



## Empowerment of Carocok Port in Improving the Economy of the Koto XI Tarusan West Sumatra

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### ABSTRACT

*From the establishment of Carocok Port until the era of modernization in fishing from the fishermen, it provides proof that the people of Koto XI Tarusan District get their livelihood from the sea it has an economic impact on their respective families. The research objectives are to explain the socio-economic condition of the Koto XI Tarusan Sub-district, describe Carocok Port, and analyze the empowerment and management of the Carocok Port fisheries economy for the Koto XI Tarusan Sub-district Community. This research uses a qualitative descriptive approach in the form of a case study focusing on a particular unit. The results of the research in this article, namely: First, the community of Koto XI Tarusan Sub-district is located in Pesisir Selatan Regency with livelihoods from the sea. Most people are still categorized as poor. Second, the location of the port is very strategic and fantastic with natural beauty, safe from big waves, and recreational areas for tourists. Third, the empowerment and management of the Carocok Port fisheries economy are experiencing optimal utilization of marine and fisheries resources and continuity.*

**Keywords :** Empowerment Harbor, Fisheries Management, Economic Improvement

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## INTRODUCTION

Indonesia is a world maritime country and the largest country in Southeast Asia. The islands in Indonesia vary in size, namely: Kalimantan (554,110.07 KM<sup>2</sup>), Sumatra(480,793.28 KM<sup>2</sup>), Maluku, and Papua (494,965.85 KM<sup>2</sup>). These large islands are inhabited by people, namely around 4,080 islands (7.26%) only. Tens of thousands of islands provide ample opportunities for people to conduct shipping, fisheries, and inter-island trade activities (Banowati, 2014).

The connection between the islands is through ship transportation and stops at each port. A harbor is a place where ships can dock safely, protected from large waves, wind, and ocean currents. Ports have a great attraction for ships from outside, for example, a bustling market where forest products from the hinterland and food and drink are provided for ship consumption. There is a close correlation between the size of trade volumes (including food supplies) and the frequency of visits and number of ships calling at a port on any coastal island in Indonesia (Lapian, 2017).

Integrated coastal area management involves more than two ecosystems, resources, and utilization (development) activities in an integrated manner to achieve coastal area development in continuity. The integration of coastal area management has three dimensions, namely: sectoral, scientific fields, and ecological linkages. Sectoral integration is in the form of coordination of duties, authorities, and responsibilities between sectors or government agencies. Scientific integration is the management of coastal areas carried out based on an interdisciplinary approach, such as economics, ecology, engineering, sociology, law, and other relevant sciences (Kristiyanti, 2016).

Essentially the geography of the port shows the crossing of cargo between land and marine space. Trade is carried out regularly and the loading and unloading of goods can be carried out in the context of simple technology or can also occur in the context of a system of transportation advances (Adisasmita, 2016).

Ports in Indonesia, including in West Sumatra, also have their port management bodies. The management has a goal to improve the economy of coastal communities. The location of national and international scale ports is also owned by

the province of West Sumatra, such as Carocok Tarusan Fish Service Port, Tiku Port, Teluk Bayur Port, Bungus Water Port, Pariaman Port, and so on. The management of these ports is integrated into the national level, and all ports are managed following policies by the national party, technically and procedurally office services, but for the management of fish catches it is still in the hands of fishermen to continue the continuation of their catches, whether sold or directly taken by each of them to their homes and from the office only specifically to serve from the administrative side needed by those who need it.

Carocok Tarusan Beach Fishing Port is located in Koto XI Tarusan District, Pesisir Selatan Regency. This port was established in 1997 under the name of Fish Landing Base then in 2003 developed into a Coastal Fishing Port with complete facilities. The coastal fishery in Koto XI Tarusan District can accommodate fishery products with a large capacity to serve fishing vessels in inland waters, island waters, and territorial seas. Carocok Port facilities, namely fish landing sites, fish auction sites, refueling facilities for fishermen, ice storage, ship repair sites, administrative offices, and others (Wahyudi, 2022).

