CHAPTER-I
INTRODUCTION AND DESIGN OF THE STUDY

1.1 INTRODUCTION

India is basically an agrarian society where sole dependence has been on agriculture since time immemorial\(^1\). In the olden days, the agricultural produce was fundamentally bartered naturally where farmers exchanged goods for goods and also against services.\(^2\) Gradually the scenario changed with the changing times and agriculture produce began to be sold with an element of commercial value.

Trading of agriculture produce began for exchange of money. And from trading to marketing of agricultural produce followed suit although it is a way of traditional selling. The marketing as a term is broader than traditional trading. And agricultural marketing as a concept is still evolving in Indian society. In India, there are networks of cooperatives at the local, regional, state and national levels that assist in agricultural marketing\(^3\). The commodities that are mostly handled are food grains, jute, cotton, sugar, milk and areca nuts.

Turmeric is a tropical perennial plant, native to India and Indonesia and is cultivated throughout the tropics around the world. It is known as the ‘Golden Spice of Life’ and is one of the most essential spices used as an important ingredient in cooking all over the world. India is the largest producer and consumer of Turmeric in the world, but in spite of that India has the largest share in world exports. The top export destinations of Indian Turmeric are U.A.E., Bangladesh, Malaysia, Iran, the U.K. and the U.S.A. Exports of turmeric have risen significantly since 2011 due to efforts taken by the Spice Board of India on quality control. Many of the developed countries like the USA, the UK and Japan are taking much interest in purchasing Indian turmeric due to high degree of quality consciousness being followed by the Indian exporters.

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3  Supra n.2, pp.280-295.
Turmeric exports have fallen to 77,500 tonnes in 2013-14 from 88,513 tonnes in 2012-13 as exporters have kept away from the market due to limited availability of quality stocks. Turmeric exports are expected to continue the rising trend in 2014-15 on expectation of quality arrivals in the current season. Exports are forecasted to touch 80,000 tonnes in 2014-15.

It is an important commercial spice grown in India. Indian turmeric is considered the best in the world. Turmeric is grown only in 6% of the total area under spices and condiments in India and India is the largest producer and exporter of turmeric in the world and accounts for 78% of world’s total production. Further, Turmeric is the second largest foreign exchange earner among Indian spices. India consumes nearly 80% of turmeric.

Indian turmeric exports have witnessed a significant jump during the financial years (FY) 2011-12 and 2012-13 and the trend is expected to continue in the year 2013-14 too. As per the Spices Board of India, turmeric exports between April-Nov’13 increased 11 per cent to 50,500 tonnes as against 45,655 tonnes during the corresponding period last year. In value terms, exports jumped 41 per cent to Rs. 408.3 crore as against 290.1 crore.

The area under turmeric cultivation and quantity of turmeric production of major turmeric growing states has been taken for the study. The major turmeric cultivating states in India are Andhra Pradesh, Tamil Nadu, Orissa, West Bengal, Maharashtra, Karnataka, and Kerala. The average results indicate that Andhra Pradesh produces the maximum quantity and also has the largest area of turmeric cultivation. Next to it are Tamilnadu and Orissa as significant turmeric cultivation states in India.

1.2 STATEMENT OF THE PROBLEM

This study concentrates to examine the problems faced by the turmeric producers and the prospects with regard to maintaining their livelihood, prospects in cultivating turmeric, market potential for the small farmers, support system and strategies adopted and finally, the challenges in marketing the turmeric products by the small farmers in Erode district. However, there are lots of studies that investigated the farmers’ perception, whereas the present study concentrates specifically on small
farmers who are the land owners cultivating turmeric in more than one acre of land and less than 5 acre of land in and around Erode district.

The sustainability of the small farmers’ livelihood was discussed with regard to generation of returns maintaining small land holdings, growth achieved with minimal investment, minimal labour and family support system that helps in eradicating the labour shortage, plenty of enterprise opportunities to increase income, achievement of supplementary income whenever intercropping is done, plenty of opportunity for women, and finally, maintenance of resources and transportation facilities are adequate to successfully carryout the business and also to make more profit. Prospects for the products based on pricing is found uniform and the requirement for the product because of its medicinal values is highly in need and sustainability of the crop after cultivation for storing after processing and finally low cost factors during productions are also considered. The market potential and technical support for the product is quite high that helps the small farmers to successfully market their produce with sustainable strategies. The technical support, training and development through government initiatives, institutions, cooperative societies and NGOs also help the small farmers to resist in the agricultural business.

