Analysis of PPN Karangantu Facility and Infrastructure Needs Planning Based on "Geographical Condition"

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Abstract

Fishing ports have a very important role in marine fisheries, because fishing ports are the center of the economy starting when fish are landed after being caught from the fishing ground until the start of the fish being marketed at the fishing port. PPN Karangantu has a strategic value for the development of the fisheries and marine economy. In addition to supporting fishermen, the existence of PPN Karangantu plays a very important role in the development and development of marine fisheries in the Karangantu area. PPN Karangantu is also the economic center of fish landed to fish to be marketed. The purpose of this research is to analyze the needs for facilities and infrastructure of PPN Karangantu. This research is a type of descriptive research with a qualitative approach. Data collection was carried out through observation and interviews, and information related to the research object was obtained from various sources. The study concluded that the Karangantu PPN waters need to normalize the river channel to support shipping activities and accelerate the development or expansion of the Karangantu PPN land in accordance with what has been planned by the Karangantu PPN and stated in the Karangantu PPN development business plan. It can be concluded that the Karangantu PPN can provide strategic added value for the development of the fisheries and marine economy which is assessed based on geographical conditions supporting the welfare of fishermen.

Keywords: land; normalization; port; infrastructure; facilities.

A. INTRODUCTION

Harbor is something region Which consists from land, water, with limitations certain like place activity government and activity pereconomy that is used as a place to berth ships, berthing ships, raising and lower passenger, and place demolish load equipped with services security maritime and function supporters.

Basically general level development economy something region influenced by progress system transportation specifically transportation sea as bone back trade world in push globalization, because almost 80% trade world done through track sea or street sea. Wrong One infrastructure most important in system transportation sea is harbor as the door gate economy area Which existence very influence development area.

The mode of sea transportation or ferry transportation is important in driving economic activity. Therefore safe, comfortable and economical transportation is the hope for all elements of society. To carry out port activities such as passenger departure, boarding and boarding, loading and unloading or a place for ships to dock, adequate facilities and infrastructure are needed.

PPN Karangantu is one of the ports located on the north coast of Banten, Serang City, Banten Province and has strategic value for the development of the fisheries and marine economy. The existence of PPN Karangantu also plays a role in regional development. PPN Karangantu development has been carried out such as development equity, expansion of employment opportunities and reduced urbanization flows. This will

improve the standard of living and welfare of the people in general and fishermen in particular.

At first the Karangantu VAT functions as a fishing port and a safe place of activity for fishermen and fishing vessels. This initial function then led to the growth of the concentration of fishermen and fishing vessels. Then followed by other related activities such as building and repairing ships, as well as marketing fishery products. Starting from these basic activities, the existence of a fishing port has begun to grow and develop into an infrastructure that functions to support marine and fisheries activities in the utilization and management of fish resources starting from pre-production, production, post-production, processing, marketing of fish, and monitoring of fish resources. fish. The fishing port is a supporting infrastructure that has government functions and business functions that have a multiplier effect on regional economic development in the form of increasing added value, efficiency, productivity of capture fisheries businesses, and employment. Republic of Indonesia (NKRI).

B. RESEARCH METHODS

This research is a type of descriptive research with a qualitative approach. Qualitative research is conducted to provide an explanation of a phenomenon and will later construct a theory related to this phenomenon and this research method is mostly in the form of narrative. The research was conducted at PPN Karangantu, Banten Province. The choice of location was based on the consideration that PPN Karangantu is a port in Banten province which is the entry gate for loading and unloading and fish trading in Banten. Data collection was carried out by means of observation and data obtained directly from several sources related to the object of research which were obtained directly from interviews and field surveys.

C. DISCUSSION

PPN Karangantu is located on Jalan Fish Auction, Banten Village, Kasemen District, Serang City, Banten Province with a geographical location of 06°02' South Latitude and 106°09' East Longitude. The city of Serang was inaugurated by the Banten provincial government on the basis of Law number 32 of 2007, to be precise, it was inaugurated on August 10, 2007. The area of the city of Serang itself is around 266.74 km2 and the city of Serang is one of the eight districts/cities under its control. Banten Provincial Government Serang City also has 6 sub-districts and 67 sub-districts including Cipocok Jaya District, Curug District, Kasemen District, Serang District, Taktakan District and Walantaka District.

The boundaries of the city of Serang are of course in line with other city/district areas, including:

1. In the north it is directly adjacent to the sea of Java Island
2. To the east it is directly adjacent to Serang Regency, which includes Ciruas District, Kragilan District.
3. In the south it is directly adjacent to Cikeusal District, Baros District, Petir District, this area is included in the Serang Regency administration.
4. To the west it is directly adjacent to Pabuaran District, Waringin Kurung District , Kramatwatu District.

