



ANALYSIS OF SUPPLY CHAIN OF BLUE CRAB (*PORTUNUS PELAGICUS*) IN PANGANDARAN, WEST JAVA (CASE STUDY AT PT. ASI PUDJIASTUTI MARINE PRODUCT)

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KeyWords

Pangandaran, Blue crab, Supply chain, Distribution channels, Risk.

ABSTRACT

This research aims to analyze the management of the blue crab supply chain in terms of product flow, financial flow, information flow, and risk as well as marketing margins of each chain involved in PT. ASI Pudjiastuti Marine Product, Pangandaran Regency, West Java Province. The research method used was descriptive qualitative and quantitative using primary and secondary data with snowball sampling methods. The analytical tool used was the analysis of supply chain conditions, risks, and consequences of blue crab supply chains. The results of this study showed that the process of product flow of the blue crab supply chain in Pangandaran Regency involves fishermen, PT. ASI Pudjiastuti Marine Product, wholesalers, small traders, and end consumers are quite well related to channeling from fishermen who have not been supported by fishermen's knowledge related to blue crab quality. The blue crab supply chain distribution channel is divided into 7 types of marketing chains with differences in each chain. The marketing channel of blue crab in Pangandaran Regency shows that the structure of the second chain with business actors is fishermen → PT. ASI Pudjiastuti Marine Product → large traders → small traders → consumers are more efficient with a marketing margin of Rp. 15,000 / kg or 33.33%, and has fisherman's share of 75%. The largest market share value of 59.01% is on the 4th channel with PT. ASI Pudjiastuti Marine Product as a marketing agent.

The first page should be used only for Title/ Keyword/ Abstract section. The main paper will start from second page.

1. INTRODUCTION

The blue crab (*Portunus pelagicus*) is one of the leading Indonesian fisheries commodities that have high economic value [1]. In 2010, the number of blue crab production in West Java Province reached 6,392.65 tons. Based on the Indonesian Ministry of Fisheries and Marine Affairs's statistical data, the number of blue crab production in the last five years has fluctuated each year, for example in 2015 the number of blue crab production in West Java Province reached 7,299.00 tons, then increased in 2016 by 77% to 12,944.00 tons, increasing rapidly in the year 2017 with an increase of 765% to 111,909.16 tonnes, then in 2018 it decreased by 92% to 8,423.89 tonnes [2].

Pangandaran Regency is one of the capture fisheries production centers in Indonesia, especially in West Java. The southern coastal area of Pangandaran Regency is directly adjacent to the Indian Ocean so that in general it has been developed as an area for tourism and fisheries activities. Based on data from the Department of Maritime Affairs, Fisheries and Food Security in Pangandaran, the production of blue crabs in Pangandaran in 2015 was 18,594.40 kg, in 2016 it was 7,905.77 kg, in 2017 it was 1,198.10 kg, in 2018 it was 3,987.75 kg, and in 2019 amounted to 11,983.75 kg with an average production value of Rp. 353,844,405.64 for the last five years [3]. All of these blue crab production activities involve the main members through their direct involvement in the supply chain

business process from production to marketing or until the product is in the hands of the user. Meanwhile, the supporting members in the supply chain are the local government in providing assistance or transportation rental companies for the distribution process.

PT. ASI Pudjiastuti Marine Products is a company that is actively involved in the supply chain for blue crabs in Pangandaran. PT. ASI Pudjiastuti Marine Products is a company engaged in the trading of fresh fishery commodities that implements strict procedures and controls so that products are in a clean and hygienic condition. The growing era of increasingly fierce competition in local and global markets, product innovations that have shorter life cycles, and higher customer expectations force all companies to invest and focus on supply chains [4]. Competition is a condition that every organization needs to pay attention to, so the organization must have a marketing strategy that can be used as a weapon in winning the existing competition [5]. Therefore, a strategy is needed in designing the most effective and efficient supply chain process [6].

