



Evaluation Of Transport Fare At Ferry Port On Track Waai - Umeputih In Maluku Province, 2020

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ABSTRACT

Waai Ferry Port is a port located in Waai Village, Central Maluku Regency which serves the Waai - Umeputih crossing. In terms of need, greatly affect the level of transportation services, especially in fulfilling public services. However, the prevailing fare are on the Waai route. Umeputih is now the when the track is still a pioneer route, not the that was applied when it became a commercial route. In addition, there is also a change in the Production Unit (SUP) in the type of vehicle class in accordance with Attachment I, Regulation of the Minister of Transportation Number 66 of 2019 concerning the Determination Mechanism and the Calculation Formulation of Ferries Transportation. The aims of this research are as follows: 1) To know the definition and unit system of ferries transportation. 2) Knowing the Fare on the Waai - Umeputih Line in Maluku Province in 2020. 3) Knowing the Fare on the Waai - Umeputih Line in Maluku Province in 2020. The research methodology used is direct field research, interview, literature / documentation and institutional. Then to analyze this based on Regulation of the Minister of Transportation Number 66 of 2019 concerning the Determination Mechanism and the Calculation Formulation of Ferries Transportation. The analysis used is load factor analysis, ship operational cost analysis, unit analysis and revenue analysis. The results of this study are 1) The Unit of Ferries Transportation which consists of the Passenger Transport and the for Vehicle and Their Cargo at the Ferry Port Based on the Applicable Regulations. 2) On the Waai - Umeputih Line in Maluku Province in 2020 is Irrelevant to Current Conditions, Due to Changes in Track Status and Changes in Production Unit (SUP) Units in the Management / Management System at PT. ASDP Indonesia Ferry (Persero) Ambon Branch in 2020. 3) Evaluation of Ferries Transportation on the Waai - Umeputih Route in Maluku Province Changes according to the following provisions: a) If there is an increase in the unit at the new, the regional government of the Regent of Central Maluku can do The Highest Reduction With Differentiation of 20% (Twenty Percent) From The Determined. b)The increasing of a fare nowadays is following Regulation of the Minister of Transportation Number 66 of 2019 concerning the Determination Mechanism and the Calculation Formulation of Ferries Transportation that stated a fare of production nowadays has increasing previous fare.

Keywords : Evaluation, Fare, Ferries, Transportation, Commercial.

1. Introduction

Maluku is a province covering the southern part of the Maluku Islands, Indonesia. Maluku province covers an area of 46,914.03 km² which is divided into 11 cities and regencies. Central Maluku Regency is one of the districts in Maluku province. Central Maluku Regency has 13 districts, one of which is Salahutu sub-district. In Salahutu sub district, it has a Waai crossing port located in Waai village.

The route at the Waai crossing port is the Waai - Umeputih route. The Waai - Umeputih route is a pioneering route that connects crossings between districts in Central Maluku itself. The Waai - Umeputih route is 17 nautical miles and takes 2.5 hours. However, in 2018 this route underwent a change in the status of the track, becoming a commercial route based on the Decree of the Director General of Land Transportation



Number: SK.650 / AP.204 / DRJD / 2018 concerning the Determination of Pioneer Crossings for Fiscal Year 2018, this is due to the Waai - Umeputih has experienced an increase in load factor by 60% (sixty percent) every year, so that the load factor can affect the fare conditions for service users.

$$\text{SUP Available} = \frac{\text{Vehicle Deck Area}}{\dots}$$



Picture 1 Map of The Waai Port Crossing

Fares greatly affect the level of transportation services, especially in fulfilling services to the community. The rate must be able to meet the interests of the business in operating and be able to improve services. The role of the government is urgently needed in terms of setting fares in accordance with the prevailing regulations to align the interests of service users and service providers so that no party feels disadvantaged.

The prevailing fares at the Waai Ferry Port are currently set by the Central Maluku Regent Regulation Number 12 of 2013 concerning Adjustment and Determination of Ferry Transportation Rates Operating in the Central Maluku Regency. From this situation, the prevailing fare on the Waai - Umeputih route is currently the fare when the route is still a pioneer route, not the rate that was applied when it became a commercial route. In addition, there is also a change in the Production Unit (SUP) in the type of vehicle class in accordance with Attachment I, Regulation of the Minister of Transportation Number 66 of 2019 concerning the Mechanism for Determining and Formulating the Calculation of Ferry Transportation Rates.

2. Research Method

The method used in this research is :

a. Primary Data

Primary data is data obtained directly from the source or based on direct observations in the field, in obtaining primary data the author uses the following methods:

1. Observation Method

Conducting direct observations of actual conditions in the field, namely passenger boarding and descending activities and fare payment transactions between service users and service providers as well as between service providers and service providers.



The data obtained are passenger and vehicle productivity data at KMP. Samandar for One Month at the Waai Ferry Port, Maluku Province in 2020.

