Fisheries Journal, 15 (2), 699-708 (2025)
http://doi.org/10.29303/jp.v15i2.1419

STUDY ON THE UTILIZATION OF NUSANTARA FISHERY PORT (PPN) KEJAWANAN CIREBON

Studi Pemanfaatan Fasilitas Pelabuhan Perikanan Nusantara (PPN) Kejawanan Cirebon

Devi Fitriani*, Fittrie M. Pratiwy, Asep A. H. Suryana, Ine Maulina

Fisheries Study Program Padjadjaran University

KH Agus Salim Street, Pegagan Village, Palimanan District, Cirebon Regency, West Java

*Corresponding Author: devi21006@mail.unpad.ac.id

(Received February 15th 2025; Accepted April 27th 2025)

ABSTRACT

The Nusantara Fisheries Port (PPN) Kejawanan in Cirebon City is an important infrastructure that supports the fisheries sector in the northern coastal region of West Java. As a distribution center for fish catches and a driver of the capture fisheries economy, this port is regulated by various regulations, including Law Number 45 of 2009 and Regulation of the Minister of Marine Affairs and Fisheries Number 8 of 2012, which requires the existence of basic, functional, and supporting facilities. This study aims to evaluate the level of facility utilization in PPN Kejawanan using a descriptive method by collecting primary data through observation and interviews, as well as secondary data from port managers. The results of the study show that the PPN Kejawanan has fulfilled 19 of the 22 required facilities, or around 86%, with most of the facilities functioning optimally. However, there are several facilities that are not yet available, such as jetty piers and fishermen's guesthouses. These results indicate the need to increase the utilization of facilities to ensure better port services and support the economic growth of the fisheries sector in PPN Kejawanan.

Keywords: Facilities, Port, Utilization, PPN Kejawanan

ABSTRAK

Pelabuhan Perikanan Nusantara (PPN) Kejawanan di Kota Cirebon adalah infrastruktur penting yang mendukung sektor perikanan di wilayah pantai utara Jawa Barat. Sebagai pusat distribusi hasil tangkapan ikan dan pendorong ekonomi perikanan tangkap, pelabuhan ini diatur oleh berbagai regulasi, termasuk Undang-Undang Nomor 45 Tahun 2009 dan Peraturan Menteri Kelautan dan Perikanan Nomor 8 Tahun 2012, yang mensyaratkan adanya fasilitas pokok, fungsional, dan penunjang. Penelitian ini bertujuan untuk mengevaluasi tingkat pemanfaatan fasilitas di PPN Kejawanan menggunakan metode deskriptif dengan pengumpulan data primer melalui observasi dan wawancara, serta data sekunder dari pengelola pelabuhan. Hasil penelitian menunjukkan bahwa PPN Kejawanan telah memenuhi 19 dari 22 fasilitas yang diwajibkan, atau sekitar 86%, dengan sebagian besar fasilitas berfungsi optimal.

Namun, terdapat beberapa fasilitas yang belum tersedia, seperti dermaga jetty dan wisma nelayan. Hasil ini mengindikasikan perlunya peningkatan pemanfaatan fasilitas untuk memastikan pelayanan pelabuhan yang lebih baik dan mendukung pertumbuhan ekonomi sektor perikanan di wilayah PPN Kejawanan.

Kata Kunci: Fasilitas, Pelabuhan, Pemanfaatan, PPN Kejawanan

INTRODUCTION

The Nusantara Fisheries Port (PPN) Kejawanan in Cirebon City is one of the key infrastructures in the development of the fisheries sector in the northern coastal area of West Java. The port is an important point in the transportation network that connects sea and land cargo activities (Kramadibrata, 2002). Fishing ports, in particular, function to support the smooth running of capture fisheries activities. A fishing port is an area that combines land and sea areas to support fishing activities, equipped with various facilities from landing to fish distribution. In addition to being a distribution center for catches, fishing ports also play an important role in driving the economy of the capture fisheries sector (Machdani *et al.*, 2023).