The barriers in cultivation of turmeric are adopting traditional method of irrigation, inadequate action plan, and migration of agricultural labours, improper maintenance, inadequate water supply, problems in natural disaster, low irrigation potential and the economical situation of the country. Some of the market challenges faced by the farmers are supply chain and linkages, certification issues, lack of women representation, quality of the plant material, access to financial services and finally, enterprise sustainability. Hence it is necessary to understand,

1. Whether the livelihood for the small farmers is favourable?
2. Whether there are any prospects to cultivate turmeric by the small farmers in Erode district?
3. Whether the market potential helps the small farmers to achieve success and to sustain in the agriculture?
4. Whether the small farmers are satisfied with the technical support, training and skill development provided by the policy makers?
5. Whether the problems have any significant impact among the small farmers during turmeric cultivation? and finally,
6. What are the challenges that the small farmers face to market their product in the study area?

1.3 OBJECTIVES OF THE STUDY

The objectives are

1. To examine the demographic profile of the small farmers involved in cultivation and irrigation of turmeric in the Erode district
2. To identify the livelihood of the small farmers, prospects in turmeric cultivation and market potential for their product
3. To evaluate the problems in turmeric cultivation and challenges in turmeric market
4. To find out the level of satisfaction towards technical support, training and skill development provided by the policy makers
5. To measure a model to analyze the barriers and prospects perceived by the small farmers in the agricultural sector
6. To contribute suggestions for policy implications

1.4 FRAMEWORK OF HYPOTHESES

Hypothesis – 1 (Mean Score Analysis)

There is significant relationship between Demographic Factors and Prospects for Turmeric Products in Erode district.

Hypothesis – 2 (ANOVA)

There is significant difference between Demographic Factors of the small farmers and their perception towards the determinants of prospects and barriers for Turmeric Cultivation.

Hypothesis – 3 (Regression)

There is significant impact on market potential based on the determinants perceived by small farmers.
Hypotheses – 4 (Moderation Effect)

There is no significant moderation effect (Barriers) which reveals that the Prospects factor had significantly influenced Market Potential

There is no significant moderation effect (Barriers) which reveals that the livelihood factor had significantly influenced Market Potential

There is no significant moderation effect (Barriers) which reveals that the Market Challenges factor had significantly influenced Market Potential

1.5 METHODOLOGY

Research in common parlance refers to the search of knowledge. In this context research may be defined as, “The objective and systematic method of finding solution to a problem i.e, systematic collection, recording, analyzing, interpretation and reporting of information about facts of a phenomenon under study”. Methodology is the systematic, theoretical analysis of the methods applied to the field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge. It can also be stated as the analysis of the principles or procedures of inquiry in a particular field.

1.5.1 Research Design

The sources of data included both primary as well as secondary data. Questionnaires were used for the primary data collection, whereas secondary data collection was made based on the information provided by the Agricultural Development Sector, journals, websites, and other published sources. The questionnaire was adopted as research instrument. The questionnaires were administrated through distribution to small farmers with detailed interview.
1.5.2 Sampling Design

As stated by Bryman and Bell (2007) there are three types of non-probability sampling, that is Convenience Sampling, Snowball Sampling and Quota Sampling. Convenience Sample is one that is conveniently available to the researcher with its goodness of accessibility. The problematic facet of this type of non-probability sampling is that it is impracticable to generalize the results but at the same time the convenience sampling plays a more remarkable role than supposed. As explained by the authors in business and management field this technique is more worthy as compared to sample based on probability sampling.

1.5.3 Instrumentation and Construction of Questionnaire

The questionnaire has been used to extract information from the small farmers involved in Turmeric Cultivation and Promotion in Erode district. The questionnaire was classified into six categories such as 1) Prospects in Turmeric Cultivation, 2) Livelihood of the Small Farmers in Turmeric Cultivation and Promotion, 3) Market Potential for the Turmeric products based on Sustainable and Successful Strategies, 4) Satisfaction on Technical Support, Training and Skill Development in the field of Turmeric Market, 5) Barriers in Turmeric Cultivation and finally, 6) Market Challenges faced by the Small farmers to promote the products which are the perspectives taken into consideration while designing the questionnaire to conduct the study.

