Original Research Article

Margin Analysis Of Gillnet Fishermen Marketing At Nusantara Fishery Port Palabuhanratu, Sukabumi

ABSTRACT

This study aims to determine marketing activities and marketing margins, costs and profits. Gill nets at the Palabuhanratu Nusantara Fishing Port, Sukabumi. This research was conducted from October 2021 to May 2022. The method used is a descriptive method with a case study approach. The types of data used are quantitative and qualitative. The sampling technique used in this research is snowball sampling. A snowball sampling technique is a step in selecting sources at the time in the field or based on previous informants' instructions so that researchers get complete and in-depth data. The results showed that there are 4 patterns of marketing channels, where the most efficient marketing channel is through channel type three followed by channel type one. However, it should be underlined that marketing efficiency is not only seen from marketing margins and share margins, although type 3 channel is the most efficient channel, but when viewed from the quality and freshness of fish, type 1 channel is better.

Keywords: Marketing Activities, Marketing Margins, Share Margin, Cost, Profits

1. INTRODUCTION

Palabuhanratu is one of the largest ports on the southern coast of Java and even in West Java (Aritonang 2018). The Palabuhanratu Archipelago Fishery Port (PPN) is a capture fisheries sector or area that has abundant natural resources as evidenced by varied catches. The catch of course has a direct effect on the level of welfare of fishermen because it is the main source of income for fishermen (Ridha, 2017). The catch is a product that is sold by capture fisheries business. The increase in sales from the catch is certainly closely related to marketing activities. Marketing activities can run smoothly if they are driven by a balance of purchasing power from consumers (Setyawan et al., 2021). According to Arbi et al (2018) marketing channels are a series of interdependent institutions or organizations involved in the process of making a product acceptable to consumers. The larger the marketing margin, the smaller the percentage of the share received by fishermen. Fishermen need marketing agencies to be able to distribute their catches for sale more quickly and efficiently. This phenomenon can be seen from the low selling price obtained by fishermen (Muninggar et al., 2013). Therefore, information related to what type of catch provides the highest profit margin can certainly increase the income of the fishermen themselves, because the increase in income is also related to welfare level, so that the marketing margin has a big influence on the welfare of fishermen in Palabuhanratu. This study aims to describe the background above regarding the analysis of marketing activities from the catch of gillnet in Palabuhanratu, Sukabumi.
2. MATERIAL AND METHODS

This research was conducted at the Fisheries Port of the Archipelago, Palabuhanratu, Sukabumi Regency, West Java Province, Indonesia, in October 2021 – May 2022. The method used for this research is a descriptive method with a case study approach. This method has a purpose in making a description, and an accurate picture in accordance with the existing facts and the phenomenon being investigated. The sampling method used is snowball sampling. The snowball sampling method was carried out to trace the institutions involved in the marketing process of fish caught by drift gillet fishermen, there are, 1 ownerhip, 1 collectors, 2 agents and 2 retailers, and so on.

2.1 Marketing Analysis

The data analysis to answer the objectives of this research is as follows:

1. To find out the marketing channels of fish caught by gillnets observations of the marketing institutions involved ranging from fishermen, retailers. The income received by marketing agencies will vary.

2. To analyze the marketing used quantitative analysis and marketing margins at the agency level in channels and marketing efficiency by calculating the costs, profits and marketing margins for each intermediary agency in various channels (Sudiyono 2002).

2.1.1 Marketing Costs

According to (Sudiyono 2002) Marketing costs are the sum of the costs of each marketing agency formulated as follows:

\[ B_p = B_{p1} + B_{p2} + B_{p3} + \ldots + B_{pn} \]

Description:

\( B_p \) : Marketing Costs

\( B_{p1}, B_{p2}, B_{p3}, \ldots, B_{pn} \) : Marketing costs per marketing agency

2.1.2 Marketing Profit

Profit is the sum of the profits received by each marketing agency that is passed in a marketing channel, according to (Sudiyono 2002) which is formulated as follows:

\[ K_p = K_{p1} + K_{p2} + K_{p3} + \ldots + K_{pn} \]