The existence of fishing ports in Indonesia is regulated by Law Number 45 of 2009 concerning Fisheries which was amended to Law Number 31 of 2004, and is technically described in the Regulation of the Minister of Marine Affairs and Fisheries Number 8 of 2012 concerning Fisheries Ports. The policy states that a fishing port is a location that includes land and waters with certain boundaries, where fishing vessels dock, anchor, or load and unload fish, and is equipped with shipping safety facilities and other fisheries support (Law No. 45 of 2009; Regulation of the Minister of Maritime Affairs and Fisheries No. 8 of 2012).

To achieve optimal fishing port operations, support from various adequate facilities is required. The regulation stipulated in Permenkp No. 8 of 2012 states that every fishing port must be equipped with facilities that include basic, supporting, and functional facilities. These facilities are important to ensure the smooth running of the two main functions of the fishing port, namely the government function and the business function (Permenkp No. 8 of 2012).

According to Lubis and Pane (2012), fishing ports must be able to support all activities of the fishing community, including interactions between fishermen, fishing entrepreneurs, and various other stakeholders. As explained by Solihin (2003), fishing ports need to be equipped with facilities that support every stage of operations, from catching, handling fish at the port, to the marketing process. Adequate facilities not only guarantee the quality of the catch to meet export market standards, but also ensure a clean and hygienic environment. The availability of good facilities is very important to support optimal port services; conversely, limited facilities will have a negative impact on the effectiveness of port services.

Based on the background, it is necessary to identify the types of basic facilities, functional facilities, and supporting facilities available at PPN Kejawanan. Thus, this study aims to determine the utilization of facilities and evaluate the level of utilization of facilities at the Nusantara Fisheries Port (PPN) Kejawanan, Cirebon City.

RESEARCH METHODS

This research was conducted in July 2024 at the Nusantara Fisheries Port (PPN) Kejawanan, Cirebon City. The tools and materials needed in this study were a camera that was useful for field documentation, office stationery (ATK) that was useful for recording research results, and a list of questions or questionnaires that were useful as aids when interviews with respondents were conducted. All data collected was processed and compiled descriptively containing information about fishing port facilities.

The method used in this study is a descriptive method, which aims to provide a systematic, actual, and accurate picture based on sample data or field conditions (Rukajat, 2018). The data collected consisted of primary and secondary data. Primary data in the form of basic facilities, functional facilities, and supporting facilities for PPN Kejawanan were obtained directly from the research subjects, as well as the location of basic facilities, functional facilities, and supporting facilities for PPN Kejawanan which were obtained through observation and interviews. Interviews were conducted with PPN Kejawanan officers. Observation is done by directly observing the subject in the field, while interviews aim to obtain information verbally from respondents through direct dialogue (Nazir, 2005); (Koentjoroningrat, 1991).

In addition, this study also uses secondary data obtained from the fishing port manager. The secondary data used includes the profile of port facilities, which are then analyzed to support the research results (Surakhmad, 1985).

Data Analysis

Data analysis was conducted to see the level of facility utilization at PPN Kejawanan. The level of tank facility utilization can be calculated based on the available facilities and compared based on needs or consumption, using the following formula (Zain *et al.*, 2011):

$$P=\frac{Up}{Ut}\times 100\%$$

Description:
P = Facility utilization rate
Up = Size of utilized facilities
Ut = Size of available facilities

According to Mustari and Dahri (2011), the percentage of facility utilization rate is determined using utilization criteria. The following are the criteria for facility utilization rate (Table 1).

