CHAPTER-I

INTRODUCTION AND DESIGN OF THE STUDY

In the present global economic scenario, India is increasingly being looked upon as a leading supplier of high quality tea which is appreciated in major international markets. The tea industry was characterized by a dynamic growth in exports. The tea industry in India had been developed mainly through exports. Indian tea are being exported to various parts of the world like Russia, Western European Countries, Australia and such others. Yet India’s share in the world trade in tea is around 15.00 per cent only.

The tea industry provides direct employment to around one million workers, of which a sizeable number are women. More than two million people derive their livelihood from ancillary activities associated with production, value-addition and marketing of tea. The foreign exchange earning is of the order of Rs.18,500 million per annum. The contribution to state and central exchequers is more than Rs.11,000 million.

The tea industry in India is a cyclical one with the share of good and bad times. Sometimes the bad cycle is prolonged. Of course, tea is indigenous to India—an area where country can take a lot of pride. Tea production in India is around 850 million kgs. per annum, while it is only 250 to 300 million kg in Srilanka. Yet, Srilanka is the leading exporter of tea in the world, while India has
dropped to fourth place; Kenya and China are at second and third positions respectively. Of course, the collapse of Soviet Economy has adversely affected India’s tea exports. The Free Trade Agreement between India and Sri Lanka a few years ago reduced the duty on tea imports to 7.5 per cent. Even though, there are so many steps have been taken up, the tea exports from India is falling. The situation calls for improvement in the productivity and quality of Indian tea.

**NEED FOR THE STUDY**

Tea production is the world more or less static in 2002 at 3021.6 million kgs compared to 3021.4 million kgs. in 2001. India maintained its leading producer status in tea with a share of 27.3% followed by China (23.7%), Sri Lanka (10.3%) and Kenya (9.5%). India’s total tea production was 826.3 million kgs. in 2002 compared to 853.7 million kgs. in 2001, registering a decline of 3.2 per cent. The total production in South India fell to 194.4 million kgs. in 2002 from 202.9 million kgs. in 2001, a short fall of 4.2 per cent. The latest available information indicates that the production for the year 2003 would be significantly lower than that of 2002.

After the bleak tea export performance in 2001, the year 2002 provided some respite at least with regard to quantum of exports. Quantity of exports on All India basis increased by 8.5 per cent i.e. from 182.6 million kgs. in 2001 to 198.1 million kgs. in 2002. Export from South India was 97.2 million kgs. in 2001 which
increased to 106.4 million kgs. in 2002 accounting 54 per cent of India’s export. However, a decline in the unit value realization was noted irrespective of region.

After the removal of quantitative restrictions in April 2001, one of the major threats faced by the tea industry is the increase in import of low priced tea into India. Import of tea into India increased by 31.5 per cent from 16.6 million kgs. 2001 to 21.9 million kgs. in 2002.

Tea was cultivated in an area of 36,800 ha. in Kerala during 1999-2000. The production of tea in Kerala decreased from 69.3 million kgs. in 2000 to 66.1 million kgs in 2001-02. Again it has come down to 65.8 million kgs in 2002-03. Tea exported from South India was 111.1 million kgs. and the value realized was 738.2 crores in 2000. It decreased to 97.2 million kgs and in value terms Rs.660.2 crores. The quantity of export from the South has slightly increased to 106.4 million kgs. and the export value realized to Rs.690.7 crores in 2002.

Tea exported through Kochi port during 2001-02 was 96155 million tonne valued at Rs.205.48 crores. It increased to 103544 million tonne valued at Rs.325.23 crores in 2002-03. The overall decline in export of tea is caused by the problems encountered by the exporters in the global market. At the same time, the market for tea is also increasing. Hence the study focuses on both the aspects namely problems and prospects of tea exports from India.
STATEMENT OF THE PROBLEM

Indian tea is being exported to different parts of the world, yet India’s share in the world trade is less than 15 per cent. The export units are facing so many problems related to the purchase order, execution of the order, lack of information on the exports, pricing at the international market, lack of modernization, delayed payments, unfair rejection of tea and also competition from Kenya, Sri Lanka and China. The problem in export of tea is primarily caused by the lack of information and modernization. The international market segments indicate the countries, nature of products exported, nature of buyers, nature of intermediaries abroad and also marketing strategies of the exporters. Since the international market segments are highly versatile in nature, the exporters have to collect the detailed information on the importing countries and importers. It will help them to formulate appropriate marketing strategy which is suitable to the international market segments. The Indian exporters are deprived of the expertise of the international market segmentation analysis and are faced by many challenges and problems in analysis of the problems and prospects of tea exporters in India for some policy implications.
REVIEW OF LITERATURE RELATED TO EXPORTS

The review of previous studies are related to export behaviour, problems in exports and the export performance and marketing of tea in domestic and international trade.

