CHAPTER III
REVIEW OF LITERATURE

Review of related literature gives a basis for any research. Unfortunately, there are not much studies conducted in this field of Logistics Management. Following are the available related studies undergone in the area of Logistics Management.

Chang-Ing and I-Jin (1999) show the relation between average logistics cost per item, consumer demand and the interrelationship between them are analyzed. Commodities are distributed through a depot directly or through single intermediate terminal to many retail establishments. Minimizing average logistics cost, or maximizing total supply subject to the demand-supply equality determines the optimal density of retail establishments and local terminals. The envelope curves for the optimal configuration strategies corresponding to different values of total market area and terminal cost are derived.

Aronsson et al (2000) have developed a template for a logistics education course. The template addresses functional, process and supply chain needs. The template is currently being prototyped with the principle of ‘gestalt’- the whole is greater than the sum of the individual parts.
Outi (2000) studied logistics costs of industrial enterprises in a supply chain. The following aspects of logistics costs are included:

a) Activity Based Costing (ABC)

b) Average logistics Costs of industrial product manufacturers and suppliers

c) The factors which influence a company’s cost efficiency in logistics

d) An ABC simulation model for the logistics costs in a company

A study on “Logistics of small-size deliveries” has been carried at the Technical Research Center of Finland. Seventeen enterprises participated in this study. In this study a calculation model was developed and tested with the logistics costs of the participating companies. After calculating the costs, order structure as well as the working methods of the companies’ was examined. With this information the ABC simulation model was developed to explain and simulate the change in the logistics costs of a company.

Neil and Jim (2001) look at the emerging issues in reverse logistics system. There is a fundamental shift in waste management responsibility from the private waste management industry and local governments towards manufacturers, distributors and retailers. In the recent years the responsibility of manufacturers has been extended to cover the entire life of certain products. The enforcement of environmental legislation becomes more
stringent and an increasing number of customers are demanding to take-back of their old products. Companies are beginning to focus on possible distribution channels for the return of their products i.e. Reverse logistics. This paper examine the emerging issues in reverse logistics, in particular the information requirements for reverse logistics within the extended enterprises. A study of end-of-life vehicles (ELVs) illustrates the specific information flow between the key players within the automotive industry. This study addresses the initial development of possible distribution channels, their key operational decisions and supporting information systems for the recycling of end of life products.

Wang and Tyan (2003) refer the involvement of Global third-party logistics in e-commerce and globalization. An effective global supply chain (GSC) management seeking to secure market share. Global third-party logistics (3PL) has developed into an alternative for the needs of global collaboration. In this, the authors present a new application of collaboration in Global Supply Chain execution, namely collaborative transportation management (CTM) that can reduce delivery time and to improve delivery reliability. A case study is illustrated the application of CTM by a 3PL provider in a notebook computer GSC. The implementation results show that the delivery cycle time and the total cost are simultaneously reduced.

Alan and Van Remko (2003) brought a conceptual developments in logistics and supply chain management in “lean thinking” and “agility.
Cranfield School of Management has been at the forefront of these developments and has benefited enormously from the groundbreaking work in this field.

Kee-Hung and Cheng (2003) describe the supply chain performance (SCP) in transport logistics by service providers in the transport logistics industry in Hong Kong. The industry in this study encompassing firms involved in the business of serving the physical flows of goods from a point of origin, i.e. shippers, to a point of destination, i.e. consignees, in a supply chain. These firms include those in sea transport, freight forwarding, and air transport and third-party logistics services. The authors mention that they have conducted a cross-sectional survey with firms in the industry to evaluate their perceived Supply Chain Performance in transport logistics and the attached importance from both cost and service perspectives. This study envisages managerial insights for firms in the industry to understand their SCP in transport logistics and benchmark areas for performance improvement.

Makukha and Gray (2004) communicate that Logistic Service Providers claims that they are the strategic partners but they are unable to provide the service required. The most existing logistics partnerships are still operational rather than strategic in nature. Many logistics partnerships being operational in nature, are known as “Strategic” without not understanding of the term, and the influence of a logistics partnership on a shipper’s strategic moves and competitive positioning has not been researched thoroughly
A Delphi investigation reveals that although large companies from logistics partnerships, the perceptions of partnership formation motives, inhibitors and orientation by shippers and Logistics Service Providers (LSPs) are likely to differ. The failure to integrate on a strategic level suggests a lack of strategic management knowledge by relevant managers.

Larson and Halldorsson (2004) introduce by describing four unique perspectives on the relationship between logistics and Supply Chain Management. Results of an International survey of logistics/SCM experts are reported. 200 questionnaires were sent to leading logistics educators. Based on experts opinion, cluster analysis conducted and confirms that the existence of the four perspectives on logistics versus SCM re-labeling, traditionalist, unionist and intersectionist.

