

ANALYSIS OF INCOME AND PRODUCTIVITY OF SMALL-SCALE HARPOON FISHERY BUSINESS IN KEI KECIL ISLAND PARK CONSERVATION AREA, SOUTHEAST MALUKU REGENCY

Analisis Pendapatan dan Produktivitas Usaha Perikanan Panah Skala Kecil di Kawasan Konservasi Taman Pulau Kecil Kei Kecil, Kabupaten Maluku Tenggara

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(Received April 15th 2025; Accepted May 20th 2025)

ABSTRACT

Small-scale harpoon fishing is an economic production activity in the TPK Kei Kecil conservation area. As an economic activity, harpoon fishermen always try to increase their income and productivity every season. Still, these efforts are always faced with various problems, namely high operational costs, changes in market prices, and uncertainty of catches due to variations in fishing seasons. The purpose of this study was to determine the level of income. and feasibility of small-scale harpoon fishing fleets that use paddle power, 6.5 HP ketinting, and 15 HP outboard motors that are developing in the TPK Kei Kecil conservation area of Southeast Maluku Regency. The types of data needed are primary and secondary, and data is collected using a survey method with triangulation techniques. The analysis used is qualitative and quantitative descriptive analysis. The analysis results show that the 15 PK outboard motor harpoon fishing fleet is very profitable in the east season, with 6.5 PK ketinting in the transition season 2 and rowing in the transition season 1. Small-scale harpoon fisheries are worthy of being developed because they have a productivity index value in each season of more than 1 ($P > 1$), even the 15 PK outboard motor harpoon fishing fleet and the highest rowing in the east season, and 6.5 PK ketinting in the transition season 2; therefore, the management and development of harpoon fisheries need to be carried out effectively and adaptively.

Keywords: Conservation Area, Harpoon Fishing, Income, Productivity, Season

ABSTRAK

Perikanan panah skala kecil merupakan suatu kegiatan produksi yang bersifat ekonomi di kawasan konservasi TPK Kei kecil. Sebagai kegiatan ekonomi nelayan panah selalu berupaya untuk meningkatkan pendapatan dan produktivitas usahanya dalam setiap musim, namun

upaya tersebut selalu diperhadapkan dengan berbagai permasalahan yakni biaya operasional yang tinggi, dan perubahan harga pasar, dan ketidakpastian hasil tangkapan akibat variasi musim penangkapan. Tujuan penelitian ini untuk mengetahui tingkat pendapatan dan kelayakan usaha armada perikanan panah skala kecil yang menggunakan tenaga penggerak dayung, ketinting 6.5 PK, dan motor tempel 15 PK yang berkembang di kawasan konservasi TPK Kei kecil Kabupaten Maluku Tenggara. Jenis data yang dibutuhkan adalah data primer dan sekunder, data dikumpulkan menggunakan metode survei dengan teknik triangulasi. Analisis yang digunakan adalah analisis deskriptif kualitatif dan kuantitatif. Hasil analisis menunjukkan bahwa armada perikanan panah motor tempel 15 PK sangat menguntungkan pada musim timur, ketinting 6.5 PK pada musim pancaroba 2 dan dayung pada musim pancaroba 1. Perikanan panah skala kecil layak untuk dikembangkan karena memiliki nilai indeks produktivitas disetiap musim lebih dari 1 ($P > 1$) bahkan armada perikanan panah motor tempel 15 PK dan dayung tertinggi pada musim timur, dan ketinting 6.5 PK pada musim pancaroba 2 karena itu pengelolaan dan pengembangan perikanan panah perlu dilakukan secara efektif dan adaptif.

Kata Kunci: Kawasan Konservasi, Perikanan Panah, Pendapatan, Produktivitas, Musim

INTRODUCTION

The Small Island Park (TPK) Kei Kecil conservation area is a conservation area located in the western part of Kei Kecil Island, Southeast Maluku Regency, which has a sub-zone area of 113,919.73 Ha of capture fisheries. The conservation area was formed to conserve natural resources and ecosystem balance, so that it can better support efforts to improve the welfare and quality of life of coastal communities and small islands in Southeast Maluku Regency. Therefore, this conservation area is a potential fishing area for small-scale fishing fleets, especially fleets whose home bases are in or around the conservation area (Picaulima et al., 2024). One of the small-scale fishing fleets that has developed in this conservation area is the bowfishing fleet.

Bowfishing gear is a fishing gear that is operated directly by humans by shooting reef fish targets with sharp objects in coral reef areas (Nihe et al., 2017). Bowfishing gear is an environmentally friendly fishing gear for catches because it has high selectivity (Pratama et al., 2012). Arrow fishing gear is used by small fishermen in the TPK Kei Kecil conservation area to increase economic needs because the catch is reef fish that are worth catching and have high economic value. Therefore, arrow fishing is an economic fishery production activity.

