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The Impact of Sea Toll Program on Logistic Availability in Disadvantaged, Isolated, Outermost and Border Regions (T3p) in Indonesia

Mauritz H. M. Sibarani^{1*}, Vidya Selasdini², Yosafat Anggiat Siregar³

^{1),2),3)} Sekolah Tinggi Ilmu Pelayaran Jakarta, Indonesia

*Corresponding Author: mauritz.halomoan.sibarani.1968@gmail.com

Abstract: Sea Toll is a concept of marine logistics transportation that aims to connect sea ports in the archipelago. Sea ports that are interconnected will be able to create smooth logistics transportation to isolated regions of the country. The government created a Sea Toll program to connect all islands in Indonesia and connectivity to Disadvantaged, Isolated, Outermost and Border Regions (T3P) In Indonesia to reduce price disparities in the eastern and western parts of Indonesia. This program has been running for almost five years, and has recorded achievements in the form of creating new connectivity in the Disadvantaged, Isolated, Outermost And Border Regions (T3P) as evidenced by the increasing number of ports of call. In addition, the distribution of logistics has increased, especially for basic necessities and essential goods, which is greater than in the previous period, as well as decreasing price disparities in several regions. This research is a type of research with quantitative methods. Data was collected by using a questionnaire distributed to 73 respondents that is employees of the Directorate of Sea Traffic and Transportation, employees of State-Owned Enterprises (BUMN) and private employees who cooperate in the implementation of the Sea Toll Program with a total of 20 statements. In looking for the results of calculations and data analysis, the author uses the SPSS version 26 program.

Keyword: Sea Toll, Logistic Availability, Disadvantaged, Isolated, Outermost and Border Regions (T3P) In Indonesia

INTRODUCTION

Indonesia has a water area larger than the mainland, large waters spread from Sabang to Merauke, is a challenge for the nation to be able to provide equitable welfare for all Indonesian citizens, even though they are domiciled in the Disadvantaged, Isolated, Outermost And Border Regions (T3P) In Indonesia. Therefore, sea transportation is a very important sub-sector to connect the area with other areas so that the movement of the distribution of goods and the mobility of people can be properly facilitated, so that isolated

areas are not left behind in the efforts of the Indonesian government from the village, from the periphery, and from the border.

The government created a Sea Toll Program to connect all islands in Indonesia and connectivity in the Disadvantaged, Isolated, Outermost And Border Regions (T3P) to reduce price disparities in eastern and western Indonesia. The implementation of the Sea Highway Program, from a managerial perspective, consists of two concepts in a single shipping system, the big concept and the small concept. The big concept is that the Sea Toll is a connectivity in the form of a ship route network that connects ports to support the movement of people and goods for national and international transportation. The small concept is that the Sea Toll is a subsidy for the public service obligation of transporting goods at sea in an orderly and scheduled manner for the availability of basic goods and important goods so as to reduce price disparities of basic goods and important goods.

The facts show that there are several problems faced in the development of the national logistics system, including the unbalanced supply-demand of goods, the unbalanced trade in goods for the West-Eastern region of Indonesia, not yet optimal performance of infrastructure supporting logistics activities (multimodal connectivity), and collaborations between shipper-consignee have not been impactive. This has resulted in an inimpactive and inefficient logistics system, one indication of which is that the national logistics costs are still high. Sea toll is the hope of playing a role in connecting isolated regions with production areas as well as modes of transportation for marketing regional superior commodities. Nevertheless, there are still various operational obstacles to the Sea Toll, including the limitations of loading and unloading facilities, the selection of the wrong type of facilities, the limitations of dock facilities, the existence of double handling due to the wrong type of pier, connectivity between routes is not good in the hub and spoke operation scheme, access to ports is limited, lack of stacking fields, ship layover times at a port can be quite long, long routes, uncertainty in labor hours, and non-standard loading and unloading labor rates (TKBM). Based on this, the author tries to raise the issue in a thesis entitled "The Impact Of Sea Toll Program On Logistic Availability In Disadvantaged, Isolated, Outermost And Border Regions (T3P) In Indonesia".

