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GREEN LOGISTICS: THE ROAD AHEAD

Dr. Seema Somani

Associate Professor & Head, Department of Commerce. Pillai College of Arts, Commerce and Science, New Panvel - 410 206, Maharashtra, India

ABSTRACT

The study first introduced the topic that what is green logistics and origin of the problem. It covered conceptual framework giving a glimpse of the terms used in the study. Then it included Need and Objectives of the study, Limitations of the study, Scope for further research.

Research Methodology which includes research design adopted in the present study, area, scope covered under this study, sources of data collection. Primary data Collection of data through questionnaire the researcher designed a comprehensive questionnaire covering various areas pertaining to usage of green logistical practices which was administered to 20 logistics firms situated on central and harbor line of Mumbai region.

The primary data collected was processed, classified, tabulated and analyzed with the help of tables, graphs, frequency and then finally logical conclusions were drawn. Finally the study dwells on Findings of the Study and Suggestions.

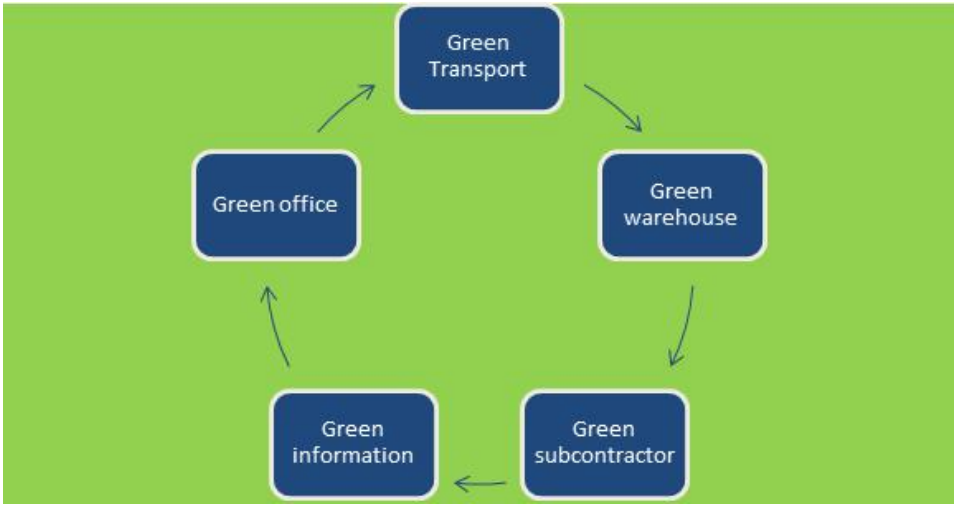
KEY WORDS: *Green Logistics, Recycling, Reuse, transportation, environmental concern.*

1.1 INTRODUCTION

Green or sustainable logistics is concerned with reducing environmental and other negative impacts associated with the movement of supplies. Green supply chains seek to reduce negative environmental impact by redesigning sourcing/distribution systems and managing reverse logistics to eliminate inefficiencies and make them favourable towards environment.