Description:

\( K_p \) : Marketing advantage

\( K_{p1}, K_{p2}, K_{p3}, \ldots, K_{pn} \) : Marketing profit of each marketing agency

2.1.3 Marketing Margin

Margin The marketing margin is the difference between the price at the producer level and the final consumer level. According to (Sudiyono 2002) it is formulated as follows:

\[ M_p = P_r - P_f \]

Description:

\( M_p \) : Marketing Margin (IDR/kg)

\( P_r \) : Consumer Price (IDR/kg)

\( P_f \) : Producer Price (IDR/kg)

2.1.3 Percentage Marketing Margin

Percentage Margin or Share margin is the percentage of the price received by fishermen to the price paid by consumers.

\[ M_p = \left( \frac{P_f}{P_r} \right) \times 100\% \]

Description:

\( M_p \) : Marketing Margin

\( P_f \) : Price at producer level (IDR/kg)

\( P_r \) : Price at consumer level (IDR/kg)

3. RESULTS AND DISCUSSION

Marketing system of marine caught landed at PPN Palabuhanratu carried out through two channels. First, through the TPI and some without going through the TPI. Marketing through TPI is carried out based on the results of the auction with
The pattern of marketing channels can be created by the association of marketing institutions ranging from producers (fishers) to consumers. Based on the results of the research that has been carried out, it can be described about the pattern of marketing channels for fish caught by drift gillnet. The following is an illustration of the types of marketing channels traversed by drift gillnet at PPNP Palabuhanratu.

1) Fishermen - Ship Owners/Gatherers - Retailers - Consumers
2) Fisherman - Ship Owners/Gatherers - Collectors 2 - Retailers - Consumers
3) Fishermen - Ship Owners/Gatherers - Agents - Consumers
4) Fishermen - Ship Owners/Gatherers - Restaurants/entrepreneurs - Consumers

Based on fish marketing channels the above catchment, fish marketing is carried out through four channels, namely:

a. Channel I
In channel 1, fishermen sell their catch to ship owners/collectors. Sales are made by means of the ship owner/collector waiting for or visiting the fishermen shortly after going to sea. Then from the ship owner/collector, the fish is directly sold to the retailer by way of the retailer coming to the ship's owner/collector, then the retailer will wait for consumers who will call or send messages to the retailer because they have subscribed. From the interviews, it can be seen that this marketing channel is the most widely used channel by marketing business actors for drift gillnet catches in PPNP.

b. Channel II
This channel can be said to be the channel through which the most institutions pass among the other channels. Starting from the fishermen...
selling their catch to the boat owner who acts as the first collector, then the fish is bought by the second collector then the fish is bought by retailers who then sell the fish to consumers.

c. Channel III
If the sales proceeds from the ship owner/owner are not sold or purchased by retailers and collectors, the catch will be wholesaled by agents and earn high profits, because of the low price. Furthermore, the fish are purchased by retailers and the fish will be sold to consumers. Consumers who buy fish directly from agents will be reprocessed into processed fish such as fish balls, fish nuggets, as well as for the supply of business materials such as restaurants. So that the third channel can be systematically described as follows: fisherman – ship owner/ – agent – consumer.

d. Channel IV
In this last channel, marketing continues through fishermen as producers, followed by ship owners/collectors. Furthermore, this ship owner/collector sells to restaurants who want very fresh quality fish directly from the sea and are willing to pay a high price compared to buying fish from an agent that has been frozen. Ship owners/collectors also cooperate with entrepreneurs outside the city who want fresh quality fish.

3.4 Types and Prices of Fresh Fish
The types of fish caught are divided into two types, namely the main catch fish and by catch.