Economical fishery production in small-scale capture fisheries is an activity that aims to transform the input production subsystem into efficient and effective fishery production output (Picaulima et al., 2023). As an economic production activity, small fishermen always strive to increase their income and business productivity in every fishing operation. The income and productivity of the capture fisheries business can explain the economic conditions of the capture fisheries business (Vinay et al., 2017).

Previous research related to small-scale arrow fishing businesses is an analysis of the financial feasibility of fishing businesses using arrows and bottom traps (Pratama et al., 2012); the effectiveness of arrow fishing gear (Nihe et al., 2017); the agribusiness system of arrow fishing (Ujung et al., 2020); analysis of fishermen's exchange rates for arrow fishing gear (Mumu et al., 2022); contribution of arrow fishing gear income to household income (Lussy et al., 2023). Research on the income and productivity of small-scale arrow fishing businesses with different driving forces in the TPK Kei Kecil conservation area in each season has never been conducted to date. Business profits describe the level of success and progress in managing a business (Sumiratin & Syarbiah, 2018), while productivity describes the level of feasibility of a fishery business that is economically feasible (Prasetyono et al., 2021). Therefore, the

income and productivity of small-scale arrow fishing businesses in each season are one of the indicators of success and feasibility in managing a fishery business.

The study of income analysis and productivity of small-scale arrow fishing fleets in the TPK Kei Kecil conservation area is important to be conducted because this study aims to determine the level of profit and feasibility of small-scale arrow fishing fleets that use paddle power, 6.5 HP ketinting, and 15 HP outboard motors that are developing in the TPK Kei Kecil conservation area of Southeast Maluku Regency. The results of this study can provide an overview and source of literacy on the economic conditions of small-scale arrow fishing businesses for the government as a fisheries manager in managing and developing the potential of small-scale arrow fishing businesses effectively in improving the welfare of coastal communities in the TPK Kei Kecil conservation area of Southeast Maluku Regency.

METHODS

Time and Location of the Research

This research was conducted from May 2023 to January 2024. The research location was in Ohoibadar, Ohoililir, Madwaer, Warbal, Ur Pulau and Tanimbar Kei, Southeast Maluku Regency (Figure 1). The selection of the six Ohoi as research locations was because the waters of the TPK Kei Kecil conservation area are potential fishing areas for small-scale fish arrow fishermen and have been going on for a long time.

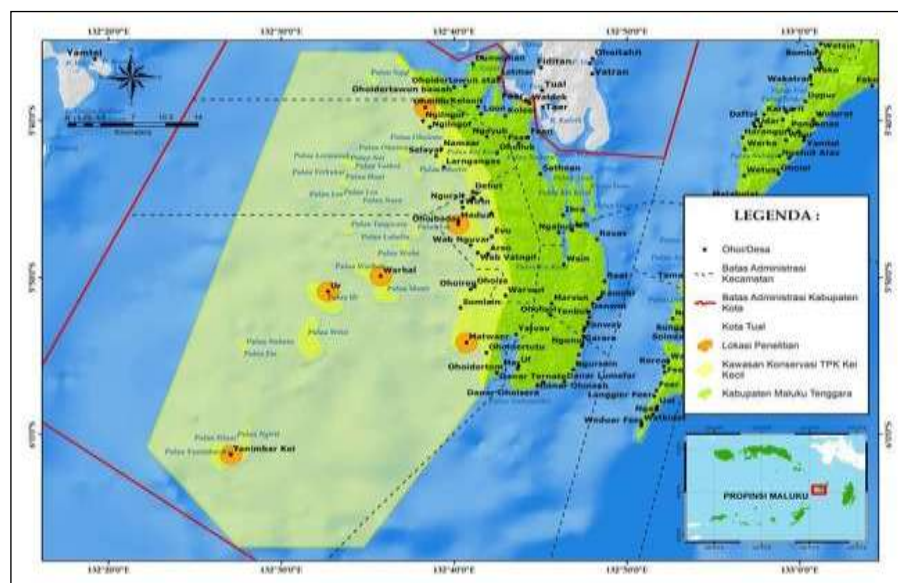


Figure 1. Research Location Map
Source: Personal Document (2023)

Data Types and Sources

The types of data used in this study include primary and secondary data. Primary data comes from small fishermen who use fishing arrow fishing gear whose fishing areas are in the waters of the TPK Kei Kecil conservation area in each season, including the construction of fishing gear and fleet, types and quantities of catch, fishing areas, number of trips, fish selling prices, fuel prices, rations, ice prices and needs, and fleet capacity. Secondary data obtained from the website of the Southeast Maluku Regency Government, related agencies and institutions, and library materials related to income and productivity of the arrow fishery business.