The population in Serang City was recorded in 2019 reaching 688,603 people, in 2020 it reached 692,101 people, then in 2021 the population of Serang City was recorded

as 704,618 people. From these data it can be seen that the population growth rate in the city of Serang has increased by around 0.1% - 0.2% each year.

General description of Karangantu VAT

PPN Karangantu is a place of economic activity where the majority of the people around PPN Karangantu work as fishermen. In addition, PPN Karangantu is also a place for marine agro-tourism and provides passenger boat services that wish to travel/tour to islands such as Lima Island, Tunda Island or just around the waters of PPN Karangantu.

Every day fishermen carry out activities at PPN Karangantu such as fishing in the sea to buying and selling fish. PPN Karangantu accommodates vessels up to 30 GT which are usually used by fishermen. The fishermen leave the port at night and moor to the port the next day.

PPN Karangantu provides boat repair facilities and a place for repairing fishing gear so fishermen can maintain and repair their fishing gear. In addition, it also has the role of providing information about effective fishing gear and raw materials for making fishing gear.

Data up to March 2023 in the Karangantu PPN there were 395 units of ships where only 179 units of ships were actively landing fish because most of them were damaged caused by the shallow bottom of the Karangantu river channel. Another factor in the inactivity of the fishing vessel is the fishing boat crew who changed their profession temporarily and the erratic weather conditions caused the fishing boat crew not to go fishing at sea. Even so, the catch of fish at the Karangantu VAT until the first quarter of 2023 was 3,600 tons with a catch of 10 tons per day. The data shows that PPN Karangantu plays a major role as a port for fishermen and in fishing activities which supply most of the needs of fish in Banten Province.

Analysis of the needs of facilities and infrastructure at PPN Karangantu

The definition of a fishing port as stipulated in PERMEN KP number 8 of 2012 is a place consisting of land and surrounding waters with certain boundaries as a place for government activities and fishery business system activities used as a place for fishing boats to dock, anchor and/or unload. load fish equipped with shipping safety facilities and fishery support activities. Based on the PERMEN, PPN Karangantu initially met the following technical and operational criteria:

1. Able to serve fishing boats conducting fishing activities in Indonesian waters and ZEEI;
2. Has mooring facilities for fishing vessels of at least 30 GT;
3. A quay length of at least 150 m, with a pool depth of at least minus 3 m;
4. Able to accommodate fishing vessels of at least 75 units or a total of at least 2,250 GT; and
5. Utilize and manage land of at least 10 ha.
6. There is an activity of loading and unloading fish and marketing of fishery products an average of 30 tons per day;
7. There are fish processing industries and other supporting industries

As time progresses, until 2023, criteria number 3, 4 and 5 above cannot be met because the river channel used as a pond no longer has a depth of at least 3 meters and is experiencing siltation of up to 1 meter. This condition makes the pond unable to accommodate 75 units of vessels and fish loading and unloading activities and fishery

product marketing is less than an average of 10 tons per day. This is an important concern for the sustainability of the Karangantu VAT in the future.

In order to support the function of the fishing port, PPN Karangantu has facilities consisting of:

Table 1. Main Facilities

No.	Facility	Units/Capacity	Procurement Year	Condition
1.	Harbor Area	2.8 Ha	1975	Good
	• Certificate land	28000 m²	1975	Good
	• Reclaimed land	-	-	
	• Industrial Land	240 m²	1975	Good
	• 3rd party operated land	4312 m²	1975	Good
	• Unused land	-	-	
2.	Harbor Pool			
	• Shipping Line		1975	Experiencing Siltation
3.	Dock			
	• Unloading jetty (P = 100 m)	20-30 ships	2000	Good
	• Mooring pier (F = 250 m)	0. boa t		Good
4.	Road			
	• main road	4 km	1998	Good
5.	Drainage	1600 m	1998	Good
6.	Water tunnel	1 package	1998	Good

Table 2. Functional Facilities

No	Facility	Units/Capacity	Procurement Year	Condition
1.	Office			
	• Administrative office	500 m²	1955	Good
	• Workshop office	150 m²	1955	Good
	• Port administration office landscape	500 m²	1955	Good
2.	Hygenic TPI	360 m²	2017	Good
3.	Fish basket	200 Unit		Good
4.	Genset			
	• Genset 250 KVA	1 Unit		Good
	• Genset 150 KVA	1 Unit		Good