<table>
<thead>
<tr>
<th>No</th>
<th>Species of Fish</th>
<th>Price (IDR/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mackerel (Scomberomorus commerson)</td>
<td>40,000</td>
</tr>
<tr>
<td>2</td>
<td>Mackerel Kuwe (Charanx ignobilis)</td>
<td>35,000</td>
</tr>
<tr>
<td>3</td>
<td>Marlin/ Jangilus (Istiophoridae)</td>
<td>30,000</td>
</tr>
<tr>
<td>4</td>
<td>Cloves / gray tuna (Thunnus tonggol)</td>
<td>13,000</td>
</tr>
<tr>
<td>5</td>
<td>Talang talang (Chorinemus tala)</td>
<td>13,000</td>
</tr>
<tr>
<td>6</td>
<td>Baby tuna/ jabrig (Thunnus albacares)</td>
<td>18,000</td>
</tr>
<tr>
<td>7</td>
<td>Skipjack tuna (Katsuwonus pelamis)</td>
<td>18,000</td>
</tr>
</tbody>
</table>

*Main catch Primary data 2022

The table above shows that mackerel has a higher price compared to other types of fish, namely IDR. 40,000/kg. Mackerel at a price of IDR. 40,000 is mackerel which has a large size with very good quality. Then followed by the price of tuna type Kuwe with the offered price of IDR. 35,000/kg with a big size. Then Marlin fish or commonly called jangilus with a price of IDR. 30,000/kg with large size and good quality, Cengker fish at a price of IDR. 13,000/kg small size, Talang-talang fish at a price of IDR 13,000/kg with a small size, baby tuna, which is a fish that has a local name jabrig, has a price of IDR. 18,000/kg with size and the last type is the main catch in Palabuhanratu namely skipjack tuna which has a price of IDR. 18,000/kg which have medium size tend to small.
Table 2. Prices and Types of Fish, the by catch of gillnet gillnets

<table>
<thead>
<tr>
<th>No</th>
<th>Type of Fish</th>
<th>Price (IDR/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Waho/male mackerel (Acanthocybium solandri)</td>
<td>18,000</td>
</tr>
<tr>
<td>2</td>
<td>Pari/Cawang (Dahsyatis sp)</td>
<td>6,000</td>
</tr>
<tr>
<td>3</td>
<td>Bloating (Rastrelliger kanagurta)</td>
<td>30,000</td>
</tr>
<tr>
<td>4</td>
<td>Semar (Lampris guttatus)</td>
<td>28,000</td>
</tr>
<tr>
<td>5</td>
<td>Balida (Chitala lopis)</td>
<td>10,000</td>
</tr>
<tr>
<td>6</td>
<td>Layur (Trichiurus lepturus)</td>
<td>55,000-60,000</td>
</tr>
<tr>
<td>7</td>
<td>Squid (Loligo sp)</td>
<td>28,000-30,000</td>
</tr>
</tbody>
</table>

*By catch Primary data 2022

Table above shows that Waho fish or male mackerel has a price of IDR. 18,000/kg. Furthermore, stingrays or cawing have a price of IDR. 6,000/kg. Several years ago, stingray/cawang was a by-catch that was very popular in Palabuhanratu. This causes massive exploitation which has an impact on the scarcity of this marine biota. In order to prevent extinction, the government has set a policy, namely the prohibition of catching stingrays/cawang fish as a conservation effort. Fishermen who dare to carry out trading activities and are monitored by units from government officials will be given a sanction in the form of a fine of IDR. 2,000-15,000 per kilogram. Another by-catch is bloating which has a selling price of IDR. 30,000/kg. Then Semar fish with a selling price of IDR. 28,000/kg, balida fish at a price of IDR. 10,000/kg. In addition, Layur fish has a selling price of IDR. 55,000-60,000/kg. The determination of the price of Layur is based on the quality and size of the fish when it lands. The last by-catch is squid with prices ranging from IDR. 28,000-30,000/kg.