Table 1. Utilization Level Criteria

No	Utilization Level	Presentase Tingkat Pemanfaatan Fasilitas (%)
1	Very Good	80,01 - 100%
2	Good	60,01 - 80%
3	Medium	40,01 - 60%
4	Very Poor	0 – 40%

Source: Ratri Sundari, Abdul Rosyid and Dian Ayunita, 2015

RESULT

Geographical Conditions

The Nusantara Fisheries Port Kejawanan is a fishing port located in Lemah Wungkuk Village, Cirebon City, precisely at the position of 06°44'14" LS and 108°34'53" BT (Figure 1). PPN Kejawanan has been equipped with several facilities or infrastructure such as basic facilities, functional facilities, and additional/supporting facilities. Based on its geography, the location of Nusantara Fisheries Port Kejawanan is very strategic because it is the gateway to the eastern part of West Java and easily connects potential marketing areas, namely Bandung and Jakarta, as well as a gateway for the entry and exit of export-import commodity flows that function as a center of trade and industry as well as domestic and foreign tourists to Cirebon (Widagdo, 2015). Nusantara Fisheries Port Kejawanan is one of two Type B PPNs in Java (Ruswandi & Gartika, 2013; Sudirman *et al.*, 2013).

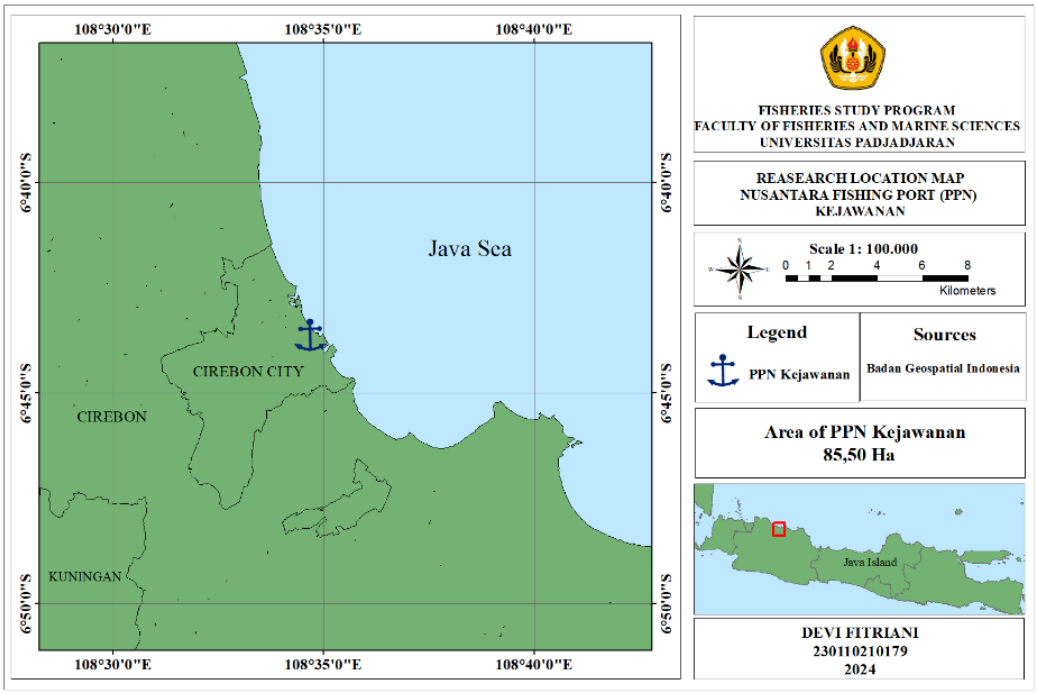

Figure 1. Location of Nusantara Fisheries Port Kejawanan

Utilization Level Analysis

Identification of the facilities available at Nusantara Fisheries Port Kejawanan is needed to see the comparison between the types of facilities available at Nusantara Fisheries Port Kejawanan with Permen KP Number 8 of 2012. The following is a map of the facilities available at Nusantara Fisheries Port Kejawanan (Figure 2).

Figure 2. Map of Nusantara Fisheries Port Kejawanan Facilities

The eligibility status of the facility is assessed based on its utilization rate. A comparison of these facilities can be seen in Table 2.

