# INTERNATIONAL JOURNAL OF RESEARCH IN **COMPUTER APPLICATION & MANAGEMENT**



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#### JOURNAL AND OTHER ARTICLES

 Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

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# A STUDY ON OPERATIONAL CONSTRAINS INVOLVED IN STEVEDORING TECHNIQUES AT SEAPOL LOGISTICS PVT. LTD., TUTICORIN

# DR. A. MERLIN THANGA JOY ASST. PROFESSOR SCHOOL OF MANAGEMENT STUDIES NOORUL ISLAM CENTRE FOR HIGHER EDUCATION KUMARACOIL

#### **ABSTRACT**

The logistics market place is one of major opportunity of global business. In the globalization era, the use of internet has increased the need for a flexible logistics infrastructure to support a global supply chain, enabling the movement of goods from a growing number of source locations to meet market demand. Depending on industry sector, supply chain logistics costs account from 5 percentage to 50 percentage of a product's delivered cost. India the fourth largest and the second fastest growing economy in the world, is on the fast track where infrastructure spending is concerned. Some of the infrastructure areas where huge government spending is taking place are, roads, ports major & minor, airports expansion and modernization of existing ones and building of new ones, inland waterways, coastal shipping and railway lines. There is also huge spending by the corporate sector both as public and private enterprises.

#### **KEYWORDS**

Stevedore, Logistics, Docks, Cargo, Wharf, Warehousing, Crane, Combustion, Demurrage.

#### 1.1. INTRODUCTION

he stevedores usually perform a range of tasks in the docks, including loading and unloading of cargo, stacking or stowing them on-board the ship or on-shore, operating cranes, derricks and various cargo-handling equipment. The scope and responsibility of a stevedore, or the stevedoring firm vary from country to country, and even from port to port. Depending on the contractual obligations, as agreed with the principal (who may be the shipping company, steamer agent or the port authority), a stevedore may be responsible for on-shore operations, ship-board operations or the complete terminal handling operations and associated logistics. A stevedore may perform one or multiple roles depending on the contractual binding, statutory and regulatory framework, ongoing practices and the administrative jurisdiction of the local agencies like port, dock labor boards and union bodies.

#### 1.2. INDUSTRY PROFILE

The logistics market place is one of major opportunity. The globalization that is a by-product of extensive use of the Internet has increased the need for a flexible logistics infrastructure to support a global supply chain, enabling the movement of goods from a growing number of source locations to meet market demand. Depending on industry sector, supply chain logistics costs account from 5percentage to 50 percentage of a product's delivered cost. As such, supply chain management has been elevated in strategic importance, providing an area of potential strategic advantage for global players. In addition, it is estimated that world-class supply chains hold up to 50 percentages less inventory in their distribution channels.



#### 1.3 WORLDWIDE LOGISTICS INDUSTRY GROWTH

Currently the annual logistics cost of the world is about \$3.5 trillion. For any country, the annual logistics cost varies between 9 percentage and 20 percentage of the GDP, the figure for the US being about 9 percentage. The issues and trends in the world logistics market and in the US logistics market, in particular, in their annual surveys of top 25 global logistics service provider. According to the firm, the global logistics market sizes in 1992, 1996 and 2000 were \$ 10 billion, \$ 25 billion and \$ 56 billion, respectively. In 2003 and 2004, the corresponding figures were \$270 billion and \$ 333 billion, registering high growth rates. Though most of the large logistics service providers are headquartered in Europe, the US logistics market is the largest in the world capturing one-third of the world logistics market. In 2003, it was about \$ 80 billion. In 2004, it grew to \$89 billion, and in 2005, it registered an impressive growth rate of 16 percentage to cross the \$100 billion mark for the first time and reach \$ 103.7 billion (Foster and Armstrong, 2004, 2005, 2006). However, considering the fact that the logistics market in the \$ is about 10 percentage of its annual logistics cost (Foster and Armstrong, 2006) there is still immense potential for growth of 3PL in the US in particular, and in the world in general.

#### 1.4 INDIAN SHIPPING AND LOGISTICS INDUSTRY

India the fourth largest and the second fastest growing economy in the world, is on the fast track where infrastructure spending is concerned. Some of the infrastructure areas where huge government spending is taking place are, roads, ports major & minor, airports expansion and modernization of existing ones and building of new ones, inland waterways, coastal shipping and railway lines. There is also huge spending by the corporate sector both as public and private enterprises.