3.5 Margins, Marketing Costs, and Profits Marketing

3.5.1 Margins, Marketing Costs, and Profits Marketing Channel I (Main catch)

The costs incurred by the ship owner/first collector ranged from IDR. 1,150-IDR. 7,500 per kilogram. The costs were used for transportation and ice blocks as well as risk costs, while at retail institutions the costs incurred ranged from IDR. 850-IDR. 4,010 per kilogram. The costs were used for transportation, ice and also packaging. The marketing agency for ship owners/collectors gets quite a large profit, which ranges from IDR. 850-IDR. 7,500 per kilogram, while retailers earn around IDR. 1,000-IDR. 5,990 per kilogram. Retailers only take profits in this channel because usually the number of catches obtained by fishermen is large, so that there is also a lot of fish circulating in the community. Furthermore, the marketing margin of the ship owner/first collector ranges from IDR.2000-IDR.15,000 per kilogram while the retailer ranges from IDR.2000-IDR.10,000 per kilogram. It can be seen that in this channel the highest marketing margin is found in the marketing agency of the ship owner/first collector.

3.5.2 Margins, Marketing Costs, and Profits Marketing Channel (by catch)

In channel I, with by catch the costs incurred by ship owners ranged from IDR. 1,050 – IDR. 6,300 per kilogram while the costs incurred by retailers ranged from IDR. 800-IDR. 5,400 per kilogram.
so that is the most costs incurred by the ship owner/first collector. The highest profit is for the ship owner/first collector with a price range of IDR.800 - IDR.13,700 per kilogram, while the profit for retailers is between IDR.800-IDR.5,400 per kilogram. Furthermore, the marketing margin for channel I with the highest by catch is the ship owner/first collector, which ranges from IDR. 2000 - IDR. 20,000 per kilogram, while the marketing margin at retailers ranges from IDR. 1000 - IDR. 7,000 per kilogram.

3.5.3 Margins, Marketing Costs, and Profits Marketing Channel II (Main Catch)

In Channel II, the main catch of the highest cost is in the marketing agency is ship owners, which ranges from IDR. 1,150-IDR. 7,500 per kilogram followed by institutions retail marketing agencies ranging from IDR.800-IDR.5,400 per kilogram and the lowest cost, namely collector 2, ranges from IDR. 700-IDR.5,000 per kilogram. The advantage of by catch in this channel is that the marketing agency for the first ship owner/collector ranges from IDR.800-IDR.13,700 per kilogram. This happens because the by catch of layur fish gets high profits because it is favored by the people of Palabuhanratu. Followed by retailer marketing agencies ranging from IDR.800-IDR.5,400 per kilogram and the lowest profit on this channel is owned by marketing agency 2 which is in the range of 200-2,500 per kilogram. Furthermore, the marketing margin in this channel is owned by the marketing agency of the ship owner/first collector, ranging from IDR. IDR.1,000-IDR.7,000 per kilogram.

3.5.4 Margins, Marketing Costs, and Profits Marketing Channel II (by catch)

In Channel II, with by catch costs incurred by ship owner/first collector, which ranges from IDR. 1,050-IDR. 6,300 per kilogram followed by institutions retail marketing agencies ranging from IDR.800-IDR.5,400 per kilogram and the marketing agency with the lowest cost, namely collector 2, ranges from IDR.350-IDR.5,500 per kilogram. The advantage of by catch in this channel is that the marketing agency for the first ship owner/collector ranges from IDR.800-IDR.13,700 per kilogram. This happens because the by catch of layur fish gets high profits because it is favored by the people of Palabuhanratu. Followed by retailer marketing agencies ranging from IDR.800-IDR.5,400 per kilogram and the lowest profit on this channel is owned by marketing agency 2 which is in the range of 200-2,500 per kilogram. Furthermore, the marketing margin in this channel is owned by the marketing agency of the ship owner/first collector, ranging from IDR. IDR.1,000-IDR.7,000 per kilogram.