Shanmuga Sundaram and Panchanatham (2007)\textsuperscript{1} mentioned the important problems in tea exports as unreliable order, price, lack of information about the world market, modernization and delayed payments. The above mentioned problems have not shown linear relationship with the performance in exports. There is a significant difference of opinion among the respondents about the export performance.

Meera et al., (2006)\textsuperscript{2} identified the reasons for success in the phenomenal growth rate of the exports of knit wear items from Tirupur as easy availability of hosiery yarn, availability of cheap/rural labours and flexible attitude of entrepreneurs in meeting demands of buyers. Exporters and logistics operators prefer Tuticorin port due to its speed, proximity and economy. They prefer main line operators due to less transit time, cost effectiveness and reliable services.

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important countries to which, the tea exported are Europe Union, U.S.A., and South America.

Neena and Singhvi (2006)\(^3\) identified the important key determinants of garment purchase behaviour among men as quality judgement, available range, customization and value for time, whereas among women, it is available range, customer care, and quality judgement. Women often act first on the recommendation of their friends. Then comes window-shopping, experience and sales person’s recommendation and lastly point area. Men acquire more from experience and by window shopping.

Fatima and Ahmed (2006)\(^4\) found that there is a significant negative correlation between rate of rejection and quality control. A significant positive correlation is found between rate of rework and quality control. The TOM can help reduce the rate of rejection. This rate of rework would perhaps reduce further with improved organizational climates.

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Lance and Nakos (2005)\(^5\) found that on average, the more systematic a firm Systematic International Market Selection process was in targeting foreign markets, the better the firm performed. SIMS significantly increased the international performance of small or medium sized exportation. The study also considers traditional firm and decision-maker characteristics which are to be the important determinants in predicting export success.

Peter et al., (2005)\(^6\) found that the Singapore’s net positive gains in electronics exports compared to the reference economies clearly shifted towards losses. A negative export differential in with a broad manufacturing category need not signify a loss of competitiveness overall but rather conceals a natural process of changing comparative advantage or a process of “catching-up” as raising real wages and productivity results in a restructuring away from labour intensive industries towards higher value-added activities within a given manufacturing category.


Evangelia et al., (2005)\textsuperscript{7} indicated that market spreaders tend to control their export sales activities through a behaviour based system to a greater extent than firms that adopt a market concentration strategy. Export sales managers in firms that implement a market spreading approach appear to be satisfied with the export territory design that the firms develop. They are characterized by higher levels of professional competence and customer orientation.

Gabriel and Simone (2004)\textsuperscript{8} identified that the important factors influencing export performance in international marketing are marketing expertise, market skimming pricing strategy, perceptions of benefits of exporting, outside assistance, ability to handle environmental problems, managers’ personal attributes and strong motivation to export. The important discriminant factor among high and poor performers is marketing expertise, market skimming pricing strategy and product differentiation strategy.


Ingram et al., (2004)\(^9\) found that export sales manager’s motivation, as well as the adoption of a team selling orientation, did not differ significantly between export concentrators and spreaders. The operationalised motivation reflects mainly intrinsic motivation, which exists when sales people find their job to be inherently rewarding.

Luis and Lages (2004)\(^{10}\) used three-dimensional scale for assessing managerial judgement of short-term export performance namely satisfaction with short-term performance improvement, short-term exporting intensity improvement and expected short-term performance improvement. The study established that the poor or successful performance in export operations has an immediate impact on strategic decisions.

Hallen and Johnson (2004)\(^{11}\) found that the type of competition faced by a firm affects its interest in exporting. They also mentioned that the destination of exports (that is, the country of origin of the buyer) affects the type of channel


strategy utilized by exporters. Apart from this, the Government business relations played a key role in the success of international trade developing countries.

Rosson and Ford (2003)\textsuperscript{12} felt that importers’ and exporters’ perceptions of the level of conflict in a relationship often differ. That difference has a strong relationship with the export performance. The variables such as the degree of uncertainty, perceived distance, conflict, co-operation, power dependence and the degree of adoption have been identified as being related to the export marketing activities of the firms.

