1. **SIGNIFICANCE OF THE STUDY**

Globalization helps to do business anywhere in the world. In the globalized economy, shipping of products/materials from one place to another place is a complex task. It is because, purchase of raw material takes place at one point, processed at another point, marketed in different places in the world using various transportation modes. In this situation, companies have to present best quality products at a reasonable price as and when required, avoiding risk.

Logistics and Supply Chain Management (LSCM) place the right item in the right quantity at the right time at the right place for the right price in the right condition to the right customer and it has the ability to ensure consistency in the quality, cost-saving potential and making available goods at the place of requirement in time. So, there is a need to focus on the LSCM and to study the performance of LSCM. In business, it may have internal focus, or external focus covering the flow and storage of materials from point of origin to point of consumption.

The study on LSCM is significant because of the following:

1. The total time for material to travels through the entire supply chain can be quite long
2. The goal of supply chain to reduce uncertainty and risk
3. The main goal of supply chain provide products right stuff to the right place at the right time
4. SCM builds a chain of suppliers that focus minimizing waste and maximizing value
5. The design, planning and operations of a supply chain have a strong impact on overall profitability

2. **OBJECTIVES OF THE STUDY**

   a. To present brief description of origin and growth of Seafood Industry
   b. To examine the theory of Logistics and Supply Chain Management
   c. To study the process of Logistics and Supply Chain Management in Devi Sea Foods
   d. To examine the performance of the LSCM in Devi Sea Foods
   e. To find out the internal and external factors influence to Logistics and Supply Chain System of Devi Sea Foods
   f. To identify the gaps and reduce supply chain costs to the maximum possible level

3. **DATA BASE**

   The study is based on both Secondary and Primary sources of data. Secondary data is collected from books, reports and records, research articles, journals and periodicals and from the Internet. Primary data is collected from the managers and supervisors with the help of a structured schedule.

Censes method of investigation is adopted in the collection of primary data.

Table-1: Shows the Details of Managers and Supervisors in Devi Seafoods Ltd.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Employees Name</th>
<th>Designation</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M.Chowdary</td>
<td>Manager</td>
<td>Maintenance</td>
</tr>
<tr>
<td>2</td>
<td>M.Lanin</td>
<td>Manager</td>
<td>Production</td>
</tr>
<tr>
<td>3</td>
<td>G.V.Krishna Rao</td>
<td>Supervisor</td>
<td>Pre-Processing</td>
</tr>
<tr>
<td>4</td>
<td>K.Brammaiah</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>T.Subba Reddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>A.Ramesh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>P.Rama Rao</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>R.S.Reddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>K.A.Paul</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>U.Satyanaraya</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>D.Vasu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>P.Subba Reddy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>G.Satya</td>
<td>Supervisor</td>
<td>Individual Quisk Frezion (I Q F)</td>
</tr>
<tr>
<td>14</td>
<td>D.Narayana Rao</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>K.Sreenu</td>
<td>Supervisor</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>D.Malli</td>
<td>Supervisor</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>CH.Chinni Krishna</td>
<td>Supervisor</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>A.Arjun</td>
<td>Supervisor</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>P.Dinesh Kmar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>T.Malyadri</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. **PERIOD OF THE STUDY**

The period of the research study is one academic year i.e., 2010-2011. Data is collected from supervisors of the organization in the month of May, 2011 relating to Logistics and Supply Chain System of Devi Sea Foods Ltd.

5. **TOOLS OF ANALYSIS**

The collected data is analysed with the help of statistical tools. Percentages, Tables, Diagrams are employed at appropriate places.

6. **CONCEPTS USED**

**Logistics** It is concerned with getting products and services where they are needed when they are desired. It involves the integration, transportation, inventory, warehouse, material, and packaging.
Supply chain management is an integrated management function which combines various activities involved in production & operation distribution marketing and services after sales with a customer focus so as to optimize the total cost. It refers to a managerial process, which combine all supply chain participants to design, develop and operate system which responds to customer expectation by making available right quality & right quality products at the right time and place in the right physical form all right cost.

