where 44.89% of respondents are included in the category of “Very Low” financial inclusion and 28.00% are listed in the “Perfect” Financial Exclusion. A mere

20.00% of the tribal population is included in the “Medium” inclusion, with a small percentage (7.11%), having achieved the “High” level of inclusion and no one has achieved “very high” or “perfect” inclusion. These results support the fact that even though the number of account ownership is high, active and diversified usage of financial products is very low. The continued existence of these disparities is an indication of structural impediments related with access, awareness, capability, and affordability. This situation creates urgent need for specially designed programs to facilitate better usage of financial products and services among the tribal people.

V. Variation in Financial Inclusion across Socio Demographic Variables

1. Financial inclusion on the basis of gender implies that both genders of respondents have relatively equal opportunities and limitations (mean score of male = 0.179, mean score of female = 0.162) in accessing and utilizing formal financial services.
2. Financial inclusion across age groups shows that the highest mean score ($M = 0.275$) is occupied by the participants below 35 years, followed by the age group of 35-39 ($M = 0.233$). The scores declines gradually as the age increases with the lowest mean in the age group of 50-54 ($M = 0.081$) and 60 and above ($M = 0.121$). Therefore, there is a considerable gap between generations, where younger respondents are much more engaged in formal financial services than older generations. This trend further indicates the necessity of targeted measures to enhance the financial access and utilization among the older population, who are confronting the risk exclusion.
3. There is a significant and statistically positive association between financial inclusion levels and educational attainment. Financial inclusion improves progressively with each higher educational tier and ultimately results in the highest mean score among respondents with college education ($M = 0.47$). This upward trend indicates that education not only widens awareness and understanding of financial products but also strengthens the ability of people to effectively utilise them. Hence it can be stated that education is a primary determinant of financial inclusion among the Scheduled Tribes and therefore

improvement of educational opportunities could substantially curtail financial exclusion among this population.

4. Variation in Financial Inclusion across occupational groups indicates that respondents belonging to business and retail and government service have the highest inclusion. The least inclusion is found among the healthcare workers and unskilled labours showing limited engagement with formal banking system.
5. It is found that participation of tribal community in MGNREGA does not affect financial inclusion.
6. Tribal communities with higher incomes have improved access to and usage of formal financial service. Hence it can be stated that higher income are significantly associated with higher financial inclusion.

VI. Variation in Financial Inclusion across Tribal Communities

1. Within the communities, Mala Arayan registers the highest inclusion, followed by Kurichiyan. Malasar and Mala Vedan record the lowest inclusion reflecting extreme exclusion from financial services. Malayan, Eravalan, Paniyan, Adiyar and Ulladan communities hold the intermediate position. This apportionment brings out the imbalanced penetration of financial inclusion among the tribal population with a sparse segment demonstrating comparatively high participation level and others being significantly under-represented.

VII. Variation in Financial Inclusion across Region

1. There is a slight difference between the tribal communities in the north, south and central regions as regards to financial inclusion. The highest mean is obtained by the north region ($M=0.195$) followed by south region ($M=0.182$) and the central region ($M=0.150$).

VIII. Variation in Saving Behaviour across the Levels of Financial Inclusion

- I. The respondents under the higher financial inclusion group depict higher usage of formal savings accounts and in few instances, minimal use of stocks and shares.

The importance of cash savings in this category is due to a long-standing preference in terms of liquidity in savings. The respondents who fall in the medium and very low inclusion segments have higher usage of informal savings clubs, which shows their minimal access or trust in formal financial institutions. At the bottom, there are the completely financially excluded who are overwhelmingly approaching family based saving and informal saving strategies.

5.2.4 Role of Financial Literacy in Promoting Financial Inclusion among the Tribal Communities

I. Association between Financial Literacy and Financial Inclusion

1. Statistically significant association is evident between financial literacy and financial inclusion. Among the perfect financial exclusion category only 5.56% of tribal population is financially literate and a high percentage (94.4%) is financially illiterate. In the very low inclusion group, there is a slight improvement in the level of literacy (17.33%), but a majority of the respondents (82.67%) are not financially literate. There is a considerable reverse shift in the category of medium inclusion, that a substantial majority (81.11%) are financially literate with only 18.89% as illiterate. This pattern is most common within the high inclusion category where 93.75% are financially literate and only 6.25% are illiterate. The results clearly depicts that the more the people are financially literate, the more they are motivated to achieve higher levels of financial inclusion thereby establishing literacy as one of the driving force behind financial inclusion. The chi-square test determines the statistical significance in this relationship and finds financial literacy as a key driver in fostering financial inclusion among tribal communities.

II. Effect of Gender and Age on the relationship between Financial Literacy and Financial Inclusion

1. Men tend to have slightly higher levels of financial inclusion compared to women. This indicates that gender disparities continue to exist, with males having slightly higher inclusion even at equivalent literacy levels.

2. Age does not contribute any changes to the financial literacy and inclusion relationship and confirms that literacy stands as the decisive factor across all age groups.

5.2.5 Status of Financial Planning, Financial Anxiety and Financial Confidence among the Tribal Households

I. Financial Confidence

1. A considerable percentage (47.78%) of the tribal community showed confidence in making financial decision. The response of 40.00% indicates lack of confidence, while a 12.22% kept a neutral stance. Statistical analysis confirms that the overall confidence level does not differ significantly from a neutral stance. This indicates that, capability and confidence of tribal community in managing household financial decisions is not strongly established across different groups.
2. One-half of tribal community expressed challenges in understanding bank statements and in filling pay-in-slips whereas one-third of respondents have confidence in this matter. Statistical analysis substantiates that the overall confidence level associated with these tasks stands below the neutral threshold level.
3. There is lack of confidence among the tribal population in carrying out the basic banking operations like money transfer and periodic monitoring of account balances. A very few respondents feel comfortable in carrying out these transactions while a majority express hesitation or uncertainty. This minimal confidence stands as a constraint in the efficient utilisation of banking services including digital-based services such as payment of bills, transfer of funds, and financial tracking.
4. One-third of the tribal community report that they can confidently gather the appropriate information prior to financial decision-making while one-half of the individuals lack this confidence. Hence there is a considerable gap in accessing and evaluating financial information, which acts as an impediment in effective and informed decision-making.

II. Financial Planning

1. Most of the respondents do not set proper financial goals and objectives yet they are aware about the financial planning concept. This exhibits inconsistency between awareness and its implementation in personal financial planning.

III. Financial Anxiety and Financial Satisfaction

1. The majority of the respondents are nervous while talking about financial issues and feel anxious when going through bank statements or passbooks, which portrays their psychological pressure related to financial management. The respondents are satisfied with their current financial status, which indicates a complex dynamic where contentment with present situation coexists with latent stress and uncertainty. This disparity point out the absence of long-term financial confidence where people experience relatively protected in the short run but fearful of how they will cope with the future financial hurdles.

IV. Variation in Financial Satisfaction across Tribal Communities

1. While looking in to the financial satisfaction among tribal communities, the lowest score is attained by the Malavedan (2.48) and the highest by Paniyan (3.90) community. A relatively better level of satisfaction exists amongst Kurichiyan and Adiyen. Mid-range satisfaction is observed in Eravalan, Malayan, Ulladan, and Malasar communities. Mala Arayan (2.94) represents a score just below the average, despite the higher financial literacy and financial inclusion exhibited by this community.

V. Access Barriers

1. Procedural and administrative hurdles are the most common barriers in accessing formal financial services among the respondents. The most salient barriers were found to be cumbersome formalities and lengthy documentation requirements and most of the participants viewed the same as being critical challenges. Also, the language obstacle is a major limiting factor to the successful engagements in financial activities. Certain individuals were reported to have been affected by

some other factors that include inappropriate timing of the branch, unequal access, and lack of proper attention by the authorities. Notably, the physical location of financial institutions was not regarded as an important obstacle, which means that the respondents have physical access to such institutions. The perceptions of unfriendly staff behaviour were minimal, and the majority of respondents indicated a sense of contentment towards the interpersonal relationships. In general, procedural and bureaucratic complexities demonstrate higher constraints than geographic or interpersonal considerations in accomplishing effective financial inclusion.

VI. Effect of Language Problems on Financial Literacy

1. Language barriers plays crucial role in ascertaining the financial literacy level. Financially illiterate people confront higher challenges in understanding financial terminology, financial processes and paperwork because of language problems, which compromise their ability to learn and interact with financial systems. Financially literate people on the other hand do not have to go through many of these problems. This implies that overcoming language related barriers being a precondition and facilitator for improvements in the financial literacy. These observations highlight the necessity to develop financial literacy initiatives in local languages, simplify financial paperwork and to offer translation or linguistic support within financial institutions. Language barriers should be addressed effectively in order to bridge the gaps in knowledge, empowering communities to make sound financial choices and to minimise exclusion.

VII. Influence of Inequality in Access on the Financial Inclusion of Scheduled Tribes

1. A strong negative relationship exists between financial inclusion and inequality in accessing financial services. The individual experiencing higher inequality either due to discrimination, unequal opportunities or structural barriers is less likely to be included in the formal financial system. However, decreasing inequality results in significant improvement in financial inclusion. Financial inclusion is not only determined by individual awareness or literacy but also by structural and

institutional factors. Despite financial literacy being gained by the individual, inequality in service delivery (such as biased treatment by financial institutions or absence of prioritization to the tribal people) can deter their full inclusion into financial system. Increasing inclusion requires not only enhancing financial literacy but also systematically removing access-based inequalities is mandatory. Considering inequality therefore should not only be envisioned as an auxiliary activity but rather a crucial requirement to make inclusive financial advancement of marginalised people, including the Scheduled Tribes.

VIII. Attitude towards Informal Financial Sources

1. Informal financial sources were most preferred by tribal communities due to convenience, ease of access, and user-friendly interactions. The approachable nature of the informal sector, liberal hours of operation, lack of bureaucratic demands and accessibility features distinguish the informal sources from the bureaucratic and rigid nature of formal financial institutions. Responses show that access to informal resources is not fueled by the rejection from formal services; instead it is a reaction to the obstacles posed by formal systems. The policies which are focused on facilitating formal financial inclusion raised the number of accounts and accessibility to formal resources but they failed to sufficiently deal with the experiential and procedural problems which hinder the active use of formal financial products and services. This gap is therefore addressed by informal agents who give solutions that are closer to the lived realities of the respondents. Nevertheless, there are certain risks associated with depending informal channels such as abusive lending practices, lack of consumer protection, and inadequate financial security in the long term.

IX. Influences of Access barriers on Attitude towards Informal Financial Sources

1. Access barriers significantly contribute to the attitudes of tribal communities toward informal financial channels. One-unit increase in access barriers result in a corresponding rise of 1.056 units in the likelihood of preferring informal channels.

X. Influence of Attitude towards Informal Financial Sources on Financial Inclusion

1. The attitude towards informal financial sources showed a remarkably negative relation with financial inclusion. This indicates that financial inclusion drops by 0.016 units with a one-unit improvement of favorable attitudes towards informal sources. Thus, access barriers push the tribal people towards the informal sources and this shift undermine their formal financial inclusion.

XI. Influence of Access barriers on Financial Inclusion

1. Access obstacles have a negative and direct influence on financial inclusion. Financial inclusion declines by 0.048 units with increase in every unit of access barriers and this underscores the adverse impact that limited access to formal institution creates on inclusion outcomes.

XII. Influence of Financial literacy on Financial Anxiety

1. Financial literacy and financial anxiety have an inverse relationship with each other. One unit increase in financial literacy leads to 0.010 unit decrease in financial anxiety among tribal communities. Financial literacy has been linked with lower levels of uncertainty, stress, and anxiety regarding management of finances. This finding underlines the buffering effect of financial literacy on improving the psychological wellbeing of tribal families through reducing financial anxiety.

XIII. Influence of Financial inclusion on Financial Planning

1. The financial planning habits of Scheduled Tribes in Kerala were influenced positively to an extent by the financial inclusion. With every unit increase in financial inclusion, there will be an associated increase in 0.755 units of financial planning practice among the respondents. Enhanced access to and involvement in formal financial services will help the tribal population to participate more actively in the saving, budgeting, and taking future-oriented financial decisions

where needed, which consequently empower their overall financial management capabilities.