Data Collection Method

The data collected in this study used a survey method. The data collection technique used the triangulation method. Triangulation is data collection that integrates three techniques, namely observation, interviews and document analysis (Sitorus, 1998). The sample was determined based on the purposive sampling technique for arrow fishermen, the requirements for respondents were willing to be interviewed, live and fish in the area around the TPK Kei Kecil conservation area, have experience as arrow fishermen for more than five years, have an arrow fishery fleet capacity of less than 10 GT. The number of samples in this study was 30 units of arrow fishery fleets that used paddle propulsion, 6.5 PK ketinting and 15 PK outboard motors spread across 6 coastal Ohoi in the TPK Kei Kecil conservation area. The data that had been collected was then processed, analyzed and presented in the form of images and discussed descriptively comparatively.

Data Analysis Method

The collected data is then analyzed using qualitative and quantitative descriptive methods. Qualitative descriptive analysis is an analysis to provide a description and explanation using sentences systematically and easily understood according to the data collected, namely the construction of fishing gear, size of ships and engines, fishing areas and seasons, types and catches. Quantitative descriptive analysis is data analysis by providing a discussion or study of the data that has been collected using calculations, namely by analyzing total business revenue, total fishing or operational costs, business profits, and business productivity. Qualitative and quantitative descriptive analysis methods (Picaulima et al., 2024) formula, as follows:

1. Analysis of Small-Scale Trolling Fleet Fishing Areas

Analysis of the identification of fishing areas for the arrow fishing fleet in each season is carried out through a grid map and shown to fishermen who own the arrow fishing fleet, then the small fishermen mark the fishing areas in each season. The marked grid map is then transformed into Arc Map software to obtain an overview of the fishing areas for the small-scale arrow fishing fleet in each season in the TPK Kei Kecil conservation area.

2. Total Revenue from the Arrow Fishing Business

$$TR = Q.P \quad (1)$$

Where:

TR = Total revenue from the arrow fishing business in each season (IDR)

P = Average selling price of fish in each season (IDR/Kg)

Q = Average fish production of the arrow fishing business in each season (Kg)

3. Total Fishing Costs for the Arrow Fishing Business

$$TC = TVC + TFCE \quad (2)$$

Where:

TC = Total fishing costs for the arrow fishing business fish in each season (IDR)

TFC = Total fixed cost of fishing arrow fishing business in each season (IDR)

TVC = Total variable cost of fishing arrow fishing business in each season (IDR)

4. Productivity of Fishing Arrow Fishing Business

$$Pr = TR/TC \quad (3)$$

Where:

Pr = Productivity (IDR/season)

TR = Total income (IDR/season)

TC = Total operational cost of fishing (IDR/season)

Requirements: The Productivity figure (Pr) is greater than one (1) or $P > 1$.

5. Revenue of Fishing Arrow Fishing Business

$$\pi = TR - TC \quad (4)$$

Where:

π = Net income of fishing arrow fishing business in each season (IDR)

TR = Total income of fishing arrow fishing business in each season (IDR)

TC = Total fishing costs of fishing arrow fishing business in each season (IDR)

RESULTS

Arrow Fishing Gear

The construction of the arrow fishing gear operated by small fishermen in the waters of the TPK Kei Kecil conservation area is a simple fishing gear that technically consists of two parts, namely a wooden gun frame with an average length of 1.20 m and an average width of 4 cm, a rubber arrow pusher made from a motorcycle or car inner tube with one end tied to the end of the gun, and the arrows used are made of stainless steel with a length of 1-2 m (Figure 2). Supporting facilities for fishing operations are boats, cooler boxes, compressors, air hoses, diving equipment, weights, diving flashlights. Therefore, this fishing gear can be operated during the day and night.



Figure 2. Small-Scale Arrow Fishing Fleet in the TPK Kei Kecil Conservation Area

In Figure 2, the vessel used to operate the arrow in the waters of the TPK Kei Kecil conservation area has a capacity of less than 5 GT (0.2 to 2 GT), using paddle power, a 6.5 PK ketinting, and a 15 PK Yamaha outboard motor fueled by Peralite and kerosene and using oil on the 15 PK outboard motor. The number of fishermen in the arrow fishing operation is 1 to 2 people in charge of operating the arrow fishing gear.

