CHAPTER FIVE
CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

This chapter presents (1) a summary of the study, (2) a summary of the findings, (3) discussion of findings, (4) conclusions, and (5) recommendations for further research.

5.1 SUMMARY OF THE STUDY

5.1.1 Objectives of the Study

The purpose of this study was to find the major causes of damage to imported cargo during marine transportation as well as to investigate the level of understanding and responsibility of the relevant parties to the shipment. The results of this study may give some basic information to the relevant parties such as insurance companies for their further study on loss prevention and recovery action. At the same time, the shipper, the carrier and the consignee may use the findings to improve the standard of transportation and receiving.

5.1.2 Subjects, Materials, and Procedures

The subjects in this study were the consignees. Most of them were factories in Thailand's Industrial Estates who have recently received their cargo in a damaged condition.

A questionnaire was used as the instrument for this study. It was divided into four parts with closed-ended and open-ended questions, asking about background of the consignee, background of the damage found in the recent shipment, behavior of the relevant parties and some comments or ideas to help reduce damage to occur with the imported cargo.

To describe the study in the areas of equipment used, human act and responsibility, the researcher asked the respondents to rank the score ranging from 1 to 5. Then the mean and the standard deviation were calculated, in order to find out the mean value and standard deviation. Meanwhile, the relevant factors such as loading place, period of shipment, etc were coded and interpreted by percentage.

5.2 SUMMARY OF THE FINDINGS

The results of the study can be summarized as follows:

5.2.1 General information

There were 50 respondents of this study who are representatives of 50 consignees in Thailand. Most of them imported cargo for both domestic sale and further export with experience of more than 20 years. Their frequency of import was mostly over 24 shipments per year with the value of 11-100 million baht per year. Meanwhile, their most recent damage occurred around 1-6 months ago.

5.2.2 Background of damage to recent shipment

The majority of the loading ports were from Japan and other East Asian countries. The period of transport was 1-2 weeks and the cargo was sent through CY container. Most of the imported cargo were chemicals and steel products but the packing was mostly in a cardboard cartons. The majority of the damage were dents, scratches, tears and breakages of the cargo, and the quantity of damaged goods was in the region of 0-25%. The import value was mostly between 1 million and 10 million baht and the damage value was mostly between 10,001 and 100,000 baht. The party that caused damage to this recent shipment was reported to be the inland carriers who picked up the cargo from the port.

5.2.3 Attitude towards all parties in marine transportation.

Most of the respondents agreed that their shippers performed their jobs with appropriate loading equipment, workers and responsibility. Meanwhile, the majority of them considered that the equipment of the shipping line and of the port was not appropriate. For the inland carrier, all categories were mostly the same as the shipper. Finally, most of the respondents stated that their unloading equipment, workers and responsibility were highly appropriate when compared with other parties.

5.2.4. Suggestions

According to the last section of the questionnaire, some respondents offered suggestions relating to marine transportation as follows:

1. The shippers should improve the packing manner. One kind of packing may not suit all kinds of cargo. The shippers should choose an appropriate packing to suit each type of cargo.

2. Cooperation between each party should be improved. Counter measures against damage should be applied together with documentary evidence at each stage.

3. Port workers should improve their skills in using the loading and unloading equipment. Moreover, rough-and-ready operation that tends to cause damage or accident should be avoided.

5.3 DISCUSSION OF THE FINDINGS

5.3.1 Cause of Damage: Party at fault

First, this study shows that damage was mostly caused by inland carriers who picked up the cargo from port, accounting for 28% of the damage. The first reason was due to CY terms of carriage as the inland carriers have to devan the cargo at port by themselves. In other cases, they are responsible for transporting the container to the consignee's factory for devanning. In both cases, the inland carrier is the only party who has to be responsible for the damage. For CFS terms of carriage, it is suggested that this was partly due to a lack of receiving evidence. Generally, when the cargo was kept at the port's warehouse, the port officer will issue "Survey Note" in the case that he finds severe damage to the cargo or its package. For minor damage, the inland carriers may have a difficulty in asking the port officer to issue such a report as evidence. When the respondents (as consignees) received the cargo, they had to judge that the inland carrier was the party at fault due to lack of evidence.