Activities involved in global supply chain management
1. Purchasing
2. Manufacturing
3. Logistics
4. Distribution
5. Transportation
6. Marketing

Supply Chain Drivers determines the performance supply chain by design, planning and operation of the supply chain. Drivers of Supply Chain Performance: Facilities, Inventory, Transportation, Information, Sourcing, and Pricing.

Models to measure supply chain performance
a. SCOR (Supply Chain Operations Reference Model)

b. Balanced Scorecard Method.

a. SCOR model: This model refers to an attempt at standardizing processes for supply chain management. As per SCOR, supply chain performance fall under the following broad categories.
  - Cost
  - Assets
  - Reliability
  - Flexibility

Supply chain council refers to measures related to costs and assets as internal-facing measures, while reliability and flexibility are termed as customer facing measures.

b. Balanced Scorecard Method: The supply chain management performance framework can be directly linked to the balanced scorecard, resulting in a framework which could be called SCBSC (Supply Chain Balanced Score Card).

The supply chain balanced score-cards:
- Provide clearer vision of the company’s strategy.
- Provide feedback around both internal system & external outcomes
- Continuously improve strategic performance and results.

It covers four stages
1. Finance: Financial area includes cost of manufacturing, warehousing, transportation etc.
2. Customer: This includes order fill rate, back order levels, on-time delivery, etc.
3. Operational: (Internal business process)
4. Training: (or learning and growth).

7. CHAPTER SCHEME
The study is presented in Five Chapters.
1. The First Chapter deals with the Significance of the study, Objectives of the study, Hypotheses tested, Data Base, Sample Design, Period of the study, Tools of Analysis, Limitations of the study, and Chapter Scheme.
2. A Theoretical Framework relating to the topic of research in the second chapter.
3. Industry Profile and Company origin, growth, performance, internal & external operations, future plans and opportunities are mentioned in the third chapter.
4. An analysis of collected data with the use of Statistical tables, graphs, diagrams, percentages and Interpretation of the results exhibited in the fourth chapter.
5. The last and fifth chapter presents the main findings and suggestions.

One Questionnaire is used in the collection of primary data is also appended to the Appendix-I at the end of the report.

A brief bibliography of articles, books, journals and reports are appended to the report of the study to indicate the nature of literature available on the subject of research at Appendix-II at the end of the report.

8. LIMITATIONS OF THE STUDY
The scope of the study is limited to Devi Sea Foods Ltd, Singarayakonda, Prakasam district plant. The findings and suggestions are relevant to small organization;

9. PROFILE OF THE INDUSTRY & COMPANY
The Global Scenario of India Seafood
In the last 50 years, the fish eaters of the world have doubled. The seafood industry has changed beyond recognition. India's seafood’s industry is one of our biggest foreign exchange earners. Its turnover is around 9 billion dollars. There are around 400 processing plants in India and out of this 160 are processing India seafood for export to the US.

From the 1960s, India started exporting processed items instead of dried ones. Developed countries started acquiring a taste for Indian marine products, which came to be known as India seafood’s. Earlier, India exported mainly to neighboring countries like Srilanka, Myannar, Singapore etc. But as frozen and canned items became a prominent part of exports, affluent markets like USA, France, Australia, Canada and Japan became India's buyers. Modern machinery for freezing and canning were introduced at the processing plants.

The main buyer for frozen shrimp was the US. But after 1977, Japan became the principle buyer followed by the Western European countries, which had acquired a taste for India seafood. China imported fishes like the Ribbon fish, croaker etc.

Profile of the Devi Seafood Ltd (DSFL)
Name of the Company : DEVI SEA FOODS LIMITED
Year of establishment : 1996
Head office : Devi sea food’s ltd.,
9-14-8/1, C. B. M. Compound
Visakapatnam-3,

Nature of the company : Limited company
Factory location : The factory is located at town, Singarayakonda, Ongole, Prakasam District, Andhra Pradesh,
India. The factory is situated 200 km’s away from the airport at CHENNAI. And 2 km’s from Ongole railway stations.

