

## The Improvement of Local Shipping Safety in Makassar

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### Abstract

Traditional Shipping is a traditional business of the people and has its own characteristics to carry out transportation in waters using sailing ships including Pinisi, Motorized Sailing Ships, and/or simple motorized boats of a certain size. Accidents in people's voyages still often occur in the waters of Makassar City. This study aims to analyze the improvement of local shipping safety in Makassar. This research is a qualitative descriptive method using SWOT analysis. The results of this study show 1). Seaworthiness Conditions of Traditional Ships regarding the implementation of procedures, information on weather conditions, seaworthiness conditions were in the very good category 53.3% and good category by 46.7%. 2). safety management and supervision of sea transportation in Makassar City have performed in accordance with applicable regulations and procedures so that the services provided in the excellent category were 50.0%, in the good category at 46.7%, and in the poor category 3.3%. 3). Plans to reduce shipping accidents in Makassar, namely the establishment of the Syandu Program (Syahbandar Education) program and conducting field supervision on 1x vessels are in a good category at 60.0% and in the very good category at 40.0%

**Keywords:** Traditional, Shipping, Safety, Security, Makassar

### 1. Introduction

Maritime safety and security in the shipping, the industry has adopted a number of international regulations issued by the International Maritime Organization (IMO) such as SOLAS, ISM Code, ISPS Code and others. There have even been efforts to increase the reliability of ship systems to reduce accident rates and improve efficiency, but the rate of maritime accidents is still high (Rothblum et al., 2002). The Director-General of Sea Transportation issues regulation No. HK.103/2/8/DJPL-17 dated 18 April 2017 concerning Traditional Passenger Carrier Ship Guidance, in order to ensure the safety of traditional passenger ships and as a condition of eligibility for traditional passenger transport vessels in Indonesian waters (<http://hubla.dephub.go.id/>).

Makassar is the capital of South Sulawesi Province which has 12 islands, among others: Lae-Lae, Kayangan, Gusung Tallang, Samalona, Kodingareng Lompo, Kodingareng Keke, Barrang Lompo, Barrang Caddi, Bonetambung, Lumu Lumu, Langkai and Lanjukang ([www.makassarkota.go.id](http://www.makassarkota.go.id), 2019). To connect these areas, traditional sea transportation modes such as Jolloro, Katinting, Karoro, and Patorani are used to catch fish. However, in practice it is used to transport passengers and goods because of the transportation user does not have other means of transportation to land or return to the island unless using these types of boats. This is not in accordance with the safety and safety standards of sea transportation shipping, even in this area, there

was an accident of the Jolloro ship type namely Arista which sank at the Paotere-Barrang Lompo crossing on June 13, 2018.

## 2. Research Method

This research was conducted from August to December 2019. The research location was in the port of Paotere. This research approach is a qualitative descriptive using SWOT analysis. The SWOT analysis is used to compare the condition of ship construction, machinery and crew members with the factors that determine the criteria for strengthening the performance of public shipping safety services

## 3. Results and Analysis

### The suitability of the condition of the Seaworthy of Traditional Ships in Local Makassar

#### 3.1. Seaworthy Condition of Traditional Ships in Makassar

The basic principle of shipping safety states that the ship that wants to sail must be in seaworthiness. In addition, the ship is fit to receive cargo and transport it and protect the safety of the cargo and crew. This is consistent with employee performance in implementing procedures, information on weather conditions, seaworthy conditions. In line with the results of data analysis that employees have the ability to apply the rules and procedures that have been set by the office in the excellent category 53.3% (16 respondents) and the good category by 46.7% (14 respondents).

Republic of Indonesia Law Number 17 the Year 2008 concerning shipping Chapter IX Carrier Obligations and Responsibilities, Article 40 relating to transport responsibilities contain: 1) water transport companies are responsible for the safety and security of passengers and/or the goods they transport; 2) the water the transport company is responsible for the cargo of the ship according to the type and amount stated in the cargo document and/or the agreed transportation agreement or contract. This is consistent with the results of data analysis that determines and eliminates causes that cause accidents before the accident occurs in the good category 60.0% (18 respondents), the very good category is 36.7% (11 respondents), and the category is less good 3.3% (1 respondent).

The findings based on the Decree of DJPL No.HK.103/2/8/DJPL-17 concerning Traditional Ship Passenger Transport Guidance and findings in the field on the People's Sailing Vessels at the Paotere Port and Bangkoang Tumba Crossing can be seen in Table 1.

**Table 1. Findings**

No.	Description	Finding
1	Ship Condition	Observations made at the port condition of the ship is still good
2	Load conditions	The cargo is still relatively normal
3	Safety Equipment	The average safety equipment is inadequate like Life Jacket does not match the number of passengers and there is no fire extinguisher
4	Crew crewing	The average crew does not have a basic safety certificate (BST)
5	Management Oversight	Need strict supervision related to shipping safety in the city of Makassar

Source: Field observation data, 2019

### 3.2. Safety Management and Supervision of Sea Transportation in Makassar City

The results of data analysis regarding the management of safety and supervision of sea transportation in Makassar City show that; Cooperation of 3 agencies involved in supervision in the very good category was 50.0% (15 respondents), and the good category was 46.7% (14 respondents), and the category was not very good 3.3% (1 respondent).

From the results of the study, it can be seen that the level of the satisfaction of organizational management performance is at the percentage of each category is shown in Table 2.