Secondly, port was reported as a party at fault at 26%. Damage caused at the port mostly occurred to CFS container when the cargo was devanned by port workers and kept at the port's warehouse. This was considered a major risk for CFS terms of carriage.

The other main cause of damage was unknown. Some cases were due to lack of evidence. Meanwhile, natural disasters were the main reason that the respondents indentified as cause of damage when they could not find the party at fault exactly. For rusty steel products, it was quite impossible to determine the responsible party. Rust may have occurred when the cargo had contacted with rain or moisture in the air. Another point is sweat condensation. It is noted that the period of collecting the data was from December to January. At that time, the temperature at loading port such as Japan and other East Asian countries was around 0-15 degrees Celsius whereby Thailand's temperature was around 25-35 degrees Celsius, so droplets of water appeared on the cargo or container's panels and damaged the cargo. Therefore, it is suggested that natural disasters were also another cause of damage in this study.

5.3.2 Other factors: Loading port, period of shipment, term of carriage and packing manner

Chinda Kingarounchai (personal communication, October 18, 2007) stated that the shipment from Japan generally has appropriate packing manner and sustains less damage. Nevertheless, the result of this study shows that the majority of loading ports which had damage (68%) were from Japan. However, to find out which companies had experienced damage to their cargo recently, the researcher contacted Thai Adjusting Co., Ltd., the local claims settling agent for 18 leading marine insurance companies located in Japan, China, Taiwan, Korea, etc. for the information. Therefore, our purposive sampling may have some correlation with the insurance companies as most of the shippers were in the same countries of the insurer. Therefore, the majority of loading ports were from Japan and other East Asian countries. Some slight opportunity, the shippers were only the trading company and they bought the cargo from another country and sent it directly to Thailand. Meanwhile, the frequency on period of shipment did not present any remarkable relation with damage. Long period of shipment was only 12% but the majority of damage (54%) was found from the period of 1-2 weeks. In order to investigate the exact relation of such loading ports, period of shipment and the extent of damage, additional correlational research should be carried out for further study.

Contrary to the interview (Chinda Kingarounchai, personal communication, October 18, 2007) and previous study (Niyada, 1986) who claimed that containers should help reduce damage to the cargo, the result shows that damage still occurred although the cargo was sent by container. Most of the damage (80%) was from containerized shipments and the remaining 20% was from general cargo without container. None of the damage was from bulk carrier. Nevertheless, according to the respondents, we learnt that cargo such as electronic parts which was sent through the container needs more extra care as it was more sensitive to shock or vibration than non-containerized cargo like steel products and other bulk cargo. Therefore, though damage happened to only the package, not the contents inside, the consignees had to reject all the cargo in that package as the damage might affect the quality of the electronic parts when they were assembled with other parts. The consignee could not guarantee the quality of such electronic products in the long run. Compared with bulk cargo such as fertilizer and agricultural products with no packing, the consignee may accept the slight damage that normally occurs to their cargo, so they never claim against the insurance company.

5.3.3 Attitudes toward relevant parties

Results from this study support most of the previous studies. The score of 3.68-4.30 shows that equipment of all relevant parties was appropriate. Though the equipment is appropriate, damage to the cargo tends to be caused by human act (3.22 of port and 3.28 of shipping line) as well as lack of responsibility (3.38 of port).

The stage before transportation: packing and stowage manner, man power and responsibility of the shipper are considered to be appropriate (3.70-3.90). Generally, this might result from the fact that the consignees had selected the appropriate supplier. If the shipper has trouble with equipment, staff and responsibility, the consignee may refuse to accept the cargo from that company. So, scores of the inland forwarders are also the same reason (3.82, 3.50 and 3.90) because the consignees hired their inland forwarder directly.