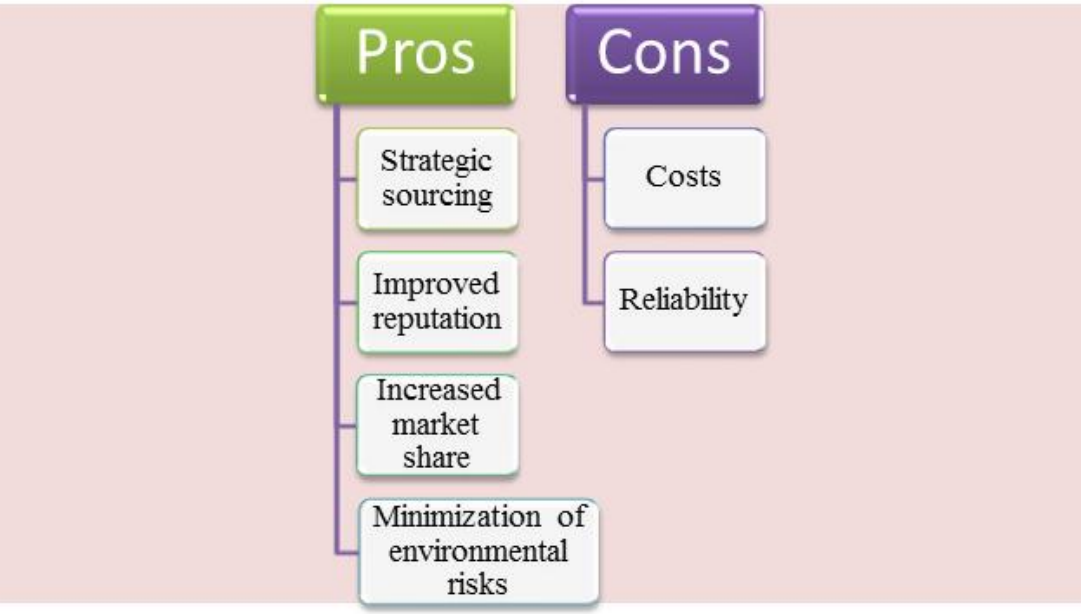
The International Organization of Standards (ISO) 14000 series of standards provides a formal system for the management of environmental matters. The ISO 14000 family addresses various aspects of environmental management. The very first two standards deal with environmental management systems (EMS). ISO 14001:2004 provides the requirements for an EMS. ISO 14004:2004 gives general EMS guidelines. The other standards and guidelines in the family address specific environmental aspects, including: Labeling performance evaluation, life cycle analysis, communication and auditing.

1.1.1 Elements of Green Logistics:

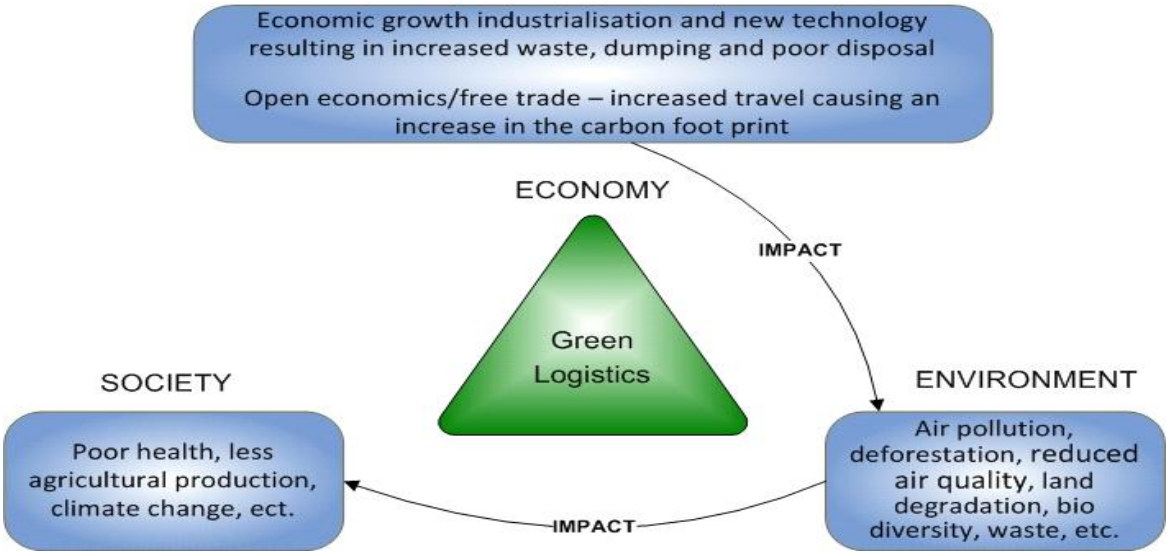


Green logistics contains elements such as Green transport i.e. usage of green modes of transportation, green warehouse by optimizing warehouse operations, warehouses and distribution centers can minimize land usage, lower energy costs and reduce waste production, green information, green office and green subcontractor.