**Table 2.** Level of Satisfaction of Organizational Management Performance

No.	Range	Frequency	Percentage	Category
1	161 – 168	5	16.7%	Very good
2	153 – 160	16	53.3%	good
3	145 – 152	7	23.3%	Not good
4	137 – 144	0	0%	bad
5	129 – 136	2	6.7%	Very bad
<b>Total</b>		<b>30</b>	<b>100</b>	

Source: Primary Data Processed, 2019

### 3.3. SWOT Analysis

The research was conducted and analyzed by SWOT method. The result as follow:

Internal Factor = Strength – Weakness = Leadership – Management

External Factor = Threat – Opportunity = Supervision – Job Result.

The conclusion from the analysis based on questionnaire taken is:

Internal Factor =  $4,2 - 4,21 = -0,01$  (X axis, horizontal)

External Factor =  $4,8 - 4,4 = 0,4$  (Y axis, vertical)

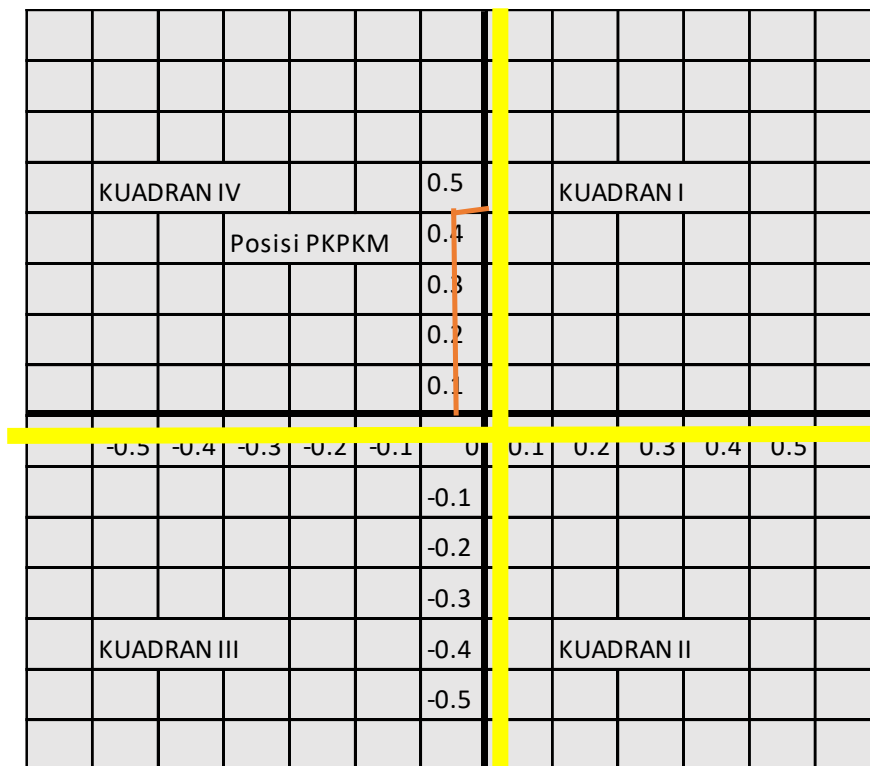


Figure 1.

## **Improving the Safety of Local Sea Transportation in the Makassar City Water Region**

Increasing shipping safety in Indonesia follows international shipping safety. Although in reality, the government imposed Government Regulations on Shipping. Safety oversight is the Directorate of Sea Transportation and in practice are Syahbandar and his staff. Plans to reduce shipping accidents in the Makassar City waters area, namely:

- 1) Improve crew training through free Community Empowerment Training (CET) made by the Human Resources Development Agency (HRDA) of the Ministry of Transportation through the Technical Implementation Unit of the education and training underneath;
- 2) Make safety standards especially if the ship contains passengers;
- 3) Improve the competency of ship supervisors both from the port and transportation services based on the results of data analysis that conducts field supervision on ships once a week in the good category 60.0% (18 respondents), and the very good category by 40.0% (12 respondents);
- 4) Consolidation between the Syahbandar and the transportation service related to the supervision. This is consistent with the results of data analysis that the Department is one of the three best agencies within the scope of customer satisfaction in the excellent category of 50.0% (15 respondents), and a good category of 46.7% (14 respondents), and the category of less good 3.3% (1 respondent);
- 5) Change safety management by adopting the first safety standard;
- 6) Syahdu Program (Syahbandar Educate) to the community, ship owners and Ship Crew. In line with the results of the data analysis that employees have the ability to apply the rules and procedures that have been set by the office in the excellent category 53.3% (16 respondents) and the good category by 46.7% (14 respondents)

## **4. Conclusion**

The Condition of Seaworthiness of Traditional Ships regarding the implementation of procedures, information on weather conditions, seaworthiness conditions are in the very good category 53.3% and the good category by 46.7%. The related department of marine transportation safety and supervision management in the city of Makassar has performed in accordance with applicable regulations and procedures to reduce the level of shipping accidents. Collaboration with 3 agencies involved in supervision so that the services provided in the category of very good 50.0%, and good category amounted to 46.7%, and the category of less good 3.3%. Plans to reduce shipping accidents in Makassar City, namely related agencies, make Syahdu (Syahbandar Educate) Programs to the Public, Ship Owners and Ship Crew related to safety improvement by providing safety understanding and training. This is relevant to conducting field oversight on ships 1x a week in the Good category at 60.0% and the very good category at 40.0%

The conclusion of swot analysis above shows that authority as the organization responsible for the safety of local shipping in the city of Makassar must immediately take a stance to overcome the threat by departing from internal factors namely strenghts and weaknesses, in line with those covered in quadrant IV that syahbandar or the Department of Transportation is weak in monitoring the enforcement of existing regulations , complex government bureaucracy processes and overlapping regulations

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