1.5.4 Reliability

A Five-Point Likert scale has been used for measuring few a determinants that measure the Prospects, Market Potential, Barriers and Challenges during Cultivation and Promotion of Turmeric Products perceived by the Small Farmers in Erode district are included in the research instrument. The scaling carries the scores of equal weightage that provides the lowest score with 1 point and the highest score with 5 points. Further, to measure the internal reliability of the items, Cronbach’s Alpha was used.

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Table No. 1.1: Reliability of the Constructs

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Factors</th>
<th>Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prospects in Turmeric Cultivation</td>
<td>10</td>
<td>0.846</td>
</tr>
<tr>
<td>2.</td>
<td>Livelihood of the Small Farmers</td>
<td>11</td>
<td>0.838</td>
</tr>
<tr>
<td>3.</td>
<td>Market Potential for the Turmeric products</td>
<td>14</td>
<td>0.860</td>
</tr>
<tr>
<td>4.</td>
<td>Satisfaction on Technical Support, Training and Skill Development</td>
<td>10</td>
<td>0.833</td>
</tr>
<tr>
<td>5.</td>
<td>Barriers in Turmeric Cultivation</td>
<td>14</td>
<td>0.816</td>
</tr>
<tr>
<td>6.</td>
<td>Market Challenges</td>
<td>8</td>
<td>0.841</td>
</tr>
</tbody>
</table>

The result of the Cronbach’s Alpha suggested the overall reliability of the coefficient of the test that is tested for the study based on the opinion of the small farmers to understand the level of reliability (greater than or nearly equal to the recommended level and consistency)\(^2\)

1.5.5 Pilot Study and Pre-Testing

The first-hand information was collected using a structured questionnaire. Its reliability was tested using Cronbach’s coefficient alpha. The test-retest method was adopted during the pilot study. A pilot study was conducted with nearly 10% (50 respondents) of the respondents to know the depth and frequency of the instrument. The small farmers were approached individually and the objectives of the study were clearly explained to get accurate response. After pre-testing, necessary modifications were made in the questionnaire to fit it on track for the present study.

1.5.6 Period of the Study

The present study was conducted from September 2015 to March 2016 for conducting the analysis and for achieving the results of the study with the help of survey data.

1.6 SAMPLING METHOD

1.6.1 Sample Design

The population was classified only with small farmers and the survey was conducted among the small farmers engaged in cultivation and promotion of Turmeric Products in Erode district, Tamil Nadu. The sample size of the study is 560 small farmers.

Table 1.2: Zone-wise Classification of Small Farmers

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Zone</th>
<th>Total number of respondents selected from each zone</th>
<th>Total number of received responses</th>
<th>Total number of samples selected for the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North</td>
<td>700</td>
<td>524</td>
<td>131</td>
</tr>
<tr>
<td>2</td>
<td>South</td>
<td>700</td>
<td>532</td>
<td>133</td>
</tr>
<tr>
<td>3</td>
<td>East</td>
<td>700</td>
<td>560</td>
<td>140</td>
</tr>
<tr>
<td>4</td>
<td>West</td>
<td>700</td>
<td>624</td>
<td>156</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2800</td>
<td>2240</td>
<td>560</td>
</tr>
</tbody>
</table>

Source: Survey Data

1.6.2 Sampling Technique

The technique used for the research is Non-Probability sampling. However, considering the accessibility and availability of small farmers, keeping in mind all the zones of Erode district such as North, South, East and West zones, convenient sampling technique was selected for the study. Also, the small farmers who are engaged in turmeric cultivation and promotion having a minimum of one acre of land holdings and with a maximum of 5 acres (not exceeding) in all the zones of Erode district are considered for the survey. The researcher has identified a minimum 700 small farmers from each zone and was able to circulate the questionnaires to two thousand and two hundred and forty small farmers for data collection. Out of the 2240 responses the relevance and perfection of data that can be included for the study confined after scrutiny was limited to 560 small farmers which was 25% of the total responses received. Received responses of 25% from the total responses received was also applicable zonewise for producers and retailers respectively.
1.7 METHOD OF DATA COLLECTION

This piece of research depends entirely on the Primary Data collected for studying the above-mentioned objectives among various Small Farmers engaged in Turmeric Cultivation and Promotion in Erode district. However, the Secondary data were also collected from the information provided by the Directorate of Economics and Statistics of Government web-site, Season and Crop Report of Government of Tamil Nadu.