#### 1.5 SIZE OF THE INDIAN LOGISTICS INDUSTRY

There is however a huge demand for logistic services in India especially with the growth of the Indian economy along with the influx of new companies in sectors that was otherwise unknown. Estimated at a value of \$14 billion this industry is slated for another 9 percentage to 10 percentage growth in the years to come.

The annual logistics cost in India is estimated to be 14 percentage of the GDP, which translates into \$140 billion assuming the GDP of India to be slightly over \$1 trillion. Out of this \$140 billion logistics cost, almost 99 percentage is accounted for by the unorganized sector (such as owners of less than 5 trucks, affiliated to a broker or a transport company, small warehouse operators, customs brokers, freight forwarders, etc.), and slightly more than 1 percentage, i.e. approximately \$1.5 billion, is contributed by the organized sector. So, one can see that the logistics industry in India is in a nascent stage. However, the industry is growing at a fast pace and if India can bring down its logistics cost from 14 percentage to 9 percentage of the GDP (level in the US), savings to the tune of \$50 billion will be realized at the current GDP level, making Indian goods more competitive in the global market.

#### 1.6 LIST OF TOP LOGISTICS COMPANIES IN INDIA

Some of the top logistics companies which came in the top position by a survey conducted by Business today in September 2010.

TABLE NO. 1.1: LIST OF TOP TEN LOGISTICS COMPANIES IN INDIA

S. No.	Company name
1	Gati
2	TNT Express
3	AFL
4	DHL
5	Blue Dart
6	Agarwal Packers and Movers
7	Safexpress
8	DTDC
9	First Flight
10	Ashok Leyland

Source: Business Today, Sep 2010

#### 1.7 GROWTH RATE OF THE INDUSTRY

The growth in logistics industry is an important for Indian economy because whenever the export and import getting higher the GDP also grow and in 2010 Indian GDP went 11.5-12 percentage.

**TABLE NO. 1.2: GROWTH RATE OF THE INDUSTRY** 

Financial year	Growth rate in Percentage
2005-2006	5.32
2006-2007	6.13
2007-2008	5.45
2008-2009	8.50
2009-2010	12.20

Source: Business Today, Sep 2010

#### 1.8 LOGISTICS GROWTH RATE IN TAMILNADU

Tamilnadu as a whole has a strategic location on the international seafaring. Its all-weather natural harbor and the large export of goods, especially coal and sea food makes it a very important port in India. Growth rate of logistics industry in Tamilnadu mentioned below.

TABLE NO. 1.3: LOGISTICS GROWTH RATE IN TAMILNADU

Financial year	Growth rate in Percentage
2004-2005	3.67
2005-2006	5.32
2006-2007	6.13
2007-2008	8.00
2008-2009	11.5
2009-2010	12.2

Source: Global Tamilnadu, June 2010

#### 1.9 INDIAN SHIPPING AND LOGISTICS INDUSTRY

India the fourth largest and the second fastest growing economy in the world, is on the fast track where infrastructure spending is concerned. Some of the infrastructure areas where huge government spending is taking place are, roads, ports major & minor, airports expansion and modernization of existing ones and building of new ones, inland waterways, coastal shipping and railway lines. There is also huge spending by the corporate sector both as public and private enterprises.

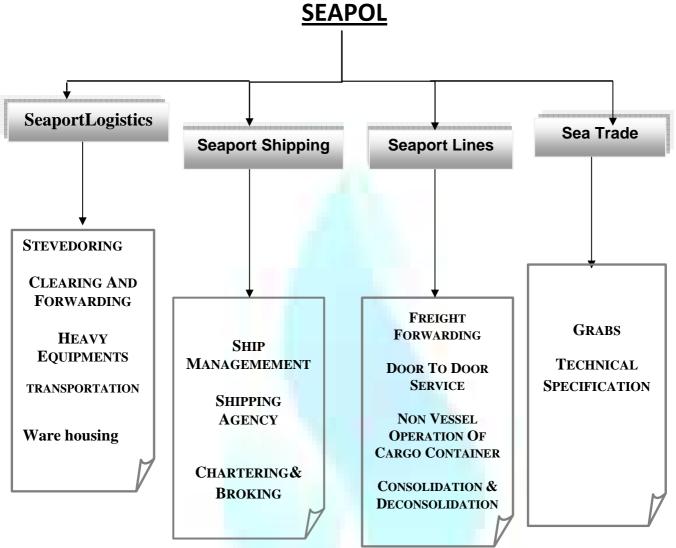
#### 1.10. COMPANY PROFILE

Established in the year 1994, Seapol has been able to create a very good name across its operating domains. Seapol have established self among the leading Logistics provider, shipping & transportation services.