Mittlestaedt et al. (2003)\textsuperscript{13} found a number of firm characteristics linked with SME export performance. They include: firm size, international experience, dependence on exports, and adaptation of product for sale in foreign markets.

Julian (2003)\textsuperscript{14} stressed the need for systematic analysis to select export markets for better export performance. It requires systematic and formalized international market research, visits of foreign markets, monitoring of national and

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international business press for product related activities and use of published statistical sources in differentiating foreign markets.

Zou, et al., (2003)\(^\text{15}\) analysed the export marketing capabilities with export performance. They identified export marketing capabilities as pricing capability, distribution capability, communication capability and product development capability. They have a significant positive impact on exporter financial performance but the low cost advantage and branding advantage.

Akyol and Akehurst (2003)\(^\text{16}\) examined the export market orientation through three components: export intelligence generation; export intelligence dissertation and export intelligence responsiveness. All these three factors are focused on export consumers, competitors, intelligence among the export staff, and all responsiveness to the generated and disseminated intelligence.

Anne et al., (2003)\(^\text{17}\) identified the important determinants of Export information use. They are frequency of information acquisitions, reliance on

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information acquisition, export information overload, export personnel, marketing, financial, production, R&D personnel, top management, export experience, dependence, complexity and specificity, competitive customers and technological turbulence, company size, uncertainty avoidance, masculinity and power distance.

Zon and Cavusgil (2002)\(^{18}\) identified three major theoretical approaches to researching firms’ international performance. The industrial organization theory describes a firm’s international performance to its external market position. Transaction cost analysis uses market in perfection to explain a firm’s international strategy choice. And efficiency in international marketing focuses on internal organizational resources to identify the determinants of a firm’s international marketing performance.

Manolova et al., (2002)\(^{19}\) found that the age of the decision maker in export marketing has no significant relationship with his performance. Similarly the educational level shows a non-significant relationship with export performance. At the same time, the company age and the percentage of exports to total sales have a significant positive influence on the export performance.


Wilkinson et al., (2002)\textsuperscript{20} found that the export information affects the export strategy. The different types of information used are associated with various degree of export success. It is common for information to be acquired but not subsequently used in decision making; such non use also has been documented in an export selling. Given the substantial costs often associated with export information gathering activities, means of increasing the likelihood that collected information will be put to good use are important from an organizational efficiency point of view.

Baum et al., (2001)\textsuperscript{21} argued that it is equally important to consider the possible effects of foreign income with uncertainty on trade. The effects of uncertainty on trade may well occur with a lag that can be hedged.

Cadon et al., (2001)\textsuperscript{22} analysed the important factors in export market orientation with the help of confirmatory factor analysis. These are export intelligence generation, export intelligence dissemination and export intelligence

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\end{thebibliography}
responsiveness. The significant difference among the various nations has been identified regarding their export market orientation. The developing countries are poor in their export market orientation compared to the developed countries.

Deshpande (2001)\textsuperscript{23} identified the important antecedents of export information use. These are context specific factors (firm size and environmental turbulence); information–specific factors (intensity of information acquisition, information overload and information users); country of origin (uncertainty avoidance, masculinity and power distance); export specific factors (export experience, export dependence, export complexity and export specificity).

Amine and Tamer (2001)\textsuperscript{24} identified the important factors that influence the export performance of tea. These are company’s commitment to exporting, process of market selection, marketing mix decisions and selection of retail outlets abroad. No evidence has been found on association between either company size or the availability of parent company help with exports and resulting levels of export performance. However, export performance does appear to improve with greater experience, measured by number of years in exporting.


Aulakh and Kotabe (2000)\textsuperscript{25} identified that cost leadership strategy tends to enhance export performance for emerging economy firms in both developed and developing countries. A differentiation strategy leads to improved performance if the market focus is on developing countries.

Bacchetta and Wincoop (2000)\textsuperscript{26} used a general equilibrium framework that allows for deviation from purchasing power parity to analyse the question of whether exchange rate stability associated with a fixed exchange rate regime necessarily implies an increase in trade. The authors find that the level of trade is not dependent on the exchange rate regime but depends on preferences and the policy rules followed by monetary authorities.