1.7.1 Primary Data

Primary data is the first-hand information that is obtained through experiment, surveys, etc. In this study the primary source of data is obtained by issuing questionnaires to various Small Farmers engaged in Turmeric Cultivation and Promotion in Erode district. In questionnaire method the respondents are given questionnaires with a request to return after completing them.

1.7.2 Secondary Sources

Secondary sources are the facts that are available already. In this study the secondary data was collected from the Directorate of Economics and Statistics of Government web-site, Season and Crop Report of Government of Tamil Nadu.

1.8 FRAMEWORK OF ANALYSIS

The objectives framed for the present study formed the basis of the identification of the relevant statistical techniques. Cronbach’s Alpha has been used to test the reliability of the constructs.

a) Percentage Analysis
b) Weighted Mean
c) Garrett Ranking Technique
d) Mean Score Analysis
e) One-Way ANOVA
f) Chi-Square Test
g) Multiple Regression
h) Factor Analysis
i) Structural Equation Modeling
Simple Percentage

In a research various percentages are to be used for analysis. The data observed will be converted into percentage for easy understanding. Simple percentage analysis refers to a special kind of ratio. With the help of absolute figures it will be difficult to interpret any meaning from the collected data, but when the figures are represented as percentages, it becomes easy to find the relative difference between two or more attributes.

\[ \text{Percentage} = \frac{\text{No. of Respondents}}{\text{Total Number of Respondents}} \times 100 \]

Weighted Mean

The Weighted mean is a mean where there is some variation in the relative contribution of individual data values to the mean. Each data value (Xi) has a weight assigned to it (Wi). Data values with larger weights contribute more to the weighted mean and data values with smaller weights contribute less to the weighted mean. The formula is

\[ X_w = \frac{\sum W_i X_i}{\sum W_i} \]

There are several reasons why one might want to use a weighted mean:

- Each individual data value might actually represent a value that is used by multiple people in the sample. The weight, then, is the number of people associated with that particular value.
- The sample might deliberately over-represent or under-represent certain segments of the population. To restore balance, one would place less weight on the over-represented segments of the population and greater weight on the represented segments of the population.
- Some values in the data sample might be known to be more variable (less precise) than other values. One would place greater weight on those data values known to have greater precision.

Henry Garrett Ranking Technique

This technique was used to rank the problems faced by the respondents in the area of competency mapping. As per this method, respondents have been asked to assign the rank for all factors and the outcome of such ranking was converted into score
value. In other words, respondents were asked to rank according to the magnitude of the problems. The order of merit given by the respondents was converted into ranks by using the following formula.

$$\text{Percentage Position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

The percentage position of each rank thus obtained was converted into scores by referring to the table given by Henry Garrett. Then for each factor the scores of individual respondents were added together and were divided by the total number of respondents for whom the scores were added. These mean scores for all the factors were arranged in the order of ranks and consequently inferences were drawn on the basis of scores of these factors.

➢ Mean Score Analysis

Mean is the simplest measurement of central tendency and is a widely used measure. Its chief use consists in summarizing the essential features of a series and in enabling data to be compared. A team score for a particular characteristic can also be measured by taking the average, or mean, of all team member scores. Using this method, the amount of each trait for individual members is combined to form a group-level measurement of that trait (Barrick, et al., 1998). Calculating means is much more quantitative and reliable than using simple averages, especially in economic and social studies where direct quantitative measurements are possible.

Thus we have basic statistical formula

$$\bar{X} = \frac{\Sigma X}{N}$$

Where $\Sigma X = \text{Summation of the value of the } i^{th} \text{ item } X, I = 1, 2, 3, \ldots, N$

$N = \text{Total number of items}$

➢ One-Way Analysis of Variance

The basic principle of ANOVA is to test for differences among the means of the populations by examining the amount of variation within each of these samples, relative to the amount of variance made viz., one based on between samples variance and the other based on within samples variance.
F = Estimate of population variance based on between samples variance
    Estimate of population variance based on within samples variance

i) Sum of the squares of variations amongst the columns: SSC = It is the sum of the squares of deviation between the columns or group means and grand means.

\[ SSC = r \Sigma (x_j - x)^2, \]

Where

- \( x_j \) = mean of the jth samples;
- \( x \) = mean of the sample (column) means;
- \( r \) = number of rows or size of each sample.