2. Interview Method

Interviews were conducted to obtain information about the components of Ship Operational Costs. Those who were selected as sources in this study were as follows:

- a. Interviewees I : Ahmad Nazar, Staf Usaha, PT. ASDP Cabang Ambon
- b. Interviewees II : Rifnia Augrah Utami, Staf Teknik, PT. ASDP Cabang Ambon
- c. Interviewees III : Ardan Naufal Dionisio Billah, Staf Keuangan, PT. ASDP Cabang Ambon

b. Secondary Data

Secondary data is data that is obtained in a finished form, has been collected and processed so that it is in the form of publication, in obtaining secondary data the writer uses the following methods:

1) Literature Method

This method is carried out by searching for literature or documentation from various existing sources regarding theories and data related to solving this problem.

2) Institutional Method

Data collected from various related agencies, namely:

- a. PT. ASDP Indonesia Ferry (Persero) Ambon Branch
- b. BPTD Region XXIII Maluku Province

3. Results and Discussion

Existing Condition Analysis

a. Load Factor Analysis Based on Survey Data

1) To find out the load factor for the arrival (unloading) of passengers and vehicles at KMP, Samandar can use the formula:

a) Passenger

$$\begin{aligned}
 LF &= \frac{\text{Used SUP}}{\text{Available SUP}} \times 100\% \\
 &= \frac{1.830}{3.000} \times 100\% \\
 &= 61\%
 \end{aligned}$$

b) Vehicle

$$\begin{aligned}
 LF &= \frac{\text{Used SUP}}{\text{Available SUP}} \times 100\% \\
 &= \frac{4.986}{7.080} \times 100\% \\
 &= 70,43\%
 \end{aligned}$$

2) To determine the load factor for the departure (load) of passengers and vehicles at KMP, Samandar can use the formula:

a) Passenger

$$\begin{aligned}
 LF &= \frac{\text{Used SUP}}{\text{Available SUP}} \times 100\% \\
 &= \frac{1.854}{3.000} \times 100\% \\
 &= 61,8\%
 \end{aligned}$$

b) Vehicle

$$\begin{aligned}
 LF &= \frac{\text{Used SUP}}{\text{Available SUP}} \times 100\% \\
 &= \frac{4.996}{7.080} \times 100\% \\
 &= 70,56\%
 \end{aligned}$$

Table 1 Load Factor Arrival and Departure of KMP Samandar

Ship Name	Load Factor Arrival (unloading)	Load Factor Departure (load)



	Passenger	Vehicle	Passenger	Vehicle
KMP. Samandar	61%	70,43%	61,8%	70,56%

b. Ship Operational Cost Analysis

The calculation of the operational costs of the ship in question is the cost incurred in calculating the ferry transportation rates. The data in the calculation of ship operational costs are as follows:

1) KMP. Samandar Operational Costs

Table 2 Technical Data for BOK KMP. Samandar

NO	Components	Big	Unit
(1)	(2)	(3)	(4)
1	Distance	17	Mile
2	Tonage of Boat Cruises	672	GT
3	Operational Speed	7,5	Knot
4	Main Motor		
	a. Ukuran mesin	550	HP
	b. Jumlah mesin	2	Unit
5	Auxiliary Motor		
	a. Engine Size	87	HP
	b. Number of Machines	2	Unit
6	Fuel Usage Ratio	0,1	Liter/HP/JHour/Unit
7	Lubricant Usage Ratio	0,0033	Liter/HP/Hour
8	The Ratio of The Use of Grease	50	Kg /Month
9	Freshwater Usage Ratio		
	a. For Crew	200	Liter/Person/Day
	b. For Passenger	0,5	Liter/Person/Mile/Trip
10	Services	94	GT/Call
11	Totak Crew	19	People
12	Total Land Employees	8	People
13	Carrying Capacity		
	a. Passenger	200	200 SUP
	b. Vehicle (mixed)	14	705 SUP
14	Days of Operation	330	Hari
15	Transport Frequency		
	Average Frequency/day	1	Trip
	Average Frequency/year	539	Trip
16	Transport Production (SUP x number of trips x distance)		



	a. Production of miles/day	15.385	SUP
	b. Production of miles/year	8.292.515	SUP

2) Analysis of Plan Conditions

Analysis of Ship Operational Costs Based on the Fare Calculation Formulation in Ministerial Regulation Number 66 of 2019.

The operational cost calculation in question is the cost incurred in carrying out ferry transportation, the amount of which is influenced by the current cost component

a. Total Operating Costs Per Year

Total operating costs per year across Waai - Umeputih :

= Direct costs (a) + Indirect costs (b)

= Rp. 4.676.585.177 + Rp. 1.512.038.316

= Rp. 6.188.623.493 per year

b. Cost Per Unit Per Mil

$$= \frac{\text{Total operating costs/year}}{\text{SUP /year}}$$

$$= \frac{\text{Rp.6.188.623.493 ,-}}{905 \text{ SUP} \times \text{trip per year} \times \text{distance}}$$

$$= \frac{\text{Rp.Rp.6.188.623.493 ,-}}{905 \text{ SUP} \times 539 \times 17}$$

$$= \frac{\text{Rp.7.238.449.269 ,-}}{8.292.515 \text{ SUP}}$$

$$= \text{Rp. 746 / SUP}$$

c. Shipping PPH

= 1,2 % of cost per SUP

= 1,2% x Rp. 746,-

= Rp. 9,-

d. Cost of Goods per SUP per miles on *Load Factor* 60%

$$= \frac{\text{load factor } 100 \%}{\text{load factor } 60 \%} \times (\text{cost per SUP} + \text{Shipping PPH})$$

$$= \frac{100 \%}{60 \%} \times (\text{Rp. 746} + \text{Rp. 9})$$

$$= \text{Rp. 1.259,-/mil}$$

3) Income Analysis

To calculate the amount of income, the following calculation formula is used:

