

THE POTENTIAL OF CAPTURE FISHERIES IN PANGANDARAN DISTRICT- A REVIEW

Nora Akbarsyah¹, Sheila Zallesa², Aulia Andhikawati³

¹ Department of Fisheries, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran

² Department of Marine, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran

³ Department of Fisheries, Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran

ABSTRACT

The Pangandaran Regency area is one of the capture fisheries centres in West Java Province. According to data displayed by the West Java Province Central Statistics Agency (BPS), in 2019-2020, Pangandaran Regency contributed 3,948 tons of marine fish. This large number is a potential for Pangandaran to continue to advance its fishing fisheries sector. This makes capture fisheries the foundation of the people's economy in Pangandaran Regency. Pangandaran fishermen are counted as small fishermen with vessels <5 GT with fishing gear operated by human power. Things like that cause less optimal utilization of capture fisheries in the waters of Pangandaran Regency. Therefore, Pangandaran Regency has great fishery potential but has yet to be utilized optimally due to the facilities and infrastructure supporting the activity. This research uses research methods from various literature sources and tries to review the potential for capturing fisheries in Pangandaran. The results of the review show that the potential capture fisheries in Pangandaran have excellent potential, with areas and catches still in a sustainable state. Therefore, the Capture Fisheries Business in Pangandaran is a profitable potential. However, the fluctuating number of fisheries is a problem in capture fisheries. Therefore, considerations and regulations on catch restrictions are also essential to study.

Keyword : Fisheries Resources, Small Scale Fisheries, Pangandaran

Background

General Description of Areas and Conditions of Capture Fisheries

Minister of Maritime Affairs and Fisheries Regulation No. 18 of 2014 concerning Fisheries Management Areas (WPP), Pangandaran is included in WPP 573, located in the south of Java Island and directly adjacent to the Indian Ocean. Pangandaran is a coastal area with an enormous fishery resource potential (Dewanti, Apriliani *et al.*, 2018). The Pangandaran area is a maritime tourism area with capture fisheries potential. According to Nurhayati 2013, from 1999 to 2005, fish caught fluctuated and were categorized as overfishing with a value *Maximum Sustainable Yield* (MSY) of 1567 tonnes. In 2012 fisheries production was 2219.91 tons, with a sustainable catch (MSY) of 2415.4 in the same year (Anaset *et al.*, 2016). This makes the Pangandaran fishery potential in 2012 still within tolerable limits.

Fishing in Pangandaran has several methods adapted to fishing gear: FADs, fishing rods, gill nets (*gill net*), and beach trawlers (Fauzy, 2009). In addition, according to Fisheries Statistics data for Pangandaran Regency, there are 2069 vessels with gill nets and 860 boats with doggo fishing gear (Dewanti, Mahdiana *et al.*, 2018). The use of various fishing gears can indicate a considerable capture fisheries potential.

Location Capture Background

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utilization of capture fisheries in the waters of Pangandaran Regency. Therefore, Pangandaran Regency has great fishery potential but has yet to be utilized optimally due to the facilities and infrastructure supporting the activity.

Discussion

Capture Fisheries Policy

The enormous potential for capturing fisheries in Pangandaran Regency must be accompanied by appropriate management and development strategies to create a balance between growth equity and justice (Kurniawan, 2018). Pangandaran Regency is an attraction in marine tourism and captures the fisheries sector, which significantly contributes to the regional economy and society to support regional development and growth (Kartika *et al.*, 2020).

Based on Pangandaran Regent Regulation Number 62 of 2016 concerning Main Duties, Functions, Job Descriptions and Work Procedures of the Marine, Fisheries and Food Security Services Article 6 Paragraph (1), that: "The Capture Fisheries Field is led by a Head of Division is under and responsible to the Head of Service "who manages everything related to capturing fisheries in Pangandaran Regency. This has also been regulated in article 6, paragraph (2), which reads, "The Capture Fisheries Sector has the task of carrying out coordination preparations, facilitating the formulation and implementation of policies, evaluation and reporting, preparing technical instructions, planning, facilitating and technical guidance in the capture fisheries sector which is under the authority district area".

In carrying out tasks for managing capture fisheries, it is necessary to pay attention to how to empower small fishermen and manage and implement Fish Auction Places (TPI), starting from coordination, facilities and evaluation. In addition, it also pays attention to the capital system, promotion, investment, and technology development regarding capture fisheries where, which will be the primary key to developing capture fisheries in Pangandaran Regency to become more managed in a sustainable manner.