Francis and Colleen (2000)\textsuperscript{27} revealed the effectiveness of a proactive export orientation and caution against a conservative approach in the turbulent business environment faced by high-tech SMEs. The most successful firms are those that use more proactive as well as less conservative approaches. The negative relationship between conservative strategies and export performance


indicates that conservative actions are not just wasted effort but are detrimental to export success.

Susan and Nikolaos (1999)\textsuperscript{28} suggested that the profitability of exporting is significantly relating to decisive and unequivocal use of information as an important decision input. Export sales performance is significantly related to four actual uses of information namely backup managerial hunches, export marketing research, key decision making and export decision.

Tiger Li (1999)\textsuperscript{29} found that the new product performance in a host country market is found to be determined, to a large extent, by the intensity of a firm’s marketing Research & interface process. This finding suggests the interface process plays a key role in enhancing new product performance. The results show that the characteristics of environmental factors influence a firm’s behavioural activities investment, the market research and development (R & D) interface. The market R & D interface is driven less by competition than by customer characteristics.


REVIEWS RELATED TO TEA INDUSTRY

Chaytanya Bora (2003) revealed the impact of recent policies of Government on the tea exports from India and also its price consequences. The inadequate marketing technique is one of the most important disadvantages of the Indian Tea Industry in the global market. A strained relationship with neighbouring countries and political instability are some of the significant factors resulting in flow development of export trade.

Vidya (2001) concluded that the various aspects of the identity circle encapsulate the concept of brand identity and its potential market segment. The aspects of physique, relationship and reflection and physical and external to the brand, giving it a Yang identity; whereas the aspects of personality, culture and self-image are intrinsic to the brand giving it a Yin identity.

Jawahar (2000) observed the necessity of new age marketing in the tea market. It implies the launch of value-added products as well as the development of corporate brands. The companies are advised to work together towards a generic campaign to strengthens the brand equity of tea.

Moorthi (2000)\textsuperscript{33} identified the importance of ‘product redefinition’ in the tea market. It includes the changes in product’s firm, shape, taste, packaging etc. The companies like Tata, Lipton, McLeod Russel and Goodricke used this strategy in the tea market.

Maheswari (2000)\textsuperscript{34} revealed the importance of creation of Dealer-Push for the Brand in Tea Market. It involves both distributor oriented promotions and retailer oriented promotions.

Damodaran (1999)\textsuperscript{35} has put forward an alternative tea market classification as the traditional classification – based on appearance and processing – ignores ‘economic reliability’ relation of beverage to life styles and growing sentiment of environment and ecology.

Narayani (1999)\textsuperscript{36} suggested the need for better conceived marketing network in the tea market. The network covers both domestic and international market.

Sharma (1998)\textsuperscript{37} mentioned that the market for Tea is now changing. Tea is facing increased competition from aerated drinks. Because of change from production orientation in tea industry to market orientation, the market – production linkage can be strengthened by market creation and market matching.

Majumdar (1994)\textsuperscript{38} suggested the value for money, effective positioning, innovative packaging, generating dealer’s push for the brand, better conceived marketing network and regional variation as the strategies for the tea industry.

Even though, there are so many studies related to export of tea, other consumer goods, there is no exclusive study on the problems and prospects of tea exporters in India on the basis of the owner’s perception. There are few studies related with tea industry. Majority of the studies focused the marketing of tea in domestic market. Even some studies are related with international market but their focus are scarcity. Hence, the present study has made an attempt to fill up the research gap with proposed research model.


PROPOSED RESEARCH MODEL

A research model have been generated to fill up the research gap, it is given in Figure 1.1.

FIGURE 1.1

Profile of the exporters of Tea

Export Problems
- Important Export Problems in Tea industry
- Internal – Domestic Export Problems
- Internal – Foreign Export Problems
- External – Domestic Export Problems
- External–Foreign Problems
- Managerial Problems

Export Behaviour
- Export Marketing mix
- Entrepreneurial Behaviour
- Export Competencies
- Export Stimulus

Export Prospects
- Production
- Marketing
- Certification

Strength
Weakness
Opportunity
Threats to
Tea Exporters

Export Performance
OBJECTIVES OF THE STUDY

Based on the proposed research model, the present study confine its objectives to:

i) To exhibit the profile of the exporters and their units;

ii) To analyse export behaviour among the exporters;

iii) To examine the various dimensions of export problems in tea exports;

iv) To reveal the important prospects of tea exporters;

v) To analyse the future prospects of tea exporters with the help of SWOT analysis;

vi) To evaluate the impact of perception on problems and prospects of tea exporters on their export performance; and

vii) To identify the discriminant factors among the large and small export units regarding various aspects of tea exporters.