Seapol started of handling the imported cargo such as Wheat, Sulphur and Fertilizers for Govt. Organizations like FCI, STC, IFFCO, KRIBHCO etc. under the name of HAJIAR CARGO HANDLING AGENCIES PVT. LTD. Later on during December 1994, Seapol tied up with the conglomerate ETA UAE and firm was renamed and registered as ETA Shipping Agencies ServicesPvt.Ltd. As time went on, business expanded rapidly and seapol obtained CHA License and Stevedoring License and finally on 16.03.2000 seapol registered ourselves as an independent identity under the name of SEAPORT LOGISTICS PVT. LTD.With the support of ETA.

At Chennai Port the firm started its business in the year 1995 without any licenses. From the time the firm obtained the Stevedoring License, the receivers using the Chennai port have approached the firm with more confidence and extended their business to the firm. Seaport has its regional office located in Tuticorin which also plays a major role in Tuticorin port in dealing mostly with dry bulk cargos like coal, iron ore, sulphur etc.,

Seapol has got an excellent report with the Customs / Port. Seapol expedites processing of the documents at the earliest with the Customs / Port to clear or to ship the goods by destuffing / stuffing the container or loading / unloading of the cargo on the ship. Seapol are efficiently organized and supervised by a competent team in the specialized division of Seapol.



#### 1.11 IMPORTS AND EXPORTS OF SEAPOL

On Imports seapol experience includes the following in addition to the bulk Coal, Fertilizers & Food grains which seapol do on regular basiswood pulp cargo in 20' and 40' Containers, various raw materials/chemicals like Aluminium Fluoride, Costic soda flakes, bath Cryolite and Magnesium Metal Ingots routed through 20' and 40' Containers. Also handles one shipment of bulk clinker to Evrwat, 1st time at chennai port.

#### SEAPOL IS PROPOSED TO HANDLE IMPORTS OF THE FOLLOWING

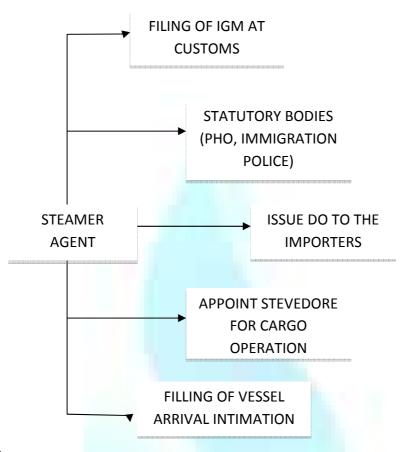
Atomic Energy Plant Project Cargo, Asbestos Bags, Wood pulp, New & second hand machineries, Wooden logs, Sewing machines, News Print rolls, Various software & electronic equipments in large volumes of 20' & 40' containers

#### ON EXPORTS

On Exports seapol experience includes handling of Rice, Sugar, Fruit pulps, Provisions & other edible commodities. It is proposed to handle the following on exports Cars, Iron Ore at various Indian ports, Agarbathies, Large volume of Feldsper of different grades Chemical Clays. Seapol offer the following Services, Handle bulk cargo such as Coal, Fertilizers, wheat, Iron ores etc.. Customs clearing and forwarding services. Supply of heavy equipments such as Grabs, Payloaders, forklift etc. Offer cargo transport facilities by road & rail. For bulk handling the company provides Storage plots manned round the clock to avoid any pilferage/loss.