Table 2. Comparison of Indonesian Fishing Port Facilities

No	Fasilitas Nusantara Fisheries Port Kejawanan	Facility Usage	Facility Capacity	Utilization Rate	Information
	Fasilitas Pokok				
1.	Breakwater	-	770 m^2, 796 m^2	-	Utilized
2.	Shipping Channel	-	6,4 ha	-	Utilized
3.	Harbor Pool	-	5,5 ha	-	Utilized
4.	Jetty	-	-	-	-
4.	Entrance Road	-	2.987,25 m^2	-	Utilized
5.	Drainage	-	3.789 m^2	-	Utilized
6.	Pier	-	2.302 m^2	-	Utilized
7.	Land	114,74 ha	114,74 ha	100 %	Optimal
	Functional Facilities				
1.	Administration Office	300 m^2	300 m^2	100 %	Optimal
2.	Integrated Service Office	226 m^2	226 m^2	100 %	Optimal
3.	Net Repair Place	216 m^2	216 m^2	100 %	Optimal
4.	Pump & Generator House	36 m^2	36 m^2	100 %	Optimal
5.	Generator	105 kVa	105 kVa	100 %	Optimal
6.	Beacon Sign Installation	-	1 unit		Utilized
7.	Workshop Building	69 m^2	69 m^2	100 %	Optimal
8.	Fishery Extension Post	-	-	-	-
9.	Waste Pond (IPAL)	855,6 m^2	855,6	100 %	Optimal
10.	TPI	1.405,22 m^2	1.405,22 m^2	30 %	Not Yet Optimal
11.	Fish Processing Building and Fish Drying Place	-	-	-	-
12.	TPS	104 m^2	104 m^2	100 %	Optimal
13.	Fish Marketing Place	-	-	-	-
14.	Precast Fence	2.423 m^2	2.423 m^2	100 %	Optimal
	Supporting Facilities				
1.	Fishermen's Meeting Hall	360 m^2	360 m^2	100 %	Optimal
2.	Operator's Mess	89 m^2	5 unit	-	Utilized
3.	Fishermen's Guesthouse	-	-	-	-
4.	Net Repair Building	216 m^2	216 m^2	-	Utilized
5.	Guard Post	6 m^2	6 m^2	100 %	Optimal

6.	Mosque	266,4 m^2	266,4 m^2	100 %	Optimal
7.	Official Residence		5 unit	-	Utilized
8.	Fishermen's Shop	192 m^2	8 unit	-	Utilized

Source: Primary Data from Kejawanan Nusantara Fishing Port (2024)

Facilities Completeness Analysis

There are several facilities that are not available at Kejawanan Nusantara Fishing Port. The following is a comparison of the facilities available at Kejawanan Nusantara Fishing Port with the facilities owned by the Fisheries Port regulated in Permen KP Number 8 of 2012 (Table 3).

Table 3. Comparison of Facilities at the Indonesian Fisheries Port

No	Facilities based on the Regulation of the Minister of Marine Affairs and Fisheries of Indonesia Number 08 of 2012	Facilities of Kejawanan Nusantara Fishing Port
A.	**Main Facilities**	
1.	Breakwater	Breakwater
2.	Pier	Pier
3.	Jetty	-
4.	Port Pool	Port Pool
5.	Shipping Channel	Shipping Channel
6.	Complex Road and Drainage	Main Road
7.	Land	Port Land
	Main Facilities of Kejawanan Nusantara Fishing Port	6/7 (six out of seven)
B.	**Functional Facilities**	
1.	Fish Auction Place	Fish Auction Place Hygienic
2.	Navigation and communication such as telephone, internet, radio communication, signs, beacons, and watchtowers	Navigation signs, telephone, internet.
3.	Clean water, fuel installation, ice and electrical installation	Water installation and water reservoir, generator, generator house.
4.	Ship and fishing gear maintenance places such as docks/slipways, workshops, and net repair places	Net repair place, workshop building, equipment warehouse, TPI
5.	Fishery product handling and management places such as transit sheets and quality control laboratories	Quality control laboratory
6.	Offices such as port administration offices, integrated service posts, and banking	Administration office, integrated service office
7.	Transportation such as fish transport equipment	
8.	Cleanliness and wastewater management such as Wastewater Treatment Installations and Waste Disposal Sites	Waste pond
9.	Area security such as area fences	Precast Fence
	Functional Facilities of Kejawanan Nusantara Fishing Port	9/9 (nine out of nine)
C.	**Supporting Facilities**	