XIV. Influence of Financial inclusion on Confidence in Financial Matters

1. The financial confidence of Scheduled Tribes is greatly influenced by their financial inclusion. A one-unit rise in financial inclusion will result in 1.204 units increase in confidence in dealing with their financial matters. The increased inclusion in to the formal financial sector strengthens the ability of the tribal households to handle money, make effective financial decisions, and to face financial obligations with more confidence.

XV. Influence of Financial literacy on Confidence in Financial Matters

1. Financial literacy has a significant positive effect on financial confidence among the Scheduled Tribes of Kerala. It is clear that for every unit increase in financial literacy, there will also be a 0.016 unit increase in financial confidence when making financial decisions. Though the size of the effect is quite modest, the finding demonstrates the importance of financial literacy in enhancing the self-confidence of tribal households pertaining to financial matters.

XVI. Consumption of Hazardous Substances

1. More than one-half of the respondents reported regular consumption of alcohol; thereby making it the most widely used hazardous substance. Smoking too presents high prevalence as more than 43% of the respondents depicted being regular smokers, whereas another notable proportion (14.22%) indicated use on an occasions or weekly basis. In the same way, betel chewing presents as an ordinary practice as almost one-half of the respondents marked regular use of betel products, and further proportion (13.78%) reported the use on occasions or weekly basis.

The consumption pattern of hazardous substances reveals that alcohol, smoking, and betel chewing are deep-rooted lifestyle habits in the tribal communities, where habitual usage surpasses instances of non-usage in many situations. The increased

presence of such behaviours are a cause of concern in terms of the potential health risks, economic liabilities and consequences to the society, thus necessitating specific awareness campaigns and intervention strategies aimed at overcoming the use of harmful substances and its repercussions.

2. The variation in alcohol consumption among communities stands out manifestly clear. The Paniyan community reported the highest mean score ($M=4.48$), which reflected considerably higher alcohol consumption; and was then followed by the Malasar, Malayan, and Malavedan community, who reported above the overall mean. On the other hand, the Mala Arayan ($M=2.20$) and the Eravalan community ($M=2.96$) mean scores were relatively small, indicating relatively limited alcohol consumption. These results underscore the heterogeneous nature of the tribal groups in using hazardous substances.

5.2.6 Financial Development of Tribal Communities

1. Monetary incentives play a central role in motivating people to engage in the programs related to financial literacy and inclusion. When no such incentives are provided, the interest in attending the workshops is notably lower, but the attendance rate significantly increases in the presence of tangible rewards or remuneration. This implies that economic constraints act as the strong factor influencing engagement and direct intervention on the constraints will significantly increase the engagement. A large proportion of the respondents (73.78 %) confirmed their readiness to use digital banking services in case they were offered with free or subsidised mobile phones and maintenance support which means that the access to devices and its affordability are the key determinants of digital inclusion within tribal communities. The resistance to technology may not be the reason behind the low levels of adoption but instead it is due to the structural obstacles that include cost, accessibility and maintenance problems. Besides monetary rewards, the results point out the importance of culturally sensitive interventions. The respondents had a greater inclination to deal with the financial institutions when the service providers or the officials belonged to their respective community. This implies that trust, familiarity and reduced

communication barriers are necessary for promoting effective financial inclusion among tribal communities in Kerala. Livelihood-related interventions, including the facilitation of daily-wage jobs via banks and subsidizing insurance premiums proved to be a significant motivator which demonstrate the interconnection between socio economic security and financial inclusion. Similarly, trust-building efforts such as bringing lending activities more closely with the flexible and accessible channels used by informal financial intermediaries and the encouragement of timely loan repayment by offering interest rate reductions, were identified to strengthen the engagement of tribal people with formal banking system and participation in the formal financial system is crucial for attaining their sustainable financial development.

5.3 Conclusion

The findings of the study reveals that despite considerable advancements in enhancing access to financial services for Scheduled Tribes in Kerala, there are still a lot of gaps regarding the usage, effectiveness and sustainability. The analysis portrays that the financial literacy level is still quite low among different communities and the disparities is influenced by the educational level, income, age, occupation and territorial factors. This limited financial literacy negatively affects both basic digital financial literacy and financial inclusion, highlighting the adequacy for integrated approaches rather than isolated initiatives. Even though the formal accounts ownership has increased significantly, the results show that the mere access to account does not convert in to effective financial participation. A sizeable segment of tribal households continue to depend on cash savings and informal methods which reflects not only cultural inclinations but also barriers such as bureaucratic challenges, lack of trust and absence of financial confidence. Community based disparities exhibit the absence of uniformity in financial inclusion where some communities have a relatively higher degree of inclusion and others are still marginalised from the formal financial system. Furthermore, the study develops a strong connection between financial literacy, financial inclusion and financial development which demonstrates that the advancement on one factor will lead to improvement in the others.

Nevertheless, the continued effect of the psychological obstacles, the complexity of the procedures and the limited familiarity with advanced financial products shows that structural changes and culturally sensitive policies are necessary to bridge the usage gap. Overall, this chapter emphasizes that although Kerala has made substantial progress in terms of account opening and financial accessibility, the main challenge is related to maintaining effective usage, creating trust and introducing products tailored to the tribal needs. The true financial development would not only be based on the extent of inclusion but also on the extension of quality and depth of financial participation among tribal communities.

Chapter 6

**RECOMMENDATIONS, IMPLICATIONS AND
SCOPE FOR FUTURE RESEARCH**

6.1	Introduction	325
6.2	Recommendations	326
6.3	Implications of the Study.....	334
6.4	Potential Avenues for Future Research.....	335
6.5	Conclusion.....	335

6.1 Introduction

The findings of the current study provide valuable insights into the opportunities and challenges confronted by the Scheduled Tribes in Kerala. Despite Kerala having significant strides in social development indicators, tribal communities in the state still face disparities in accessing and using financial services, digital platforms and institutional support systems. The analysis undertaken in this research not only reveals the present status of financial literacy and financial inclusion but it also highlights the fundamental interdependence between economic empowerment, financial capability and sustainable development. This chapter goes further beyond the descriptive and analytical description of results to explore their extensive research contribution, policy relevance and practical implication. It outlines targeted recommendations that can guide policymakers, financial institutions and community organisations in formulating inclusive strategies in accordance with the unique socio-cultural realities of tribal communities. As a corollary, the study addresses the implications for developing better financial education, strengthening institutional interventions and promoting equitable development. Understanding that the domain of financial literacy and inclusion of tribal communities is still developing, this chapter provides directions to the possible areas for the future research, open up areas where additional investigation is required to refine theoretical models, strengthen empirical evidence, and enable more effective interventions. Together, these factors ensure that apart from enriching scholarly debate. The study generates actionable knowledge potentially having transformative implication for tribal development across Kerala.

6.2 Recommendations

The following recommendations are made in the light of the previous findings:

1. The following programmes can be conducted under the initiative of the tribal development department to empower the tribal community: (a) Awareness campaigns in tribal settlements to counter patriarchal norms and to emphasize the positive effect of shared household leadership (b) Gender-sensitization programs for male members to emphasize the positive influence of women's financial participation on household welfare (c) Develop household-level case studies to show case the importance of shared leadership in improving the financial wellbeing of tribal communities and display them during tribal gatherings as success stories also provide proper recognition through honorarium or awards for the households practicing shared financial decision-making.
2. Since education is the foundation for financial literacy and financial inclusion, Government of Kerala is to regularly monitor and evaluate the dropout ratio of students at the primary, secondary and higher secondary school levels and urgent intervention is needed to overcome the dropout of students at the school level. Remedial classes can be arranged for the tribal students at their Unnathies with free refreshments in associations with NGOs.
3. The existing Job reservation policy of the Government of Kerala can be extended to private sector organisations for the eligible and qualified tribal youth for professional and administrative jobs. The government can also support self-employment through micro-credit, business incubation and market linkages for tribal entrepreneurs in their core competing areas to diversify their sources of income and reduce their reliance on unskilled jobs. The success stories of tribal professionals and entrepreneurs can be showcased through word of mouth and also through establishing peer mentorship networks where employed tribal youth may act as mentors to fresh graduates
4. Organise Unnathi-wise information camps for simplifying MGNREGA entitlements, wage structures and registration procedures for tribal households.

Equal pay for both men and women, hundred days work guarantee and other advantages of this programme should be clearly imparted to each person in the Unnathi. It can be accomplished by availing the services of community leaders, Local Self-Governments and SHGs by conveying information in local languages. Also Integrate MGNREGA with skill development initiatives so that workers can gradually transform from unskilled labour to higher skilled occupations.

5. Encourage the participation of women and youth in income-generating activities through focused skill training, micro-credit support and SHG linkages which could help in developing household income security. Job diversification strategies should be promoted so that multiple earning members should not be confined to the same unskilled and low-paid jobs thereby reducing collective vulnerability.
6. Workshops can be conducted in Tribal Unnathies with the initiative of Tribal development department to train the tribal community for framing short-term and long-term financial goals and for highlighting the importance of keeping records of income, expenses and bill payments as a buffer against financial instability. This program should address the issues of overspending, especially on non-essentials such as alcohol and other and other unwanted purchases.
7. Develop awareness and training programmes that define inflation in simple, relatable terms, So that the impact of inflation on the savings and spending becomes understandable to tribal households. Price of agricultural or essential goods over time can be used to illustrate the concept of inflation and to indicate its effect on the household well-being. Hands-on sessions can be conducted with the help of students of higher education institutions regarding calculation of simple and compound interest rate concepts, EMI calculations and borrowing costs, using real-life examples like local loan products or chit funds to make it more effective.
8. Basic-level investment literacy programmes can be conducted in selected Unnathis by demonstrating the benefits of diversification in financial risk reduction and facilitates exposure visits or peer-learning sessions where tribal communities can observe successful practices of diversified income or investment

methods. The service of SEBI empanelled resource persons can be availed for disseminating investment literacy among marginalised communities in Kerala.

9. Create community-friendly saving products which reflect the convenience of informal modes by promising protection and interest returns. Expand Banking Correspondents (BCs) and Mobile Van Banking to tribal settlements to ensure formal saving equally accessible as that of informal methods. The risks of saving only in cash (loss, theft, zero returns) should be compared with the benefits of institutional saving (interest, insurance, government protection) and the result of the comparison should be clearly imparted into the minds of the Scheduled Tribes in easily understandable form.
10. Seasonal or income-linked repayment models can be adopted by the banks and microfinance institutions to enable the lower and irregular income groups such as seasonal and daily wage earners to access institutional credits. Conduct mandatory pre-and post-loan counselling on financial planning, scheduling of repayments, productive utilisation of credit and also to mitigate the over dependence on credit. Introduce a local credit monitoring mechanism through SHGs or Panchayats to track utilisation, repayment, and outcome of credit support. Necessary assistance should be offered to the tribal households with training and resources for alternative income-generating activities to minimise income deficits and the resultant financial instability.
11. Awareness programmes can be conducted among the tribal communities through tribal development department by emphasizing long-term benefits of saving and investments. This can be done by linking it to health, education, security and intergenerational prosperity by recognising cultural and social motivations for spending. Conduct interactive sessions by using folk media and visual tools to portray the long-term benefits of savings and investment. Engage tribal leaders, SHG coordinators, Kudumbashree workers and tribal promoters as trusted intermediaries to conduct household-level counselling on saving, investments and about the necessity of conscious spending.

12. Develop financial well-being corners in each Unnathi where individuals can confidentially and independently discuss both financial and other related emotional challenges. Promote ward level support groups where members can discuss their financial stress and share coping strategies openly without any barriers. The operation of this support group should be clearly monitored by the respective ward members. Collaborate with National health missions and National mental health programs to integrate financial literacy and stress-management outreach in tribal settlements.
13. The tribal development department is to conduct motivation campaigns by incorporating financial planning modules as part of welfare and livelihood programmes. This would be helpful in making planning a customary way of life, rather than a privilege. The inferiority perception in the minds of the tribal people should be eliminated through the persistent interaction with non-tribal people and holding periodic meeting with financially prosperous individuals from their nearest localities. The government should initially sponsor a few tribal entrepreneurs by offering continuous financial assistance, training, and supervision until they become financial viable. The selection process should ensure equal representation from each tribal community in Kerala. Once these entrepreneurs who attain a sustainable position can serve as role models and mentors to motivate and guide other members of their respective tribal groups.
14. Encourage coexistence models where both traditional and digital services ensure that adoption is gradual and inclusive rather than disruptive. Awareness should be delivered to tribal communities regarding cash deposit, withdrawal, mobile or internet banking, UPI/ digital payment, insurance products and loans. Establish help desks administered by trained SHG members or students from the particular tribal communities to aid others regarding insurance claims, loan applications and online banking.
15. Focused financial education programs can be designed in culturally sensitive and accessible ways, to empower tribal households to participate effectively in the contemporary modern financial ecosystem. Such financial literacy drives in tribal

Unnathis should concentrate on elementary and advanced financial concepts like saving, budgeting, borrowing, interest rate, insurance, digital payments etc. Develop financial education materials in local languages/dialects, employing visual aids, folk media and storytelling to guarantee accessibility for low-literate populations and carry out regular evaluations of financial literacy levels to measure progress and recalibrate interventions.