Variance amongst columns: MSC = \( SSC / c - 1 \), where \( c \) is the number of columns.

The variance amongst the columns MSC indicates the degree of explained variables due to sampling variations.

ii) Sum of square of variations within columns: SSE = It is the sum of the squares of variations between individual items and column means.

\[ SSE = \Sigma_1 \Sigma_j ((x_j - x)^2, \]

Where

- \( x_i \) = i\(^{th}\) observation in the column;
- \( x_j \) = Mean of j\(^{th}\) column.

Mean of the square of Column Errors: MSE = \( SSE / c(r-1) \)

Where \( c \) = number of columns; \( r \) = number of rows.

This is also called unexplained variance because it indicates only the chance variation which cannot be explained in terms of variation in population.

iii) Total Sum of Squares of Variation: SST = the total sum of squares is given by SST which is defined as:

Where

- \( T \) = grand total of the values in all the samples
- \( r \) = number of rows
c = number of columns

It is the sum of the squares of observation between the individual values and grand mean x.

Also

\[ SST = SSC + SSE \]

Total variance comprise of both the explained and the unexplained variance and is defined as

\[ \text{Total Variance} = \frac{SST}{n-1} \]

Where \( n = r \times c \) = total number of observation in all the samples and \( n-1 \) is the degree of freedom.

**Tukey’s HSD Test**

Tukey's test, also known as the Tukey range test, Tukey method, Tukey's honest significance test, Tukey's HSD (Honest Significant Difference) test, or the Tukey–Kramer method, is a single-step multiple comparison procedure and statistical test. It is used in conjunction with an ANOVA to find means that are significantly different from each other. Named after John Tukey, it compares all possible pairs of means, and is based on a studentized range distribution (q) (this distribution is similar to the distribution of t from the t-test). Tukey HSD (Honest Significant Difference) test is to identify statistically differences between pairs of groups. Tukey’s HSD was designed for a situation with equal sample sizes per group, but can be adapted to unequal sample sizes as well (the simplest adaptation uses the harmonic mean of n-sizes as n*). The formula for Tukey’s is

\[ \text{HSD} = q \sqrt{\text{MSE} / \text{n}*} \]

where q = the relevant critical value of the studentized range statistic and n* is the number of scores used in calculating the group means of interest.

**Chi-Square Test**

A chi-squared test, also referred to as chi-square test or \( \chi^2 \) test, is any statistical hypothesis test in which the sampling distribution of the test statistic is a chi-squared distribution when the null hypothesis is true. Also considered a chi-squared test is a test in which this is asymptotically true, meaning that the sampling distribution (if the null hypothesis is true) can be made to approximate a chi-squared distribution as closely as
desired by making the sample size large enough. The value of the test statistic is calculated using the following formula.

\[ \chi^2 = \sum \frac{(O - E)^2}{E} \]

With Degree of Freedom (D.F.) = \((c-1)(r-1)\) where,

- \(O\) = Observed frequency,
- \(E\) = Expected frequency,
- \(c\) = Number of Columns,
- \(r\) = Number of Rows.

**Multiple Regression Analysis**

In statistics, regression analysis is a statistical process for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent variable (or 'criterion variable') changes when any one of the independent variables is varied, while the other independent variables are held fixed. Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables – that is, the average value of the dependent variable when the independent variables are fixed. Less commonly, the focus is on a quantile, or other location parameter of the conditional distribution of the dependent variable given the independent variables. In all cases, the estimation target is a function of the independent variables called the regression function. In regression analysis, it is also of interest to characterize the variation of the dependent variable around the regression function which can be described by a probability distribution.

Regression analysis is widely used for prediction and forecasting, where its use has substantial overlap with the field of machine learning. Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. However this can lead to illusions or false relationships, so caution is advisable\(^{22}\), for example, correlation does not imply causation.
Multiple regressions is mainly based on equation wherein the predictor variables coefficients are found out. The general multiple Linear Regression equation is.

\[ Y = a_1x_1 + a_2x_2 + \ldots + a_nx_n + K \]

Where \( Y \) is the dependent variable

\( k \) is constant.

\( a_1, a_2, \ldots, a_n \) are the regression coefficients for the independent variables \( x_1, x_2, \ldots, x_n \) respectively.

