

CHAPTER III

RESEARCH METHODOLOGY

Research techniques generates inferences that are supported by facts and provides authenticity to the study .“Research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organising and evaluating data; making deductions and reaching conclusions ; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis (Kothari C R and Garg, 2021)”. Research is conducted systematically, and it adds to a body of knowledge and supports many theories. In this case, the research aims to analyze the impact of consumer attitude towards sustainable fashion. The research will be conducted using primary data sources that are been collected. The methodology followed in the current study is discussed under the following heads

- 3.1 Nature of the Research
- 3.2 Selection of the Study Area
- 3.3 Selection of the Sample Units
- 3.4 Method of Data Collection
- 3.5 Period of the Study
- 3.6 Tools for Analysis of Data

3.1 Nature of the Research

This study adopts the descriptive nature of research design. Acquiring reliable and practical information about a phenomenon or process is accomplished through research. Research methodologies are the specific procedures and methods used to determine, process, and examine data. It results in general knowledge and understanding of nature and its laws. Research is systematic enquiry whose goal is communicable knowledge. The current study focused on to describe about the tribal’s financial inclusion. Hence it is classified as descriptive study.

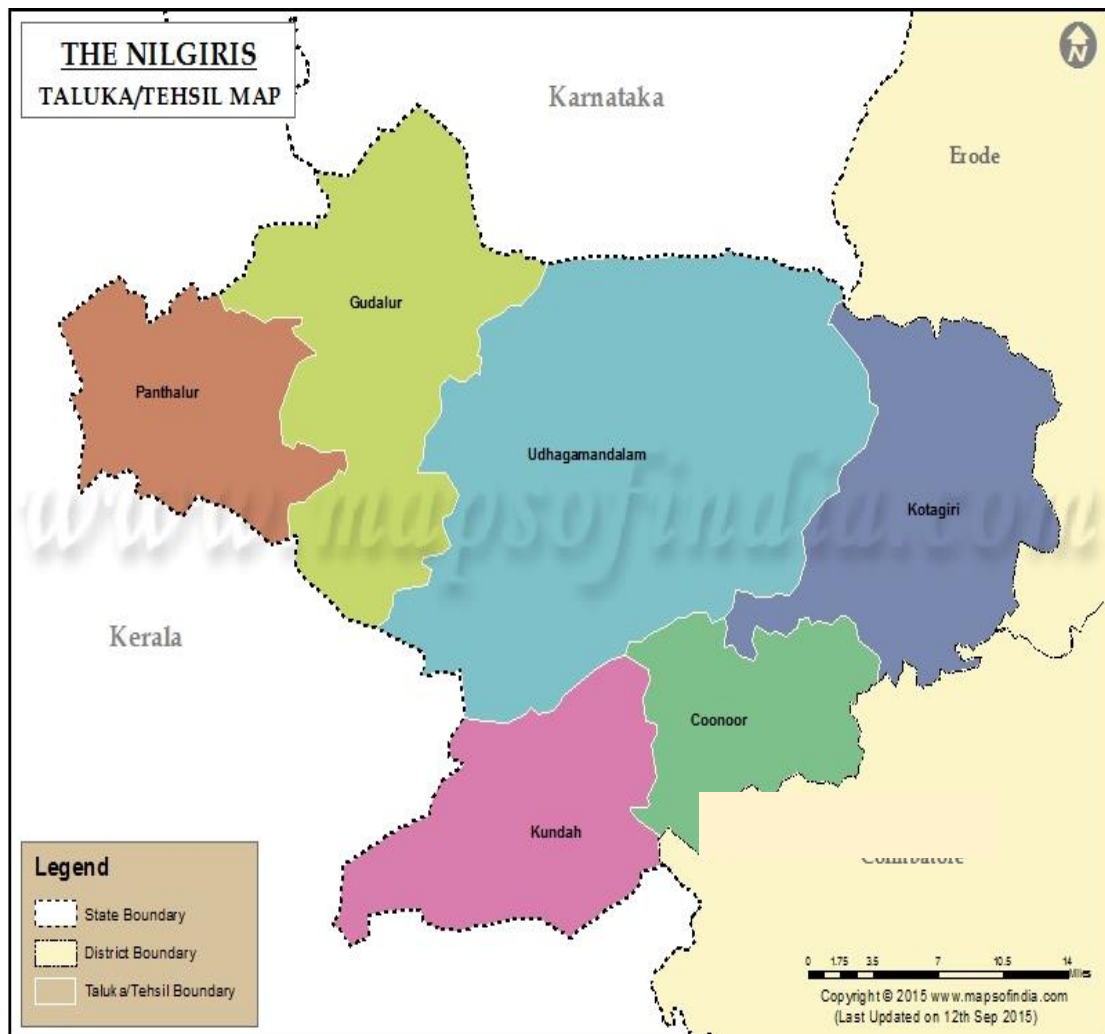
3.2 Selection of the Study Area

The present research is confined to the selected group of tribal households in the Nilgiris Districts of Tamil Nadu. The Nilgiris District is selected because it is a tribal