According to Mochtar (2020), policies to support territorial-based development can strengthen the main aspects of fisheries development by achieving transformative and accelerating achievements, namely: 1) maintaining fish resources for sustainable productivity; 2) minimizing the impact of fishing on the environment & SDI, including for non-target and protected species; 3) generate optimal economic benefits for business actors and society; 4) generate sustainable revenue for the state; 5) maximizing employment/livelihood opportunities for fishermen and the community; 6) maintain harmony between *stakeholder*; 7) support national defence and security. In order to push these policies optimally and not damage the environment, marine policies must be based on the principles of sustainable development (*sustainable development*), which means that development must be based on the principle of a balance between utilization and environmental preservation so that it can be utilized for the long term across generations (Adani *et al.*, 2021).

SWOT Analysis of Capture Fisheries Potential in Pangandaran Regency

The strategy for sustainable capture fisheries management was analyzed by the method *Strengths Weaknesses, Opportunities Threats* (SWOT)). SWOT analysis is a method for knowing strengths, weaknesses, opportunities and threats that are expected to come, including strategies for dealing with weaknesses and threats from existing opportunities and strengths (Rangkiti, 2000).

Table 1 SWOT Analysis of Capture Fisheries Potential in Pangandaran Regency

Internal	<p>Strengths (S)</p> <ol style="list-style-type: none"> 1. Having marine fishery resources and considerable fish resource potential, both pelagic, demersal and reef fish 2. Availability of adequate workforce 3. Regionfishing ground potential 4. Strategic geographical conditions facilitate distribution to other cities 	<p>Weakness (W)</p> <ol style="list-style-type: none"> 1. Fish management in Kab. Pangandaran is still simple, so it affects the quality of the fish and the durability of the fish when it is distributed further 2. Management of capture fisheries areas which are still mixed with water tourism activities 3. Less variety of catches due to less variety of fishing gear used 4. Lack of capital for small fishermen
External		

<p>Opportunities (O)</p> <ol style="list-style-type: none"> 1. No areas supply animal protein needs in the area around Pangandaran Regency. 2. The need for raw fish materials for processing continues to increase 	<p style="text-align: center;">SO strategy</p> <ul style="list-style-type: none"> · Development and expansion of marketing of capture fishery products, Empowering local communities to obtain result processing skills fishery · Optimization of small-scale fishing 	<p style="text-align: center;">WO strategy</p> <ul style="list-style-type: none"> · Development of capture fisheries infrastructure · Management of territorial waters for capture fisheries activities and activities · Development of capture fishing fleet
<p>Threats (T)</p> <ol style="list-style-type: none"> 1. Increase in fuel prices 2. Expensive transportation and transportation capital 3. Fishing is limited by weather and season 4. Price games are carried out by baskets so that the standard price of fish is difficult to adjust 	<p style="text-align: center;">ST Strategy</p> <ul style="list-style-type: none"> · Logistics system development · Setup and upgrade price control by the government related · Improvement of fishing cooperatives · Increased public awareness of work safety · Application of technology in the determination process of fishing grounds to minimize fuel expenditure 	<p style="text-align: center;">WT Strategy</p> <ul style="list-style-type: none"> · Improving community capacity in handling fishery products

Feasibility of Capture Fisheries Business in Pangandaran Regency

Fishery business in the Pangandaran Regency area is included in small-scale fisheries. According to Ginanjaret *al.* (2022), Apart from being characterized by technology and relatively small business capital, small-scale fisheries are also characterized by various fishing gear and their catches. Fishermen are defined as fish cultivators and salt farmers in Law No. 7/2016, catching fish to fulfil their daily needs, whether not using boats or using boats (10 GT is the biggest).

Fishermen carry out fishing efforts in Pangandaran Regency based on the season. The season influences fishermen who go to sea to catch fish; the use of fishing gear is also influenced by the season. According to Hermawan *et al.* (2006), capture fisheries in Indonesia are still dominated by small scale, namely 85% and 15% of which are filled by large-scale capture fisheries companies. Weather factors, west winds, east winds, and transitional winds generally influence this because there are differences in fish growth in each season.

The fishing gear's use is considered because it needs to comply with applicable rules and criteria. The most widely used fishing gear based on statistical data from the Maritime Affairs, Fisheries and Food Security Service (DPKPKP) of Pangandaran Regency in 2020, namely gill nets (*gillnet*) of 1,881 units (82.46% of the total fishing gear units in Pangandaran). The arrest operation is classified as daily (*one-day trip*). However, fishing gears are still not environmentally friendly and have low selectivity (Apriliani *et al.*, 2021).

Capture fisheries in Pangandaran Regency can be developed if the most fishing gear is a sufficient *code of Conduct for Responsible Fisheries* (CCRF). Human resources are one of the crucial instruments in developing the capture fisheries business because understanding related to ecology and fishing grounds (DPI) using assistive devices will have a significant influence.

Conclusion

The potential capture fisheries in Pangandaran have excellent potential, with areas and catches still in a sustainable state. Therefore, the Capture Fisheries Business in Pangandaran is a profitable potential. However, the fluctuating number of fisheries is a problem in capture fisheries. Therefore, considerations and regulations on catch restrictions are also essential to study.

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