Traditional fishermen in Carocok Harbor, Koto XI Tarusan District have competition with fishermen using motorboats in fishing. Fishermen using motorboats are usually categorized as modern fishermen. The modernization of fishing in Carocok Harbor fishermen does not only use motorboats but on a large or small scale, the motorboat is used at the level of fishing ability to exploit the fish (Hoktaviandri 2018, 22). From the establishment of Carocok Port until the era of modernization in fishing from these fishermen, it provides proof that the people of Koto XI Tarusan Subdistrict get their livelihood from the sea it has an economic impact on their respective families.

For the discussion to be more comprehensive on this research, there are three problem formulations, namely: How is the socio-economic condition of Koto XI Tarusan Subdistrict, How is the description of Carocok Harbor, and How is the empowerment and management of the Carocok Harbor fisheries economy for the Koto XI Tarusan Subdistrict Community.

## METHOD

This research uses a descriptive qualitative approach in the form of a case study focusing on a particular unit of various phenomena to describe and summarize various conditions, situations, or phenomena of social reality in society. The use of a qualitative approach is also intended as a research procedure to produce descriptive data, about speech, writing, or observable behavior of an individual, group, community, and/or organization in a certain setting (Jumiati, 2018).

Creswell summarizes the views of experts that the qualitative approach focuses more on descriptive processes and meaning through words or images and inductively; researchers build abstractions, concepts, hypotheses, and theories from details. The researcher is the main instrument physically in contact with people, settings, locations, or institutions to observe or record behavior in its natural setting (Jumiati, 2018).

Data collection methods in this study, namely: First, the primary survey is a direct survey conducted by researchers to the study area with interviews, field observations, and taking photos or documentation. Second, the secondary survey is data collection through agency survey objects to obtain quantitative data or qualitative data in the form of statistics or maps from various offices or agencies such as the Fisheries and Marine Service of Pesisir Selatan Regency, the Central Bureau of Statistics and agencies related to research (Wahyudi, 2022).

The next step of the researcher after doing service in the form of structured education is to collect data. Data processing is done quantitatively through statistical and qualitative tests. For processing qualitative descriptive data, namely:

1. Data reduction, namely selecting the data collected and supporting it through categorizing data that is needed by researchers and not needed.
2. Presentation of data, namely researchers trying to compile relevant data so that it becomes information that can be concluded and has a certain meaning.
3. Data verification, namely the researcher draws conclusions based on the findings and triangulate between observations (Susdarwono, 2022)

## RESULTS AND DISCUSSION

### 1. Socio-Economic Condition of Koto XI Tarusan Sub-district

Pesisir Selatan Regency is part of the province of West Sumatra and geographically borders the Indonesian Ocean with a coastal length of about 234 KM. The center of fishing and activity has been equipped with fish landing port infrastructure in Carocok, Koto XI Tarusan Sub-district ([pesisirselatankab.go.id](http://pesisirselatankab.go.id) n.d). The topography of the west coast of Sumatra at Carocok Harbor is characterized by many headlands and bays. This natural situation is a typical sign of coastal areas and many situations give the meaning of coastal areas. Two headlands located close to each other, usually form a bay, and this bay, is usually suitable as a seaport (natural harbor) (Asnan, 2007) such as Carocok Harbor provides convenience to the Tarusan community in sea fishing.

The community of Tarusan has considerable fisheries potential. The utilization of fisheries potential requires the development of Human Resources potential to be the driving force for fisheries aspects. Quality human resources will also provide the main role in conducting fisheries business to be able to be oriented towards welfare, and national development and compete in increasing production and improving the economy of the community (Leilani *et al*, 2022).

Koto XI Tarusan District is one of the sub-districts in Pesisir Selatan Regency which consists of 23 villages, one of which is Nagari Sungai Pinang. The majority of the main livelihoods of the community in Nagari Sungai Pinang are fishermen, with 158 Fishery Households (RTP) and one active Joint Business Group (KUB) and the rest are inactive groups and some are still in non-fishery group status. KUB is a group formed by fishermen based on the results of deliberations with all members with an agreement to conduct business in the field of capture fisheries to increase the income of fellow members, fairly with a full sense of responsibility. (Leilani *et al*, 2022).

Koto XI Tarusan sub-district has 296 fishermen as of 2018. Traditional fishermen generally have the same characteristics, namely that of all the fishermen who are Informants of this paper, they are 24 years old to 66 years old. Of the 95 ordinary informants; 55 people are elementary school graduates or elementary

school level, 30 people are junior high school graduates or junior high school level, and 10 people are high school graduates or high school level. For the purpose of working as a fisherman, one's educational background is not important.