Arrow Fishing Area

The arrow fishing fleet fishing area in the waters of the TPK Kei Kecil conservation area is very economical in every season. In general, the fishing area in the coastal area of the TPK Kei Kecil conservation area. In Figure 3, the west season the arrow fishing fleet fishing area is in the coastal waters between Pulau Dua and Pulau Sepuluh, and the waters of Pulau Sepuluh, namely Pulau Nai and part of Pulau Lima, namely Pulau Lik, Warbal and Manir, as well as the east and north coasts of Tanimbar Kei Island.

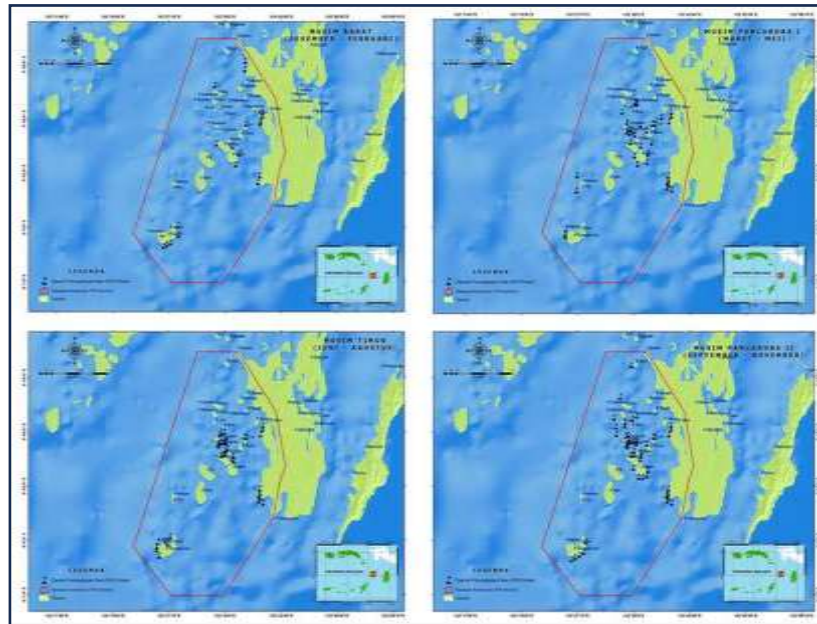


Figure 3. Fishing Areas of Small-Scale Arrow Fishing Fleets in the TPK Kei Kecil Conservation Area in Each Season

In the transition season 1, the fishing area of the arrow fishing fleet is in the coastal waters of Pulau Sepuluh, namely Tangwain, Lea and Watukmas, and the waters of Pulau Lima, the west coast of Pulau Nuhuta and the west coast of Pulau Tanimbar Kei, the coastal waters between Ohoi Madwaer and Somlain. In the eastern season, the fishing area of the arrow fishing fleet is in the coastal waters of Pulau Sepuluh, namely Tangwain, the coastal waters of Pulau Lima and the coastal waters of the north and west of Pulau Tanimbar Kei, the coastal waters between Ohoi Madwaer and Somlain. In the transition season 2, the fishing area of the arrow fishing fleet is in the coastal waters of the southern part of Pulau Ngaf, the coastal waters of Pulau Sepuluh, Pulau Lima and the eastern and southern coasts of Pulau Tanimbar Kei, the coastal waters between Ohoi Madwaer and Somlain (Figure 3).

Arrowfish Catch

The catch of small-scale arrowfish fleets in the waters of the TPK Kei Kecil conservation area is always economical and the dominant types of arrowfish catches are horse mackerel (*Lethrinus* sp.), parrotfish (*Skarus dimidiatus*), jackfruit (*Parupeneus indikus*), grouper (*Epinephelus* sp.), samandar fish (*Siganus* sp.), sand skin (*Nemipteridae* sp.), and parrotfish (*Skarus dimidiatus*). Figure 4 shows that the amount of arrow catch fluctuates in each season, the highest catch of the arrowfish fleet using a 15 HP outboard motor occurred in the east season of 6,444 kg, ketinting 6.5 HP occurred in the transition season 1 of 2,696 kg and paddles also occurred in the transition season 1 of 2,100 kg. The lowest catch of the small-scale bowfishing fleet using a 15 HP outboard motor occurred in the transitional season 1 of 2,111 kg, the 6.5 HP ketinting occurred in the west season of 1,476 kg, and the paddle also occurred in the west season of 1,045 kg.