$TR = P \times Q$

Information :

TR = Total Revenue

P = Unit Selling Price (applicable rates)

Q = Production Volume (Total Transport Production)

Table 3 Comparative Advantages pertrip

Commentary	Fare Existing	Fare Results Analysis
Income/Trip	Rp.5.455.583	Rp. 12.706.938



Operating Costs	Rp.11.481.676	Rp.11.481.676
Profit	- Rp.6.026.094	Rp. 1.225.261

From the table above, it is obtained by using the prevailing fares that are experiencing losses, so it is necessary to set a new rate in accordance with the results of primary data analysis of productivity. If the analysis result rate is applied, the company will get a profit of Rp 1.225.261 / trip.

Table 4 Comparison of Current Fares with Planned Rates Based on Ministerial Regulation Number 66 of 2019

Category	Regent Regulation Number 12/2013		Calculation Rates	Percentage Increase	
	The Fare Applicable	The Fare Subsidized			
A	PASSENGER				
1	Adult Passengers	Rp.19.000	Rp.15.150	Rp.21.399	11%
2	Child Passengers	Rp.14.000	Rp. 10.700	-	-
3	Baby Passengers	-	-	Rp.2.140	-
B	VEHICLE				
1	Group I	Rp. 15.500	Rp.13.410	Rp47.729	68%
2	Group II	Rp.27.000	Rp.24.300	Rp86.040	69%
3	Group III				
4	Group IV Passenger	Rp 192.700	Rp.176.475	Rp686.822	72%
5	Group IV Item	Rp 192.700	Rp.176.475	Rp711.864	73%
6	Group V Passenger	Rp 318.200	Rp.269.450	Rp1.294.453	75%
7	Group V Item	Rp 318.200	Rp.269.450	Rp1.317.355	76%
8	Group VI Passenger	Rp 464.700	Rp.396.400	Rp2.151.216	78%
9	Group VI Item	Rp 464.700	Rp.396.400	Rp2.208.576	79%
10	Group VII	Rp 901.700	Rp.776.400	Rp2.893.900	69%
11	Group VIII	Rp 1.351.700	Rp.1.176400	Rp4.039.816	67%

If the fare on the Waai - Umeputih route is not adjusted to the Regulation of the Minister of Transportation Number 66 of 2019 concerning the Determination Mechanism and Formulation for the Calculation of Ferry Transportation Rates, PT. ASDP Indonesia Ferry (Persero) will experience a deficit and the public will still be concentrated on a conservative way of thinking that relies only on subsidies and things that are free without thinking about the running of the state administration.

4. Closing Conclusion

After conducting research and looking at the data from the survey results and from the



results of the analysis conducted by the researcher, the existing problems can be concluded as follows:

- 1) Ferry Transportation Fare Unit is the Fare which consists of Passenger Transportation Fares and Vehicle Transportation Rates and Their Contents at the Ferry Port Based on the Applicable
- 2) That the Fare on the Waai - Umeputih Line in Maluku Province in 2020 is Irrelevant to Current Conditions, Due to Changes in Track Status and Changes in Production Unit (SUP) Units in the Management / Management System at PT. ASDP Indonesia Ferry (Persero) Ambon Branch in 2020.
- 3) Evaluation of Fares on the Waai - Umeputih Line in Maluku Province Changed According to the applicable SUP with the following conditions:
 - a. If there is an increase in the fare unit at the new rate, the regional government of the district head of Central Maluku can reduce the highest fare with a differentiation of 20% (twenty percent) from the stipulated rate.
 - b. That the Increase in Current Fares Follows Ministerial Regulation Number 66 of 2019, which states that the current production units have increased from the previous production units.

Suggestion

Based on the above conclusions, suggestions can be given, namely:

- 1) In order to supervise and evaluate the amount of the basic fare set by the Minister every six months based on the Minister of Transportation Regulation Number 66 of 2019 concerning the Determination Mechanism and Formulation for the Calculation of Ferry Transport Rates. Perlu dilakukan sosialisasi kepada pengguna jasa mengenai pemberlakuan tarif yang baru agar tidak ada pihak yang merasa dirugikan antara operator dan pengguna jasa.
- 2) It is necessary to disseminate information to service users regarding the imposition of new fares so that neither party feels disadvantaged between the operator and service users.
- 3) As for avoiding the fare comparison gap between PT. ASDP Indonesia Ferry (Persero) with the ability of service users, a policy of subsidies from the Government of both the Regional and Central Government is needed

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