The fishermen of Carocok Harbor in Koto XI Tarusan District are still classified as traditional, based on the type of fishing gear and the ability of fishing gear, and the distance of fishing from the beach. The traditional fishermen of Carocok Harbor still believe in the values; women should not fish in the sea, should not go to the sea on Friday afternoon, say dirty words when fishing, do not go during storms, point to unknown objects when fishing, are prohibited from committing adultery and are prohibited from being arrogant. Traditionally, they have consumptive values when they earn a lot of money by spending a lot of goods (Hoktaviandri, 2018).

Based on the average income earned by traditional fishermen per day, namely: 64 people have an income of IDR 100,000 to IDR 300,000, 15 people with an income of IDR 400,000 to IDR 600,000, and 16 people have an uncertain income of IDR 50,000 to IDR 400,000. In general, they earn an average profit of IDR 150,000 to IDR 200,000 per day (Hoktaviandri, 2018).

Traditional fishermen in Carocok are categorized as poor. This condition requires a small number of traditional fishermen to look for side or additional jobs to fulfill their family's needs. Based on their side jobs, among others, out of 95 traditional fishermen, only 5 people have gardens and rice fields with coconut, cocoa, and vegetable plants. While other traditional fishermen do not have additional jobs (Hoktaviandri, 2018).

## **2. Description of Carocok Harbor, Koto XI Tarusan District**

Carocok Tarusan coastal fishing port is one of the three fishing ports in West Sumatra. Carocok Tarusan Coastal Fishing Port (CFP) was built in 1997 with the designation of Fish Landing Base (FBL) with an area of 2.19 Ha. In line with the facilities owned by FBL became a Coastal Fishing Port (CFP) and was inaugurated by the Minister of Maritime Affairs and Fisheries in 2003 (Tim Dinas Kelautan dan Perikanan Provinsi Sumatera Barat, 2014).

Carocok Tarusan coastal fishing port is located in Koto XI Tarusan District, Pesisir Selatan Regency, West Sumatra Province, and geographically located at

coordinates 0.59' - 1.17' LS and 100.34' - 100.64' East. The distance of the port location to the sub-district center is 4 km, to the center of Pesisir Selatan Regency is 20 km and to the center of West Sumatra Province (Padang) is 65 km (Tim Dinas Kelautan dan Perikanan Provinsi Sumatera Barat, 2014).

Based on the Regulation of the Governor of West Sumatra Number 65 of 2009 concerning the Organization and Work Procedures of the Technical Implementation Unit of the Maritime and Fisheries Service of West Sumatra Province, the Carocok Beach Fishing Port became a Regional Technical Implementation Unit at the Maritime and Fisheries Service of West Sumatra Province (Tim Dinas Kelautan dan Perikanan Provinsi Sumatera Barat, 2014). Government encouragement to accelerate development in Carocok District Koto XI Tarusan in the fisheries sector has been carried out the construction of fisheries facilities and infrastructures such as the Development of PT Dempo Fisheries Industry, and other facilities such as Fish Landing Center (FLC) and Fish Auction Place (FAP) (Hoktaviandri, 2018).

Carocok Tarusan Beach Fishing Port is a unit led by a head responsible to the head of the agency. Carocok Harbor has the main task of carrying out part of the operational technical activities and/or supporting technical activities of the agency in the field of Coastal Fishery Ports (Tim Dinas Kelautan dan Perikanan Provinsi Sumatera Barat, 2014). Carocok Tarusan Harbor sets its mission, as follows:

- a. Developing fishing port facilities.
- b. Improving the community development of Carocok Tarusan, including increased production, distribution, and marketing of fishery products.
- c. Supervise the fishing business, handling, marketing processing, and quality of fishery products.
- d. Increase diktat/courses for fisheries port officers.
- e. Improve coordination with stakeholders.