#### 1.12 FUNCTIONS OF SEAPORT SHIPPING

#### STEAMER AGENT INITIAL PROCESS



#### 1.13 LITERATURE REVIEW

- Chapman (2003), The internal business perspective translates the customer perspective into what the company must do in order to meet its customer's
  expectations. Continuous change is required. For a logistics service provider these innovations can mean to change business strategies such as a change
  from short to long distance transport, adding additional activities, new countries, new modes of transport, new communication systems such as RFID or
  WebServices Financial performance indicators measure whether the company's strategy, implementation, and execution are contributing to bottom-line
  improvement.
- 2. Faber N. (2002), examine information systems for warehouse management. In their exploratory study they examine complexity of warehouses and control structure. Complexity of warehouse management is indicated among others by amount and heterogeneity of handled products, the extent of overlap between them, amount and type of technology as well as characteristics of associated processes. Their 5 findings suggest that warehouses with a high daily amount of processedorderliness and amount of stock keeping units will be best supported by customized software.
- 3. Mentzer, (2001), Supply chain management is defined as the systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole.
- 4. Moberg and Speh (2004), study the process of selecting logistics service providers in order to outsource warehousing. Their empirical evidence is based on a survey in the US to customers of logistics service providers that offer warehousing activities. According to their findings, the most important indicators for choosing a particular logistics service provider are related to responding to service requests, general management and ethical issues. Criteria that seem to be less important are the risk affinity of logistics service providers, information technology, company size and coverage.
- 5. Colson and Dorigo (2004), present a software tool which allows selecting public warehouses. Their extensive list of decision criteria includes: storage surface and volume, dangerous items, possibility fortemperature control, separation of storage areas, control for temperature humidity, ventilation, offices on site, geographical distance to highway connection, train, waterways, certification (ISO 9001/9002, SQAS, HACCP), opening hours, assistance with customs, use of technology such as RFID/Barcoding, modem connection, handling equipment (electric, gas and diesel/petrol forklifts) number and characteristics of docks.

#### 1.14. SCOPE OF THE STUDY

The study was conducted to evaluate and understand the problems in Logistics operations. The study was done to find out the problems in logistics services and to improve their service level. The study is carried out in Seapol logistics ltd. In future the study will help to improve the service level of Seapol with respect to their customers and also helps to find out the reasons for their lower performance with par with others in the industry.

#### 1.15 NEED OF THE STUDY

The need for the study is to assess the problems faced by stevedore agents at Tuticorin port, compared with other organizations of the same industry. The organization also requires relevant data to improve its management policies in order to gain future market share.

#### 1.16 OBJECTIVES OF THE STUDY

- To analyse the various operational techniques involved in stevedoring.
- To identify the various problems in stevedores in seapol.
- To study the problems in transportation and safety measures in cargo handling.
- To offer suggestions to overcome the problems in future.

#### 1.17 TYPE OF RESEARCH

Descriptive type of research is used for the study.

#### 1.18 SAMPLING METHOD

The sampling method used for the study is Simple random sampling method .

#### 1.19 SAMPLE SIZE

The selected samples size is 30 stevedoring employees out of 100. Among 30, 15 are loading employees, 10 truck drivers and 5 crane operators.

#### 1.20 SOURCES OF DATA COLLECTION

#### PRIMARY DATA

Primary data are collected by questionnaire, personal interviews and observation method.

#### **SECONDARY DATA**

Secondary data were obtained from the Company publications, Books and Internet.

#### 1.21 TOOLS USED FOR ANALYSIS

The tools used for analysis were Simple percentage method and chi square test.

#### 1.23 DATA ANALYSIS & INTERPRETATIONS

#### **DATA ANALYSIS**

Data analysis is done on the questionnaire collected from the employees of Seapol in Tuticorin.

#### 1.24 TYPE OF CARGO MOSTLY HANDLED BY SEAPOL

The type of cargo mainly handled by Seapol is mainly coal, fertilizers, dolomite and gypsum also other perishable goods. Type of cargo mostly handled is important to study because some kind of cargo cause adverse diseases which will affect effective unloading.

**TABLE NO. 1.4: TYPE OF CARGO MOSTLY HANDLED** 

Type of cargo	No. of Respondents	Percentage
Hazardous	24	80
Normal	3	10
Perishable	3	10
Total	30	100

Source: primary data

The main type of cargo handled in Seapol is coal, which is found to be a hazardous cargo. The study reveals that 80 percentage of hazardous coal is imported and the rest 20 percentage leads to other type of Cargos.

#### 1.25 DIFFERENT MODES OF LOSS OF CARGO WHEN HANDLING

Loss of cargo takes place at different stage of handling. The researcher has made an attempt to identify the reasons for the loss.