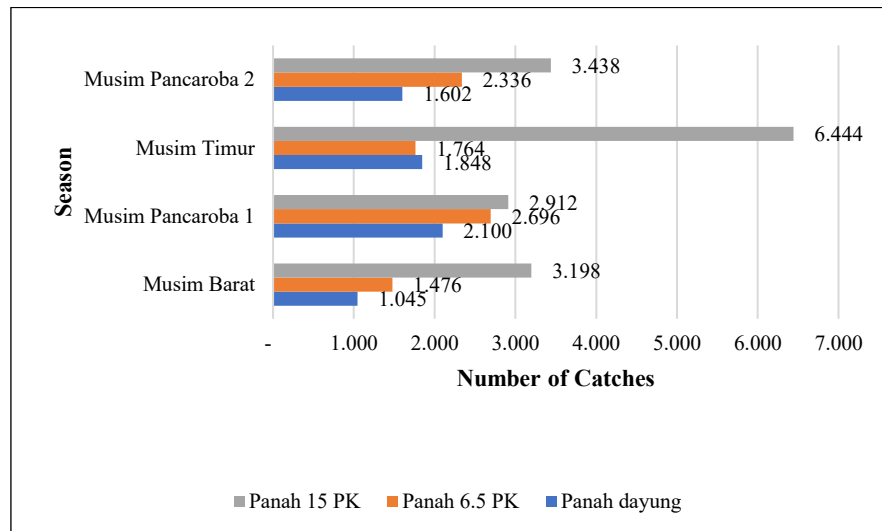


Figure 4. Total Catch of Small-Scale Bowfishing Fleet in the TPK Kei Kecil Conservation Area in Each Season

Operational Costs of Bowfishing Business

The total operational costs of the small-scale bowfishing fleet operating in the waters of the TPK Kei Kecil conservation area always fluctuate in each season. In Figure 5, the highest operational cost of the archery fleet using a 15 HP outboard motor occurred in the transitional season 2 of IDR7,690,000, the 6.5 HP ketinting also occurred in the transitional season 1 of IDR3,550,000 and the rowing also occurred in the transitional season 1 of IDR1,440,000. The lowest operational cost of the archery fleet using a 15 HP outboard motor occurred in the east season of IDR5,400,000, the 6.5 HP ketinting also occurred in the east season of IDR1,358,000, and the rowing also occurred in the east season of IDR600,000.

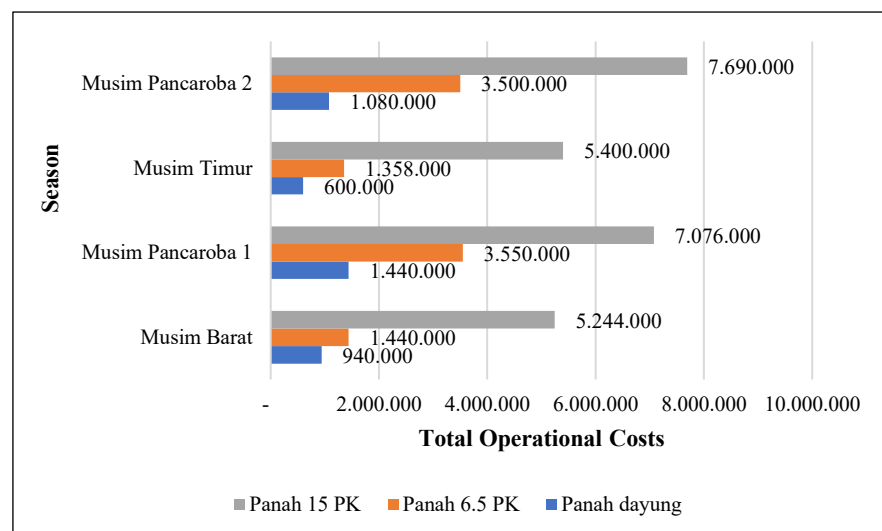


Figure 5. Total Operational Costs of Small-Scale Arrow Fishing Fleet in the TPK Kei Kecil Conservation Area in Each Season

Arrow Fishing Business Income

The income of the small-scale arrow fishing fleet whose fishing grounds are in the TPK Kei Kecil conservation area is always profitable and fluctuates in each season. In Figure 6, the highest income of the archery fleet using a 15 HP outboard motor occurred in the east season of IDR32,220,000, the 6.5 HP ketinting occurred in the east season of IDR32,220,000 and the

rowing occurred in the transition season 1 of IDR33,840,000. The lowest income of the archery fleet using a 15 HP outboard motor occurred in the transition season 1 of IDR18,408,000, the 6.5 HP ketinting occurred in the west season of IDR16,344,000, and the rowing occurred in the transition season 2 of IDR18,981,000.