16. Separate financial literacy and financial inclusion programmes can be initiated for younger and older generations. For the younger generations, the focus can be on advanced financial planning and investment products with the support of mobile-based applications, simulations and games-based financial education modules. While for older groups, the importance can be given on basic literacy, secure saving practices and active use of accounts with the support of visual aids, local dialect materials and role-playing activities for experiential learning. Engage educated tribal youth as volunteers of financial literacy activities to assist their elders and peers and create intergenerational learning circles wherein youth help elders with digital banking, while elders share traditional financial management practices.
17. Construct community-specific financial literacy/digital financial literacy and financial inclusion interventions that could deal with the specific impediments faced by the most marginalised groups by assuring that tribal development process are inclusive and equitable.
18. The Region-specific policy interventions such as training, awareness campaigns and local support systems are urgent especially in the central and north regions focusing on financial literacy and digital financial literacy among the tribal communities. This initiative could reduce the regional gap and ensure more uniform financial empowerment among the tribal communities in Kerala.
19. Create comfort and trust-building with the use of digital tools by letting the tribal communities adapt at their own pace without depriving them from access to the current banking system. Deploy Business Correspondents in tribal areas to bridge the distance between households and digital financial systems. Also utilise the

CSR funds of telecommunication companies to enhance the network infrastructure and facilitate safe digital transactions in tribal settlements by promoting their participation in digital financial system by illustrating the real-life advantages of digital tools such as quicker remittances and secure access to saving practices.

20. Develop teaching programmes that combine both financial concepts and digital financial concepts in a single curriculum, since advancement in one reinforces the other. Mobile devices along with demo applications can be used to teach the concept in both practical and theoretical forms. Monitor advancements in both financial and digital financial literacy simultaneously by ensuring balanced progress rather than isolated gains. Also partner with fintech companies, banks, and NGOs to expand integrated literacy models in tribal regions. Specific attention should be given towards step-by-step digital financial literacy which covers how to check balance, money transfer via UPI, and bill payment through mobile apps.
21. Deposit penetration drive among tribal communities should be taken up by the financial institutions that promote at least minimal, frequent deposits even though it is in small denominations. Automatic reminder through SMS or community banking agents could be taken as a prompt that reminds households to make deposits at regular intervals.
22. Campaigns to promote insurance literacy should be conducted to illustrate how insurance offers financial security with examples from everyday life. Real life matters related to health costs, crop losses, accidents can be considered to demonstrate the necessity of financial security. Tribal-based micro-insurance products with very low premiums should be introduced. Wider adoption of low-cost schemes like Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Ayushman Bharat among tribal communities should be considered as a matter of priority.
23. Mere access to financial services cannot by itself ensure the true objectives of financial inclusion; rather, emphasis should be placed on the effective utilisation of bank accounts that have been opened. Form partnerships among banks, Tribal

Development Departments and NGOs to coordinate inclusion efforts. Joint initiatives can combine financial training with livelihood support, ensuring that financial usage is linked to income generation and social security enhancement.

24. For Scheduled Tribes in the “perfect exclusion”, “Medium and very low inclusion” groups, banks should design doorstep convenient and trusted micro-savings products to replicate the convenience of informal savings clubs but within the boundaries of formal system.
25. Joint efforts can be made by collaborating with the Department of Education and Kerala Institute for Local Administration (KILA) towards incorporating age-specific financial education in tribal schools. Saving, prudent spending and the basics of banking and insurance can be covered through different modules. Educate teachers, trainers and SHG facilitators to become financial literacy educators. Provide them with context-sensitive teaching materials in malayalam and tribal dialects to improve communication and comprehension. Construct intergenerational household based learning circles where each household member engages together in financial learning sessions. It enables exchange of knowledge between generations and instills regular financial discipline among households.
26. Shift from theory-oriented drives to simulation-based hands-on sessions where participants actually practice tasks such as: reading a sample bank statement, filling in a withdrawal/deposit slip, using an ATM or mobile wallet with guided support, taking financial decisions, monitoring of account balances and money transfers. People feel more confident when they can do the things in the presence of safe and supported environments. Banks should provide pictorial, bilingual forms and passbooks, audio-visual aids, local dialect SMS alerts, and helpline assistance in order to reduce the perplexity in reading statements or checking the balances.
27. Create financial mentoring networks through developing tribal committees. Trained facilitators can monitor progress, provide guidance, and assist households in consistently and stably implementing financial plans. Offer structured sessions

on financial planning to shift focus from short-term satisfaction to long-term security.

28. Banking authorities can extend kind, equal, and respectful treatment to tribal clients while addressing their concerns even if it is minor. Although tribal bank accounts may not appear to be immediate business opportunities from the banks' perspective, they hold significant potential to develop into valuable opportunities for the future. To ensure inclusiveness, all forms, passbooks, brochures and digital interfaces should be made available in tribal or local dialects. Additionally, bank employees need to be trained in basic local dialects as well as cultural competence to develop trust and free communication.
29. The authorities need to make the formal services as accessible, flexible and user-friendly as informal alternatives without compromising regulatory safeguards. Unless formal institutions adapt to the socio-cultural and procedural needs of marginalized communities, informal financial sources will continue to dominate by weakening the productivity of financial inclusion efforts of the country. Also integrating informal money lenders in to the formal financial structure can be helpful, because they had strong connection with the financial mind-set of tribal people.
30. Consumption of alcohol, smoking and betel chewing habits need to be discouraged and eventually it should be completely eliminated among the tribal communities in Kerala. Targeted awareness and intervening mechanisms with practical demonstration are essential to address the use of such destructive substances, while concurrently highlighting their adverse health and financial consequences on individual well-being. A one-size-fits-all approach is inappropriate for tribal communities; instead, community-specific policies and initiatives are required for the present condition. Each community varies substantially, with both relatively advanced and disadvantaged groups existing within the Scheduled Tribes. For instance, communities like Paniyan, Malasar, Malayan, and Malavedan would require immediate and targeted interventions to reduce alcohol consumption, whereas preventive measures may find more

effective in communities with lower prevalence rates. Such differentiation is vital for designing culturally sensitive, community-specific health and awareness programmes.

31. In order to strengthen engagement of tribal communities with formal financial systems, a package of incentive-based interventions can be adopted. Availing free or subsidized mobile phones with maintenance support would promote digital adoption, while remuneration for attending financial literacy seminars and workshops could motivate participation in capacity-building initiatives. Engagement levels are also found to improve when service providers or officials belong to their own community, highlighting the importance of culturally sensitive delivery. Additionally, offering schemes where the government covers a portion of insurance premiums for individuals and their families, alongside initiatives such as daily wage employment opportunities facilitated through banks and subsidized insurance coverage, can enhance trust and uptake of formal services. Furthermore, incentivizing punctual loan repayment through reduced interest rate would foster responsible borrowing habits and deepen long-term relationships with banking institutions. Altogether, these strategies address both economic and social impediments, thereby promoting sustainable financial development within the Scheduled Tribes in Kerala.

6.3 Implications of the Study

The importance of the financial literacy and financial inclusion for the financial well-being of the Scheduled Tribes in Kerala is highlighted through the key findings of the study. The fact that financial literacy is a key determinant of financial inclusion underscores the need for sustained, context-based literacy programs which transcend beyond awareness creation to stimulate confidence, skills, and abilities for the Persistent long-term financial planning. Even though the number of people holding bank accounts has also grown significantly, the usage of the account is very low. Limited product diversification is an indicator of the structural barriers in usage, trust and affordability. This highlights the necessity of simplified processes, expansion of culturally sensitive outreach and availing participation incentives. The low insurance

penetration, formal savings activity and overreliance on informal mechanisms imply that unless there are targeted interventions, Scheduled Tribes will remain susceptible to financial shocks. This inhibits their ability to contribute to and gain from wider economic growth. Strengthening tribal involvement in formal finance not only improve the household-level resilience and social security but also supports inclusive economic growth by mobilising savings, enhancing credit flows and deepening risk-sharing mechanisms. In general, the study suggests that addressing the disparities in financial literacy and inclusion among Scheduled Tribes is not merely a social justice imperative but a fundamental condition for equitable financial development in Kerala.

6.4 Potential Avenues for Future Research

The present research provides numerous avenues to the development of further studies. Future research would be able to assess the development in financial literacy over time and its effects on the sustained inclusion and financial growth, especially within the context of rapidly dynamic digital delivery system. The future research possibilities include:

1. A Comparative study of financial literacy and financial inclusion among Scheduled Tribes in multiple states or between tribal and non-tribal population.
2. Investigate the role of psychological and behavioural based dimensions on sustained participation of Scheduled Tribes in formal financial landscape.
3. Assess the level of digital financial inclusion and its influence on the financial resilience of tribal communities in Kerala.
4. Analyse the effectiveness of institutional and policy interventions, such as government schemes, technology-enabled delivery mechanisms and financial counseling services in countering procedural hurdles and enhancing financial trust.

6.5 Conclusion

The recommendations made in this chapter are derived directly out of the key findings of the study and they are particularly applicable in addressing the distinct problems

confronted by Scheduled Tribes in Kerala. Although, the prevalence of higher bank accounts is a sign of improvement in terms of access, the prevailing low active usage, poor planning of financial matters and minimal product diversification reveal that something more needs to be done beyond mere account ownership. Creating sustained financial literacy, building confidence in taking financial decisions and the elimination of procedural barriers are the important elements that assist the transformation of passive access into meaningful inclusion. Meanwhile, enhanced insurance coverage, diversified saving habits, and establishment of trust via culturally sensitive service delivery will undoubtedly contribute towards long term financial stability. The community-based programs, interventions at the policy level and the modern financial products must run in the synergy mode to deal with the existing inequalities. By adhering with global development goals and national financial inclusion strategies, these recommendations will ensure that the tribal households are not only incorporated into the financial system but are also empowered to perform their part in an effective and sustainable way. Finally, the proposed measures reinforce the idea that financial literacy and inclusion are not ends in themselves but they are the key drivers of socio-economic empowerment and financial development among marginalised population.

BIBLIOGRAPHY

- Aggarwal, R. (2014). Financial inclusion in India: Challenges and opportunities. *International Journal of Research*, 1(4).
- Akudugu, M. A. (2013). The determinants of financial inclusion in Western Africa: Insight from Ghana. *Research Journal of Finance and Accounting*, 4(8), 1–10.
- Al-Duhaidahawi, H. M. K., Zhang, J., Abdulreza, M. S., Harjan, S. A., & Shah, S. S. H. (2019). The role of financial inclusion and competitive advantage: Evidence from Iraqi Islamic banks. *International Journal of Economics and Financial Issues*, 9(3), 193–199.
- Alonzo, D. E.V, Santillan, A. G., & Molchanova, V. S. (2022). Saving habits of high-school students associated with their future retirement as financial literacy topics. *European Journal of Contemporary Education*, 11(3), 946–961.
- Amagir, A., Groot, W., Brink, H. M., & Wilschut, A. (2018). A Review of Financial Literacy Education Programs for Children and Adolescents. *Citizenship, Social and Economics Education*, 17(1), 56-80.
- Ananda, S., Kumar, R. P., & Dalwai, T. (2024). Impact of financial literacy on saving behavior: the moderation role of risk aversion and financial confidence. *Journal of Financial Services Marketing*, 843-854.
- Anoop, V. (2019). A study on the service quality of financial inclusion in rural area. *UNNAYAN: International Bulletin of Management and Economics*, 11, 71–81.