METHODOLOGY

Research methodology is the way of systematically and scientifically solving the research problem. It is a blue print of the way in which the research is going to be conducted. The research methodology enlightens the method to be followed in research activities starting from problem identification to presentation
of research report. It includes research design, locale of research, sampling framework, source of data, collection of data, framework of analysis and limitations.

**RESEARCH DESIGN OF THE STUDY**

A research design is the overall plan or programme of research. It includes an outline of what the investigation will do from writing the hypotheses and their operational implications to the final analysis of data. The research design of the present study is descriptive and diagnostic in nature. Since the present study covers the profile of the exporters and their units, exporter’s behaviour, export performance, problems encountered by the exporters, strengths, weaknesses, opportunities and threats of the export of tea; and also prospects of tea exporters, it is purely descriptive in nature.

Apart from this, as the present study analyses the association between the profile of the exporters and the exporter’s behaviour, perception on problems of tea exporters and the impact of problem perception and prospects perception among the exporters on their export performance, it is also diagnostic in nature.

**LOCALE OF RESEARCH**

While studying the export of tea in India, it is imperative to select the exporters for the present study. Since Assam, West Bengal, Kerala, Maharastra
and Tamilnadu are the major states producing tea, it was decided to include the exporters who have registered their name or unit in International Trade Centre (ITC) in the present study.

**SELECTION OF STUDY AREA**

The researcher selected five important states namely as the study area for the following reasons:

1. The tea export units are clustered in all five states in India
2. The ITC is an organizational set up which is ready to disclose their member’s list and also extend their help to carry on this research work.
3. The above said five states consist of many types of exporters, who are dealing in many international market segments.
4. The researcher has a good rapport with the authorities in ITC which is highly essential for the collection of data from the units.

**Population details of Tea Exports**

The exporters are classified into two important groups namely large units and small units. The units which sold more than 1000 kg per annum is treated as large units whereas the units which sold less than or equal to 1000 kg per annum is treated as small units. The distribution of export units at important states in India.
TABLE 1.1
Tea Export Units in India during 2007-08

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>States</th>
<th>Number of units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Large</td>
<td>Small</td>
</tr>
<tr>
<td>1.</td>
<td>Assam</td>
<td>215</td>
<td>203</td>
</tr>
<tr>
<td>2.</td>
<td>Kerala</td>
<td>83</td>
<td>50</td>
</tr>
<tr>
<td>3.</td>
<td>West Bengal</td>
<td>71</td>
<td>94</td>
</tr>
<tr>
<td>4.</td>
<td>Tamilnadu</td>
<td>49</td>
<td>35</td>
</tr>
<tr>
<td>5.</td>
<td>Maharastra</td>
<td>49</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>467</td>
<td>415</td>
</tr>
</tbody>
</table>


In total, there are 882 export units in important five states in India. As a maximum of 47.39 of the total units are in Assam which is followed by West Bengal which consists of 18.71 per cent of the total units in five states of India. In total, a maximum of 52.95 per cent of the units are large in nature. The higher number of large units are identified in Assam and West Bengal whereas the higher number of small units are also seen in Assam and West Bengal.

SAMPLING FRAMEWORK

The applied sampling procedure of the present study is ‘census method’. All tea exporting units in five major states namely Assam, Kerala, West Bengal,
Tamilnadu and Maharastra have been included for the present study. Hence the applied sampling technique is ‘census method’.

**COLLECTION OF DATA**

Since the study is completely based on the primary data, the questionnaire is developed on the basis of the objectives that have been formulated. The relevant details on exporter behaviour, export performance, problems and prospects in exports and the strengths, weaknesses, opportunities and threats in tea exports have been developed with the help of the previous studies and the experts’ views. The developed questionnaire has been pre-tested among 20 each large and small exporters at Tamilnadu and Kerala. After carrying out the suggestions given by the exporters, the final draft of the questionnaire has been developed. The questionnaire consists of various variables related to each aspect of exports. Because of uniformity, the exporters were requested to rate the variables related to each aspect at “Likert five point scale”. Essential steps have been taken up to distribute the questionnaire and collect the filled in questionnaire.

