CHAPTER-III
DESIGN OF THE STUDY

3.1 Introduction

The agricultural regulated market centres have predominant economic importance in any region.\(^1\) These markets are economically most viable and represent the pattern of agricultural development in India. Agricultural regulated market can easily be considered the barometer of the Indian economy. Regulated markets have been developed in our country since the beginning of the twentieth century for the sole purpose of removing inefficiencies and malpractices from the agricultural marketing in the country.

The importance of regulated markets in ensuring the welfare of farmers and traders cannot be underestimated. In the present scenario due to hectic changes and severe competition, any system has to re-orient itself to the growing needs and expectations of the beneficiaries, but for which the very survival of the system itself will be at stake. Therefore, it is essential that the regulated market system has to be critically evaluated keeping in view the agrarian economy and the dominating role of agriculture in the Indian system. Development of regulated markets is one of the prime factors to

provide economic steadiness to the farmers. Therefore, it is imperative to know the broad picture of functioning of these regulated markets from farmers’ point of view. Against this background, the present study is undertaken to examine the working of regulated markets as these are an essential social institutions for upliftment of the poor masses like farmers.

3.2. Statement of the Problem

Marketing of agricultural produce is considered an integral part of agriculture, since an agriculturist is encouraged to make more investment and to increase production. It is said that production, processing and marketing are the 3 pillars of the agricultural economy in India. But due to his illiteracy, ignorance and financial weakness, the farmers possess a weak bargaining power and on the other hand the trader takes the advantage of the farmer’s weakness because he is generally well informed, well organized, financially sound and very tactful in his dealings.

Basically, agricultural production is scattered and is a small-scale production, which creates problems of marketing. In addition, the infrastructure facilities like roads, means of transport, storage facilities, etc. are scarce in rural areas. In India, there are a large number of markets, which are not regulated under the marketing acts. The unregulated markets are in the hands of commission agents. Some of the unfair practices viz.

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short weights, considerable delay in payment, high market charges, taking away substantial quantity under the name of sample, underhand dealings, and the incorrect and false weights are fairly known in agricultural marketing in India. Thus, the trader has the upper hand in the agricultural marketing system and the farmer is always at his mercy. A major part of the commercial crops like cotton, jute, sugar cane and oilseeds has to be marketed immediately as the farmers are in need of cash for meeting their dues and other expenses. As regards food grains, the marketable surplus varies by crops and regions, but may be placed at about 20 to 30 per cent under normal conditions.

The farmers do not have access to quality seeds and fertilizers at subsidized rates at the right time. In the absence of proper access to credit, they fall prey to unscrupulous moneylenders. Moreover, these moneylenders lend advance money to the farmers who are not in a position to sell their produce in the open market at a profitable price. These debts sometimes carry an understanding or an obligation to sell the produce to or through the lender or his nominee. At the time of sale, the position of advantage occupied by the village banker acts reflected either in a lower price or unfair weights or delayed settlement. If the sale takes place in the mandi or the market through the brokers, the farmer pays not only for the services rendered by the middlemen but is also subjected to other unwarranted deductions.
The farmers in the rural areas ordinarily do not get information about the market trend and about the ruling price in the big markets. As a result the farmers in rural areas have to accept the price quoted to their produce and have to believe whatever traders tell them. Thus, the traders make huge profit without their effort, out of the produce of farmers who grow it and there by the farmers are exploited. As a result the farmer is forced to sell the agricultural produce immediately after the harvest to the local money lender to the middlemen or to the people who have provided.

Therefore, the farmers face various problems like heavy commission charges, lack of finance, un-remunerative prices, non-availability of manures, pesticides, water scarcity and lack of storage facilities, irregular power supply and want of market for the produce, high transport cost, the lack of regular payment and the like. To remove the disabilities of the farmers in the mandi, regulated markets have been established. The management of regulated markets vests in committees on which farmers are also represented. However, many of the marketing committees are not yet fully conscious of their responsibility of utilizing their funds for developing marketing facilities. In this context the researcher has made an attempt to study the working of select regulated markets in Tamil Nadu.
3.3. Objectives of the Study

The aim of the study is to make an objective assessment on the working of the select regulated markets in Tamil Nadu. Besides, the following are the broad objectives of the present study:

1. To study the existing system of agricultural marketing in general.
2. To review the established marketing practices of the select regulated markets.
3. To analyze the operational performance of the select regulated markets in Tamil Nadu.
4. To study the perception of the farmers towards working of select regulated markets in Tamil Nadu.
5. To offer suitable suggestions for the efficient functioning of the regulated markets in Tamil Nadu.