Carocok Port is equipped with important facilities to support the operation of the fishery port with basic facilities in the form of land reclaimed from the beach with an area of 2.19 ha and for the port, the site used 1.19 ha. Then the port dock has a length of 100 m with a dockyard area of 2,000 m<sup>2</sup> used for mooring boats/motorboats carrying their fish catch (Tim Dinas Kelautan dan Perikanan

Provinsi Sumatera Barat 2014, 4). On the left and right sides of the harbor, there is a 400 m-long wave barrier. This pile is also used as a place for ships to moor and stop temporarily (Tim Dinas Kelautan dan Perikanan Provinsi Sumatera Barat, 2014).



**Figure 1. The shape of Carocok Port**

Carocok Port also has functional facilities in the form of a port office with an area of 225 m<sup>2</sup> and is equipped with office equipment as a place to carry out daily tasks. Then the supervisor's office is assigned to supervise every ship entering the dock, and at the same time, the officers patrol out of the port to the seaside, to monitor every ship's voyage (Sepriandi, 2019).





**Figure 2. Post Office**

Furthermore, the Fish Auction Place (FAP) has an area of 480 m<sup>2</sup> and is used as a place for fish buying and selling transactions between boat/motorboat owners and fish traders. The condition in 2014, the roof leaked a lot, some building pillars were damaged and many floor tiles were loose due to the earthquake. While in 2019, the roof was fashionably designed. Next to the TPI, there are toilet facilities with an area of 12 m<sup>2</sup> and a Fisheries Equipment Material Shop with an area of 45 m<sup>2</sup> consisting of 3 plots of 5x3 m<sup>2</sup> shops, and a Fish Processing Building with an area of 204 m<sup>2</sup>. The location of this building is in front of the harbor outskirts to make it easier for fishermen to directly sell their catches to consumers.



**Figure 3. Fish Auction Place (FAP)**

Next, the Musholla facility is intended for the public, fishermen, office employees, tourists, and so on. The security room is close to the mushalla and is located right in front of the entrance gate to the harbor (Sepriandi, 2019).



**Figures 4 dan 5. Mushalla and Security Room (Front Gate)**

### **3. Economic Empowerment of Carocok Harbor**

According to Edi, empowerment comes from the word "power". The main idea

of empowerment approaches the concept of power. According to Abdul, community economic empowerment requires active and creative participation. Active and creative participation is stated as participation refers to an active process with the target group being able to influence the direction and implementation of the development project rather than the beneficiary of the project (Fernanto, Amiruddin, and Maulana 2022, 198).

In general, government programs regarding the economic empowerment of coastal communities aim to provide welfare to coastal communities through the development of economic activities, improving the quality of human resources, and strengthening socio-economic institutions with optimal utilization of marine and fisheries resources and continuity (Sumiarti and Yenida, 2015)

*a. Fish Marketing Management*



**Figure 6. Fish Catches of the Fishermen (2014)**

Fish landing activities in Carocok Tarusan coastal fishing harbor are carried out on the dock and buying and selling transactions are carried out in the FAP (Fish Auction Place) building. The dominant fish species in the harbor are Anchovy,

Tongkol, Mackerel, Mackerel, Layang, and other types of fish. These fish come from the catches of Bagan boats and Payang and Gillnet motorboats owned by fishermen of Carocok Tarusan beach fishing harbor and its surroundings. After the sale and purchase transaction between the fish boat owners and fish traders at the FAP building of the fishing port, they then market the fish to the surrounding areas, Padang, Pekanbaru, Bengkulu, and Jambi.

Fish marketing activities are conducted almost every day at Carocok Harbor. When the fishermen arrive at the port with their catches, they are awaited by many potential buyers from collectors, auctioneers, or juragan. After the purchase, the fish will be sold by them to the wider community, from within the region to outside the Pesisir Selatan Regency area, including outside the West Sumatra province.

The Carocok Fishing Port Office of Koto XI Tarusan District is only a facilitator in controlling the place of fish buying and selling transactions, and providing services for people who want to carry out buying and selling activities at the port, and the port also provides tourism access services to tourists to the Mandeh tourist attraction area and not far from the port.

*b. Management of the Trinket Market*

The harbor trinket market has been opened to the public and the Pesisir Selatan Regency part of the main tourist area in tourism coincides with the tourist part of the Mandeh area. The trinket market was opened and the community was allowed to trade on the inside of the harbor to improve the family economy (Sepriandi 2019). They do so with the consideration of earning regular income due to the presence of visitors to the port. Many ship passengers will travel or have just arrived in general needing something for traveling needs or as souvenirs have been provided by street vendors. This is an example of the main attraction of Parepare harbor so that it becomes a place to make a living because there must be passenger ships docked at the dock carrying passengers and requiring the services of street vendors (Asmirah and Sampara 2021, 569).