The questionnaires were sent to all export units in all five states namely Assam, Kerala, West Bengal, Tamilnadu and Maharastra. Nearly three months of time was given to get the filled in questionnaire. The response rate from the units was very poor which were ranging from 2.15 per cent to the total units in Assam (9 units) to 26.19 per cent of the total units in Tamilnadu (22 units). Reminders
were sent to the non responding units. Another 3 months of time have been given to collect the filled in questionnaire. There was a small improvement in the response rate. But the total response rate is only 34.92 per cent to the total of 882 units (308 units). Out of 308 units, the reusable questionnaires have been found only from 270 units. These 270 units have been taken as the sample of the present study. The collected data have been processed with the help of appropriate statistical tools.

FRAMEWORK OF ANALYSIS

For analyzing the data from the exporters of tea, the relevant statistical tools were used to fulfill the objectives of the study. The statistical tools were selected on the basis of the scale of data and the nature of objectives taken for fulfillment. The applied statistical tools are listed below.

1. Exploratory Factor Analysis (EFA)

Exploratory factor analysis is an attempt to narrate the variables included for the analysis into factors. Factor analysis is fairly similar to multiple regression analysis, in that each variable is expressed as a linear combination of underlying factors. The amount of variance a variable shares with all other variables included in the analysis is referred to as communality. If the variables are standardized, the factor model may be represented as:
\[ X_i = A_{i1} F_1 + A_{i2} F_2 + A_{i3} F_3 + \ldots + A_{im} F_m + V_i U_i \]

Where,

- \( X_i \) = \( i^{th} \) standardized variable
- \( A_{ij} \) = Standardised Multiple Regression Co-efficient of Variable i on Common factor ‘j’
- \( F \) = Common factor
- \( V_i \) = Standardized regression co-efficient of variable i on unique factor ‘i’
- \( U_i \) = Unique factor variable i
- \( M \) = Number of common factors

The unique factors are correlated with each other and with the common factors. The common factors themselves can be expressed as linear combinations of the observed variable.

\[ F_i = W_{i1} X_1 + W_{i2} X_2 + \ldots + W_{ik} X_k \]

Where,

- \( F_i \) = Estimate of the ‘i’ th factor
- \( W_i \) = Weight or factor score co-efficient
- \( k \) = Number of variables

In the present study, EFA have been executed to narrate the variables related to important export problems and important management problems.

2. Confirmatory Factor Analysis (CFA)

The reliability and validity of the variables in each factor identified by EFA have been tested with the help of Confirmatory Factor Analysis. CFA is used to
measure the convergent and construct validity; discriminant validity. The convergent validity is related to high association between the new construct and other similar constructs. Discriminant validity is related to the distinction of the construct from other unrelated measures. The convergent validity is measured with the help of standardized factor loadings and its significance by ‘t’ statistics whereas the discriminant validity is confirmed by the inter correlation between the factors extracted by EFA. The composite reliability is measured for internal consistency. It is confirmed with the suggested threshold of 0.70 (Fornell and Larcher, 1981, Anderson and Gerbing, 1988; Ahire et al., 1996; Haider and Supriya, 2008). In the present study, the CFA have been administered to test the validity and reliability of the variables included in each important export problems, internal domestic export problems, internal foreign export problems, external – domestic problems, external foreign problems, important managerial


problems, frequency to export problems, production prospects, marketing prospects, certification prospects, strengths, weaknesses, opportunities and treats to the tea exporting units; and the export performance.

3. Two Group Discriminant Analysis

Discriminant analysis is a technique for analyzing data when the criterion or dependent variable is categorical and the predictor or independent variables are interval in nature. When the criterion variable has two categories, the technique is known as two group discriminant analysis. The unstandardised procedure has been followed to establish the discriminant function. The function is:

\[ Z = a + b_1 X_1 + b_2 X_2 + \ldots + b_n X_n \]

Where,

\[ Z \] = Discriminant criterion  
\[ X_1, X_2, \ldots, X_n \] = Discriminant Variables  
\[ b_1, b_2, \ldots, b_n \] = Discriminant Co-efficients

The Wilk’s Lambda was calculated as a multi-variant measure of group difference over discriminating variables. The relative discriminating power of the variable was calculated by

\[ I_j = K_j (\bar{X}_{j1} - \bar{X}_{j2}) \]

Where,

\[ I_j \] = The important value of the \( j^{\text{th}} \) variable  
\[ K_j \] = Unstandardised discriminant co-efficient for the \( j^{\text{th}} \) variable
\( \bar{X}_{jk} \) = Mean of the \( j^{th} \) variable for \( k^{th} \) groups

The relative importance of a variable \( R_j \) is the given by

\[
R_j = \frac{I_j}{\sum_{j=1}^{n} I_j}
\]

In the present study, the discriminant important export problems, dimension of export problems, important managerial problems, export strategy, export performance, strategy export orientation and quality management factors among the large and small export units.