RESEARCH METHOD

Data Description

Sea Toll (X) Presidential Regul

Presidential Regulation Number 27 of 2021 concerning the Implementation of Public Service Obligations for the Transportation of Goods from and To Disadvantaged, Isolated, Outermost, and Border Regions explains that the Sea Highway is the implementation of goods transportation services at sea from ports to other ports by using the mechanism for the implementation of public service obligations for Freight.

Logistic Availability (Y)

Inventory As the main element of working capital, it is an asset that is always in a state of rotation, which is constantly changing (Riyanto, 2001 quoted by Wardana dkk, 2014).

Disadvantaged, Isolated, Outermost And Border Regions (T3P).

Based on Presidential Regulation Number 63 of 2020 concerning the Determination of Disadvantaged Regions for 2020-2024 Article 1 paragraph 1 Disadvantaged Regions are districts whose territories and communities are less developed than other regions on a national scale. In article 2 paragraph 1 an area is designated as a Disadvantaged Region based on the

criteria: Community Economy; Human Resources; Facilities and Infrastructure; Regional Financial Capability; Accessibility; and Regional Characteristics.

Research Time

The author conducts research while doing Real Work Practice or Land Project for 6 months starting from February 2021 to August 2021.

Research Place

The place for conducting the research used by the author is at the Directorate of Traffic and Sea Transportation of the Ministry of Transportation, Medan Merdeka Barat Street No 8, Gambir, Central Jakarta City DKI Jakarta 10110, Indonesia.

Approach Method

In this study, quantitative methods are used as an approach method in solving problems that occur to employees of the Directorate of Sea Traffic and Transportation, employees of State-Owned Enterprises and private employees who cooperate in the implementation of the Sea Toll Program. Quantitative method is a process of finding knowledge that uses data in the form of numbers as a tool to analyze information about what you want to know.

Data Collection Techniques

The data collection technique used in this study consisted of several techniques as follows: Questionnaire; Observation; Literature Review.

Research Subjects

Population is a collection of all observation units that are the object of research in a survey research according to Asra, Abuzar & Prasetyo, Achmad (2015). The population of this research are employees of the Directorate of Sea Traffic and Transportation, employees of State-Owned Enterprises and private employees who cooperate in the implementation of the Sea Toll Program as many as 90 people.

According to Sugiyono (2017), the sample is a sub-group or part of the population consisting of several selected members of the population, in other words part of the population elements. This study used random sampling. So the number of samples is 73 employees of the Directorate of Sea Traffic and Transportation, employees of State-Owned Enterprises and private employees who cooperate in the implementation of the Sea Toll Program with calculations using the Slovin formula.

FINDINGS AND DISCUSSION

Data Analysis

Test of Validity

Test of Validity is used to determine the validity of the questionnaire in collecting data. A statement is declared valid if the value of r_{count} which is the corrected item value has a total correlation (in spss version 26) greater than r_{table} . Df = (N-2). In this validity test, r_{table} is 0,2303.

Table 1. Validity Test Table						
No	Variable	No. Item	Valid Item	Desc.		
1	Sea Toll (X)	10	10	Valid		
2	Logistic Availability (Y)	10	10	Valid		
a	D' 1/ 1					

Source: Primary data processed

Test of Reliability

Test of Reliability was conducted to find out whether the questionnaire showed accuracy, accuracy, or stability in collecting certain symptoms from a group of individuals, even though it was carried out at different times. To be able to test the reliability of the statement items in each variable. Declared reliable if cronbach alpha > 0,60.

Reliability Test

Table 2. Reliability Test					
No	Variable	Cronbach Alpha	Desc.		
1	Tol Laut (X)	0,883	Reliabel		
2	Logistic Availability (Y)	0,759	Reliabel		
Source: Primary data processed					

Test of Normality

Test of Normality is used to test whether the residual value resulting from the regression is normally distributed or not. Value terms sig > α (0,05).