1.1.2 Green Logistics: Pros and Cons:



Ill effects of green logistics on different factors:



Source: https://dlca.logcluster.org/display/LOG/Green+Logistics

1.2 Conceptual framework:

1. Green logistics: It means minimizing the ill effect of logistics on the environment.
2. Road Ahead: Considering present and future.
3. In India: India

1.3 Objectives of the study:

1. To understand green logistics and its implications.
2. To study use of green logistics in various countries in world.
3. To suggest solution, if required.

1.4 Rationale of the study:

To understand the impact of the logistics on various parts of the society and how it would benefit to the economy, society and environment as a whole and find out ways and means to make it more environmental friendly.

1.5 Limitations of the study:

1. This study is limited to Mumbai only.
2. There may be biasness in the opinion expressed.

1.6 Scope for further Research:

1. This study may be extended to other areas of service sector.
2. This study can cover other geographical areas.

2.RESEARCH METHODOLOGY

This includes research design adopted in the present study, area, scope and period covered under this study, samples and sample size and determinant procedures, sources of data collection.

2.1 Research design employed in the present study:

This research is descriptive in nature. Descriptive research was chosen because it is accurate and has a low requirement for internal validity. The two most common types of descriptive research tools are surveys and observation. This study surveyed the adoption of green logistics practices by the 20 logistics firms in Mumbai. Out of which 10 were domestic firms and 10 were MNCs.

2.2 Area and scope of the study:

The firms located on the central line and harbor line of Mumbai region were covered for the study.

2.3 Sources of data collection:

This study is based on both – primary and secondary data sources. The secondary data was collected through books, Journals, internet, websites, Government- reports on green logistics management, circulars and notifications etc.

2.3.1 Primary data:

Primary data was collected using a well-structured questionnaire for this study. The questionnaire included both open ended and closed questions. The questionnaire was prepared using five point Likert-type scale (1 = not considering it, 2 = planning to consider it, 3 considering it currently, 4 = carrying out to some extent, 5 carrying it out totally).

2.3.2 Data analysis and interpretation:

After data collection examination for completeness and reliability for the data was performed. To determine whether green logistics practices were being adopted by the respondents the data was analyzed by computing frequencies and percentages to determine factors affecting these practices adoption and their evaluation on performance. The statistical package for social sciences (SPSS), Version 17 was used; whereby mean, standard deviation, variance correlation coefficient and frequencies were calculated.

The respondents were asked to rate each green logistics practice factor on the current practice adoption using a five-point Likert-type scale (1 = not considering it, 2 = planning to consider it, 3 considering it currently, 4 = carrying out to some extent, 5 carrying it out totally) to indicate the extent to which their organization practiced them. The Green Logistics Practice factors in the questionnaire included internal environmental management, green purchasing, eco-design, green distribution, cooperation with customers for eco design and investment recovery. Each Green Logistics practice factor had various variables which were rated. All the scores from the 20 firms who responded were summed up and a mean for each factor variable computed.

3.FINDINGS OF THE STUDY

1. This study indicated that the pressure on logistics firms to adopt green logistics practices mostly came from the environmental regulatory policy.
2. Out of total 20 firms covered for the study mostly MNCs were complying with the green logistics practices.
3. Domestic firms were implementing it very gradually as it was more expensive, no special government incentive for it and less competitive.
4. Green logistics practices have been found valuable in overcoming environmental impacts arising from logistics operations as environmental impacts occur at all stages of a product's life cycle.
5. Many domestic firms are willing to implement this practice as they fetch more international customers.
6. The firms want the design of products ready for reuse, recycle and recovery of material which would enable them to be a part of green logistics.

4.SUGGESTIONS

1. More awareness needs to be generated among the domestic firms to make use of green logistics practices.
2. Government must frame policies which would encourage the logistics companies to adopt green practices.
3. Environmental agencies should recommend the Government and make it mandatory for the logistics firms to adhere to environment friendly methods in the field of logistics so as to have better environment.
4. There should be proper facility available for recycling, reuse and treating waste generated out of it.
5. Awards can be constituted for the companies complying with green logistics practices which would motivate other companies too.

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WEB RESOURCES:

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