area and Scheduled Tribe's population recorded as one of the highest (4.5 percent) in the Tamil Nadu state as per census 2011. Hence the Nilgiris District has been selected as the locale of the study.

3.2.1 Selection of the Study Location

The Nilgiris District has a population of 7,35,394, with a gender distribution of 375251 female and 360143 male. The total population of the district includes the schedule tribe population of 32183 consisting of 16091 male and 16722 female (Census 2011). For administrative purpose the Nilgiris district is divided into six taluks namely Udhagamandalam, Kundah, Coonoor, Kotagiri, Gudalur and Pandalur . The study has been carried out in six taluks.



Source: <https://www.mapsofindia.com/maps/tamilnadu/tehsil/the-nilgiris.html>

Figure: 3.1 Geographical location the Nilgiris District

Majority of tribal community in Tamil Nadu are found to be inhabitants of the Nilgiris district (Gowri Lakshmi.G.M Muthura.A, 2020). There are six primitive native groups in Niligiri district (Todas, Kotas, Kurumbas, Irulas, Paniyans and Kattunayakans). Each native groups have their culture and rituals to follow and these ethnic population is not evenly distributed across the district (Jakka Parthasarath, 2016).The research study is conducted among the six primitive the tribal people of the southern region of India.

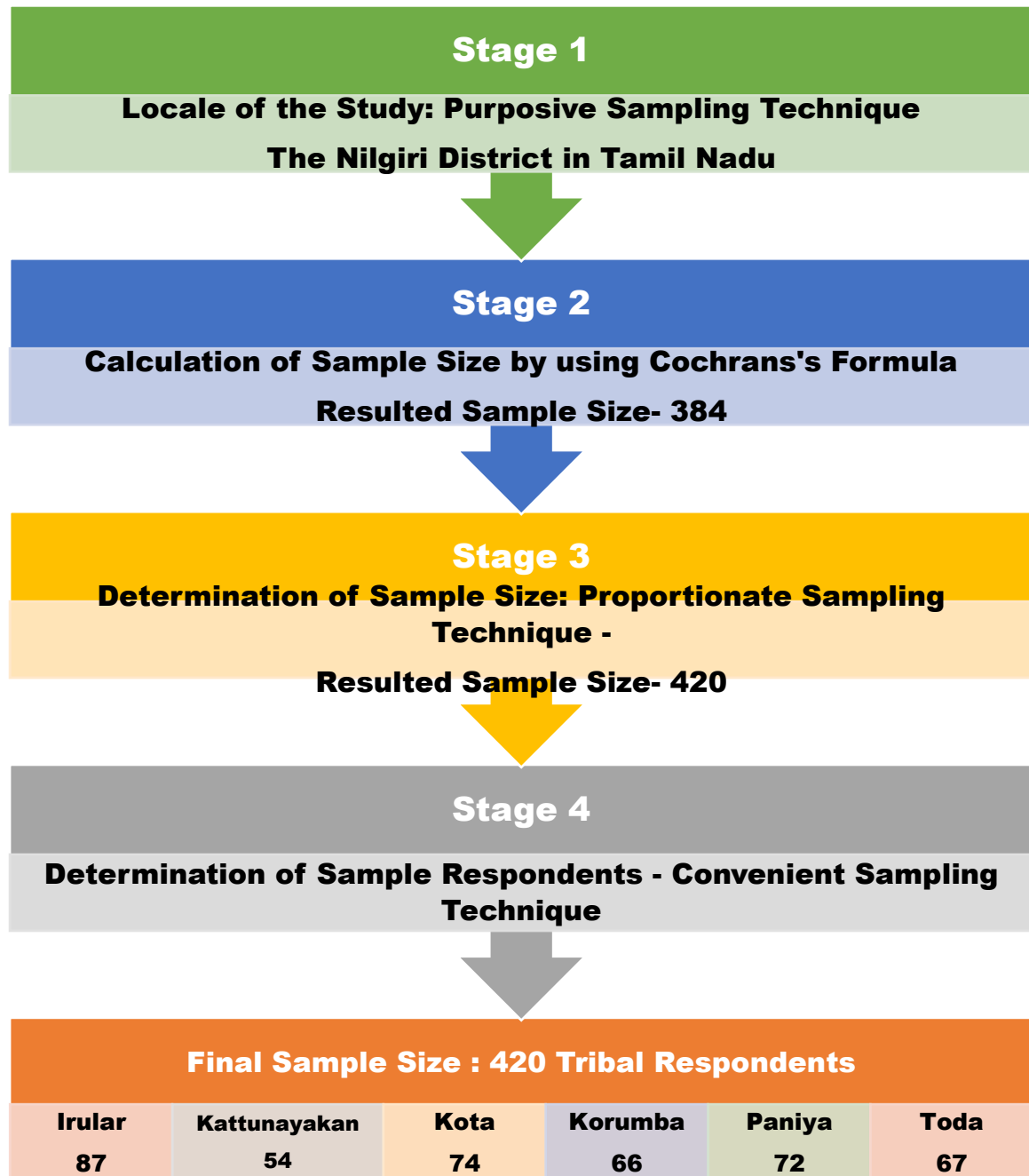


Figure 3.2 Sampling Design

3.3 Method of Sampling

Multi stage sampling method was adopted to arrive at the sample respondents for the study. In the first stage the locale of the study, the Nilgiris district of TamilNadu has been selected purposively as the district hosts highest tribal population .

The second stage is the determination of the sample size.

Sample Size

The sample size has been determined by using Cochran's formula.

$$\text{“Cochran's formula (n) = } \frac{Z^2 p(1-p)^2}{e^2}$$

Where

n = sample size

Z = Z-score which depends on the confidence level chosen by the researcher(95%).

p = the estimated proportion of an attribute that is present in the population.

e = margin of error or confidence interval”.

According to the Cochran's formula the minimum sample size required to conduct the study is 384. Hence, 420 Tribal respondents are adequate to conduct this study.

In the third stage, The proportionate random sampling method was adopted to arrive at the sample respondents from six taluks (Table 3.1).

Table 3.1