1.	Fishermen's Meeting Hall	Hall
2.	Operator's Mess	Operator Mess, Official Residence
3.	Fishermen's Guesthouse	-
4.	Social and Public Facilities	Place of Worship and Toilet
5.	Shops	-
6.	Guard Post	Security Post
	Supporting Facilities of Kejawanan Nusantara Fishing Port	4/6 (four out of six)
	Condition of Kejawan Nusantara Fishing Port Facilities	19/22 (86,36%)

Source: Primary Data from Kejawan Nusantara Fishing Port (2024)

DISCUSSION

Geographical Conditions

PPN Kejawanan is a Type B Fishing Port located in Cirebon with an area of approximately 19.16 ha. Kejawan Nusantara Fishing Port is located in the South of Cirebon Port with a distance of approximately 2.5 km from the public port. The Kejawanan area is a coastal area with a flat and slightly sloping land surface (Juhaeriyah *et al.*, 2018). The strategic geographical conditions make Kejawan Nusantara Fishing Port a destination port. Operational activities at Kejawan Nusantara Fishing Port include landing fish catches, filling supplies, repairing ships, and as a stop for ships taking shelter when large waves occur. The frequency of fishing vessel visits to Kejawan Nusantara Fishing Port in 2019 was 434 vessels with the most fishing gear being bouke ami with 262 visits (Suherman *et al.*, 2020).

Analysis of Utilization Level

Table 2 shows that the facilities at Kejawan Nusantara Fishing Port are divided into 3, namely basic facilities, functional facilities and supporting facilities. Kejawan Nusantara Fishing Port has 6 basic facilities including breakwaters, shipping lanes, harbor pools, entrances, drainage, and piers that are sufficiently utilized, as well as land that is optimally utilized with a utilization rate of 100%, and there is 1 facility that is not available at Kejawan Nusantara Fishing Port, namely the jetty. A jetty is a perpendicular building to the beach that is placed on both sides of the river mouth which functions to hold sediment or sand that moves along the beach into and settles at the river mouth (Teuku, 2024). The unavailability of a jetty at Kejawan Nusantara Fishing Port causes the coastal conditions around the Kejawan Nusantara Fishing Port to experience sedimentation and abrasion (Erlangga *et al.*, 2017).

There are 11 functional facilities at PPN Kejawanan, 9 of which are optimally utilized with a utilization rate of 100% consisting of an administration office, net repair place, pump house, and generator, generator, workshop, waste pond, TPI, TPS, integrated service office, and precast fence. Meanwhile, the installation of beacons is sufficiently utilized with a utilization rate of 30%, and there are 3 functional facilities that are not available at Kejawan Nusantara Fishing Port, namely a fish marketing place, a fisheries extension post, and a fish processing building and a fish drying place. The utilization of the fish auction place has not been optimal because the fishing vessels that land and unload the catch of Kejawan Nusantara Fishing Port have collaborated with PT so that there is no fish auction. Functional facilities are facilities that have the function of increasing the utility value of basic facilities by providing the services needed at the Fishing Port (Sinaga *et al.*, 2013). Functional facilities at the Fishing Port at least include Fish Marketing Places, navigation and communication, clean water, fuel, ice and electricity installations, ship and fishing gear maintenance places, fishery product

handling and processing places, offices, transportation, as well as cleanliness and waste processing (Minister of Maritime Affairs and Fisheries Regulation No. 8 of 2012).