From the tests that have been carried out using SPSS version 26, it is known that the significant value of Sea Toll variable and Logistics Availability variable is 0.200. So that the distribution of the questionnaire is declared normal because the significant value is bigger than 0.05.

Test of Regression

Test of Regression aims to determine the impact or linear correlation between one variable X and one variable Y.

Based on the results of the calculations, it is obtained that a is 18.071 and b is 0.610. The form of a simple linear regression equation is as follows :

 $\hat{\mathbf{Y}} = \mathbf{a} + \mathbf{b}\mathbf{X}$

 $\hat{\mathbf{Y}} = 18,071 + 0,610\mathbf{X}$

From the regression equation, it can be seen that the impact of the Sea Toll on Logistics Availability is unidirectional (positive). This is shown in the regression coefficient or the value of b in the regression equation which shows a positive number of 0.610 which means that for every addition of one unit of the Sea Toll, there will be an increase in Logistics Availability of 0.610 units (if the Sea Toll is higher, the Logistics Availability will also increase will be higher). And the value of the coefficient a (intercept) is 18.071, meaning that if there is a high Sea Toll x = 0, it is estimated that the availability of logistics in the Disadvantaged, Isolated, Outermost, and Border Regions (T3P) is 18.071 units.

Test of Correlation Coefficient

Correlation Coefficient is used to show whether or not there is a strong linear correlation between two variables. Based on statistical calculations and table data from the processing results of the SPSS version 26 program, it is known that the Sea Toll (X) has a strong impact on Logistics Availability (Y). Where it shows an interval of correlation coefficient of 0.862 with a very strong degree of correlation.

Test of Coefficient Determination

The coefficient of determination test is the magnitude of the contribution of the free variable (X) to the bound variable (Y). The higher the coefficient of determination, the higher the ability of the free variable to explain the variation in changes in its bound variable. In addition, test this coefficient of determination is also to find out what percentage of influence the variable X has on the variable Y. By looking at the statistical results or calculations

obtained from the results of processing using SPSS version 26, it can be seen that R Square is 0.743 or 74.3%. This shows the magnitude of the positive influence of the Sea Toll on Logistics Availability of 74.3%, while the remaining 25.7% is the influence of other factors.

Test of Hypothesis t Count

The test of Hypothesis t count is used to partially test the impact on bound variables. Whether the variable has a meaningful influence on the bound variable or not. From the results of data processing with statistics and the SPSS version 26 program, the results were obtained, namely the Sea Toll (X) variable where the t_{count} value was 14.322 and the signification value was 0.000. In this result, it shows its signification value which is less than 5% ($\alpha = 0.05$) and a calculated value of 14.322 > t_{table} of 1.66660. This means that the alternative hypothesis is accepted because there is a positive impact of Sea Tolls on Logistics Availability.



Solution To Problem

This study seeks to obtain an overview of the impact of the Sea Toll on the Availability of Logistics in Disadvantaged, Isolated, Outermost And Border Regions (T3P) In Indonesia. In this study, obtained the following discussion:

The regression of X to Y obtained the value of Y = 18.071 + 0.610X. From the simple linear regression equation, it shows that every one unit increase from the Sea Toll is followed by an increase in Logistics Availability of 0.610 units.

The correlation coefficient of X to Y shows a strong correlation with a value of 0.779. The coefficient of determination of X against Y is obtained by the coefficient of determination of 0.743. The amount of the contribution of the Sea Toll variable to the Availability of Logistics in Disadvantaged, Isolated, Outermost And Border Regions (T3P) is 86.2% while the remaining 13.8% is caused by other factors not analyzed in this study.

In testing the hypothesis, it is known that the p-value (Sig.) is 0.00 <0.05 and the t_{count} value is $14.322 > t_{table}$ 1.66660 so it can be concluded that Ho is rejected, Ha is accepted, which means that there is an impact of the Sea Toll on Logistics Availability in Disadvantaged, Isolated, Outermost And Border Regions (T3P) in Indonesia.