-
- Arunmozhi, M. S. (2016). Tribal people of Nilgiris District and their financial inclusion awareness. *International Journal of Engineering Research and Technology (IJERT)*, 4(27).
- Asha, C. M. (2020). Education of tribal communities in Kerala. *International Journal of Social Science and Economic Research*, 5(6), 1390–1399. <https://doi.org/10.46609/IJSSER.2020.v05i06.001>
- Asongu, S. A., & Zogo, T. E. (2025). Financial inclusion, inequality and women in politics and business. *International Journal of Public Administration*. Advance online publication.
- Baber, H. (2019). Financial inclusion and FinTech: A comparative study of countries following Islamic finance and conventional finance. *Qualitative Research in Financial Markets*, 12(1), 24–42. <https://doi.org/10.1108/QRFM-12-2018-0131>
- Bagli, S., & Dutta, P. (2012). A study of financial inclusion in India. *Journal of Radix International Educational and Research Consortium*, 1(8).
- Bari, M. A., Khan, G. D., Gani, M. O., & Yoshida, Y. (2025). Financial inclusion strategies for slum households: Insights from a conjoint analysis. *Journal of Applied Economics*, 28(1). <https://doi.org/10.1080/15140326.2025.2509207>
- Barik, R., & Sharma, P. (2019). Analysing the progress and prospects of financial inclusion in India. *Journal of Public Affairs*.
- Barua, A., Kathuria, R., & Malik, N. (2016). *The status of financial inclusion, regulation, and education in India* (ADB Working Paper 568). Asian Development Bank Institute. <http://www.adb.org/publications/status-financial-inclusion-regulation-and-education-india>
- Berlinger, E., Domotor, B., Megyeri, K., & Walter, G. (2025). Financial literacy of finance students: A behavioral gender gap. *International Journal of Educational Management*, 39(8), 116–133. <https://doi.org/10.1108/IJEM-04-2024-0221>

- Bharathi, A. M. (2021). *A study on financial literacy among scheduled communities in Tuticorin district* (Doctoral dissertation, Manonmaniam Sundaranar University, Tirunelveli). Department of Commerce, Manonmaniam Sundaranar University.
- Bijoy, K. (2017). Financial inclusion in India and PMJDY: A critical review. In *Proceedings of the First International Conference on Information Technology and Knowledge Management* (pp. 39–46). ACSIS, 14. <https://doi.org/10.15439/2018KM32>
- Biswal, R., & Jha, M. (2024). Financial inclusion at the intersection of social exclusion: A study among the Juang tribes in Keonjhar district of Odisha. *GLS KALP: Journal of Multidisciplinary Studies*, 2(2), 30–39.
- Bjorklund, M., & Sandahl, J. (2021). Inviting students to independent judgement: Teaching financial literacy as citizenship education. *Citizenship, Social and Economics Education*, 20(2), 103–121.
- Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1), 3–15.
- Bongomin, G. O., Ntayi, J. M., & Malinga, C. A. (2020). Analyzing the relationship between financial literacy and financial inclusion by microfinance banks in developing countries: social network theoretical approach. *International Journal of Sociology and Social Policy*, 40(11), 1257-1277.
- Bongomin, G. O. C., & Munene, J. C. (2020). Financial inclusion of the poor in developing economies in the twenty-first century: Qualitative evidence from rural Uganda. *Journal of African Business*, 21(3), 355–374.
- Bongomin, G. O. C., Chrysostome, E., Nkongolo-Bakenda, J.-M., & Yourougou, P. (2025). Toward increasing financial inclusion and sustainability of indigenous microenterprises in Africa in the presence of financial literacy. *Journal of Business and Socio-economic Development*, 5(2).

-
- Bongomin, G. O. C., Munene, J., & Yourougou, P. (2020). Examining the role of financial intermediaries in promoting financial literacy and financial inclusion among the poor in developing countries: Lessons from rural Uganda. *Cogent Economics & Finance*, 8(1)
- Bongomin, G. O. C., Munene, J., Ntayi, J., & Akol, C. (2018). Nexus between financial literacy and financial inclusion: Examining the moderating role of cognition from a developing country perspective. *International Journal of Bank Marketing*, 36(7), 1190–1212.
- Bongomin, G. O. C., Ntayi, J., & Akol, C. (2020). Analyzing the relationship between financial literacy and financial inclusion by microfinance banks in developing countries: Social network theoretical approach. *International Journal of Sociology and Social Policy*, 40(11), 1257–1277.
- Bongomin, G. O. C., Ntayi, J., Munene, J., & Akol, C. (2018). Institutions and financial inclusion in rural Uganda: The mediating role of social capital. *Journal of African Business*, 19(1), 1–18.
- BRICS. (2021). *BRICS digital financial inclusion report 2021*.
- Chakrabarty, K. C. (2010). *Inclusive growth – Role of financial sector* [Speech]. National Finance Conclave 2010, Bhubaneswar, Orissa, India.
- Chakrabarty, K. C. (2011). *Financial inclusion: A road India needs to travel* [Speech]. Finance Inclusion Summit 2011, organised by SKOCH Development Foundation, New Delhi. Reserve Bank of India.
- Chakrabarty, K. C. (2013, September 6). *Financial inclusion in India – Journey so far and way forward* [Keynote address]. Finance Inclusion Conclave, CNBC TV 18, New Delhi, India. Reserve Bank of India.
- Chakravarty, S., & Pal, R. (2013). Financial inclusion in India: An axiomatic approach. *Journal of Policy Modeling*, 35(5), 813–837.

- Chellasamy, P., & Kannamudaiyar, S. (2022). Factors influencing the particularly vulnerable tribal groups livelihood towards tribal co-operative marketing development federation: A study with reference to Nilgiris District. *International Journal of Health Sciences*, 6(S2) , 10886–10892.
- Collard, S., Kempson, E., & Whyley, C. (2001). *Tackling financial exclusion: An area-based approach*. The Policy Press.
- Committee on Financial Inclusion (2008). *Report of the Committee on Financial Inclusion* (Chair: C. Rangarajan). Government of India, Ministry of Finance.
- Committee on Financial Sector Reforms. (2008). *A hundred small steps: Report of the Committee on Financial Sector Reforms* (Chair: Raghuram G. Rajan). Government of India, Planning Commission.
- CRISIL. (2018, February). *CRISIL Inclusix: Financial inclusion surges, driven by Jan-Dhan Yojana* (Vol.4).
- Cupak, A., Kolev, G., & Brokesova, Z. (2019). Financial literacy and voluntary saving for retirement: Novel causal evidence. *The European Journal of Finance*, 25(1), 1-20.
- Dangi, N., & Kumar, P. (2013). Current situation of financial inclusion in India and its future visions. *International Journal of Management and Social Sciences Research*, 2(8), 155–166.
- Dar, A., & Ahmed, F. (2020). Financial inclusion determinants and impediments in India: Insights from the Global Financial Inclusion Index. *Journal of Financial Economic Policy*.
- Das, R. (2011). An empirical analysis on preferred investment avenues among rural and semi-urban households. *Journal of Frontline Research in Arts and Science*, 1, 26–36.

-
- Das, S. (2021, July 15). *Inaugural address at Economic Times Financial Inclusion Summit* [Speech]. Economic Times Financial Inclusion Summit, New Delhi. Reserve Bank of India.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://www.worldbank.org/en/publication/globalfindex>
- Department of Financial Services, Ministry of Finance, Government of India. <https://financialservices.gov.in/>
- Dewi, V. I. (2022). How do demographic and socio-economic factors affect financial literacy and its variables? *Cogent Business and Management*, 9(1), 2077640.
- Elonge, M. (2013). An evaluation of financial literacy in elementary schools towards financial education enhancement: A case study of Baltimore public school. *Literacy Information and Computer Education Journal*, 4(4).
- Fessler, P., Silgoner, M., & Weber, R. (2020). Financial knowledge, attitude and behaviour: Evidence from the Austrian Survey of Financial Literacy. *Empirica*, 47(4), 929–947.
- Fungáčová, Z., & Weill, L. (2015). Understanding financial inclusion in China. *China Economic Review*, 34, 196–206. <https://doi.org/10.1016/j.chieco.2014.12.004>
- Gabor, D., & Brooks, S. (2016). The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy*, 22(4), 423–436. <https://doi.org/10.1080/13563467.2017.1259298>
- Gandhi, M. M. (2014). Financial inclusion in India: Issues and challenges. In *Conference proceedings of International Finance and Economics Conference* (Vol. 1). Germany: Lupcon Centre for Business Research.
- Garg, S., & Agarwal, P. (2014). Financial inclusion in India: A review of initiatives and achievements. *IOSR Journal of Business and Management*, 16(6), 52–61.

- Global Partnership for Financial Inclusion. (2020, October). *G20 financial inclusion actionplan*.<https://www.gpfi.org/sites/gpfi/files/sites/default/files/G20%2020%20Financial%20Inclusion%20Action%20Plan.pdf>
- Goel, S., & Sharma, R. (2017). Developing a financial inclusion index for India. *Procedia Computer Science*, 122, 949–956. <https://doi.org/10.1016/j.procs.2017.11.358>
- Government of India, Planning Commission. (2007). *Eleventh five year plan (2007–2012) document*.
- Govind, N. (2019). Extent of financial inclusion among tribal people of Wayanad districts. *International Journal of Social Science and Economic Research*, 4(2), 1–10.
- Guha, S., Patel, H., & Parekh, N. (2017). An exploration of the financial practices of tribal communities in Jhabua, India. *Development in Practice*, 27(6), 801-812.
- Gupta, P., & Singh, B. (2013). Role of literacy level in financial inclusion in India: Empirical evidence. *Journal of Economics, Business and Management*, 1(3), 272–276.
- Gupte, R., Venkataramani, B., & Gupta, D. (2012). Computation of financial inclusion index for India. *Procedia - Social and Behavioural Sciences*, 37, 133–149.
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Inoue, T. (2018). Financial inclusion and poverty reduction in India. *Journal of Financial Economic Policy* 11(1), 21–33.
- Iqbal, B. A., & Sami, S. (2017). Role of banks in financial inclusion in India. *Contaduría y Administración*, 62(2), 644–656. <https://doi.org/10.1016/j.cya.2017.01.007>

-
- Iyer, L. A. K. (1937). *The Travancore tribes and castes* (pp. 161–201). Government Press.
- Jain, A., & Jain, A. (2013). Achieving financial inclusion under MGNREGA in a tribal hill district: A study of Chamba (HP). *Journal of Land and Rural Studies*, 1(2), 173–198.
- Jambunathan, S., Aldemir, J., & Jayaraman, J. (2024). Teaching financial literacy in early childhood classrooms. *Early Childhood Education Journal*, 1–7.
- Joseph, J. (2012). *Financial literacy of economically marginalised people of Kerala* (Doctoral dissertation, Mahatma Gandhi University, Kottayam). School of Gandhian Thought and Development Studies, Mahatma Gandhi University.
- Kadoya, Y., & Khan, M. S. (2017). Can financial literacy reduce anxiety about life in old age? *Journal of Risk Research*, 21(12), 1533–1550.
- Kadoya, Y., & Khan, M. S. (2020). Financial literacy in Japan: New evidence using financial knowledge, behaviour and attitude. *Sustainability*, 12(9).
- Kadoya, Y., & Khan, M. S. (2020). What determines financial literacy in Japan? *Journal of Pension Economics and Finance*, 19(3), 353–371.
- Kamble, P. A., Mehta, A., & Rani, N. (2024). Financial inclusion and digital financial literacy: Do they matter for financial well-being? *Social Indicators Research*, 171(3) 777–807.
- Katini, K., Hriižiinio, K., & Amalanathan, S. (2024). Mainstreaming Northeast tribal women in India through financial education: A systematic review. *Journal of International Women's Studies*, 26(2), 1-14.
- Kempson, E., & Whyley, C. (1999). *Kept out or opted out? Understanding and combating financial exclusion*. The Policy Press/Joseph Rowntree Foundation.
- Kerala Institute for Research, Training and Development Studies of Scheduled Castes and Scheduled Tribes. (2018, March). *A comparative study on the influence of*

- developmental projects among Paniya and Kurichiya tribal communities in the Wayanad district*. Department of Developmental Studies, KIRTADS.
- Kerala State Planning Board. (2022, March). *Fourteenth Five-Year Plan (2022–2027): Working Group report on scheduled tribes development*. Government of Kerala.
- Kerala State Planning Board. (2024, January). *Economic review 2023* (Vol. 1). Kerala State Planning Board. https://spb.kerala.gov.in/sites/default/files/2024-02/ER_English_Vol_1_2023.pdf
- Kerala State Planning Board. (2025, January). *Economic review 2024* (Vol. 1). Government of Kerala.
- Kesavan, V. (2015). Financial inclusion in India – A road map towards growth of initiatives and achievements. *IOSR Journal of Economics and Finance*, 6(3), 70–81. <https://doi.org/10.9790/5933-06327081>
- Khaki, A. R. (2018). Effectiveness of financial inclusion programs: A case study of Jammu and Kashmir state. *International Journal of Financial Innovation in Banking*, 2(1), 29–47.
- Khalisharani, H., Johan, I. R., & Sabri, M. F. (2022). The influence of financial literacy and attitude towards financial behaviour amongst undergraduate students: A cross-country evidence. *Pertanika Journal of Social Sciences and Humanities*, 30(2), 449–474.
- Kim, D.-W., Yu, J.-S., & Hassan, M. K. (2017). Financial inclusion and economic growth in OIC countries. *Research in International Business and Finance*, 43, 1–14. <https://doi.org/10.1016/j.ribaf.2017.07.178>
- Kinsman, J. E. (2019). Cardless banking in the Nelson Mandela Metropole: A means of financial inclusion for the excluded. *Journal of Economic and Financial Sciences*, 12(1).