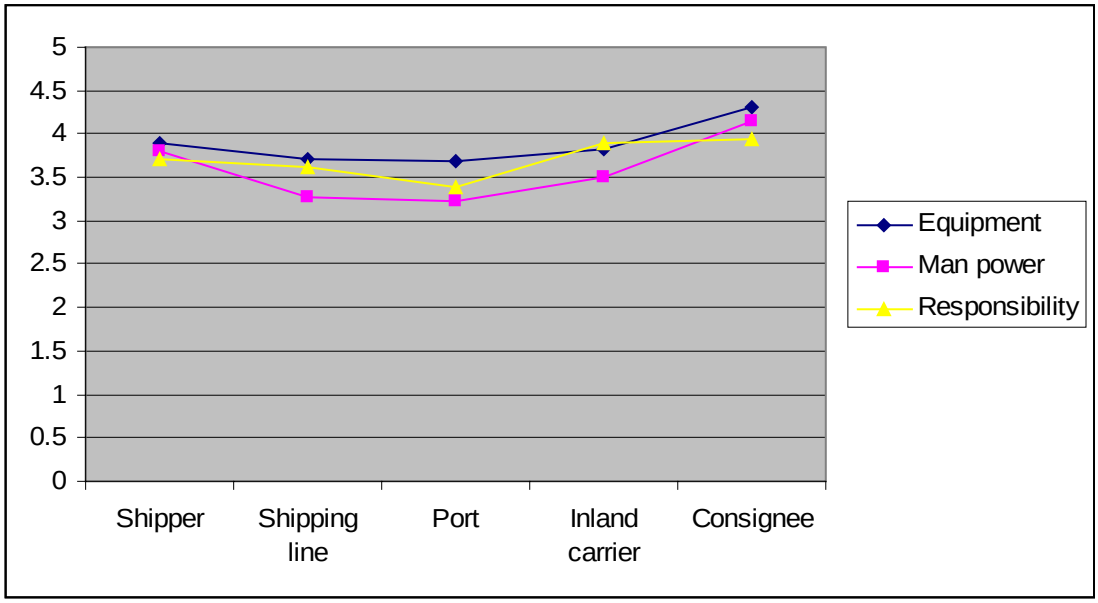

Fig.5: Mean score of each party concerning the marine transportation based on equipment, manpower and responsibility.

Meanwhile, the carrier and port were considered to have appropriate equipment (3.72 and 3.68) but the performance of their staff was considered poor (3.28 and 3.22 points). This result supports the findings of Niyada Chunhawong (นิยะดา ชุณหวงศ์, 2529), Anya Kuntavit (อัญญา ขันธวิทย์, 2530) and Jeeranun Angkasuthipong (จีรนันท์ อังคสุทธิพงษ์, 2550) that shipping line and port had low quality of manpower and responsibility. Anyhow, the consignees do not have much choice of carrier and port to choose from one route. Moreover, it is almost impossible for the consignee to control the stevedores who perform the duties of landing and unloading because they are hired through the carrier's subcontractor and port's workers. Port's operation is the worst in all aspects: equipment, performance and responsibility. This might come from the fact that the port usually uses outsourced workers for handling operation.

From Fig.5, the interesting point is that the consignees' equipment and the performance and the knowledge of their staff for receiving the cargo were perceived as very efficient (4.30 and 4.14) but the staff's responsibility was at the same level of the inland carrier (3.90). So, this means that the consignees have to control their staff first and provide counter measures for staff who lack responsibility.

5.4 CONCLUSIONS

The following conclusions are drawn from the above discussion.

5.4.1 To avoid damage, the transportation equipment should be inspected prior to use. Moreover, the relevant parties must apply the appropriate equipment for each work. For the human act, all operators should realize that quality of work is more important than quantity of work. In addition, warning signs should be used to help reduce damage on this point.

5.4.2 The representative of the consignees, or at least their customs clearance agent, should present at the time of unloading/discharging work to supervise the operation. If any accident happens, they can solve it immediately.

5.4.3 Claims against the party at fault is quite difficult. The consignees have to carefully collect all relevant documents. However, sometimes the relevant parties refuse to give such documents to the consignee. Therefore, cargo receipt should be used at all stages of receiving. When there is any damage, the remark on the receipt will help the consignee to find out who the party at fault is. Moreover, damage reports could be additionally issued in order to help the consignee to describe the accident or the damage to the cargo with full detail.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the findings and conclusions of this study, the following recommendations are made for future research.

5.5.1 Due to time limitations, the questionnaires were distributed to only 50 respondents. This is considered a small sample size. It is recommended that further research be conducted with a more appropriate sample size.

5.5.2 This is only a preliminary study that was interpreted by descriptive statistics. Therefore, in the future, if anyone is interested in this topic, he/she may focus on a more detailed study by using more sophisticated statistics such as Pearson’s Correlation or Exploratory Factor Analysis to determine relationships between relevant factors and nature and extent of damage.