Proportionate Distribution of Tribal Population

SL. No.	Taluks	Actual Tribal Population		Sample Tribal Population	
		Numbers	Percentage	Numbers	Percentage
1.	Panthalur	10897	33.21	139	33.10
2.	Gudalur	6616	20.16	85	20.24
3.	Udhagamandalam	6113	18.63	78	18.57
4.	Kotagiri	6312	19.24	81	19.29
5.	Coonoor	2354	7.17	30	7.14
6.	Kundah	521	1.59	7	1.67
	Total	32813	100	420	100

(Source: Census 2011)

The fourth stage is the selection of sample unit.

Selection of the Sample Unit

The study adopts convenient sampling technique to select the sample respondents for the study. The tribal population of Nilgiris is sparsely located in different terrains and forest areas, the researcher was able to reach them with the help of volunteers from Nilgiris Adivasi Welfare Association (NAWA), a Non-Governmental organization which has been supporting tribal people in and around the Nilgiris district.

3.4 Period of the Study

The present research work was carried out from September 2018 to September 2024. From June 2019 to August 2019, a pilot survey using the interview schedule was performed. The final data gathering began in December 2019 and ended in March 2020.

3.5 Data Collection Techniques

The researcher used primary and secondary data. The primary data were collected through well-structured Interview Schedule. The interview schedule contains eight sections.

Section I: This section contains the demographic and socio-economic profile of the select tribals.

Section II: The second section of the survey consists of questions related to banking practices among tribal respondents. This part covers the banking operations like type of bank account, number of bank accounts, and time of opening bank account and source of financial inclusion.

Section III: The third part of the structured interview schedule covers the challenges faced by tribal respondents in financial inclusion.

Section IV: The section of the interview schedule deals with access to financial institutions and its utilization by the tribal respondents.

Section V: The fifth section consist of access to digital/ electronic payment modes by tribal respondents.

Section VI: This section deals with awareness towards banking operation

Section VII: This section enumerates the purpose of raising credits from formal financial agencies by the tribal respondents

Section VIII: This section narrates the empowerment of tribal respondents through financial inclusion.