Lai et al. (2004) examine the factors that encourage firms in Hong Kong’s logistics industry to implement quality management system to ensure quality in their work processes. A generic ten-step approach for Quality Management system (QMS) has been introduced and discussed the cost and service advantages achieved in the case firm. The approach offers Procedural guidelines for firms in the industry contemplating the implementation of Quality Managements.
Miguel (2004) indicates performance measurement systems truly applicable in Logistics Management and control. The impact of using performance measurers on management style has been largely neglected. The author sets out to explore this gap using an approach based on Simons’ diagnostic versus interactive modes of control. The author aimed at describes the changes in logistics management and control compared with the situation in the rest of the firm. A case study method was undertaken involving a medium sized ceramic tile manufacturer. The results show that a clear interactive use in the logistics area, while in non-logistics department’s performance measures is used diagnostically.

Sajed and Gunilla (2004) describe the ‘impact of logistics on environment’. Environmental implications of logistics systems is one of the future challenges to logisticians. This paper explores the logistics and supply chain management (SCM) discipline to see how the scientific community handles this challenge. The preliminary literature has revealed that there are weak ties between the logistics/SCM discipline and the environmental discipline. The analysis indicates that the literature seems to be unbalanced: knowledge about assessing ‘impact of logistics on environment’ is missing, and most emphasis is on ‘impact of environment on logistics’. From the reverse logistics literature knowledge about implementation has been drawn, the same has been described by scholars as explanatory and anecdotal. When comparing the subject logistics/supply chain management and environment
with other subjects in the logistics literature, less attention has been paid to “Logistics/Supply Chain and environ”

Khalid and Richard (2004) reveal that Ports are recognized as a potential for logistics centers. Conceptualizing ports from a logistics and supply chain management approach, it is possible to suggest a relevant framework of port performance. The integrated approach of Logistic Management (LM) and Supply Chain Management (SCM) are for cost reduction and customer satisfaction. The logistics approach often adopts a costs trade-off analysis between functions, processes and even supplies chains. The approach also could be beneficial to port efficiency by directing port strategy towards relevant value-added logistics activities. A proposed framework is tested in a survey of port managers and other international experts.

Gepfert H Alan (2004) opines that Lack of management foresight when making major decisions on distribution facilities and operations can deprive a company of needed flexibility for future changes and thus lock it into a deteriorating profit trend. The author adds, “Such a lack of foresight almost always goes hand in hand with a failure to recognize logistics as a distinct function of the business and to integrate the planning and operating activities of the company’s functional divisions in the light of a logistics analysis”. This study shows that the system approach recommends in this
article describes how top managers can utilize the OR-computer capabilities to detect significant profit improvement opportunities in the logistics function.

Markus and Jean-Paul (2004) show that Institutional dimension of logistic largely at the global scale. The enduring growth of movements of goods and the freight distribution networks supporting them are widely underrepresented in regional science geographical research. Globalization has been a dominant paradigm of contemporary geographical research. The transport industry itself has become more closely integrated. Recent developments in international transportation, logistics, international trade and the emergence of e-commerce have transformed the freight transportation sector.

Angappa and Bülent (2006) highlight that Effective Performance measurers and metrics are essential for effectively managing logistics operations in a global economy. For improved organizational competitiveness the managers have to develop suitable performance measurers and metrics to make the right decisions. A question has raised that whether traditional performance measurers can be used and out of them which ones should be given priority for measuring the performance in a new enterprises environment. Some of the traditional measurers and metrics may not be suitable for the new environment wherein many activities are not easily identifiable.
Measuring intangibles and no financial performance measurers pose the greater challenge in the so-called knowledge economy. Measuring them is so critical for the successful operations of companies in this environment. Considering the importance of non-financial measurers and intangibles, the authors have made an attempt through a literature survey and some of the reported case experience to determine the key performance measurers and metrics in supply chain and logistics operations.

Mckinnon and Alan (2006) highlight the implications and suggestions in Lorry Road User Charging (LRCU). Truck trolling schemes are already implemented in Switzerland, Austria and Germany. Britain is planning to launch a Lorry Road User Charging (LRUC) during 2008. This study reveals the various implications and suggestions in LRUC. The study clearly reveals wide differences in their objectives, overage, technology, procedures and toll levels. The proposed British system would have been the most complex, allowing tolls to be varied by vehicle type, class of road, geographical area and time of day. The study also assesses the possible effects of lorry road-user charging on a range of logistical variables, including system design, freight modal choice, truck utilization, vehicle routing and the scheduling of deliveries. It shows how its logistical effects will depend on the nature of the tolling scheme and level of charges.
John and Bowen (2008) examine the changing geography of warehouses in the US between 1998 and 2005. The distribution of the warehousing industry is examined to discern the degree to which the expansion of warehousing has gravitated towards places with superior accessibility in the nation’s air, maritime, rail, and highway transportation networks. The analyses indicate that the number of warehousing establishments in 2005 and the 1998–2005 growth in the number of warehousing establishments across a sample of 143 metropolitan counties were strongly correlated with county-level measures of accessibility in air and highway and to a lesser extent rail networks. These results could be useful to communities interested in harnessing this dynamic part of the economy for economic development.

VonderGracht and LenaDarkow (2010) propose a scenario planning and present the findings of an extensive Delphi-based scenario study on the future of the logistics services industry in the year 2025. The major contribution of this study is the development of probable and unforeseen scenarios of the future which may provide a valuable basis for strategy development in the logistics services industry. The logistics services industry will be significantly affected by future developments throughout the world. Therefore, developing future scenarios is an important basis for long-term strategy development.