



Executive Summary

Office of the National Economic and Social Development Board (NESDB), a governmental unit responsible for developing database and research on Logistics Cost of Thailand, initiates a study on “Upgrading Competitiveness of Thailand’s Logistics: Phase 2”, with an objective to collect the primary data of Administrative Cost of Logistic of Thai companies in order to better estimate the Administrative Cost of Logistic of Thailand.

In this study, we adopt “structured questionnaire” to collect the Administrative Cost of Logistic from Thailand’s main industries. We collected a total of 1,097 samples which follows the survey criteria at a 95% of confidence level. The samples are divided into 3 group, 514 small-sized companies (46.9%), 352 medium-sized companies (32.0%), and 231 large-sized companies (21.1%).

After collecting the survey, we calculate and compare the Administrative Cost of Logistic using three methods; a) Direct method, b) Indirect method and c) Employee method. The NESDB has decided to employ the Direct method to estimate Thailand’s Administrative Cost of Logistic because it is a true summation of administrative cost of logistic of each involved departments. The estimations from the Indirect method and the Employee method are used to recheck and verify the accuracy of data only.

In determining the average of Administrative Cost of Logistic, we test different methods, such as Arithmetic Mean, Geometric Mean and Median, in identifying a suitable average method. NESDB has agreed to employ Geometric Mean in determining the average of Administrative Cost of Logistics. This is because, according to the international standard of statistic calculation, Geometric Mean is the most appropriate method for non-normal distributed data.

Table A: Estimation of Logistics' Administrative Cost
using Geometric Mean and Direct Method calculation by company size

| Size | Population Size | Estimated Logistics' Administrative Cost (Mil Baht) |
|--------|---|---|
| Small | 61,347 | 76,537.13 |
| Medium | 3,405 | 12,866.11 |
| High | 1,926 | 25,181.38 |
| Total | | 114,584.61 |
| | (Administrative cost of 114,585 Mil Baht equals to 1.3% of GDP'07 or 7.9% of Total transportation, warehouse management and inventory management cost of Logistics) | |

As a result, by using direct method and Geometric Mean applied to various company sizes, Thailand's Administrative Cost of Logistics is estimated at 114,585 million baht or equals to 1.3% of Thailand's Gross Domestic Product 2007 (GDP'07) and equals to 7.9% of Total transportation, warehouse management and inventory management cost of Logistics (1,458,000 million baht).

In conclusion, there are three significant issues that should be considered for future development of Thailand Logistics

- 1) In the future calculation of Thailand's Administrative Cost of Logistics, NESDB or involved party should reduce the estimation percentage of Administrative Cost to Total transportation, warehouse management and inventory management cost from 10%, in which referred from The United State of America's CASS Method (1990 – 1999)², to 8%. The new figure is a better reflection of the logistic picture of Thailand and is the result of the field study from this project.

² The United States of America has reduced the logistic administrative cost calculation from 10% to 4% since 2000 because most of the companies in the country has adopted information technology to help managing logistic activities more effectively

- 2) Thailand's strategy in reducing Administrative Cost of Logistics should focus on developing computer and/or information technology system to replace labor. This is because the labor cost is the main cost component of Administrative Cost, contributing to more than 50% of Logistics' Administrative Cost. In addition, Thai companies should focus on warehouse and procurement process improvement as over 55% of Logistics' Administrative Cost has occurred in these two departments. Furthermore, companies should focus on educating their employees on the importance of logistics' administrative cost reduction and effective logistic management process in both company level and supply chain level. Should private sector be able to reduce Logistics Administrative Cost for 1% p.a. of current NESDB's estimated Logistics Administrative Cost of 1,458,000 million baht, Thailand's Administrative Cost of Logistics will be reduced by 15,000 million baht per year.

- 3) NESDB should conduct a survey on Thailand's Logistic Administrative Cost every 3-5 years, so that the figure is up-to-date and reflect the rapid change in technology. In addition, NESDB should increase the sample size, especially companies in medium-sized and large-sized. The increase in sample size will help the data to be more normal distributed and represent Thai Companies better.