Processing Facilities: 2 Contact freezers 8.5 mt
Each one has mechanical single belt
Individually quick frozen (1QF)
Impingement freezer 10, Tones capacity,
- Blast freezer capacity -5 tones.
- Flake ice plants capacity 10 mt each.
- Block ice plants capacity -15 tones.
- Cold storages capacity 100 mt each.
- 15 mts per hour water treatment plant.

Product Range: Shrimps Fresh Water Prawns (SCAMP)
Raw: Head on/ Head less/ PTO/ P&D/ PUD
Butterfly, Marinated and flavored shrimp.

These are exported to USA, Australia, Japan, Canada, European and other Asian countries.

Business Activity: Processor & Exporter
Organizational Hierarchy: At Visakapatnam.
Managing Director: Mr. P. Bramhanandam
Director Marketing: Mr. K. A. John
No. of employees: above 600

Internal Operation System
- Raw material purchase
- Raw material receiving, washing, and storing in chill room
- De-heading peeling and washing
- Grading and storing
- Block Processing freezing metal detection and packing

10. DATA ANALYSIS AND INTERPRETATION
The collected primary data is to be process and analysed in order to have desired result. In this section, the primary data processed in a view to reducing them to manageable proportions. The processing includes editing, coding classification and tabulation. The data analyse with an object checking and present the meaningful interpretation reveals the findings in the study.

Procedure of analysis:
- i. Gather together all the information collected from the respondents
- ii. Than arranges the items of information into various groups in a preliminary way
- iii. To take account of the categories or grouping suggested by the respondents
- iv. The set of categories based on information will be formed
- v. Then collected information should be reviewed to assess with reference to objectives of the study.

11. MAIN FINDINGS
1. It is identified that, WMS, SCM, SRM, and CRM supporting systems are used in supporting LSCM
2. It is identified that, purchasing, processing, inventory/ warehousing, distribution, and marketing activities are involved in LSCM
3. They purchase raw materials only from formers
4. It is identified that, they use isolated Vehicles, Clean Plastic ice boxes, containers with -18 degree centigrade etc., are used as supporting material in LSCM
5. The customers of Devi seafood’s are located in internationally. They place the orders through mails, telephone, fax and e-mail etc. the average monthly order received is 150 tones
6. It is identified that, they use road and sea transportation in the shipment process
7. It is found that, all the managers and supervisors in Devi seafood’s are satisfied about the performance of drivers (Internal and External factors) of LSCM
8. It is found that, the opinion of all the respondents on performance of internal and external activities involved in LSCM is good
9. Production and Maintenance Managers said that, their opinion on performance in all stages of LSCM is good and all the respondents said that the internal operation process of Devi seafood is good
10. It is identified that, the opinion of all the respondents on cost of supply chain is reasonable. The purchasing and production manager said that the manufacturing cost and warehousing cost is high and the transportation cost is reasonable.
11. From the primary data, the process of logistics and supply chain management is as follows

Purchasing raw material from the suppliers (farmers) → shipping raw material through isolated vehicles by clean plastic ice boxes → testing raw material and unloaded in raw material receiving hall → Internal operation process (washing → de-heading peeling and wastage → grading and washing → freezing, metal detection and packing) → Inventory / warehousing (storage) → deliver to the customers.

In simple
Suppliers / Vendors → Processing Plant (Devi seafood’s) → Inventory / warehousing → Market

12. SUGGESTIONS
It suggested that the organization take the following necessary steps to reduce the supply chain cost:
- a. Use Production Planning Control system to reduce the manufacturing cost
- b. Integrate all activities in production and operation process by using Information Technology to reduce the manufacturing cost
- c. Identify the measures to reduce the order processing time and take necessary steps to reduce the inventory / warehousing cost
- d. It is better to use third parties in the shipment process to reduce the transportation cost

13. REFERENCES
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