Kejawan Nusantara Fishing Port Kejawanan has 7 supporting facilities, namely a fishermen's meeting hall, guard post, and mosque which are optimally utilized with a utilization rate of 100%, while the operator's mess, net repair building, official residence, and fishermen's shop are sufficiently utilized. There is 1 supporting facility that is not available at Kejawan Nusantara Fishing Port, namely the fishermen's guesthouse, but the limitations of supporting facilities do not interfere with the operational performance of Kejawan Nusantara Fishing Port. Based on Permen KP No. 8 of 2012, the supporting facilities owned by the Fishing Port at least include a fishermen's meeting hall, operator's mess, fishermen's guesthouse, social and public facilities, shops, and guard post.

Analysis of Completeness of Facilities

Table 3 shows a comparison of the facilities available at Kejawan Nusantara Fishing Port with the facilities of the Nusantara Fishing Port regulated in the Regulation of the Minister of Marine Affairs and Fisheries No. 8 of 2012. Based on Table 3, there is the availability of six of the seven main facilities, nine of the nine functional facilities, and 4 of the 6 supporting facilities owned by Kejawan Nusantara Fishing Port. Kejawanan Nusantara Fishing Port has fulfilled 19 of the 22 facilities required by the Regulation of the Minister of Marine Affairs and Fisheries No. 8 of 2012, or 86%. This shows that Kejawan Nusantara Fishing Port has complied with most of the regulations related to fishing port facilities, which support the operation and function of the port. According to Mustari & Dahri (2011), this achievement of 86% is categorized as very good.

Other facilities such as jetty docks, fishermen's guesthouses, and shopping areas are not yet available at Kejawan Nusantara Fishing Port. The unavailability of these facilities can indirectly affect the performance of the Fishing Port. This has resulted in several services not yet available at Kejawan Nusantara Fishing Port. The availability of facilities at the Fishing Port is very important to support optimal service. However, the existence of these facilities is highly dependent on the availability of land, budget, and priority of the needs of the fishing port. In addition, the results of this pairwise comparison are limited only to comparing the condition of existing facilities at the time the study was conducted. Periodic evaluations are important to monitor the development of the fishing port.

Analysis of the level of completeness of fishing port facilities aims to evaluate the suitability between the main, functional, and supporting facilities at the fishing port with existing needs. In addition, this analysis is also useful for determining whether these needs have exceeded or have not reached the limits that should be (Aulia *et al.*, 2017).

CONCLUSION

Based on the results of the study and analysis of the utilization of the facilities of the Nusantara Fisheries Port (PPN) Kejawanan, it can be concluded that PPN Kejawanan has been equipped with various basic, functional, and supporting facilities that support port operations and overall fisheries activities. The level of utilization of the facilities is mostly quite utilized and has reached optimal levels, with several facilities still requiring increased utilization. Based on the analysis of the level of utilization and completeness of the facilities, PPN Kejawanan is able to meet 86.36% of the facility categories stipulated by the Regulation of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia Number 8 of 2012. With further optimization, PPN Kejawanan has great potential to increase the productivity of the fisheries sector and encourage economic growth in the surrounding areas.

ACKNOWLEDGEMENTS

The author would like to thank the supervisors, the head of the PPN Kejawanan port, the PPN Kejawanan employees, and other parties who helped the author in completing this research.

REFERENCES

Aulia, D., Boesono, H., & Wijayanto, D. (2017). Analisis Pengembangan Fasilitas Pelabuhan yang Berwawasan Lengkungan (Ecoport) di Pelabuhan Perikanan Nusantara (PPN) Pengambengan, Jembrana, Bali. *Jurnal Perikanan Tangkap*, *1*(1).

Erlangga, L., Purwanto, & Sugianto, D. L. (2017). Kajian Karakteristik Longshore Current pada Perairan Sekitar Bangunan Jetty di Pantai Kejawanan Cirebon. *Jurnal Oseanografi*, *6*(1), 144–150.

Juhaeriyah, Sulistiyono, S. T., & Alamsyah. (2018). Perkembangan Pelabuhan Perikanan Nusantara Kejawanan dan Kontribusinya terhadap Pemberdayaan Sosial Ekonimi Masyarakat Nelayan Kota Cirebon, 1994-2011. *Indonesian Historical Studies*, *2*(2), 118–135.