TABLE NO. 1.5: DIFFERENT MODES OF LOSS OF CARGO WHEN HANDLING

Mode of Loss	No. of Respondents	Percentage
While storage	6	20
While transport	18	60
While stevedoring	6	20
Total	30	100

Source: primary data

Majority 60 percentage of losses takes place during transportation, 20 percentage take place while stevedoring and another 20 percentage loss during storage. It is evident from the study that safety measures taken at the time of transport is found to be dissatisfactory.

#### 1.26 EMPLOYEES OPINION ABOUT STORAGE FACILITY PROVIDED BY SEAPOL

Ware housing is the process of storing of goods. An improved ware house management can reduce the losses during storage. Short time storage of goods called interim storage, for coal Operations Company mostly adopt interim storage techniques. Here an attempt is made by the researcher to analyse the standard of storage facility.

TABLE NO. 1.6: EMPLOYEES OPINION ABOUT STORAGE FACILITY

Opinion	No. of Respondents	Percentage
Excellent	6	20
Very Good	12	40
Good	9	30
Poor	3	10
Total	30	100

Source: primary data

The study reveals that majority of the employee's opinion about storage facility as very good. 30 percentage of employees opinion is good and 20 percentage says it as excellent; only 10 percentage states the storage facility as poor. It is proved that the company is following an interim storage technique which is highly beneficial.

#### 1.27 EMPLOYEES OPINION ABOUT DRIVERS USED FOR TRANSPORTATION

Transportation of the goods is an another important operation in stevedoring. As per the information collected transport facility carries a major role on loss of cargo which is caused due to the irresponsibility of drivers. The vehicles used may be own or hired.

#### TABLE NO. 1.7: EMPLOYEES OPINION ABOUT DRIVERS USED FOR TRANSPORTATION

Mode of Transportation	No. of Respondents	Percentage
Own transportation	9	30
Hired vehicles	6	20
Both	15	50
Total	30	100

Source: primary data

It is revealed that 30 percentage of the transportation is done through the own vehicle and 20 percentage says that hired vehicle is used. This shows that the company does not have enough transport facility; hence they rely upon private vehicles for transportation.

#### 1.28 REASONS FOR THE DELAY IN GOODS DELIVERY

Delay in delivering goods on port make many problems, delay may cause losses or any other issues to the company. So, an attempt is made here to understand the problems encountered in delay in goods delivery.

TABLE NO. 1.8: EMPLOYEES OPINION ABOUT DELAY IN GOODS DELIVERY

Reasons for Delay	No. of Respondents	Percentage
Slow running of hired vehicles	18	60
Technical problems	6	20
Problems of ship	6	20
Total	30	100

Source: primary data

The study reveals that majority of the delay is due to the slow running of hired vehicles, 20 percentage of employees says that the delay is due to the technical problems and 20 percentage employee says the problem is due to delay of ship.

#### 1.29 REASONS FOR LOSS OF CARGO

There are various reasons for the loss of cargo. It may by through leakage, or while unloading the goods may be dumped heavily on warf of the trucker or through combustion or any natural factor without the involvement of human being.

**TABLE NO. 1.9: REASONS FOR LOSS OF CARGO** 

Reasons for Losses	No. of Respondents	Percentage
Improper dumping of cargo	18	60
Leakage when transporting	9	30
Combustion	3	10
Total	30	100

Source: primary data

From the above table majority of respondents says that improper dumping of cargo leads to heavy cargo losses, 30 percentage employees says leakage is an another constrains during transportation and 10 percentage of employees says combustion is occurring naturally which accounts for 10 percent only.

#### 1.30 REASONS FOR CARGO WEIGHT LOSS

Cargo weight loss on port is the next problem after the transportation, loss of weight of cargo can be caused by various factors such as drying of water which was sprayed to prevent combustion and air pollution or theft in the port may lead to cargo weight loss.

TABLE NO. 1.10: REASONS FOR CARGO WEIGHT LOSS

Reasons for cargo Weight loss	No. of Respondents	Percentage
Drying of water content	6	20
Leakage when stevedoring	12	40
Improper unloading	12	40
Total	30	100

Source: primary data

From the study 40 percentage of employees states that leakage of cargo while stevedoring create weight loss and improper dumping of load on port are the major problems and 20 percentage of employees states that drying of water content is the reason for weight loss, it can be overcome by irrigating the cargo.

