CHAPTER 3

OBJECTIVES, METHODOLOGY & STRUCTURE

3.1 OBJECTIVES:

1. To study the prospects of Visakhapatnam as transshipment hub & a gateway port by focusing on the following study variables:

   ➢  Costs associated with hinterland & ocean transport.
   ➢  Time associated with hinterland & ocean transport, and importantly;
   ➢  The environmental issues associated with ocean transport.

2. To study the SWOT analysis of east coast container ports to evaluate suitability as transshipment and gateway port.

3.2 RESEARCH METHODOLOGY

The secondary data was collected from the world bank reports, Indian Ports Authority reports, reports of VCTPL, reports of Consultancy Services, various national and international journal articles, newspaper articles, India’s export - import activity reports, customs EXIM data, Dept. of Commerce – Govt. Of India reports, Ministry of Shipping reports, Govt. of India, E-Resources portal of Gitam University website, libraries in Gitam university, Resources at Indian Maritime University, AMET university and from the internet. Data was also collected through informal personnel interviews with the various officials of Visakha Container Terminal Pvt. Ltd (VCTPL), officials of
Gangavaram port, Shipping Lines, Shipping agents, Transportation and Logistics companies, etc

3.3 STRUCTURE OF STUDY:

The study will be carried by using the three comparisons as illustrated in following models:

3.3.1 MODEL 1: ALTERNATE GATEWAY

Delhi is considered as the container capital of the India with it being the centre of all North India containerization. Singapore is the transshipment hub port for all the containers on the east bound trade. The cost and time for both hinterland and ocean travel and also the economically as well as environmentally beneficial aspect of fuel saving during the ocean transit for the present utilized gateway port, Mumbai(JNPT) is compared with the proposed gateway port, Visakhapatnam.

CONCEPT OF THIS MODEL: Comparison of time and cost of the 2 legs: Delhi-Mumbai(JNPT)-Singapore and Delhi – Visakhapatnam- Singapore .

3.3.2 MODEL 2: HUB & SPOKE

The presently used hub port on the east coast of India, Chennai will be compared with the proposed hub port of Visakhapatnam. The model will consider 5 ports as spokes – Paradip, Haldia, Chittagong, Yangon and Kakinada. Each of these spoke ports have good containerization potential though not enough to be having a dedicated main line call.

It envisages to compare the important aspects of maritime supply chain – Time and Cost and also the economically as well as environmentally beneficial aspect of fuel saving for
the two selected Hub container ports. The comparative benefit is analysed by the use of a program developed by the researcher using the platform of universally accepted “C” Language in “Turbo C” software. This geographical hub and spoke model bases its analysis on Distance, the main variable which has been identified by researchers in similar studies in the past. The major drawbacks, constraints identified by researchers in past studies have been omitted and appropriate assumptions have been made so as to accommodate future developments, expansions, policies, etc. The shackles in the chain with equal values have also been discarded.

CONCEPT OF THE MODEL:
3.3.3 MODEL 3: SWOT ANALYSIS

As evidenced that there is a huge potential trade with its eastern countries, India is looking to capitalize on this by developing hub container ports on its east coast. A SWOT analysis is carried out among the ports on the east coast of India which are being eyed to be developed as container hub port.
The following are the ports considered in this model:

1. Chennai
2. Paradip
3. Haldia (Kolkata)
4. Visakhapatnam
5. Krishnapatnam
6. Kakinada
7. Tuticorin

As identified in the literature there are many parameters other than transportation cost reduction on which ports have to offer competitiveness in order to be a viable transshipment hub port. A port which imposes lower vessel handling charges stands a better chance for retaining existing business and for further scope of expansion. However, to ensure reliable efficiency and service the ports have to ensure that they are equipped with adequate infrastructure, cargo handling equipment, sound management techniques including the use of latest information technology. Adopting these features will ensure that a carrier operating from that port will be in a position to offer cost effective, efficient service to shippers which in turn would result in carrier loyalty as well as to the growth of port as a transshipment hub.

Taking these parameters into account, the following set of criteria can be analyzed in the SWOT format for the ports selected in this model.
INFRASTRUCTURE

- Container handling capacity
- Quay cranes
- Draft and depth’s available
- Rail and road facilities
- Warehousing and CFS facilities

DEVIATION & DISTANCE

- Deviation from international trade routes
- Distance from international transshipment hub of Singapore

EFFICIENCY

- Pre berthing delays
- Container loading / discharging rates
- Average turnaround time of ships

HINTERLAND & CONNECTIVITY

- Proximity to productive belt of industries
- Congestion
- Distance from the seat of containerization.
TARIFFS

➢ Various tariffs and charges

➢ Incentives and discounts offered

RELATIONSHIPS & TIE-UPS

➢ MOUs with various industries

➢ Relationship with logistics companies and freight forwarders

➢ Relation of port operator with carriers to attract more volume
Sea ports of India (Figure 3.3)