No	Facility	Units/Capacity	Procurement Year	Condition
	• Genset 35 KVA	1 Unit		Good
5.	PLN electricity network			
6.	Fuel tank + installation	2 unit		Good
7.	Hydrant	It's at 2 points		Good
8.	Signs			
	• Bulletin board	2 dots + digital bulletin board		Good
	• Signboard	2 unit		Good
	• Notice board	Not recorded yet		
	• Portal	2 Unit		Good
10.	CCTV	20 Unit		Good
11.	LAN network	2 Unit		Good
12.	Telephone	2 Unit		Good
13.	Cold Storage	1 Unit		Good
14.	Net Repair Place	1 Unit		Good
15.	Place of handling and processing of fishery products (quality improvement laboratory)	One area with TPI	2017	Good
16.	Integrated Service Post	144 m²		Good
17.	Partnership	One place in the Integrated Service Post		Good
18.	Agencies in the port area			
	• Port Health Office	-		
	• SDKP	100 m²		Good
	• AL			
	• WATER POL			
	• Harbor Health			
	• Department of Transportation			
	• BNPB			
	• Satwas SDKP			
	• Provincial DKP post			

Table 3. Supporting Facilities

No.	Facility	Units/Capacity	Procurement Year	Condition
1.	Fishermen meeting hall	280 m²		Good
2.	Guest Mess	2 unit	1977	Good
3.	Pos			
	• Gate guard post	1 unit		Good
	• Fish market guard post	1 unit		Good
	• Post guarding a coastal shop	1 unit		Good
	• Integrated service office guard post	1 unit		Good
4.	House			
5.	Place of worship	2 Unit	2003 (at the fish market) and 2019 (at the administration office)	Good
6.	Shops	12 unit	2005	Good
7.	Public toilet	18 unit		Good

The results of the analysis of the needs for infrastructure based on the geographical conditions required at PPN Karangantu:

Normalization of the Karangantu River Channel

Government Regulation No. 38 of 2011 concerning Rivers defines a river as a natural and/or artificial water channel or container in the form of a water channel along with the water in it, starting from the upstream to the estuary, bounded by the banks of the river.

River normalization has been regulated in Regional Regulation Number 1 of 2014 concerning Detailed Spatial Plans and Zoning Regulations and Regional Regulation Number 1 of 2012 concerning Regional Spatial Plans for 2030. Given the distribution of seasonal patterned rain and different geological conditions, the river flow in PPN Karangantu has changed from its initial condition. In addition, due to relatively young geological conditions and a tropical climate with the sun shining all year round, the weathering rate of rocks is very high, as well as erosion and sedimentation activities in rivers. These conditions make the river in Karangantu PPN very specific and vulnerable to various problems. However, the majority of the population in PPN Karangantu is growing and developing so that the land around the river tends to be used for community activities which has decreased due to the narrowing, silting and pollution of the river.

The recommendation for the normalization of the Karangantu river channel requires the active role and authority of the River Basin Office/River Basin Office, hereinafter abbreviated as BBWS/BWS, which is the technical implementation unit of the Ministry of

Public Works and Public Housing which has the task of carrying out the management of water resources in river basins. This is in accordance with Permen no 21 of 2020.

Development/expansion of PPN Karangantu land

The recommendation for the normalization of the Karangantu river channel is a short-term recommendation that can be carried out, because the process of silting the river continuously occurs along with seasonal patterns and geological conditions.

In order to optimize the technical and operational criteria as an archipelago fishing port for the long term, it is necessary to accelerate the development or expansion of land at the Karangantu PPN as planned by the Karangantu PPN and stated in the Karangantu PPN land. So that it can increase the number of ships that land fish, increase the volume and production value of fish catches, modernize PPN Karangantu in increasing the economic growth of the surrounding community in particular.

D. CONCLUSION

The big role of PPN Karangantu in encouraging the economic growth of the fisheries and marine community needs to be increased in the facilities and infrastructure of the fishing port, so that its roles and functions can be carried out optimally.

The conclusion of this research is Karangantu VATit is necessary to normalize the river channel because the waters of the Karangantu PPN are constantly experiencing siltation as an alternative short-term solution. The normalization of the river channel aims to support ship shipping activities.River normalization has been regulated in Regional Regulation Number 1 of 2014 concerning Detailed Spatial Plans and Zoning Regulations and Regional Regulation Number 1 of 2012 concerning 2030 Regional Spatial Plans. As a long term solution it is necessary to carry out acceleration of the development or expansion of the Karangantu PPN land as planned by the Karangantu PPN and stated in the Karangantu PPN development business plan.

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