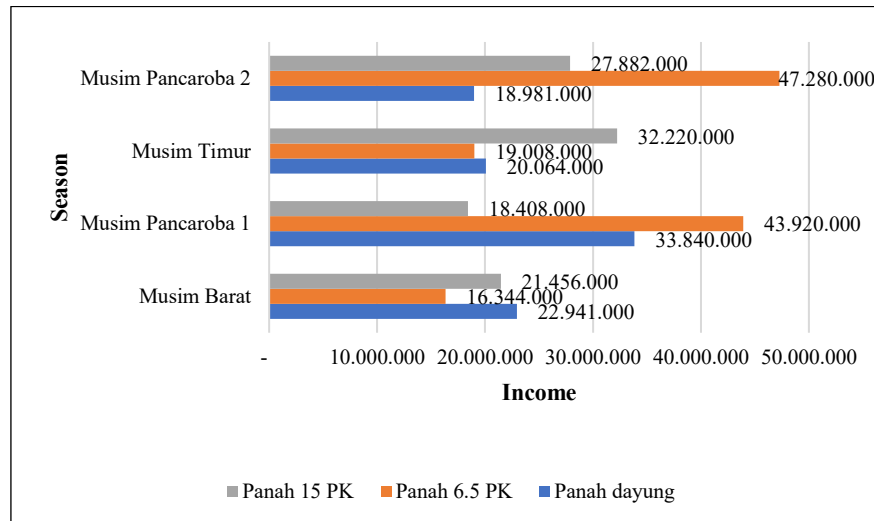


Figure 6. Income of Small-Scale Arrow Fishing Fleet in the TPK Kei Kecil Conservation Area in Each Season

Arrow Fishing Fleet Business Income

The income of the small-scale arrow fishing fleet whose fishing grounds are in the TPK Kei Kecil conservation area is always profitable and fluctuates in each season. In Figure 7, the highest income of the arrow fishing fleet using a 15 HP outboard motor occurred in the east season of IDR19,464,000, the 6.5 HP ketinting occurred in the transition season 2 of IDR43,780,000 and the rowing occurred in the transition season 1 of IDR32,400,000. The lowest business income of the archery fleet using a 15 HP outboard motor occurred in the transitional season 1 of IDR11,332,000, the 6.5 HP ketinting occurred in the west season of IDR14,904,000, and the rowing occurred in the transitional season 2 of IDR17,901,000.

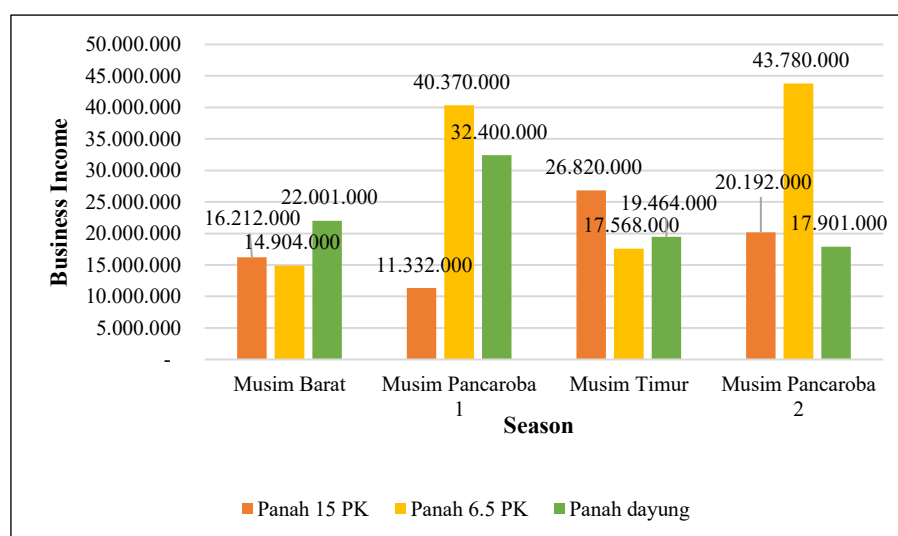


Figure 7. Business Income of Small-Scale Archery Fleet in the TPK Kei Kecil Conservation Area in Each Season

Productivity of Archery Fisheries

The small-scale archery fleet operating in the waters of the TPK Kei Kecil conservation area is productive and fluctuates in each season. In Figure 8, the highest business productivity of the archery fleet using a 15 HP outboard motor occurred in the east season of 5.97, the 6.5 HP ketinting occurred in the transitional season 2 of 13.51 and the rowing occurred in the east season of 33.44. The lowest productivity of the small-scale bowfishing fleet using a 15 HP outboard motor occurred in the transitional season 1 at 2.60, the 6.5 HP ketinting occurred in the west season at 11.35, and the rowing occurred in the transitional season 2 at 17.58.