3.4. Testing of Hypotheses

The study is based on the formulation of the following null hypotheses.

\[ H_{01} \]: There is no significant relationship among of the operational performances of the select regulated markets over the period of the study.
**H₀₂:** The demographic variables of the farmers such as gender, age, educational status, annual income, category and market they belong to do not have any influence on their level of satisfaction towards working of regulated markets in Tamil Nadu.

**H₀₃:** The socio-economic profiles of the farmers do not have any influence on their level of acceptance towards problems they encountered in the regulated markets in Tamil Nadu.

### 3.5. Operational Definitions

**Attitude**

Attitude refers to the feelings, beliefs and opinions of the farmers towards working of regulated markets in Tamil Nadu.

**Satisfaction**

Satisfaction denotes a set of attitudes about a particular thing. Thus, the term satisfaction for the purpose of the study connotes the attitudes of farmers towards working of regulated markets.

**Marginal Farmer**

A marginal farmer is a farmer possessing 2.5 acres or less of dry land or 1.25 acres or less of wet land.
**Small Farmer**

A small farmer is a farmer with 5 acres or less of dry land or 2.5 acres or less of wet land.

**Medium Farmer**

A medium farmer is a farmer who holds 5 to 10 acres of dry land or 2.5 to 5 acres of wet land.

**Big Farmer**

A big farmer is a farmer who holds above 10 acres of dry land or above 5 acres of wet land.

**Traders**

Traders are the persons, who are engaged in buying of notified agricultural commodities in the regulated markets.

**Regulated Market**

Any legislative measure designed to regulate the marketing of agricultural produce in order to establish, improve and enforce standard marketing practices and charges may be termed as regulated markets.
3.6. Scope of the Study

The present study attempts to examine the working of regulated markets in Tamil Nadu. This study is confined to the select regulated markets in the districts of Cuddalore, Villupuram and Nagapattinam. Though there are 36 regulated markets in operation in this district, the study is mainly confined to 8 regulated markets only. Besides, the study focuses its attention on the operational performance of the select regulated markets. The scope of the study is delimited to study the perception of the farmers towards working of select regulated markets in Tamil Nadu.

3.7. Sampling Technique

The study is empirical in nature based on survey method. The study aims at examining the working of regulated markets in Tamil Nadu. There are 21 Market Committees in operation in Tamil Nadu as on September 2012. In order to collect primary data for the purpose of the study, multi-stage sampling technique is adopted. At the first stage, 3 Market Committees, namely Market Committee, Cuddalore; Market Committee, Villupuram; and Market Committee, Nagapattinam were selected out of the 21 Market Committees using simple random sampling. In the second stage, 20 per cent of the regulated markets i.e. 8 regulated markets were selected out of the 36 regulated markets functioning under 3 selected Market Committees based on the performances. In the final stage, from each of the regulated markets, 80
farmers were selected on the purposive basis for the study. Therefore, the sample size consists of 480 farmers. The following table shows the sampling distribution of the present study.

**TABLE 3.1**

**Sampling Distribution**

<table>
<thead>
<tr>
<th>Market Committee</th>
<th>Regulated Markets</th>
<th>Sample Regulated Markets</th>
<th>Sample Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuddalore</td>
<td>2 (10)</td>
<td>Vridhachalam Regulated Market</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Srimushnam Regulated Market</td>
<td></td>
</tr>
<tr>
<td>Villupuram</td>
<td>4 (18)</td>
<td>Gingee Regulated Market and Thirukovilur Regulated Market</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marakkanam Regulated Market and Valathi Regulated Market</td>
<td></td>
</tr>
<tr>
<td>Nagapattinam</td>
<td>2 (8)</td>
<td>Sembanarkoil Regulated Market</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vedaranayam Regulated Market</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8 (36)</td>
<td>4</td>
<td>480</td>
</tr>
</tbody>
</table>

Figures in the parenthesis refer to population.