-
- Klapper, L., Singer, D., Starita, L., & Norris, A. (2025). *The Global Findex Database 2025: Connectivity and financial inclusion in the digital economy*. World Bank. <https://doi.org/10.1596/978-1-4648-2204-9>.
- Kodan, A. S., & Chhikara, K. S. (2013). A theoretical and quantitative analysis of financial inclusion and economic growth. *Management and Labour Studies*, 38(1–2), 103–133. <https://doi.org/10.1177/0258042X13498009>
- Konwar, N. (2018). *A study on financial inclusion among tribal communities of Tinsukia district of Assam* (Doctoral dissertation, Dibrugarh University, Assam).
- Koomson, I., Vilano, R. A., & Hadley, D. (2020). Intensifying financial inclusion through the provision of financial literacy training: A gendered perspective. *Applied Economics*, 52(4), 375–387.
- Koomson, I., Vilano, R. A., & Hadley, D. (2021). Accelerating the impact of financial literacy training programmes on household consumption by empowering women. *Applied Economics*, 53(29), 3359–3376.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd rev. ed.). New Age International Publishers.
- Kumar, B.P. (2017). Financial vulnerability among tribes in rural areas: A study. *International Journal of Multidisciplinary Educational Research*, 6(7), 1–10.
- Kumar, N. (2013). Financial inclusion and its determinants: Evidence from India. *Journal of Financial Economic Policy*, 5(1), 4–19. <https://doi.org/10.1108/17576381311317754>
- Kumar, P. (2019). Financial literacy and digital financial inclusion among tribal people – A case study of Kallar Grama Panchayath in Kasaragod district. In *MESMAC International Conference Proceedings* (pp. 1–12). MESMAC. ISBN: 978-81-939574-0-0

- Kuttencherry, A. J. (2019). *A study on socio-economic impact of neighbourhood groups (NHGs) in Attappady: A comparison between tribal and non-tribal communities* (Doctoral dissertation, Mahatma Gandhi University, Kottayam). Department of Applied Economics, Cochin University of Science and Technology.
- Kyeyune, G. N., & Ntayi, J. M. (2025). Empowering rural communities: The role of financial literacy and management in sustainable development. *Frontiers in Human Dynamics*.
- Lê, T., Dang, N., Nguyen, T., Vu, T., & Tran, M. (2019). Determinants of financial inclusion: Comparative study of Asian countries. *Asian Economic and Financial Review*, 9(10), 1107–1123.
- Lee, J. M., Lee, J., & Kim, K. T. (2020). Consumer financial well-being: Knowledge is not enough. *Journal of Family and Economic Issues*, 41(2), 218–228.
- Leyshon, A., & Thrift, N. (1995). Geographies of financial exclusion: Financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers*, 20(3), 312–341.
- Luiz, A. A. D. (1962). *Tribes of Kerala*. Bharatiya Adimajati Sevak Sangh.
- Lusardi, A. (2015). Financial literacy: Do people know the ABCs of finance? *Public Understanding of Science*, 24(3), 260–271. <https://doi.org/10.1177/0963662514564516>
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44.
- Lusardi, A., & Mitchell, O. S. (2023). The importance of financial literacy: Opening a new field. *Journal of Economic Perspectives*, 37(4), 137–154.
- Mahajan, P., & Singla, A. (2017). Effects of demonetization on financial inclusion in India. *International Journal of Science, Technology and Management*, 6(1), 338–343.

-
- Manojan, K. P. (2018). Indigenous knowledge in education: A study among Paniya tribes in Kerala. *Journal of Social Work Education and Practice*, 3(1), 43–55.
- Mathur, P. R. G. (1977). *Tribal situation in Kerala*. Kerala Historical Society.
- Mbutor, O. M., & Uba, I. A. (2013). The impact of financial inclusion on monetary policy in Nigeria. *Journal of Economics and International Finance*, 5(8), 318–326. <https://doi.org/10.5897/JEIF2013.0541>
- Melnikovas, A. (2018). Towards an explicit research methodology: Adapting research onion model for future studies. *Journal of Futures Studies*, 23(2), 29–44.
- Menon, P. (2018). Financial inclusion, banking the unbanked: Concepts, issues and policies for India. *Wiley Practitioner Paper*.
- Mindra, R., & Moya, M. (2017). Financial self-efficacy: A mediator in advancing financial inclusion. *Equality, Diversity and Inclusion: An International Journal*, 36(2), 151-170.
- Mini, P. V., & Suresh, K. P. (2022). *Documentation of tangible and intangible heritage of scheduled tribes of Kerala: Wayanad district*. Kerala Institute for Research, Training and Development Studies of Scheduled Castes and Scheduled Tribes (KIRTADS).
- Mishra, A.K. and Dash, M.K. (2019), “Financial literacy among tribal people in Odisha: a study on the Kondh tribe”, *International Journal of Scientific Research and Reviews*, Vol. 8 No. 2, 213-223.
- Mohakud, S., Singh, A., Jagdale, S., Pandey, A., & Narayanan, B. (2020). Financial inclusion in rural India: A case study of Mahuapur. *DME Journal of Management*, 1(1), 1–12.
- Mohan, A., Gutjahr, G., Pillai, N. M., Erickson, L., Menon, R., & Nedungadi, P. (2017). Analysis of school dropouts and impact of digital literacy in girls of the Muthuvan tribes. In *5th IEEE International Conference on MOOCs, Innovation and Technology in Education*, (pp. 72–76).

- Mohanty, D., Dongare, A., & Singh, P. (2022). *Pension for the common person: Progress of Atal Pension Yojana* (PFRDA Working Paper Series No. 2022-23(2)). Pension Fund Regulatory and Development Authority.
- Mohindra, K., Narayana, D., Anushreedha, S., & Haddad, S. (2011). Alcohol use and its consequences in South India: Views from a marginalised tribal population. *Drug and Alcohol Dependence*, 118, 70–73.
- Morawczynski, O., Hutchful, D., Rangaswamy, N., & Cutrell, E. (2010). The bank account is not enough: Examining strategies for financial inclusion in India. *ICTD Conference Proceedings*.
- Mountain, T. P., Kim, N., Serido, J., & Shim, S. (2021). Does type of financial learning matter for young adults' objective financial knowledge and financial behaviors? A longitudinal and mediation analysis. *Journal of Family and Economic Issues*, 42(1) 113–132.
- Musau, S., Muathe, S., & Mwangi, L. (2018). Financial inclusion, bank competitiveness and credit risk of commercial banks in Kenya. *International Journal of Financial Research*, 9(1), 203–218.
- Muthetia, O. (2024). Empowering financial inclusion: The role of financial literacy and self-efficacy among working women. *International Journal of Contemporary Africa Research Network*, 1(1), 50–62.
- NABARD. (2020). *Status of microfinance in India 2019–20*. Mumbai: National Bank for Agriculture and Rural Development. <https://www.nabard.org>
- Naidu, G. J. (2017). Financial literacy in India: A review of literature. *International Journal of Research in Business Studies and Management*, 4(6), 30–32.
- Nair, T. S. (2010). *Financial inclusion and beyond: Issues and challenges*. Economic and Political Weekly, 45(30), 18–21.
- Nanda, A. K. (2019). *Mainstreaming tribals through financial literacy: With special reference to Koraput District of Odisha* (Doctoral dissertation, KIIT Deemed

to be University, Bhubaneswar). School of Management, KIIT Deemed to be University.

Nanda, A. K., & Samanta, S. (2018). Mainstreaming tribals through financial literacy: A review of literature. *International Journal of Social Economics*, 45(2), 437-444.

National Bank for Agriculture and Rural Development. (2024). *Annual report 2023–24*. NABARD. <https://www.nabard.org/annual-report/index.html>

National Centre for Financial Education. (2019). *National Financial Literacy and Inclusion Survey (NCFE-FLIS) 2019: Main report* (June 2018 – October 2019). <https://www.ncfe.org.in>

Naumenkova, S., Mischenko, S., & Dorofeiev, D. (2019). Digital financial inclusion: Evidence from Ukraine. *Investment Management and Financial Innovations*, 16(3), 194–205.

Ngo, A. L. (2019). Index of financial inclusion and the determinants: An investigation in Asia. *Asian Economic and Financial Review*, 9(12), 1368–1382.

Nguyen, T. A. N, Polách, J., & Vozňáková, I. (2019). The role of financial literacy in retirement investment choice. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 14(4), 569-589.

Nidheesh, K. B. (2009). Strengthening tribal communities through tribal women's self-help groups in Kerala. *International Journal of Sociology and Anthropology*, 1(4), 77–81.

Nsiah, A. Y., & Tweneboah, G. (2023). Determinants of financial inclusion in Africa: Is institutional quality relevant? *Cogent Social Sciences*, 9(1).

Nurbekyan, A., & Hovanesian, N. (2018). *Financial inclusion, regulation, financial literacy, and financial education in Armenia* (ADBI Working Paper No. 843). Asian Development Bank Institute. <https://www.adb.org/publications/financial-inclusion-armenia>

- Nutassey, V. A., Frimpong, S., & Ageyi, S. K. (2024). Financial literacy induced financial well-being in Ghana: Does financial inclusion mediate? *Thunderbird International Business Review*, 325–337.
- OECD. (2016). *OECD/INFE International Survey of Adult Financial Literacy Competencies*. Paris: OECD Publishing.
- Okello, G. (2020). examining the role of financial intermediaries in promoting financial literacy and financial inclusion among the poor in developing countries : Lessons from rural Uganda, *Cogent economics & finance* <https://doi.org/10.1080/23322039.2020.1761274>
- Oliveira, T. F., Gomes, A. L., & Jorge, S. V. (2022). Financial literacy: An exploratory analysis in Portugal. *Studies in Business and Economics*, 17(2), 252–269.
- Organisation for Economic Co-operation and Development. (2005). *Improving financial literacy: Analysis of issues and policies*. OECD Publishing.
- Organisation for Economic Co-operation and Development. (2017). *G20/OECD INFE report on adult financial literacy in G20 countries*. OECD Publishing. <https://www.oecd.org/financial/education/G20-OECD-INFE-Report-Adult-Financial-Literacy-G20-Countries.pdf>.
- Organisation for Economic Co-operation and Development. (2023). *OECD/INFE 2023 international survey of adult financial literacy*. OECD Publishing. <https://www.oecd.org/financial/education/oecd-infe-2023-international-survey-of-adult-financial-literacy.pdf>
- Ouechtati, I. (2020). The contribution of financial inclusion in reducing poverty and income inequality in developing countries. *Asian Economic and Financial Review*, 10(9), 1051–1061.
- Ozili, P. (2023). Financial inclusion washing. *Journal of Financial Crime*, 30(5), 1140–1149.