3.5.5 Margin, Marketing Cost, and Profit Marketing Channel III (Main Catch)

The first ship owner/collector will usually sell fish to agents if the fish are not sold in the market either by collectors or other retailers. So that the ship owner will sell the catch as low as possible to the agent and then the fish will be stockpiled and then stored in cold storage and will be released when the fish is not in season. The costs incurred by agents ranged from IDR. 1,500-IDR. 7,000 per kilogram with profits between IDR. 1,500-IDR. 6,000 per kilogram and marketing margins ranging from IDR. 5,000-IDR. 15,000 per kilogram. Profits range from 1,500-6000 and marketing margins range from 5,000-13,000.

3.5.6 Margins, Marketing Costs, and Profits Marketing Channel IV (Main Catch)
The chain owned by channel IV is only through 2 marketing institutions, namely ship owners/first collectors and restaurants/other cities. The highest costs are in restaurant marketing agencies/other cities, which range from 1,500-7,500 because restaurants have to pay for labor and rent. Furthermore, the profits obtained by marketing agencies for ship owners and restaurants are more or less the same, ranging from IDR.7,000-IDR.15,000 per kilogram.

3.6 Marketing Efficiency

Marketing margin or marketing margin consists of costs to perform marketing functions, usually the functions used will be different so that the share margin obtained for each marketing institution involved will also be different.

<table>
<thead>
<tr>
<th>Channel</th>
<th>Description</th>
<th>Type of Catch (IDR/kg)</th>
<th>Mackarel</th>
<th>Kuwe</th>
<th>Malar/jangilus</th>
<th>Claves</th>
<th>Talangtalang</th>
<th>Baby Tuna</th>
<th>Skipjack tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Fisherman Price</td>
<td>40,000</td>
<td>35,000</td>
<td>30,000</td>
<td>13,000</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
</tr>
<tr>
<td></td>
<td>Consumer price</td>
<td>60,000</td>
<td>55,000</td>
<td>45,000</td>
<td>20,000</td>
<td>20,000</td>
<td>20,000</td>
<td>25,000</td>
<td>25,000</td>
</tr>
<tr>
<td></td>
<td>Marketing margin</td>
<td>20,000</td>
<td>20,000</td>
<td>15,000</td>
<td>7,000</td>
<td>7,000</td>
<td>7,000</td>
<td>7,000</td>
<td>7,000</td>
</tr>
<tr>
<td></td>
<td>Share margin</td>
<td>66.67%</td>
<td>63.63%</td>
<td>66.67%</td>
<td>65%</td>
<td>65%</td>
<td>72%</td>
<td>72%</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Fishermen's prices</td>
<td>40,000</td>
<td>35,000</td>
<td>30,000</td>
<td>13,000</td>
<td>13,000</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
</tr>
<tr>
<td></td>
<td>Consumer prices</td>
<td>70,000</td>
<td>65,000</td>
<td>60,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>28,000</td>
<td>28,000</td>
</tr>
<tr>
<td></td>
<td>Marketing margin</td>
<td>30,000</td>
<td>30,000</td>
<td>30,000</td>
<td>12,000</td>
<td>12,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td></td>
<td>Share margin</td>
<td>57%</td>
<td>53.84%</td>
<td>50%</td>
<td>52%</td>
<td>52%</td>
<td>64.28%</td>
<td>64.28%</td>
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<tr>
<td>III</td>
<td>Fishermen's prices</td>
<td>40,000</td>
<td>35,000</td>
<td>30,000</td>
<td>13,000</td>
<td>13,000</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
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<tr>
<td></td>
<td>Consumer prices</td>
<td>53,000</td>
<td>45,000</td>
<td>40,000</td>
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<td>18,000</td>
<td>23,000</td>
<td>23,000</td>
<td>23,000</td>
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<tr>
<td></td>
<td>Marketing margin</td>
<td>7,000</td>
<td>10,000</td>
<td>10,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Share margin</td>
<td>75.47%</td>
<td>77.78%</td>
<td>75%</td>
<td>72%</td>
<td>72.2%</td>
<td>64.28%</td>
<td>64.28%</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Fishermen's price</td>
<td>40,000</td>
<td>35,000</td>
<td>30,000</td>
<td>13,000</td>
<td>13,000</td>
<td>18,000</td>
<td>18,000</td>
<td>18,000</td>
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<tr>
<td></td>
<td>Consumer price</td>
<td>65,000</td>
<td>60,000</td>
<td>50,000</td>
<td>25,000</td>
<td>25,000</td>
<td>25,000</td>
<td>30,000</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>Marketing margin</td>
<td>15,000</td>
<td>25,000</td>
<td>20,000</td>
<td>12,000</td>
<td>12,000</td>
<td>12,000</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td></td>
<td>Share margin</td>
<td>61.53%</td>
<td>58.33%</td>
<td>60%</td>
<td>52%</td>
<td>52%</td>
<td>60%</td>
<td>60%</td>
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</tr>
</tbody>
</table>