**3.8. Data Collection**

The study encompasses both primary and secondary data. As an essential part of the study, the primary data are collected from 480 farmers who sell their agricultural produce in the select regulated markets. The
study was based mainly on primary data. On account of low level of education and poor comprehension of the farmers towards marketing activities, schedule method has been employed to collect primary data. The adequate information contained in the schedule was tested and the necessary changes were incorporated in the revised schedule in the light of the experience gained from the pilot study. A pilot study was conducted with 25 farmers during January 2013. Literature relating to the study was gathered from published reports, journals, magazines and books. The more relevant secondary sources of information were collected from the Indian Institute of Management, Bangalore; and Institute of Social and Economic Change, Bangalore. The collected data were analyzed and interpreted as intelligibly as possible to highlight the divergent activities related to the working of the select regulated markets in Tamil Nadu.

3.9. Period of Study

The study covers a period of 10 years from 2002-03 to 2011-12. The period is considered sufficient to reveal the short and long-term fluctuations. The primary data for the study were collected during the period from February 2013 to July 2013.

3.10. Framework of Analysis

For analyzing the working of regulated markets, two different analyses were made on the basis of primary and secondary data. Firstly, the
operational performance was analyzed with the help of statistical tools such as co-efficient of variation, growth rates and analysis of two-way variance. Co-efficient of variation is employed to measure consistency in the quantum and value of market arrival in the regulated markets in selected districts. Growth rates were employed to find out the annual, linear annual and compounded annual growth rates of the quantum and value of market arrival in the regulated markets. The analysis of two-way variance was employed to measure the relationship among the quantum and value of market arrival in the regulated markets over the years. For the purpose of carrying out the analysis, the data available in the reports and books have been regrouped and rearranged.

In order to study the perception of the farmers towards working of the regulated markets, analysis of one-way variance, student t test, analysis of co-efficient of variation, multiple discriminant function analysis, discriminant function analysis, multiple regression analysis and percentage have been employed. The analysis of one-way variance and student t test are employed to measure the relationship among the satisfaction levels of the farmers belonging to different demographic variables towards working of the regulated markets. The analysis of one-way variance and student t test are also employed to measure the relationship among the acceptance levels of the farmers belonging to different demographic variables towards problems they faced in the regulated markets. Co-efficient of variation is
employed to measure consistency in the satisfaction level of farmers towards working of the regulated markets. Co-efficient of variation is also employed to measure consistency in the acceptance level of the farmers towards problems they encountered in the regulated markets. Multiple discriminant function analysis was used to study how the different activities of the regulated markets discriminated among the respondents of the 3 categories, namely, small farmers, medium farmers and big farmers in terms of their level of satisfaction towards working of regulated markets. Discriminant function analysis is used to study how the respondents of outperforming regulated markets differ from those who are respondents of low performing regulated markets in terms of their level of satisfaction towards working of regulated markets. Multiple regression analysis is used to measure the extent of contribution by the independent variables on the perception level of the farmers towards working of and the problems in the regulated markets. To arrive at possible solutions, simple percentages are also employed in the study.

3.11. Limitations of the Study

The present study is concerned with farmers’ perception towards the working of regulated markets, rather than how it is reported by the traders and the officials of the market committees or regulated markets. Besides, the study has the following limitations:
1. In any study having a bearing on attitude, incomplete and non-responses to some questions could not be avoided. However, considerable care was exercised in making the study as objective and systematic as possible.

2. The study has the limitation of time and resources, usually faced by the researchers. Only 480 framers from 8 regulated markets fall under 3 market committees in Tamil Nadu have been selected and studied. Hence, the results from the survey are hard to generalize to the national population, due to some deficiencies in selecting the sample.

3.12. Chapter Scheme

The thesis is presented in seven chapters.

The first chapter deals with introduction, concept of agricultural marketing, problems in agricultural marketing, government measures for agricultural marketing and regulated markets.

The second chapter “Review of Literature” presents the previous studies related to the objectives of the present study.

The third chapter “Design of the Study” focuses on the statement of the problem, objectives of the study, hypotheses, scope of the study, operational definitions of concepts, sampling design, tools for data
collection, period of study, framework of analysis, limitations of the study and scheme of the report.

The fourth chapter “Regulated Markets: An Overview” elaborates the operations of regulated markets.

The fifth chapter, “Operational Performance of the Regulated Markets” highlights the profile of select regulated markets and analyses the operational performance of the select regulated markets.

The sixth chapter, “Perception of the Farmers towards Working of Regulated Markets,” analyses the satisfaction level of the farmers and problems they faced in the select regulated markets.

The final chapter presents the summary of findings, suggestions and conclusion. It offers various suggestions for the efficient functioning of the select regulated markets in Tamil Nadu.