-
- Ozili, P. K. (2023). Financial inclusion washing. *Journal of Financial Crime*, 30(5), 1140–1149.
- Panakaje, N., Rahiman, H. U., Parvin, S. M. R., Kulal, A., & Siddiq, A. (2023). Socio-economic empowerment in rural India: Do financial inclusion and literacy matter? *Cogent Social Sciences*, 9(1).
- Panoor, K. (1971). *Keralathile Africa* [In Malayalam]. Sahitya Pravarthaka Co-operative Society Ltd./Rawat Publications.
- Park, C.-Y., & Mercado, R. V., Jr. (2015). *Financial inclusion, poverty, and income inequality in developing Asia* (ADB Economics Working Paper Series No. 426). Asian Development Bank. <https://www.adb.org/publications/financial-inclusion-developing-asia>
- Patra, M. D. (2021). *Financial technology: Opportunities and challenges* [Speech]. 7th IBA Banking Technology Awards. Reserve Bank of India.
- Pramod, K. M. (2013). *Education and development among tribals in Kerala: A study with special reference to Wayanad District* (Doctoral dissertation). Department of Education, University of Calicut.
- Prasanth, A., & Balasubramaniam, P. (2021). An analysis on constraints faced by scheduled tribes in access to social institutions in Eastern Ghats of Tamil Nadu. *Asian Journal of Agricultural Extension, Economics & Sociology*, 39(12), 185–192. <https://doi.org/10.9734/ajaees/2021/v39i1230818>
- Putthinum, P., Watanapongvanich, S., Khan, M. S. R., & Kadoya, Y. (2021). Financial literacy and alcohol drinking behaviour: Evidence from Japan. *Sustainability*, 13, 8858.
- Raihanath, M. P. (2019). *Effectiveness of financial inclusion programme in Kerala* (Doctoral dissertation, Cochin University of Science and Technology, Kochi). School of Management Studies, Cochin University of Science and Technology.

- Ramana, D.V. and Muduli, S. (2019), “Measuring financial capability of the street vendors”, Working Paper Series WR-708, doi: 10.2139/ssrn.3433606.
- Ramanujam, V., & V.R, Dhanyamol. (2019). Personality traits impact on financial inclusion among Scheduled Tribes in Kerala. *Indian Journal of Research*, 8(5), 50–55.
- Rangarajan Committee. (2008). *Report of the Committee on Financial Inclusion*. Government of India.
- Ray, D., & Rout, H. S. (2015). Financial inclusion among the urban tribal households in Odisha: A case study of Jolli Munda Sahi community, Khurdha district. *Orissa Economic Journal*, 47(1), 1–12.
- Reddy, K.R., & Reddy, T. C. S (2015). Indebtedness and financial inclusion among the tribal: An experience of woman self-help group member households in Andhra Pradesh. *The Microfinance Review, Journal of the Centre for Microfinance Research*, 7(1), 1–19.
- Reserve Bank of India. (2019). *National strategy for financial inclusion 2019–2024: An approach paper to accelerate financial inclusion*. Reserve Bank of India. <https://www.rbi.org.in>
- Reserve Bank of India. (2021). *Financial education initiatives by RBI*. Mumbai: RBI. <https://www.rbi.org.in>
- Reserve Bank of India. (2025). *Annual report 2024–25*. Reserve Bank of India. <https://www.rbi.org.in>
- Roy, S. K. (2012). Financial inclusion in India: An overview. *Asian Journal of Multidimensional Research*, 1(5), 134–141.
- Rutledge, S. L. (2010). *Consumer protection and financial literacy: Lessons from nine country studies* (Policy Research Working Paper No. 5326). World Bank.

-
- Sahoo, A. K., Pradhan, B. B., & Sahu, N. C. (2017). Determinants of financial inclusion in tribal districts of Odisha: An empirical investigation. *Social Change*, 47(1), 45–64. <https://doi.org/10.1177/0049085716683072>
- Sarkar, S. (2022). Financial inclusion among tribal households of backward areas: A study of Purulia District of West Bengal. *International Journal of Multidisciplinary Educational Research*, 11(4).
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education.
- Sayed, M. N., & Shusha, A. (2019). Determinants of financial inclusion in Egypt. *Asian Economic and Financial Review*, 9(12), 1383–1404.
- Scheduled Tribes Development Department, Government of Kerala. (2013, November). *Scheduled tribes of Kerala: Report on the socio-economic status*. Government of Kerala.
- Servon, L. J., & Kaestner, R. (2008). Consumer financial literacy and the impact of financial education programs. *The Journal of Consumer Affairs*, 42(2).
- Sethi, D., & Acharya, D. (2018). Financial inclusion and economic growth linkage: Some cross-country evidence. *Journal of Financial Economic Policy*, 10 (3), 369-385.
- Sethy, S. K., & Goyari, P. (2018). Relationship between financial exclusion and social exclusion: A study in tribal districts of Odisha. *Orissa Economic Journal*, 50(2), 164–174.
- Sethy, S., Sethi, N., & Joshi, D.P. P. (2025). Does financial inclusion improve the effectiveness of monetary policy in South Asian countries? Exploring the role of interest rate. *Journal of Financial Economic Policy*.
- Shankar, S. (2013). Financial inclusion in India: Do microfinance institutions address access barriers? *ACRN Journal of Entrepreneurship Perspectives*, 2(1), 60–74.

- Shanthudu, D. (1993). *Institutional finance and tribal development*. Manak Publications Pvt. Ltd.
- Sharma, A. K., Sengupta, S., Roy, I., & Phukan, S. (2021). Financial inclusion index for India. *RBI Bulletin, September 2021*, 89–96. Reserve Bank of India.
- Sharma, A., & Kukreja, S. (2013). An analytical study: Relevance of financial inclusion for developing nations. *International Journal of Engineering and Science*, 2(6), 15–20.
- Sherraden, M. S., & Ansong, D. (2016). Financial literacy to financial capability: Building financial stability and security. *International Handbook of Financial Literacy* (pp. 83–96). Singapore: Springer Science + Business Media.
- Shroff, F. T., & Prasadaraao, M. (2012). Taking banking services to the common man "Aam Admi": Inclusive growth for tribal development. *Pacific Business Review International*, 5(1), 36–45.
- Shyni, V. K. (2020). *Influence of financial inclusion policy awareness and usage on the financial behaviour of Scheduled Caste and Scheduled Tribe households: A study with special reference to selected districts of Kerala* (Doctoral dissertation, Cochin University of Science and Technology, Kochi). School of Management Studies, Cochin University of Science and Technology.
- Singh, A. B., & Tandon, P. (2012). Financial inclusion in India: An analysis. *International Journal of Marketing, Financial Services and Management Research*, 1(1), 41–54.
- Singh, A. K. (2023). Tribal entrepreneurship in India: Role of National Scheduled Tribes Finance and Development Corporation. *Manpower Journal*, 57 (1-2) 57–80.
- Singh, B., & Singh, M. (2023). Financial literacy and its determinants among the scheduled tribes: evidences from India. *International Journal of Social Economics*, 50(12), 1804-1817.

-
- Singh, C., Mittal, A., Garg, R., Goenka, A., Goud, R., Ram, K., Suresh, R., Chandrakar, R., & Kumar, U. (2014). Financial inclusion in India: Select issues. *SSRN Electronic Journal*.
- Singh, K. S. (Ed.). (2002). *People of India: Kerala* (Vol. XXVII, Part 1). Anthropological Survey of India; East-West Press Pvt. Ltd.
- Singh, R. (2022). *Study of financial inclusion and financial literacy among tribes in selected districts of Madhya Pradesh and Chhattisgarh* (Doctoral dissertation, Indira Gandhi National Tribal University, Amarkantak, M.P.). Department of Commerce, Indira Gandhi National Tribal University.
- Sohn, S.-H., Joo, S.-H., Grable, J. E., Lee, S., & Kim, M. (2012). Adolescents' financial literacy: The role of financial socialization agents, financial experiences and money attitudes in shaping financial literacy among South Korean youth. *Journal of Adolescence*, 35(4), 969–980. <https://doi.org/10.1016/j.adolescence.2012.02.002>
- Solomon, M. L. (2022). *Financial literacy centres in Kerala – An evaluation* (Doctoral dissertation, University of Kerala, Thiruvananthapuram). PG & Research Department of Commerce, Mar Ivanios College (Autonomous).
- Subbarao, D. (2010, March 22–23). *Delivering financial literacy – Challenges, approaches and instruments* [Speech]. RBI–OECD Workshop, Bangalore. Reserve Bank of India & Organisation for Economic Co-operation and Development.
- Sun, S., Chen, Y.-C., Ansong, D., Huang, J., & Sherraden, M. (2022). Household financial capability and economic hardship: An empirical examination of the financial capability framework. *Journal of Family and Economic Issues*, 43(4), 716–729.
- Tambunan, T. (2015). Financial inclusion, financial education and financial regulation: A story from Indonesia. *ADB Working Paper Series* 535.

- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Tavakol, M., Mohagheghi, M. A., & Dennick, R. (2008). Assessing the skills of surgical residents using simulation. *Journal of Surgical Education*, 65(2), 77–83.
- Thomas, S. T., Thomas, E. T., McLean, M., & Titus, T. T. (2021). Paving the way to achieving the United Nations Sustainable Development Goals for women from indigenous communities: Lessons from Attapady, India. *Discover Sustainability*.
- Thomas, T., & Suresh, T. S. (2020). Digital financial inclusion: A catalyst for socio-economic transformation of Scheduled Castes and Scheduled Tribes in Kerala. *IOSR Journal of Business and Management*, 22(5), 18–26. <https://doi.org/10.9790/487X-2205021826>
- Thurston, E. (1975). *Castes and tribes of southern India* (Vol. 15). Cosmo Publications. (Original work published 1909)
- United Nations. (2006). *Building inclusive financial sectors for development*. United Nations Publications.
- United Nations Secretary-General's Special Advocate for Inclusive Finance for Development. (2024). *Foundational building blocks for financial inclusion: Insights and call to action to reach the last mile*. <https://www.unsgsa.org>
- V, Mahesha (2023). Financial Literacy For Empowering Financially Marginalized People Of Backward Areas. *IOSR Journal of Business and Management*, 25(8), 07-12.
- V.A, Haseena (2015). Poverty and livelihood problems among the scheduled tribes in Kerala: A study on Attapady. *Journal of Poverty, Investment and Development*, 14, 94–101.

-
- Varkey, J. (2019). *Financial inclusion of scheduled tribes in Kerala: An empirical study* (Doctoral dissertation, University of Kerala). University of Kerala.
- Varkey, J. (2020). Financial inclusion and organic farming practices of Kuruchya tribe in Wayanad: An empirical study. *SSRN*.
- Varkey, J. (2020). Financial literacy in the FinTech era: A study of scheduled tribes in Kerala. *International Journal of Advanced Science and Technology*, 29(5), 2904–2915.
- Varkey, J., Mathew, J., & Sujathan, P. (2025). An alternative index for measuring financial inclusion: A study of scheduled tribes in Kerala. *Social Change*.
- Veluchamy, R., & Lingaraja, K. (2020). Personality traits and its impact on financial inclusion: A study among the scheduled tribes. *International Journal of Psychosocial Rehabilitation*, 24(8), 6890–6910. <https://doi.org/10.37200/IJPR/V24I8/PR280782>
- Watanapongvanich, S., Khan, M. S., Putthinum, P., Ono, S., & Kadoya, Y. (2022). Financial literacy and gambling behaviour in the United States. *Journal of Gambling Studies*, 38(2), 445–463.
- Williams, H. T., Adegoke, J. A., & Dare, A. (2017). Role of financial inclusion in economic growth and poverty reduction in a developing economy. *International Journal of Research in Economics and Social Sciences*, 7(5), 265–271.
- World Bank. (2014). *Global financial development report 2014: Financial inclusion*. World Bank.
- World Bank. (2014). *Global financial development report 2014: Financial inclusion*. Washington, DC: World Bank.
- Xavier, S. (2018). The problems and challenges of the Kadar tribe of Kerala. *Contemporary Voice of Dalit*, 10(2), 204–215.

- Xaxa, V. (1999). Tribes as indigenous people of India. *Economic and Political Weekly*, 34(51), 3589–3595.
- Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies*, 40(6), 712–721.
- Yoshino, N., Morgan, P. J., & Wignaraja, G. (2015). *Financial education in Asia: Assessment and recommendations* (ADBI Working Paper No. 534). Asian Development Bank Institute.

