FEASIBILITY STUDY OF LEMPASING BEACH COASTAL FISHING PORT AS AN ENVIRONMENTALLY FRIENDLY FISHING PORT

 *(ECO FISHING PORT)*

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**ABSTRACT**

The concept of Eco Fishing Port is a fisheries port management concept that not only pays attention to economic and social aspects, but also the ecological aspects in its management. The purpose of this study was to assess the feasibility of Lempasing Beach Coastal Fishing Port in Lampung as an Eco Fishing Port. Data collection was done by interview, observation, and study documentation. The data obtained were analyzed based on the criteria and indicators of Eco Fishing Port management and were subsequently described descriptively qualitative. The results showed that the Lempasing Coast Fishing Port has not yet met the requirements as an Eco Fishing Port. This can be seen from the following indicators: (1) No environmental management documents and no application of them in the management of fishing ports, and also no EIA / UKL-UPL documents, (2) No integrated waste treatment facilities, (3) Not enough public service infrastructure facilities components (trash / drainage / kiosk / canteen / shop / restaurant management), (4) Little attention to the environment in the management of fishing ports (ecological, social, economic, and economic growth of the port), and (5) Little attention to sanitation and hygiene of fish marketing places (construction sites and spatial planning of fish marketing buildings in accordance with the Sanitation Operational Procedure Standard.

Keywords: *Eco Fishing Port, Feasibility, Lempasing Lampung Beach Fishing Port****,*** *Fish Marketing Places.*

**INTRODUCTION**

A fisheries port in its management not only pays attention to economic and social aspects, but ecological aspects are also important to pay attention to in the management of fishing ports. The combination of ecological, economic and social aspects is an approach to the management of an environmentally friendly fishing port (Eco Fishing Port) for the sustainability of its development. Its management is based on the Regulation of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia Number: 08/MEN/2012 concerning Ports of Fisheries, which fall into the group of functional facilities, among others (Hygiene and Waste Treatment) such as Waste Water Treatment Plants and Temporary Disposal Sites.

Lubis (2012) states that (Eco Fishing Port) is a predicate of a port that has implemented systematic efforts, methods, or steps to build and maintain an environmentally friendly port, and utilizes management strategies that has been deemed effective such as by implementing ISO 14001 Eco Management and Audit Scheme (EMAS) environmental management system.

A study conducted by Setiyawan (2017) shows that public perception in the management of an environmentally friendly fishing port (Eco Fishing Port) must pay attention to 5 aspects, among others, (1). EIA / RKL-RPL documents to supplement the environmental management system and its application, (2) Waste management and supporting systems, (3). Components of Public Service Infrastructure Facilities, (4) The attention of the fishing port management to the local ecology, (5). The Condition and Sanitation of the Fish Marketing Place that must be regulated in accordance with the Sanitation Operational Procedure Standard.

Based on this the authors conducted research on "Feasibility Study of the Lempasing Beach Coastal Fishing Port as an Environmentally Friendly Fishing Port (Eco Fishing Port)". This research is important because it is capable of making the implementation of the development and management of fishing ports remain continuous and sustainable, and the environment along with the existing ecosystems remain sustainable, healthy and beautiful and can be used as recommendations in decision making. The purpose of this study was to analyze the feasibility of the Lempasing Beach Coastal Fishing Port as an Environmentally Friendly Fishing Port.

**RESEARCH METHOD**

The research was conducted at the Lempasing Beach Coastal Fishing Port of Bandar Lampung City, Lampung Province from April to August of 2019. Data collection was carried out by interview, observation, and documentation study. Interviews were done with a Fish Stall Trader (1 person), Technical Implementation Unit Officer of the Department of Fisheries and Marine Ports of Fisheries (1 person), Lampung Provincial Environment Agency (1 person), and fishing boat owners who unloaded and loaded fish (3 people) , Forum for the environment (1 person) Regional Leadership Council of the Indonesian Fishermen Association of Lampung Province (1 person). The data obtained were then analyzed based on the criteria and indicators of Eco Fishing Port (Supriyanto, 2013) and subsequently described in a descriptive qualitative manner. The criteria and indicators include: (1) environmental management documents, (2) integrated waste treatment facilities, (3) public service infrastructure facilities, (4) ecological, social, economic and port economic growth aspects, and (5) sanitation and hygiene of the Fish Marketing Place.

**RESULTS AND DISCUSSIONS**

1. **General Condition of the Research Location**

The Lempasing Coastal Fisheries Port is managed by the Technical Implementation Unit (Unit Pelaksana Teknis Dinas) of the Region I Ports of Fisheries from the Department of Maritime Affairs and Fisheries of the Lampung Province, which is on Jalan R.E. Martadinata km 6 Bandar Lampung in the District of Teluk Betung Barat Bandar Lampung City. The location of the port has a coordinate point of 05 ° 29' 15" South and 105 ° 15' 12.5" East with tropical climate conditions. The fishing port is a type C fishing port based on the Decree of the Minister of Maritime Affairs and Fisheries No. 12 Men / 2004 concerning the Improvement of the Status of The Fish Landing Base to be a Coastal Fishing Port, the location of the Coastal Fishing Port is shown in Figure 1.

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 *Figure 1. Research Location, 2019*

 Some fishing gears and fishing vessels operating in Lampung waters were landed at the Lempasing Beach Fishing Port. Bagan and arad are the most widely used fishing gear at 25.38% and 23.86%, respectively, due to the effectiveness and efficiency of the fishing equipments used by fishermen, because the fishing gears are traditional and inexpensive, and also the condition of available fish resources has much more pelagic and demersal fish. The fishing gears are presented in Table 1.