As for solving the problem after analyzing the data above, among others:

a. Increase the number of logistics goods commodities from the western region to the eastern region.

The purpose of the Sea Toll Program is to reduce price disparities. The price disparity occurs because the amount of supply of logistics goods in the western and eastern parts of Indonesia is small. The need to socialize to consignees and shippers to contribute to the Sea Toll program to be able to send logistics goods to eastern Indonesia so that the price of goods can be evenly distributed between western and eastern Indonesia.

b. Providing subsidies for the cost of shipping logistics goods through the Sea Toll program.

With subsidies on the cost of shipping logistics goods from western to eastern Indonesia, the high cost of logistics delivery to Disadvantaged, Isolated, Outermost And Border Regions (T3P) can be reduced.

c. Improve loading and unloading facilities and dock facilities to facilitate the Sea Toll program.

Inadequate loading and unloading facilities and dock facilities can hinder the smooth running of the Sea Toll program in supplying the availability of logistics in Disadvantaged, Isolated, Outermost, And Border Regions (T3P) such as narrow piers, cranes that are still experiencing problems /interferences, etc. With improvements to loading and unloading facilities and dock facilities, the Sea Toll program can facilitate the availability of logistics in Disadvantaged, Isolated, Outermost, And Border Regions (T3P).

d. Improve access to ports to reach in distributing logistics goods.

Inadequate access to ports in distributing logistics goods can hamper the smooth distribution of logistics goods to Disadvantaged, Isolated, Outermost, and Border regions (T3P), such as roads leading to ports that are still damaged. With improvements to access to the pier, it can facilitate the distribution of logistics goods to eastern Indonesia in supplying logistics availability in Disadvantaged, Isolated, Outermost, and Border regions (T3P).

CONCLUSIONS

Based on the results of research and observations of 73 respondents who are employees of the Directorate of Sea Traffic and Transportation, employees of State-Owned Enterprises (BUMN), and private employees who cooperate in the implementation of the Sea Toll Program who answered 10 statements about the Maritime Highway variable (X) and 10 statements about Logistics Availability (Y), it is concluded that the partial test results of the Sea Highway (X) variable are obtained t_{count} 14.322 > t_{table} 1.66660 with a significant level of 0.000 < s0.05, then Ho is rejected and Ha is accepted. So it can be concluded that there is an influence of the Sea Toll on the Availability of Logistics in Disadvantaged, Isolated, Outermost, and Border Regions (T3P) in Indonesia.

REFERENCES

- Al Syahrin, M. N. (2018). Jokowi's Maritime Axis Policy and the Synergy of Indonesia's Maritime Security and Economic Strategy.
- Dr. Capt. Wisnu Handoko, M. M. (2020). SEA TOLL. Jakarta: PT Kompas Media Nusantara.
- Gultom, E. R. (2020). Refunctioning Indonesian Sea Transportation through the Sea Toll for the Economic Development of Eastern Indonesia. Sea Freight Law.
- Indonesia, R. (n.d.). Presidential Regulation No. 106 of 2015 concerning the Implementation of Public Obligations for the Transportation of Goods at Sea.
- Indonesia, R&D). Presidential Regulation No. 27 of 2021 concerning the Implementation of Public Service Obligations for the Transportation of Goods to and from Disadvantaged, Isolated, Outermost, and Border Regions.
- Indonesia, R. (n.d.). Government Regulation No. 20 of 2010 concerning Transportation in Waters, Sea Transportation.
- IIqbal Nur, d. (2020). Optimizing the Marine Toll Program on Decreasing Price Disparities. Marine Transportation Research.

Ministry of Trade. (2013). Development of Indonesian Logistics Performance Indicators.

Sugiyono. (2015). Research Methods Educational Qualitative Approach and R&D.