4. ‘T’ test

In order to find out the significant difference among the two means in two different samples, the ‘t’ test is applied.

\[
t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1) \sigma^2_1 + (n_2 - 1) \sigma^2_2}{n_1 + n_2 - 2} + \frac{1}{n_1} + \frac{1}{n_2}}}
\]

with degree of freedom = \( (n_1+n_2-2) \)

Where,

\( t \) = t-statistics

\( \bar{X}_1 \) – Mean of the first sample

\( \bar{X}_2 \) – Mean of the second sample

\( \sigma^2_1 \) – Variance in the first sample

\( \sigma^2_2 \) – Variance in the second sample
\[ n_1 \text{ – Number of samples in first groups} \]

\[ n_2 \text{ – Number of samples in second groups} \]

In the present study, the ‘t’ test have been administered to find out the significant difference among the means of various aspects related to export behaviour problems and prospects of tea exports among the large and small units.

5. One-way Analysis of Variance

The one-way analysis of variance is applied to find out the significant difference more than the means belonging to more than two groups. It is applied when the variables are in interval scale. The F-statistics is calculated by

\[
F \text{ ratio} = \frac{\text{Variance between groups}}{\text{Variance within groups}}
\]

which is calculated and compared with the respective table value of F.

In the present study, the one way analysis of variance has been executed to find out the association between profile of the exporters, export units with the various aspects related to export behaviour, perception problems and prospects of tea exporters and export performance.

6. Multiple Regression Analysis

The impact of independent variables on dependent variables has been analysed with the help of multiple regression when both the variables are in
interval scale. The Ordinary Least Square (OLS) method has been followed to establish the multiple regression function. It takes the form of

\[ Y = a + b_1x_1 + b_2x_2 + \ldots + b_nx_n + e \]

Where,

\[ Y \quad = \quad \text{Dependent variable} \]

\[ X_1, X_2 \ldots X_3 \quad = \quad \text{Independent variables} \]

\[ b_1, b_2 \ldots b_3 \quad = \quad \text{Regression co-efficient of independent variables} \]

\[ a \quad = \quad \text{Constant and} \]

\[ e \quad = \quad \text{error term}. \]

The multiple regression analysis has been applied to find out the impact of export problems on export performance and impact of prospects of export on export performance among the large and small export units.

**LIMITATIONS OF THE STUDY**

The present study is subjected to the following limitations.

1. The present study is confined to the exporters who registered in ITC of India.

2. The analysis on problems and prospects of tea exporters are based on the view of the exporters whereas the secondary data related to the problems and prospects of tea exporters are excluded from the study.

3. The selected aspects are confined to export behaviour, export problems, prospects of exports, SWOT analysis and export performance.
4. The variable related to each aspect of export is drawn from the previous studies and also from the expert’s view.

5. The profile of the exporters and their units has been included to provide the background of the exporters alone.

6. The linear relationship between the dependent and independent variables is assumed.

7. Only leading states namely Assam, West Bengal, Kerala, Maharashtra and Tamilnadu have been included for the study. The other states are excluded.

**SCHEME OF THE REPORT**

For a neat and clear presentation of the research report, the thesis is divided into seven chapters.

The first chapter provides the introduction of the study, need for the study, statement of the problem, review of literature, research gap, objective of the study, methodology and limitations and scheme of the report.

The second chapter includes the conceptual framework of the study.

The third chapter explains the theoretical frame work on the Tea Industry in India.

The fourth chapter covers the profile of the exporters the export units and the export behaviour of the units.
The fifth chapter covers the important export problems, internal-domestic problem, internal-foreign problem, external domestic problem, external foreign problem and frequency of export problems.

The sixth chapter consists of the prospects of tea exports, strength, weaknesses, opportunities and threat analysis (SWOT), impact of problem of export on the export performance and also impact of prospects of exports on export performance.

The seventh chapter includes the summary of findings, conclusions, policy implications and directions for future research.