Table1. Number of Fishing Tools

|  |  |  |  |
| --- | --- | --- | --- |
| No | Fishing Tool | Quantity | % |
| 1 | Purse seine | 19 | 7,20 |
| 2 | Bagan | 67 | 25,38 |
| 3 | Rampus (Fishing nets) | 25 | 9,47 |
| 4 | Pancing (Fishing rods) | 24 | 9,10 |
| 5 | Payang (Trawl) | 39 | 14,77 |
| 6 | Arad (Trawl) | 63 | 23,86 |
| 7 | Pelele / Pengangkut (Lifting gear / Carrier) | 27 | 10,22 |
|  | Total  | 264 | 100 |

*Source : Technical Implementation Unit Regional one Fishing Port, 2018*

Most of the ships anchored at Lempasing Beach Fishery Port are fishing vessels weighing <5 gross-tonnage (GT), comprising as much as 51.90% of the ships, and followed by fishing vessels weighing 10-30 GT at 29.54%. This is due to the fishermen using the fishing vessels are traditional and small scale fishermen. The data are presented in Table 2.

Table 2. Number of Ships According to GT in Lempasing Beach Fisheries Port 2018

|  |  |  |  |
| --- | --- | --- | --- |
| No | Vessel GT | Quantity | % |
| 1 | < 5 | 137 | 51,90 |
| 2 | 5-10 | 49 | 18,56 |
| 3 | 10-30 | 78 | 29,54 |
|  | Total | 264 | 100 |

*Source : Technical Implementation Unit Regional One Fishing Port , 2018*

In the years leading up to 2017, can be seen that the number of fish landed the most at the Lempasing Beach Fishery Port was found in 2013 with a total of 1,438,288 kilograms and it is visible that from 2013 to 2017 there was a significant decrease due to the policy by the Minister of Maritime Affairs and Fisheries Republic of Indonesia Number 71 / PERMEN-KP / 2016 concerning Fishing Track and the Placement of Fishing Equipment in the Fisheries Management Region of the Republic of Indonesia.

Table 3. Number of Fish Landed at Lempasing Beach Fishery Port from 2013 to 2017

|  |  |  |
| --- | --- | --- |
| No | Year | Number of Fish Landed (kg) |
| 1 | 2013 | 1.438.288 |
| 2 | 2014 | 937.332 |
| 3 | 2015 | 592.994 |
| 4 | 2016 | 406.883 |
| 5 | 2017 | 470.855 |
|  | Total quantity | 3.846.352 |
|  | Average per year | 7693.270 |

*Source : Technical Implementation Unit Regional One Fishing Port , 2018*

1. **Feasibility as an Eco Fishing Port**

Until now, Lempasing Beach Coastal Fishery Port has not met the requirements for an Eco Fishing Port. The data can be seen in Table 4.

Table 4. Criteria and Indicators of the Lempasing Beach Coastal Fishery Port Management

|  |  |  |
| --- | --- | --- |
| No | Criteria and Indicators | Condition |
| 1 | Environmental Management Documents (UKL-UPL) | None |
| 2 | Integrated Waste Management Facility (IPAL) | None |
| 3 | Public Service Infrastructure Facilities | None |
| 4 | Ecological, social, economic and economic growth aspects of the fishing port | Not fully implemented yet |
| 5 | Sanitation and Hygiene of the Fish Marketing Places. | Fish Marketing Places are hygienic but has not been fully implemented |

*Source: Gathered data, 2019*

The management of Lempasing Beach Coastal Fisheries Port does not yet have documents of environmental management and its application in the operation and management of the fishing port. This is due to the planning and construction being carried out in 1998 on reclaimed land that was carried out in stages which was directly operated by the Regional Government, consequently impacting the environmental management performance indicators of the fishing port.

The management does not yet have an Integrated Waste Treatment Facility due to limited understanding of environmental management. This causes an impact on garbage and sewage in the drainage ditches in the fishing port environment that may have the potential to decrease sea water quality standards and the port pond waters ecosystem.

Inadequate components of public service infrastructure facilities (rubbish, drainage, management of kiosks, canteen, shop, restaurant management). This is due to lack of funding to build public toilets, inadequate waste bin facilities, disorganized trader kiosk building layout, garbage overcapacity and impacting the environment in an unhealthy way.

There is a lack of attention to the environment in the management of the fishing port (ecological, social, economic, and economic growth aspects of the port), due to limited understanding of the management of environmental controls that impacts the fishing port area, making it untidy and shoddy.

Not yet fully paying attention to sanitation and hygiene of the Fish Marketing Places, construction sites and spatial planning of fish marketing buildings in accordance with Sanitation Operational Procedure Standards due to the management of Fish Marketing Places by the third party Mina Jaya Village Unit Cooperatives. The Fish Marketing Services are used by small-scale fishermen and merchant traders who do not yet have a culture of cleanliness, who should pay attention to the Quality and Environmental Control of an environmentally friendly fishing port (Eco Fishing Port) and due to this the Lempasing Beach Coastal Fishing Port has not met the requirements in meeting the indicators of an Eco Fishing Port.

**CONCLUSION**

Lempasing Coast Fishing Port has not yet met the requirements as an Eco Fishing Port. This result can be seen from the following indicators: (1) No environmental management documents, no application of them in the management of fishing ports, and also no EIA / UKL-UPL documents, (2) No integrated waste treatment facilities, (3) Not enough public service infrastructure facilities components (trash / drainage / kiosk / canteen / shop / restaurant management), (4) Little attention to the environment in the management (ecological, social, economic, and economic growth of the port), and (5) Little attention to sanitation and hygiene of fish marketing places (construction sites and spatial planning of fish marketing buildings in accordance with the Sanitation Operational Procedure Standard). The Provincial Government of Lampung should increase funding and budget for the development of basic, functional, and supporting facilities and pay attention to environmental and hygiene controls.

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