#### 1.31 EMPLOYEES OPINION ABOUT MAJOR TECHNOLOGY USED BY SEAPOL

It is essential to identify the technologies used to reduce losses on stevedoring. Cargo conveyor belt and grabs is used to stevedore coal and fertilizers and cranes were mainly used for loading and unloading of containers.

TABLE NO. 1.11: EMPLOYEES OPINION ABOUT MAJOR TECHNOLOGY USED BY SEAPOL

	Technology	No. of Respondents	Percentage	
	Conveyor belts	9	30	
ľ	Grabs	15	50	
	Crane	6	20	
	Total	30	100	

Source: primary data

It is encapsulated that majority of cargo is unloaded mainly using grabs in stevedoring of cargo, 30 percentage of employees reveals conveyor belt is used in unloading or loading of cargo.

#### 1.32 RELATIONSHIP BETWEEN THE OVERALL LOSS AND TYPE OF CARGO

The company is handling different cargos like coal, Dolomite, Chemicals and fertilizers and gypsum. Here doing Chi square test for checking is there any significant losses between dumping and type of cargo customers is exporting.

TABLE NO. 1.13: RELATIONSHIP BETWEEN THE OVERALL LOSS AND TYPE OF CARGO HANDLED

Factors	coal	Dolomite	Chemical &minerals	Gypsum	Total
During transportation	4	2	1	0	7
During unloading	0	2	1	0	3
During stevedoring	4	5	3	2	14
During storage	5	0	1	0	6
Total	13	9	6	2	30

Source: primary data

#### **HYPOTHESIS**

Ho: There is not significant relationship between operational loss and type of cargo handled

H<sub>1</sub>: There is a significant relationship between operational loss and type of cargo handled

**Degree of freedom** (df) = (r-1)(c-1) = (4-1)(4-1), (3\*3)=9

9 degree of freedom at 5percentage significance

 $E_{11} = \frac{(13*7)}{30=3.03}, E_{12} = \frac{(9*7)}{30=2.1}, E_{13} = \frac{(6*7)}{30=1.4} \quad E_{14} = \frac{(2*7)}{30=0.5}, E_{21} = \frac{(13*3)}{30=1.3} \quad E_{22} = \frac{(9*3)}{30=0.9} \quad E_{23} = \frac{(6*3)}{30=0.6} \quad E_{24} = \frac{(2*3)}{30=0.2}, E_{31} = \frac{(13*14)}{30=0.4}, E_{31} = \frac{(13*4)}{30=0.4}, E_{32} = \frac{(9*5)}{30=1.8} \quad E_{43} = \frac{(6*6)}{30=1.2} \quad E_{44} = \frac{(2*6)}{30=0.4}, E_{41} = \frac{(2*14)}{30=0.4}, E_{42} = \frac{(2*14)}{30=0.4}, E_{43} = \frac{(2*14)}{30=0.4}, E_{44} = \frac{(2*14)}{30=0.4}, E$ 

For df 5percentage significance table value is 16.92

There for table value is greater than calculated value

16.92>14.316

There for Null hypothesis is accepted

Here the table value is greater than the calculated value. So we accept the null hypothesis and there is no significant relationship between significant relationship between operational loss and type of cargo handled

#### 1.33 REASONS FOR FINANCIAL CONSTRAINTS

Finance is also one of the problems involved in stevedoring. Demurrage is the fine paid for delay of unloading which is a liability for the company. Hiring vehicles also create financial constraint to the company.

**TABLE NO. 1.14: REASONS FOR FINANCIAL CONSTRAINS** 

Reasons	No. of Respondents	Percentage
Demurrage	21	70
Hire	9	30
Total	30	100

Source: primary data

Majority of the employees says that demurrage is a major problem faced in stevedoring because on delay in cargo delivery. Hiring other transport vehicle also creates financial constrain to the company. It can be overcome by providing own vehicle or hire a vehicle with cheap cost.