The content validity of the interview schedule was ensured with banking professionals, officials of NAWA and academicians. Likert Scaling technique is used to measure the qualitative items.

3.6 Pilot Study

To ensure the interview schedule’s clarity, correctness, and validity, a pilot research was performed with a sample of respondents 100 tribal respondents from the study area. Based on the answers, the final interview schedule was restructured. Based on the interview schedule, data were collected from the tribal households of Niligiris District.

3.6.1 Testing the Reliability of the Instrument

Results of data reliability and validity are presented in Table 3.2.

Table 3.2
Data Validity and Reliability Test

General Variables	Number of items	Range	Cronbach’s Alpha
Level of Awareness towards Banking Operations before Financial Inclusion	10	1-5	.866
Level of Awareness towards Banking Operations after Financial Inclusion	10	1-5	.781
Purpose of Raising Credits from Formal Financial Agencies	14	1-5	.849
Participation in Financial Inclusion Initiatives by the Tribal Respondents	20	1-3	.858
Empowerment of Tribal Respondents on Financial Inclusion	12	1-3	.844
Overall Score for Sample Adequacy (Kaiser-Meyer-Olkin Measure of Sampling Adequacy)		.819	
Overall Score for Data Reliability (Cronbach’s Alpha)		.891	
F Value		476.488	
Significant (5 per cent)		.000	

Source: Computed from Primary Data

In the current study the computed KMO value stood at .819 and hence the factor-analysis is appropriate for the given data set. Reliability test (Cronbach's Alpha) value was recorded as .891 and F –test (validity test) value stood at significant mark at five per cent. These two values are found to be meritorious and acceptance as per the test norms. In short, they are found to be satisfactory.

Cronbach's Alpha is a reliability co-efficient used to indicate how well the items are positively correlated to one another (Sekaran, 2000). "It reveals that closer the value of Cronbach's Alpha to one, higher the internal consistency will be (Yusof et al., 2007)". The reliability test results from Table 6 revealed that the Cronbach's Alpha values of all the variables were above 0.70 (Nunnally & Bernstein, 1994). Hence the constructs are reliable for further analysis.

3.7 Framework of Analysis

Data collection and analysis tools are defined as a series of charts, maps, and diagrams designed to collect, interpret, and present data for a wide range of applications and industries. To draw conclusions and interpretations, the researcher need a solid methodology with the right tools and analytical techniques. The calculation was performed using SPSS. SPSS is a windows based program that can be used to perform data entry and analysis and to create tables and graphs. SPSS is capable of handling large amounts of data and can perform all the analysis covered in the text and much more. The following tools are used to analyse the data

3.7.1 Descriptive statistics

Descriptive statistics was applied to know the ground reality of the tribal respondents based on the demographic and socio-economic profile of the tribal respondents , banking practices among tribal respondents, access to financial institutions by tribal respondents, access to digital/ electronic payment modes, avenues of digital payment, shift in sources of borrowings, participation in financial inclusion initiatives by tribal respondents, and empowerment of Tribal respondents on financial inclusion.

3.7.2 Paired t test

A paired t-test is used to compare two population means where you have two samples in which observations in one sample can be paired with observations in the other sample. Paired t test was performed to analyse whether a significant mean difference

existed among awareness on banking operations before and after financial inclusion of tribal respondents.

3.7.3 Analysis of Variance

“The essence of Analysis of variance (ANOVA) is that the total amount of variation in a set of data is broken down into two types that amount which can be attributed to chance and that amount which can be attributed to specified causes (Kothari C R and Garg, 2021)”. In this study the analysis of variance is used to find out the significant mean difference between socio-economic variables and access to financial institutions among tribal respondents.

3.7.4 Factor Analysis

Factor analysis is a statistical method used to identify underlying factors or constructs that explains the patterns of correlation within a set of observed variables, in the context of consumer attitudes towards sustainable fashion, factor analysis can be used to identify the key underlying dimensions or factors that drive these attitudes. The data collected on various aspects such as the key challenges faced by tribal respondents before and after financial inclusion, participation in financial inclusion initiatives by tribal respondents.

3.7.5 Multiple Regression Analysis

Multiple regression analysis is a statistical method used to understand the cause and effect relationship between the select extrogenous and endogenous variables. The basic form of a multiple regression equation is:

$$Y = a + bx_1 + bx_2 + bx_3$$

Multiple Regression analysis was applied to determine the effect of financial, economic and social empowerment of tribal respondents on financial inclusion.