APPENDIX

Financial Literacy and Financial Inclusion among the Tribal Communities in Kerala

INTERVIEW SCHEDULE

Schedule Number									
1. District		2. Community		3. Type of Settlement	☐ 1. Unnathi (Colony) ☐ 2. Others				
1. Name (Financial Head of the Household):		2. Gender	☐ 1. Male ☐ 2. Female ☐ 3. Others	3. Age		4. Education			
5. Occupation		6. Participation in the MGNREGA	☐ 1. Yes ☐ 2. No	7. Monthly income (Personal)		Rs.....			
8. Total Family Members		9. Number of members below 15 years		10. Number of members aged 65 years and above					
11. Total number of earning members		12. Total income of the family	Rs.....	13. Average daily expenses		Rs.....			
		1. Status	2. Type of Mobile Phone	3. Network Coverage					
14. Do you have Mobile Phone?		☐ 1. Yes ☐ 2. No	☐ 1. Basic Phone ☐ 2. Smart Phone	☐ 1. Very good ☐ 3. Bad ☐ 2. Good ☐ 4. Very bad					
15. Do any other members in the household have Mobile Phone?		☐ 1. Yes ☐ 2. No	☐ 1. Basic Phone ☐ 2. Smart Phone	☐ 1. Very good ☐ 3. Bad ☐ 2. Good ☐ 4. Very bad					
16. Do you have any formal savings/deposit account with any bank?	☐ 1. Yes ☐ 2. No	If yes →	17. Type of account	☐ 1. Zero balance Savings Account ☐ 2. Normal Savings Account ☐ 3. Fixed Deposit ☐ 4. Credit Account ☐ 5. Recurring Deposit	18. Form of bank	☐ 1. Nationalised Bank ☐ 2. Scheduled Private Bank ☐ 3. Cooperative Bank ☐ 4. Grameen Bank			

1. Financial Literacy

1.1. Financial Knowledge

1. Suppose you sold an agricultural product (such as tapioca or tomatoes) worth Rs. 1000 in a local market near your residence. The shopkeeper is planning to pay the amount (Rs. 1000) after one year. If the inflation rate for the year is 6%, what will be the value of Rs. 1000 after one year?	☐ 1. Less than today ☐ 2. More than today	☐ 3. The same as today ☐ 4. Don't Know
2. If you lend Rs. 150 to a friend in the evening, and he repays you Rs. 150 the next day. What is the rate of interest you have charged on the loan?	☐ 1. 0% ☐ 2. 5%	☐ 3. 10% ☐ 4. 25%
3. It is generally possible to reduce the risk of investing in the stock market by purchasing a diverse range of stocks and shares. (For example, if I had a large sum of money, I would prefer to invest it in a variety of agricultural products or related activities, rather than putting it all into a single product.)	☐ 1. True ☐ 2. False ☐ 3. Don't know	

1.2 Financial Behaviour

1. Who is responsible for making day-to-day decisions about money in your household?	☐ 1. Personally ☐ 2. Jointly	☐ 3. Friends ☐ 4. Relatives	☐ Others....	2. Do you make day-to-day decisions about your own money?	☐ 1. Yes ☐ 2. No
3. Which of the following you do for yourself or for your household?					
1. Create a plan to manage income and expenses	☐ 1. Yes ☐ 2. No	4. Make a note of upcoming bills to ensure don't miss any payments	☐ 1. Yes ☐ 2. No		
2. Keep a record of spending	☐ 1. Yes ☐ 2. No	5. Use a banking app or money management tool to track expenses	☐ 1. Yes ☐ 2. No		
3. Keep money for bills separate from day-to-day spending money	☐ 1. Yes ☐ 2. No	6. Set up automatic payments for regular bills	☐ 1. Yes ☐ 2. No		
4. In the past 12 months, have you personally saved money in any of the following ways? Please exclude any contributions to a pension plan and consider all other forms of savings, such as building an emergency fund or setting aside money for a special occasion.					
1. Saving cash at home or in your wallet	☐ 1. Yes ☐ 2. No	5. Buying bonds or time deposits	☐ 1. Yes ☐ 2. No		
2. Paying money into a savings/deposit account	☐ 1. Yes ☐ 2. No	6. Investing in crypto-assets	☐ 1. Yes ☐ 2. No		
3. Giving money to family to save on your behalf	☐ 1. Yes ☐ 2. No	7. Investing in stocks and shares	☐ 1. Yes ☐ 2. No		
4. Saving in an informal savings club/ Chits	☐ 1. Yes ☐ 2. No	8. Saving or investing in some other way	☐ 1. Yes ☐ 2. No		

5. Sometimes people find that their income doesn't fully cover their living expenses. In the past 12 months, has this happened to you personally?	☐ 1. Yes ☐ 2. No	6. If yes, what did you do to make ends meet the last time when it happened?	☐ 1. Used existing savings or resources ☐ 2. Found additional sources of income or support ☐ 3. Accessed credit through personal contacts or existing resources ☐ 4. Borrowed from an existing credit line ☐ 5. Took on new credit or loans ☐ 6. Fell behind on payments or exceeded arranged limits
---	---	--	---

7. To what extent do you agree or disagree with the following statements about your financial behaviour?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I keep a close watch on my personal financial affairs.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. I set long-term financial goals and strive to achieve them.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3. Before I make a purchase, I carefully consider whether I can afford it.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
4. I pay my bills on time.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

1.3 Financial Attitude

To what extent do you agree or disagree with the following statements about your financial habits and attitudes?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I find spending money more satisfying than saving it for the future.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. I tend to focus on living for today and worry less about tomorrow.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3. I believe money is meant to be spent.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
4. I don't feel stressed during financial difficulties.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5. Financial planning is only for people with a lot of money.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

1.4. Financial Awareness

How aware are you of the following banking and financial services?

	Aware	Somewhat aware	Not aware		Aware	Somewhat aware	Not aware
1. Bank Passbook	☐ 3	☐ 2	☐ 1	6. Mobile Banking/ Internet Banking	☐ 3	☐ 2	☐ 1
2. Depositing/Withdrawing Cash	☐ 3	☐ 2	☐ 1	7. UPI/Digital Payments	☐ 3	☐ 2	☐ 1
3. Debit card/ Credit Card	☐ 3	☐ 2	☐ 1	8. Insurance Services	☐ 3	☐ 2	☐ 1
4. Cheques	☐ 3	☐ 2	☐ 1	9. Loan Facilities	☐ 3	☐ 2	☐ 1
5. Bank Charges	☐ 3	☐ 2	☐ 1				

1.5 Digital Financial Literacy

1. A digital financial contract requires signature as in the case of a paper contract in order to be considered valid. ☐ 1. True ☐ 2. False ☐ 3. Don't Know

2. Please indicate your level of agreement with the following statements

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I share the passwords and PINs of my bank account with close friends.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. It's important to pay attention to security issues before making online transactions.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3. I don't think it's important to read the terms and conditions before making digital transactions.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

2. Financial Inclusion

1. How many times did you use your account in the last 2 months?	for depositing		2. Do you have any insurance coverage?	☐ 1. Yes ☐ 2. No	3. If yes type of insurance	☐ 1. Life Insurance ☐ 2. Health Insurance/ Medical Insurance ☐ 3. General Insurance
	for withdrawal					

3. Financial Aspects

Please indicate your level of agreement with the following statements

	Financial Task	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. Confidence regarding the following financial matters	1. I am confident in making financial decisions for my family.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	2. I understand bank statements well.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	3. I can confidently fill out forms at the bank.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	4. I can make money transfers (e.g., paying bills, loans, etc.) with ease.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	5. I can monitor my account balance regularly with confidence.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	6. I can gather necessary information from available sources before making financial decisions.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. Financial planning	1. Retirement planning should be started at an early working age.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	2. I set financial goals and objectives in my life.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3. Financial anxiety and financial satisfaction	1. Discussing my finances makes me nervous or stressed.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	2. I feel stressed while opening my bank statements/passbook.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	3. I am satisfied with my current financial situation.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
4. Access barriers	1. I experience language problems when dealing with financial services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	2. I face inequality in accessing financial services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	3. I don't receive enough attention from authorities when seeking financial help.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	4. Documentation requirements are a barrier for me when using financial services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	5. Procedural formalities in financial services are cumbersome for me.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	6. Inappropriate branch timing makes it difficult for me to access services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	7. Geographical location creates problems in accessing financial services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	8. I find the behavior of bank staff unfriendly.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5. Attitude towards informal financial sources	1. I find the approach of informal financial sources (e.g., moneylenders) friendly.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	2. Informal financial sources offer flexible timing, which I prefer.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	3. Informal financial sources have fewer procedural formalities, making them more convenient.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
	4. Informal financial sources are easier to access than formal banking institutions.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

	Regularly	Weekly	Monthly	Occasionally	Not consuming
6. Consumption of Alcoholic Products	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
7. Smoking Habits	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
8. Betel Chewing Habits	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

4. Preferences for Financial Workshops, Banking, and Insurance

How much do you agree or disagree with the following statements regarding financial workshops, banking services, and insurance products?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. I prefer to attend workshops and seminars that provide financial information.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
2. If remuneration is offered for attending workshops and seminars, I would choose to participate in those that offer financial information.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
3. If the government provides a free or subsidized mobile phone with free recharge and maintenance, I would utilize/prioritize mobile banking and internet banking services.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

4. If bank officials are from my community, I believe that my contact with the bank increases.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
5. If banks provide daily jobs, I would keep a portion of my income in the bank as deposits.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
6. If the government covers half of my insurance premium and my family's, I would purchase more insurance products.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
7. If the bank's lending environment is similar to that of informal moneylenders or friends, I would prioritize banks for my financial needs.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1
8. If my prompt repayment of previous loans reduces interest on future loans from formal financial institution, I would fulfil my credit requirements through formal financial institutions.	☐ 5	☐ 4	☐ 3	☐ 2	☐ 1

5. Kindly Share your suggestions for improving the financial development within the settlement

THANK YOU

Measurement of Financial Inclusion

Individual Financial Inclusion Index (IFII)

IFII= Deposit (D1j) + Debit (D2j) + Insurance (D3j)

a) Deposit

$$D1j = \frac{A1 - \text{Min } X1}{\text{Max } X1 - \text{Min } X1}$$

A1= Number of times deposited in bank account last year

Max X1= Maximum number of deposits allowed at free of cost in a year (prefixed 36)

Min X 1= Minimum number of deposits in a year (prefixed 0)

b) Debit

$$D2j = \frac{A2 - \text{Min } X2}{\text{Max } X2 - \text{Min } X2}$$

A2= Number of withdrawal from bank account last year

Max X2= Maximum number of debit allowed at free of cost in a year (prefixed 48)

Min X 2= Minimum number of debit in a year (prefixed 0)

c) Insurance

$$D3j = \frac{A3 - \text{Min } X3}{\text{Max } X3 - \text{Min } X3}$$

A3 = Actual number of insurance (type)

Max X3= Maximum number of insurance (prefixed 3)

Min X3= Minimum number of insurance (prefixed 0)

Interpretation of IFII

IFII	Financial Inclusion Level
IFII=0	Perfect Financial Exclusion
0<IFII<=.250	Very Low Financial Inclusion
.250<IFII<=.500	Medium Financial Inclusion
.500<IFII<=.750	High Financial Inclusion
.750<IFII<1	Very High Financial Inclusion
IFII=1	Perfect Financial Inclusion

Individual Financial Literacy Score (IFLS)

27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	No.
32	16	36	32	32	0	52	36	32	20	72	32	84	80	96	16	32	72	36	56	28	24	36	48	44	32	32	IFLS
54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	No.
76	80	76	40	36	56	20	32	80	32	48	72	52	96	16	24	32	44	32	32	72	32	36	0	56	32	32	IFLS
81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	No.
88	36	76	72	44	48	76	56	80	24	40	88	20	84	12	84	40	52	80	84	88	64	80	72	88	32	80	IFLS
108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	No.
20	92	44	32	28	36	28	8	76	12	20	72	80	88	84	56	36	80	32	80	52	80	24	40	72	48	84	IFLS
135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112	111	110	109	No.
20	20	32	12	4	32	64	24	48	8	40	20	92	44	24	76	16	56	4	20	40	20	12	8	20	20	12	IFLS
162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	No.
72	52	44	36	48	20	28	72	40	52	44	84	24	48	36	28	20	20	40	64	32	40	20	44	12	28	44	IFLS
189	188	187	186	185	184	183	182	181	180	179	178	177	176	175	174	173	172	171	170	169	168	167	166	165	164	163	No.
24	36	28	32	52	28	16	44	72	36	84	76	76	28	16	52	76	24	28	24	36	72	48	40	32	32	36	IFLS
216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	No.
12	68	20	24	24	88	16	20	20	20	4	80	8	12	8	20	36	84	72	76	76	44	28	40	20	52	32	IFLS
243	242	241	240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224	223	222	221	220	219	218	217	No.
28	20	20	8	88	12	48	28	56	16	12	8	24	32	48	56	28	72	32	28	20	20	56	24	20	28	28	IFLS
270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248	247	246	245	244	No.
36	44	80	84	76	32	56	16	24	36	72	16	36	40	44	40	92	60	76	40	32	4	28	68	20	56	20	IFLS