#### 1.34 FINDINGS OF STUDY

- The main type of cargo handled in Seapol is coal, which is found to be a hazardous cargo. The study reveals that 80 percentage of hazardous coal is imported and the rest 20 percentage leads to other type of Cargos.
- Majority 60 percentage of losses takes place during transportation, 20 percentage take place while stevedoring and another 20 percentage loss during storage. It is evident from the study that safety measures taken at the time of transport is found to be dissatisfactory.
- The study reveals that majority of the employee's opinion about storage facility as very good. 30 percentage of employees opinion is good and 20 percentage says it as excellent; only 10 percentage states the storage facility as poor. It is proved that the company is following an interim storage technique which is highly beneficial.
- It is revealed that 30 percentage of the transportation is done through the own vehicle and 20 percentage says that hired vehicle is used. This shows that the company does not have enough transport facility; hence they rely upon private vehicles for transportation.
- The study reveals that majority of the delay is due to the slow running of hired vehicles, 20 percentage of employees says that the delay is due to the technical problems and 20 percentage employee says the problem is due to delay of ship.
- From the above table majority of respondents says that improper dumping of cargo leads to heavy cargo losses, 30 percentage employees says leakage is an another constrains during transportation and 10 percentage of employees says combustion is occurring naturally which accounts for 10 percent only.
- From the study 40 percentage of employees states that leakage of cargo while stevedoring create weight loss and improper dumping of load on port are the major problems and 20 percentage of employees states that drying of water content is the reason for weight loss, it can be overcome by irrigating the cargo.
- It is encapsulated that majority of cargo is unloaded mainly using grabs in stevedoring of cargo, 30 percentage of employees reveals conveyor belt is used in unloading or loading of cargo.
- While studying the relationship between the overall loss and type of cargo there seems to be no significant relationship between significant relationship between operational loss and type of cargo handled
- Majority of the employees says that demurrage is a major problem faced in stevedoring because on delay in cargo delivery. Hiring other transport vehicle
  also creates financial constrain to the company. It can be overcome by providing own vehicle or hire a vehicle with cheap cost.

#### 1.35 SUGGESTIONS

- Around 90 percentage of the cargo is coal so the company should provide various health protective programs like providing masks to reduce respiratory
  problems, and also the company can start a health center inside the port.
- Company must supervise the transportation of goods and vehicles by formulating transport rules and regulation which helps to reduce delay running of cargo. Similarly company have to increase own transport facility system.
- While hiring transportation from outside the company should check the fitness of vehicle.
- Company can better facilitate the interim storage system.
- To reduce the cargo loss on port there must be a supervisor who should control all the activities in the port which will helps to reduce loss of cargo.
- When dumping of cargo in the port, it should be transported or cross docked by company for reducing over dumping on port.
- Company should try for various technologies for stevedoring to increase conveyor belt facility which will helps in preventing over dumping.
- Introducing new technology to avoid delay in loading and unloading will help reduce financial losses like demurrage.

#### 1.36 CONCLUSION

The services provided by the stevedoring businesses are predominantly directed towards the handling of container cargoes. However, this should not obscure the fact that break bulk and special cargoes are still an important component of the total market, and that stevedores are required to be equipped to handle a range of cargo types depending upon the port itself and the predominant types of cargoes handled through that port. Given the extreme changes that have occurred in logistics management concepts and practices during the past several decades, the primary determinant of the shape and form of future logistical requirements will be the nature of demand that will need to be serviced. The port's main focus should be on making available all the services to meet the growing demand of the customers. It can be concluded that stevedoring has got a great opportunity of development in future, so suitable measures should be taken by the company to achieve mastery in the industry.

#### **REFERENCES**

- 1. Dr. Abrahamson D, The evolution of logistics- 2008
- 2. Dr. Bagchi, P. and Mitra S, 2006 Key success factors, performance metrics and globalization issues in the third-party logistics (3PL) industry: a survey of North American service providers.
- 3. Dr. Bøge Sorensen Lars, risks in logistic management, supply chain uncertainty (1997)
- 4. Dr.FrancisCherunilam, 'International trade & export management, Himalaya Publishing house.
- 5. Dr:KonstantinosSelviaridis,Department of Management Science,Lancaster University Management School, and Lancaster,UK) 'International Journal of Logistics Management'
- 6. Foster and Muller (1990) Logistics management Vol- 2
- 7. Foster, T A, (2007) Global trade drives third party logistics providers expansion, Global logistics and supply chain strategies.
- 8. NivedanPrakash, Logistics and shipping, 2003 March

#### WEBSITES

- 9. www.arabianbusiness.com logistics-industry
- 10. www.cscmpmembers.com
- 11. www.eximiin.net
- 12. www.expresscomputeronline.com
- 13. www.GACshippingindia.com
- 14. www.glscs.com
- 15. www.shippingcontainernews.com



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