**Figure 7. Market Condition of Harbor Merchandise**

Source : Empowerment Activities Documentation

c. Impact of the Economic Improvement of Carocok Harbor

Based on the research results from Wahyudi, there are three sub-districts with the highest amount of fisheries production in Pesisir Selatan Regency, namely Koto XI Tarusan District, Sutera District, and Lengayang District. The three sub-districts have the potential to become sub-districts of capture fisheries subsector development from the height of fisheries production and the development of increased and fluctuating production. If there is an increase in the amount of production, it makes a high contribution to the economic progress of the sub-district and the regency's economy, while for the development of fluctuations it is also a high contribution, because although production is not fixed every year, the production results are still the highest than other sub-districts (Wahyudi 2022).

**Table 1. Analysis of the Development of Total Capture Fisheries Production**

No.	district	2013	2014	2015	2016	2017	2018	2019	2020	Notes
1.	Koto XI Tarusan	21,23	23,56	19,42	17,69	21,43	21,54	22,41	19,88	Fluctuation

Source: Data processed by author, 2021

The growth in the amount of fisheries production is not fixed due to several factors including weather or climate factors, seasonal fish factors, and the completeness of the number of fleets and fisheries facilities. If the weather is bad, fishermen cannot catch fish, therefore if fishermen do not go to sea, the amount of

fisheries production automatically decreases, plus there is a seasonal factor of certain types of fish that affect the amount of production, where the catch of fishermen is small if it is not fish season and the catch can be a lot and flooded in the fish season. As for the completeness of capture fisheries facilities and fleets, more details can be seen in the next analysis on capture fisheries fleets and facilities. That is what causes the amount of production in each sub-district in Pesisir Selatan Regency to grow irregularly. Koto XI Tarusan sub-district experienced the growth of capture fisheries in this sub-district in the last 8 years period has increased (Wahyudi, 2022).

**Table 2. Analysis of the Growth Rate of the Capture Fisheries Sector**

No.	District	2013	2014	2015	2016	2017	2018	2019	2020	Average Growth Rate
1.	Koto XI Tarusan	0	0,17	-0,19	-0,14	0,29	0,04	0,13	-0,24	0,01

Source: Data processed by author, 2021

## CONCLUSIONS AND SUGGESTIONS

The people of Koto XI Tarusan Subdistrict are located in Pesisir Selatan Regency. They live around the west coast of Sumatra with livelihoods from fishing in the sea. Most of the community is still categorized as poor with only enough income for daily life. However, they have the potential as a resource to drive the economic progress of their region through the fisheries sector with the utilization of Carocok port. The productivity of fishing work in the sea is great potential in improving the community's economy with great support from the government for the welfare of their respective families.

Carocok Harbor was inaugurated by the government in 2003 as a place for fisheries transactions in the Koto XI Tarusan District. The location of the port is very strategic and fantastic with natural beauty, safe from big waves, and a place of recreation for tourists, because this port is connected to the Mandeh Peak tour in Pesisir Selatan Regency. Carocok Harbor has a mission for the welfare of the surrounding community with complete facilities in the form of facilities and

infrastructure supporting port activities to improve the economy of the Koto XI Tarusan District community.

Empowerment and management of the Carocok Port fisheries economy experience optimal utilization of marine and fisheries resources and continuity. The management of fish markets and knick-knacks markets can provide economic improvement for the people of Koto XI Tarusan Sub-district, especially since the opening of Mandeh peak tourism, Carocok Harbor has experienced an increase in income for their respective families so that they do not only rely on the catch of fish at sea. Although the income from fishing in the sea does not provide economic stability for their families, the presence of tourist sites makes a new income attraction for the people of Koto IX Tarusan District in Pesisir Selatan Regency.

The recommendation for Carocok port is to increase promotion more massively and services for tourists as well as increase fisheries production through contemporary technologies to provide convenience for the community in fishing at sea. While suggestions for further studies are a deeper study of the impact of the creative economy on the community of Koto XI Tarusan District in Pesisir Selatan Regency.

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