Koentjoroningrat. (1991). *Metodologi Penelitian*. Jakarta: C.V. Rajawali.

Kramadibrata, S. (2002). *Perencanaan Pelabuhan*. Jakarta: Ganeca Exact.

Lubis, E., & Pane, A. B. (2012). An model optimum of fish auction in Indonesia fishing ports in according with the characteristics of fisherman. *Journal of Coastal Development*, *15*(3), 282–269.

Machdani, S., Prihantoko, K. E., & Suherman, A. (2023). Tingkat Pemanfaatan Fasilitas Pelabuhan Perikanan (Studi Kasus: Pelabuhan Perikanan Pantai Lempasing). *Jurnal Perikanan Tangkap*, *7*(2), 42–52.

Mustari, Y., & Dahri, K. (2011). *Evaluasi Optimalisasi Pemanfaatan Terminal Angkutan Penumpang Umum (Studi Kasus Terminal Daya di Makassar)*. Makassar

Nazir, M. (2005). *Metode Penelitian*. Jakarta: Ghalia Indonesia.

Republik Indonesia *Undang-Undang Republik Indonesia Nomor 45 Tahun 2009 Tentang Perikanan*. https://peraturan.bpk.go.id/Details/158147/permen-kkp-no-per08men2012-tahun-2012

Republik Indonesia. Peraturan Menteri Kelautan Dan Perikanan Nomor 8 Tahun 2012 Tentang Pelabuhan Perikanan.
https://peraturan.bpk.go.id/Details/38790/uu-no-45-tahun-2009

Rukajat, A. (2018). *Pendekatan penelitian kuantitatif: quantitative research approach*. Yogyakarta: Deepublish.

Ruswandi, A., & Gartika, D. (2013). Strategi Pengembangan Investasi di Sekitar Pelabuhan Perikanan Tipe B di Jawa Barat. *Jurnal Akuatika*, *4*(1), 89–101.

Sinaga, G. V, Rosyid, A., & Wibowo, B. A. (2013). Optimalisasi Tingkat Pemanfaatan Fasilitas Dasar dan Fungsional Pelabuhan Perikanan Samudera Nizam Zachman Jakarta dalam Menunjang Kegiatan Penangkapan Ikan. *Journal of Fisheries Utilization Management and Technology*, *2*(1), 43–55.

Solihin, I. (2003). *Pola Distribusi dan Karakteristik Hintrland dari Hasil Tangkapan Ikan yang Didaratkan di PPN Pelabuhan Ratu*. Bogor: Institut Pertanian Bogor.

Sudirman, N., Semeidi, H., & Ruswahyuni. (2013). Baku Mutu Air Laut untuk Kawasan Pelabuhan dan Indeks Pencemaran Perairan di Pelabuhan Perikanan Nusantara Kejawanan, Cirebon. *Jurnal Saintek Perikanan*, *9*(1), 14–22.

Suherman, A., Boesini, H., Kurohman, F., & Mudzakir. (2020). Kinerja Pelabuhan Perikanan Nusantara Kejawanan Cirebon Jawa Barat. *Marine Fisheries*, *11*(1), 23–38.

Surakhmad, W. (1985). *Pengantar Penelitian Ilmiah – Dasar Metode Teknik*. Bandung: Tarsito.

Teuku, M. M. (2024). *Perencanaan Jetty Green Bay Pluit Jakarta untuk Mengakomodasi Pengembangan Dermaga Apung*. Jakarta: Universitas Pembangunan Jaya. https://eprints.upj.ac.id/id/eprint/7706/

Widagdo, R. (2015). Peran PPN Kejawanan dalam Pemberdayaan Ekonomi Masyarakat Pesisir Kota Cirebon. *Jurnal Penelitian Hukum Dan Ekonomi Syariah*, *3*(1), 44–62.

Zain, J., Saifuddin, & Yani, A. H. (2011). *Pelabuhan Perikanan*. Universitas Riau Press.