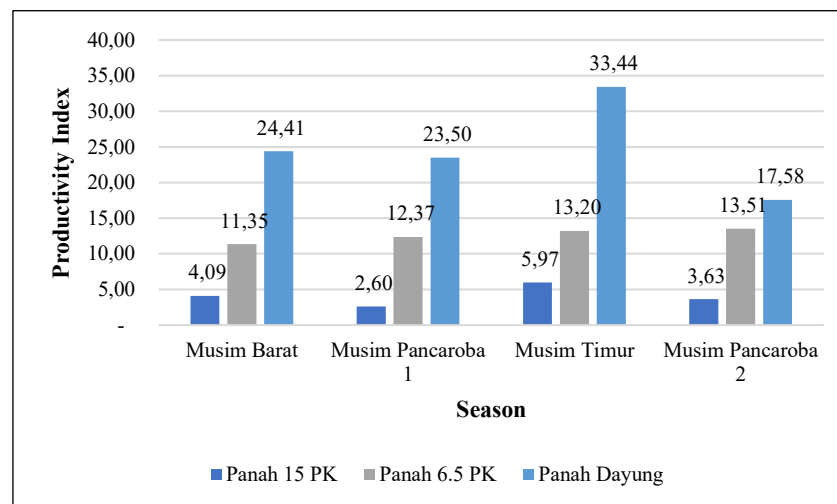


Figure 8. Index of Small-Scale Bowfishing Fleet Productivity in the TPK Kei Kecil Conservation Area in Each Season

DISCUSSION

The arrow fishing gear is a simple fishing gear because it consists of two parts, namely the fishing gear frame and the arrow (Pratama *et al.*, 2012) and is selective so that it is safe for the diversity of biological resources because the type and size of fish that are the target of the catch are determined by the archer fishermen themselves (Mubarok, 2012). Therefore, the arrow fishing gear can be categorized as an environmentally friendly fishing gear because it is safe for the habitat (does not damage the habitat), the catch is of good quality and safe for consumption, minimum discard, the catch target does not include types of fish protected by law, and is socially accepted (Kour & Hibata, 2019). The arrow fishing operation is: 1. Preparation: the stage of preparing and checking fishing gear, machines, and supplies for fishing operations. 2. Heading to the fishing ground: the stage of heading to the fishing area is carried out day and night. 3. Fishing Operations: at the stage when the fishing operation uses a compressor, the fisherman guards the compressor 1 person and the diver 1 person or alternately, if the fishing operation does not use a compressor then the number of fishermen is 1 person as well as the helmsman and diver, the fishing operation is of course supported by a ship that uses paddle power, a 6.5 HP ketinting, and a 15 HP Yamaha outboard motor.

The arrow fishing area in the TPK Kei Kecil conservation area is always dynamic because it is greatly influenced by the wind season and the target of the catch, besides that the conservation area is a potential and economical fishing area for small-scale fishing fleets including arrow fisheries because it has several characteristics, namely the diversity of biological resources, close to the fishing base, low operational costs, high economic value catches, and the existence of fish resources is influenced by the season (Picaulima *et al.*, 2024). The special characteristics of the arrow fishing fleet fishing area are areas that have coral reefs or waters near islands about 1 - 2 km from the coast because the coral reef area is close to the

coast, not too deep, the main targets are reef fish and demersal fish. Coastal areas are areas that have large, unique and high economic value fish resource potential Kristiyanti (2016); Arianto & Fredy (2020).

The types of catches of small-scale arrow fishing fleets consist of main and by-catch because the fishing areas are on coral reefs and waters near islands. According to (Kour & Hibata, 2019) the main catch of arrow fisheries is cockatoo (*Scarus psittacus*), while the by-catch is jackfruit seeds (*Parupeneus barberinus*), botana (*Acanthurus leucosternon*), white snapper (*Lates calcalifer*), tiger grouper (*Epinephelus fuscogutattus*), rabbitfish (*Siganus canaliculatus*), rabbitfish (*Siganus canaliculatus*), botana naso (*Naso* sp.), kuwe fish (*Caranx sexfasciatus*). The high number of arrow catches using 6.5 HP paddle and ketinting power during the transitional season 1 and 15 HP Yamaha outboard motors during the eastern season is because the fishing area or conservation area of the Kei Kecil TPK is located in the western part of Kei Kecil Island so that it is not affected by the eastern wind season and transitional season 1, and in the eastern season the waters of the conservation area are very fertile (high chlorophyll-a due to upwelling) so that fishing operations are very profitable. The wind season has different characteristics of weather and oceanographic conditions so that it affects the process and results of the catch (Ridha et al., 2013).