➢ **Factor Analysis**

Factor analysis is used to study a complex product or service in order to identify the major characteristics or factors considered important by the respondent. The purpose of factor analysis is to determine the responses to the several numbers of statements, which are significantly correlated.

Factor analysis is a method used to transform a set of variables into a small number of linear composites, which have maximum correlation with original variables. In order to identify the major characteristics or factors considered important by the respondents. The purpose of factor analysis is to determine whether the responses to the several numbers of statements are significantly correlated. If the responses to the several statements are significantly correlated, it is believed that the statement measures some factors common to all of them.

Factor analysis can only be applied to continuous variables (or) interval scaled variables. A factor analysis is like regression analysis as it tries to “best fit” factors to a scatter diagram of data in such a way that the factors explain the variance associated with responses to each statement.

➢ **Structural Equation Modeling**

Structural Equation Modeling has its roots in path analysis, was invented by the geneticist Sewall Wright (Wright, 1921). It is still customary to start a SEM analysis by drawing a path diagram. A path diagram consists of boxes and circles, which are connected by arrows. In Wright’s notation, observed (or measured) variables are represented by a rectangle box, and latent (or unmeasured) factors by a circle or ellipse.
or square box. Single headed arrows or ‘paths’ are used to define causal relationships in the model, with the variable at the tail of the arrow causing the variable at the point. Double headed arrows indicate covariances or correlations, without a causal interpretation. Statistically, the single headed arrows or paths represent regression coefficients, and double-headed arrows covariances.

Structural Equation Modeling is a very general statistical modeling technique, which is widely used in the behavioural sciences. It can be viewed as a combination of factor analysis and regression or path analysis. The interest in SEM is often on theoretical constructs, which are represented by the latent factors. The relationships between the theoretical constructs are represented by regression or path coefficients between the factors. The structural equation model implies a structure for the covariances between the observed variables, which provides the alternative name covariance structure modeling. However, the model can be extended to include means of observed variables or factors in the model, which makes covariance structure modeling a less accurate name.

1.9 OPERATIONAL DEFINITIONS

1.9.1 Productivity

Productivity is a measure of the efficiency of production in the form of an average, expressing the total output of turmeric divided by the total area of land used for the production of turmeric.

1.9.2 Marketing Cost

The cost incurred to move the product from the producer to the consumer is known as marketing cost.

1.9.3 Marketable surplus

The marketable surplus is the residual left with the farmer after meeting his family consumption, farm requirements, social and religious payments.
1.9.4 Marketed surplus

Marketed surplus is the quantity of produce that the producer-farmer actually sells in the market.

1.9.5 Marketing Efficiency

Marketing efficiency means the movement of goods from producers to consumers at the lowest possible cost, consistent with the provisions of the services desired by the consumer.

1.10 SCOPE OF THE STUDY

The study is to identify the prospects and market potential for turmeric cultivation and turmeric products perceived by the small farmers in Erode district. Whether there is any significant impact with respect to barriers and challenges during turmeric cultivation and product promotion perceived by the small farmers and also to examine whether there is any scope to sustain in the field and the level of support systems have satisfied the farmers that influenced their livelihood in the agricultural sector to continue producing turmeric products. The study will help the policy makers to implement suitable strategies to overcome the drawbacks and assist the farmers to achieve elevation in their field of turmeric cultivation.

1.11 LIMITATIONS OF THE STUDY

- This study is confined to the farmers cultivating in Erode district limits. Hence, the generalization of the results is restricted.
- The farmers are not in the habit of maintaining a detailed methodological records regarding cost, return and price in their cultivation and promotion. Hence the information might be subjected to recall bias.
- The size of the sample is restricted. Therefore, the limitations of a restricted sample size are applicable to the present study.
1.12 CHAPTER SCHEME

The thesis is organized in to five chapters,

- **Chapter I** presents the introduction and design of the study, statement of the problem, objectives, hypotheses, methodology, and scope of the study, limitations and chapter scheme.
- **Chapter II** outlines the review of related studies, which gives the information about the scenario of the turmeric products.
- **Chapter III** deals with the overview of problems, prospects, challenges and market potential for turmeric products and profile of the study area.
- **Chapter IV** presents the analysis and interpretation of the collected data.
- **Chapter V** deals with the summary of findings, suggestions, conclusion and scope for further research.