Based on the analysis results presented in Table 3 shows that the highest marketing margin for marketing institutions passed by drift gillnet fishermen in Palabuhanratu is channel type II because it is the channel with the longest marketing chain compared to other types of channels. This is in line with the expression (Sulistya 2014) which states that the longer the marketing channel (the more commercial institutions involved), the greater the marketing margin. Then followed by...
channel type 4, namely fish sold by culinary business actors. Furthermore, to determine marketing efficiency, it can be seen from the margin and share received by fishermen (share margin). According to Mubyarto (2002) in Sudana (2019), marketing can be said to be efficient if the goods sold from producers can be delivered to consumers at the lowest possible prices. Based on the data analysis, the marketing channel that has the smallest marketing margin and the largest share margin is channel type 3, with a margin value of between IDR. 10,000-IDR.5,000 with an average of IDR. 6,700.- and share margins ranging from 64.28% - 77.78% with an average of 71.6% followed by type 1 channels with marketing margins ranging from IDR.7,000-IDR.20,000 with an average of IDR.11,800. - and share margin ranging from 63.3% - 72% with an average of 67.28%. Thus it can be concluded that the most efficient channel is a type 3 channel followed by a type 1 channel and the least efficient channel is a type 2 channel. The most efficient channel marketing channel that has the largest marketing margin and the smallest farmer share is the inefficient marketing channel. However, it should be underlined that the efficiency of the marketing channel is not only seen from the marketing margin and share margin, although the channel type 3 is the channel analyzed is the most efficient, but when viewed from the quality and freshness of the fish channel type 1 is better fresh because it is sold on the same day. Same as catch day. While the type 3 channel sells fish that have been frozen and are usually released during certain seasons.

3.7 Marketing Strategy

The community must increase creativity in the field of fish processing so as to increase market opportunities. Another condition in the fishing community in Palabuhanratu that makes it difficult to increase the income of the fishermen themselves is the lack of capital owned by the fishermen. Most (90%) of Palabuhanratu PPN fishermen use middlemen, especially to obtain fishing capital (Lubis et al 2012). So that there is a need for government institutions that are able to fight for the interests of fishermen, especially in obtaining capital on light conditions. As long as fishermen continue to depend on ship owners and there are no fish auctions, the ship owners or the second marketing agency will benefit more than fishermen. The local institution that regulates the operation of the TPI must also be able to monitor and supervise individuals who ask for a retribution fee that is too large so that fishermen can sell their catch at TPI without feeling aggrieved. It is hoped that this strategy will have an impact on increasing the prices received by fishermen and their families, so as to increase marketing efficiency and fishermen’s income.

4. CONCLUSION

The conclusion that can be drawn from this research is there are 4 patterns of marketing channels traversed by drift gillnet fishermen at PPN Palabuhanratu including: (1) Fishermen – Ship owners/Gatherers – Retailers – Consumers; (2) Fishermen – Ship Owners/ Collectors – Collectors 2 – Retailers – Consumers; (3) Fishermen – Ship Owners/Gatherers – Agents – Consumers; (4) Fisherman – Ship owner/Gatherer – Restaurant/entrepreneur outside the city. Based on marketing margin and share margin, the most efficient channel is channel type 3 followed by channel type 1.

REFERENCES