The types of operational costs incurred by arrow fishermen in fishing operations consist of fixed costs and variable costs. Fixed costs consist of maintenance costs and depreciation of investment goods such as boats, engines, fishing gear, coolboxes, swimming goggles and flashlights, while variable costs consist of fuel oil, food supplies, and ice cubes. In general, the total operational costs incurred by arrow fishermen are the sum of fixed costs and variable costs. The operational costs of the small-scale arrow fishing fleet using oars and 6.5 HP ketinting in the transitional season 1, and a 15 HP Yamaha outboard motor in the transitional season 2 because in both seasons the weather and wind conditions are not too strong so that the sea conditions are not wavy, making the fishing operations carried out by the arrow fishermen quite far from the home base. However, in general the total operational costs of the small-scale arrow fishing fleet are very low. The operational costs of the arrow fishery are small because the fishing operations only rely on skills and experience in maximizing the operation of fishing gear (Umbase et al., 2022).

The revenue analysis was carried out to find out how much revenue would be obtained in the small-scale arrow fishing fleet business. Business revenue is the multiplication of the number of production and selling price of the catch of the archery fishery in a certain period. The highest income of the archery fishing fleet using a 15 PK outboard motor occurs in the east season, the 6.5 PK ketinting occurs in the east season, and the paddle occurs in the transition season 1. The high income of the archery fishing fleet using a 15 PK outboard motor in the east season and the paddle in the transition season 1 is due to the high number of catches while the 6.5 PK ketinting occurs in the east season due to the high selling price due to high consumer demand and taste for demersal and coral fish while the supply is low. In the east season, the catch that is usually abundant in the market is small and large pelagic fish. Therefore, income is influenced by the volume of the catch, the type and condition of the fish caught and the prevailing fish prices in the market (Asriyanto, 2014). These factors are directly proportional, so that if one of the factors increases or decreases, it can affect the income received by fishermen who do business.

The income of the small-scale arrow fishing fleet is always profitable and fluctuates in every season. The income of the small-scale arrow fishing fleet is the difference between the total production costs and revenue (Parajouw et al., 2019). The high income of the arrow fishing fleet using a 15 HP outboard motor in the east season, a 6.5 HP ketinting in the transition season 2 and a paddle in the transition season 1 is because the income of the arrow fishing fleet with the three driving forces is very high from the operational costs incurred. Income analysis can

be used to determine the effectiveness of an investment and estimate the operational budget of a business (Abubakar *et al.*, 2022). Therefore, business profits describe the measure of success and progress in managing a business (Sumiratin & Syarbiah, 2018).

The productivity of the small-scale arrow fishing fleet always fluctuates in every season. The highest productivity of the arrow fishing fleet using a 15 HP outboard motor in the east season, a 6.5 HP ketinting in the transition season 2, and a paddle in the east season. The value of business productivity because the magnitude of the business productivity figure is greater than one (1) or $P > 1$ (Picaulima *et al.*, 2024). The high value of the productivity of the small-scale arrow fishing fleet business is because the income obtained is very high compared to the operational costs incurred. Productivity describes the level of feasibility of a fishery business that is economically feasible (Prasetyono *et al.*, 2021).

CONCLUSION

The highest catch of the 15 PK outboard motor arrow occurred in the east season of 6,444 kg, the 6.5 PK ketinting occurred in the transition season 1 of 2,696 kg and the rowing in the transition season 1 of 2,100 kg, the highest operational costs of the small-scale arrow fishing fleet of the 15 PK outboard motor occurred in the transition season 2 of IDR7,690,000, the 6.5 PK ketinting occurred in the transition season 1 of IDR3,550,000 and the rowing occurred in the transition season 1 of IDR1,440,000, the highest income of the arrow fishing fleet using the 15 PK outboard motor occurred in the east season of IDR32,220,000, the 6.5 PK ketinting occurred in the east season of IDR32,220,000 and the rowing occurred in the transition season 1 of IDR33,840,000, the business The arrow fishery operating in the waters of the TPK Kei Kecil conservation area is profitable and the productivity is more than 1 ($P > 1$) in each season, the 15 HP outboard motor is very profitable in the east season, the 6.5 HP ketinting in the transition season 2 and the paddle in the transition season 1. The highest productivity index of the arrow fishery fleet is the 15 HP outboard motor and paddle in the east season, and the 6.5 HP ketinting in the transition season 2.

ACKNOWLEDGEMENT

The author would like to thank BRIN for recommending a research grant through the 2023 Advanced Indonesian Research scheme, LPDP for realizing the research grant, support from the Tual State Fisheries Polytechnic in this research, partners of the Maluku Provincial Marine Affairs and Fisheries Service through the Representative of Island Cluster VIII in this research, Malra Regency Marine Affairs and Fisheries Service and Arrow Fishermen in Ohoi Ohoibadar, Ohoililir, Warbal, Ur Pulau, Madwaer and Tanimbar Kei who have participated in providing data and information for this research.

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