288	287	286	285	284	283	282	281	280	279	278	277	276	275	274	273	272	271	No.
92	100	76	56	60	88	44	48	88	72	40	36	44	12	76	100	76	48	IFLS
306	305	304	303	302	301	300	299	298	297	296	295	294	293	292	291	290	289	No.
80	76	80	96	84	76	16	12	36	40	16	80	76	24	44	36	72	40	IFLS
324	323	322	321	320	319	318	317	316	315	314	313	312	311	310	309	308	307	No.
84	100	80	84	88	44	72	92	80	92	84	84	76	80	84	76	80	88	IFLS
342	341	340	339	338	337	336	335	334	333	332	331	330	329	328	327	326	325	No.
84	76	80	80	96	92	72	84	88	48	100	84	76	72	48	92	100	76	IFLS
360	359	358	357	356	355	354	353	352	351	350	349	348	347	346	345	344	343	No.
20	32	16	76	44	36	48	16	12	16	76	44	76	84	80	92	100	76	IFLS
378	377	376	375	374	373	372	371	370	369	368	367	366	365	364	363	362	361	No.
44	20	16	28	16	76	44	32	40	24	36	8	72	20	20	4	52	48	IFLS
396	395	394	393	392	391	390	389	388	387	386	385	384	383	382	381	380	379	No.
76	12	40	48	48	52	44	36	32	52	16	4	8	16	44	40	40	52	IFLS
414	413	412	411	410	409	408	407	406	405	404	403	402	401	400	399	398	397	No.
68	40	80	32	32	28	80	76	36	24	8	88	20	72	16	76	28	20	IFLS
432	431	430	429	428	427	426	425	424	423	422	421	420	419	418	417	416	415	No.
68	72	56	32	76	72	36	8	24	72	76	48	60	48	24	76	48	36	IFLS
450	449	448	447	446	445	444	443	442	441	440	439	438	437	436	435	434	433	No.
76	48	24	24	76	80	32	24	8	36	88	80	76	76	36	36	40	72	IFLS

Individual Basic Digital Financial Literacy Score (IBDFLS)

27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	No.
25	25	25	50	25	25	50	25	25	0	25	25	100	75	100	25	50	50	50	50	25	0	50	50	50	50	25	IBDFLS
54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	No.
100	75	0	0	50	25	0	50	75	50	50	50	50	100	25	0	25	50	25	25	25	25	50	25	25	25	25	IBDFLS
81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	No.
75	0	50	25	100	50	75	25	75	50	25	75	25	100	0	75	25	75	50	100	100	50	75	50	75	25	50	IBDFLS
108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	No.
25	100	0	25	0	25	25	25	75	0	25	25	50	75	75	25	0	75	25	75	75	50	50	25	50	50	100	IBDFLS
135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112	111	110	109	No.
25	25	25	0	0	25	50	50	0	0	25	0	50	25	25	50	25	50	0	0	0	25	0	0	25	25	0	IBDFLS
162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	No.
0	50	25	25	50	25	0	25	50	25	50	75	50	0	25	25	0	0	0	50	25	25	25	25	0	0	0	IBDFLS
189	188	187	186	185	184	183	182	181	180	179	178	177	176	175	174	173	172	171	170	169	168	167	166	165	164	163	No.
50	25	0	0	50	0	25	25	25	25	100	25	50	0	25	25	100	25	0	50	25	25	50	50	25	0	75	IBDFLS
216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	No.
0	50	0	25	25	100	25	25	25	0	0	25	0	25	0	0	25	75	25	25	50	50	0	50	25	25	25	IBDFLS
243	242	241	240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224	223	222	221	220	219	218	217	No.
25	0	0	0	100	0	25	25	25	25	25	0	25	50	25	50	0	100	25	25	0	0	25	0	0	25	25	IBDFLS
270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248	247	246	245	244	No.
25	25	50	100	75	25	50	0	0	25	25	0	0	25	0	25	100	50	50	50	25	0	0	50	0	50	0	IBDFLS

288	287	286	285	284	283	282	281	280	279	278	277	276	275	274	273	272	271	No.
100	100	50	50	50	100	25	50	100	25	75	25	25	0	50	100	75	50	IBDFLS
306	305	304	303	302	301	300	299	298	297	296	295	294	293	292	291	290	289	No.
25	100	75	100	100	50	0	0	25	50	0	50	75	0	25	25	25	75	IBDFLS
324	323	322	321	320	319	318	317	316	315	314	313	312	311	310	309	308	307	No.
100	100	75	100	75	50	50	100	75	75	100	100	75	100	75	75	100	75	IBDFLS
342	341	340	339	338	337	336	335	334	333	332	331	330	329	328	327	326	325	No.
100	50	100	75	100	100	50	100	75	25	100	100	50	75	25	100	100	25	IBDFLS
360	359	358	357	356	355	354	353	352	351	350	349	348	347	346	345	344	343	No.
0	25	0	75	0	0	25	0	0	0	50	50	75	100	25	100	100	100	IBDFLS
378	377	376	375	374	373	372	371	370	369	368	367	366	365	364	363	362	361	No.
50	0	25	25	25	50	25	50	25	25	0	0	50	0	50	0	50	25	IBDFLS
396	395	394	393	392	391	390	389	388	387	386	385	384	383	382	381	380	379	No.
50	0	25	25	25	50	0	0	50	25	25	0	0	25	25	50	50	25	IBDFLS
414	413	412	411	410	409	408	407	406	405	404	403	402	401	400	399	398	397	No.
50	50	100	25	25	25	100	25	50	75	0	75	25	50	0	75	25	50	IBDFLS
432	431	430	429	428	427	426	425	424	423	422	421	420	419	418	417	416	415	No.
50	50	50	50	75	75	0	0	0	100	100	0	50	25	25	75	0	75	IBDFLS
450	449	448	447	446	445	444	443	442	441	440	439	438	437	436	435	434	433	No.
25	25	0	75	75	100	25	25	0	50	75	100	75	100	75	0	50	75	IBDFLS

Individual Financial Inclusion Index (IFI)

27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	No.
0.04	0.21	0.10	0.21	0.04	0.00	0.21	0.04	0.14	0.11	0.31	0.21	0.64	0.26	0.00	0.04	0.00	0.04	0.15	0.11	0.11	0.21	0.04	0.08	0.00	0.08	0.24	IFI
54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	No.
0.33	0.61	0.11	0.15	0.15	0.31	0.11	0.00	0.26	0.08	0.08	0.04	0.21	0.00	0.04	0.21	0.21	0.00	0.04	0.04	0.31	0.04	0.04	0.00	0.31	0.04	0.04	IFI
81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	No.
0.42	0.14	0.31	0.10	0.10	0.47	0.42	0.43	0.36	0.15	0.06	0.50	0.15	0.56	0.15	0.50	0.04	0.39	0.56	0.50	0.60	0.10	0.43	0.25	0.42	0.25	0.29	IFI
108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	No.
0.04	0.44	0.21	0.00	0.04	0.00	0.04	0.00	0.42	0.15	0.15	0.10	0.56	0.50	0.50	0.43	0.14	0.36	0.25	0.43	0.39	0.29	0.15	0.06	0.25	0.47	0.50	IFI
135	134	133	132	131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112	111	110	109	No.
0.14	0.04	0.00	0.10	0.04	0.08	0.51	0.15	0.10	0.17	0.17	0.21	0.51	0.21	0.04	0.39	0.15	0.49	0.04	0.04	0.15	0.00	0.04	0.04	0.17	0.14	0.10	IFI
162	161	160	159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	No.
0.00	0.19	0.00	0.00	0.08	0.00	0.17	0.57	0.04	0.10	0.00	0.31	0.15	0.10	0.00	0.04	0.04	0.21	0.15	0.51	0.08	0.17	0.17	0.21	0.04	0.04	0.21	IFI
189	188	187	186	185	184	183	182	181	180	179	178	177	176	175	174	173	172	171	170	169	168	167	166	165	164	163	No.
0.21	0.00	0.17	0.14	0.19	0.24	0.19	0.00	0.57	0.00	0.49	0.36	0.39	0.24	0.19	0.25	0.35	0.00	0.04	0.21	0.04	0.61	0.00	0.14	0.00	0.14	0.19	IFI
216	215	214	213	212	211	210	209	208	207	206	205	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	No.
0.00	0.46	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	0.04	0.04	0.31	0.61	0.36	0.39	0.00	0.04	0.04	0.00	0.10	0.00	IFI
243	242	241	240	239	238	237	236	235	234	233	232	231	230	229	228	227	226	225	224	223	222	221	220	219	218	217	No.
0.24	0.00	0.00	0.00	0.44	0.00	0.00	0.08	0.29	0.00	0.08	0.00	0.00	0.00	0.00	0.15	0.00	0.39	0.00	0.08	0.00	0.04	0.29	0.10	0.00	0.24	0.00	IFI
270	269	268	267	266	265	264	263	262	261	260	259	258	257	256	255	254	253	252	251	250	249	248	247	246	245	244	No.
0.00	0.19	0.33	0.44	0.51	0.24	0.17	0.00	0.04	0.00	0.15	0.00	0.15	0.00	0.11	0.15	0.61	0.08	0.15	0.00	0.00	0.00	0.00	0.46	0.04	0.15	0.00	IFI

288	287	286	285	284	283	282	281	280	279	278	277	276	275	274	273	272	271	No.
0.61	0.57	0.15	0.17	0.08	0.44	0.19	0.19	0.44	0.00	0.19	0.08	0.28	0.00	0.29	0.57	0.43	0.19	IFII
306	305	304	303	302	301	300	299	298	297	296	295	294	293	292	291	290	289	No.
0.26	0.26	0.18	0.69	0.51	0.35	0.00	0.00	0.00	0.00	0.00	0.33	0.51	0.04	0.28	0.00	0.00	0.19	IFII
324	323	322	321	320	319	318	317	316	315	314	313	312	311	310	309	308	307	No.
0.33	0.64	0.39	0.43	0.39	0.00	0.22	0.72	0.19	0.29	0.50	0.39	0.08	0.49	0.28	0.21	0.36	0.61	IFII
342	341	340	339	338	337	336	335	334	333	332	331	330	329	328	327	326	325	No.
0.43	0.35	0.36	0.39	0.69	0.72	0.22	0.51	0.39	0.08	0.64	0.39	0.24	0.43	0.08	0.58	0.72	0.21	IFII
360	359	358	357	356	355	354	353	352	351	350	349	348	347	346	345	344	343	No.
0.00	0.00	0.00	0.29	0.00	0.00	0.08	0.00	0.00	0.00	0.24	0.00	0.21	0.50	0.26	0.58	0.72	0.26	IFII
378	377	376	375	374	373	372	371	370	369	368	367	366	365	364	363	362	361	No.
0.00	0.00	0.15	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.14	0.19	IFII
396	395	394	393	392	391	390	389	388	387	386	385	384	383	382	381	380	379	No.
0.04	0.00	0.00	0.08	0.19	0.14	0.00	0.00	0.00	0.08	0.15	0.00	0.00	0.00	0.00	0.19	0.19	0.08	IFII
414	413	412	411	410	409	408	407	406	405	404	403	402	401	400	399	398	397	No.
0.33	0.00	0.35	0.21	0.04	0.04	0.46	0.04	0.04	0.04	0.00	0.33	0.00	0.00	0.00	0.29	0.00	0.00	IFII
432	431	430	429	428	427	426	425	424	423	422	421	420	419	418	417	416	415	No.
0.33	0.00	0.00	0.00	0.17	0.18	0.00	0.00	0.00	0.10	0.17	0.00	0.08	0.15	0.00	0.24	0.00	0.14	IFII
450	449	448	447	446	445	444	443	442	441	440	439	438	437	436	435	434	433	No.
0.04	0.15	0.00	0.04	0.24	0.46	0.04	0.00	0.00	0.04	0.33	0.35	0.17	0.17	0.14	0.00	0.00	0.18	IFII