The supply chain for the blue crab (*Portunus pelagicus*) needs to pay attention to several aspects that can affect the smoothness of the distribution process up to the hands of the end consumer. In addition to meeting consumer demand, the form of regulation in the blue crab supply chain also aims to benefit every link involved. So that we need an approach to the supply chain system in the form of an approach to determine product flow, financial flow, information flow, because this will affect decision making in each existing link [7]. Making the right decisions will be useful in maintaining the supply and quality of blue crab commodity. Time to deliver the product to the end consumer is demanded to be as efficient as possible while maintaining product quality.

Production flows of fish caught in a supply chain that are too long will add to costs because price is the factor with the highest ranking, followed by delivery and quality [8]. This is in line with the statement of Silva et al. stated that fish supply chains are characterized by long supply waiting times combined with significant supply and demand uncertainty [9]. Lee et al. argued that the mapping of distribution networks and matters relating to distribution techniques along with operational costs within a certain period also need to be studied because there are changes in price patterns in each supply chain to reach consumers [10]. However, no one has specifically conducted a comprehensive research on the supply chain model of the blue crab commodity in Pangandaran so that the flow of the blue crab supply chain in Pangandaran has not been well mapped.

Based on the description above, it is necessary to conduct research entitled Analysis of the Supply Chain of Rajungan (*Portunus pelagicus*) in Pangandaran, West Java (Case Study at PT. ASI Pudjiastuti Marine Product) in order to find out:

1. How is the flow of the blue crab supply chain in the Pangandaran area, especially at PT. ASI Pudjiastuti Marine Product in terms of product flow, information flow, financial flow and risk
2. How much is the marketing margin, fisherman's share and market share obtained in each blue crab sales supply chain

2. METHODS

2.1 Research Location

This research was conducted at PT. ASI Pudjiastuti Marine Products, Pangandaran District Pangandaran Regency, West Java is located on the east coast of Pangandaran Regency and is surrounded by restaurants and fish markets. The location is easy to reach and makes it easier to sell blue crabs.



Figure 1. Map of Research Location

2.2 Research Method

The research method used in this research is a case study (case study) with the case unit at PT. ASI Pudjiastuti Marine Products in Pangandaran. According to Nazir, a case study is a research on the status of research with regard to a specific or specific phase of the whole personality [11]. The aim is to provide a detailed description of the background, traits and clear character traits of the case or individual status, which then make these distinctive characteristics a general matter. The object studied in this research is in the form of blue crab chain actors in the Pangandaran area as a marketing agency that plays a role in distributing blue crabs to consumers.

The sampling technique in this research was carried out by the snowball sampling method. Snowball sampling is a sampling technique with the help of key-informants, and from this key informants will develop according to the instructions. In this case, the researcher only revealed the criteria as requirements to be sampled. The technique is a technique for determining a sample that first starts small and then grows.

Sources of data used in this study consist of primary data and secondary data. Primary data obtained from the results of direct interviews with fishermen, sellers or business owners, and employees, filling out questionnaires by respondents by answering questions that have been compiled about the supply chain of blue crab at PT. ASI Pudjiastuti Marine Products Pangandaran Regency, as well as direct observations when interacting with respondents. Secondary data is obtained through various literature, documents, and information from the libraries of the Faculty of Fisheries and Marine Sciences as well as from various related agencies. The primary data and secondary data in research in this study are shown in Table 1.

Table 1. Types and sources of research data

No	Type of Data	Required Data	Data Retrieval	Data Source
1	Primary	Chain structure, chain objectives, chain management, chain resources, chain business processes, chain business performance.	Questionnaires, Interviews	- Fisherman - PT. ASI Pudjiastuti <i>Marine Product</i> - Wholesalers - Retailers - Consumers
2	Secondary	Crab production data, crab distribution channel data, auction mechanism in Pangandaran, and other supporting data such as statistical data and PT. ASI Pudjiastuti Marine Products, Pangandaran	Literature review	- PT. ASI Pudjiastuti <i>Marine Product</i> - Journal - Department of Marine, Fisheries, and Food Security Pangandaran District

2.3 Data Analyst

Analysis conducted using descriptive analysis conducted using quantitative. Descriptive analysis was used to analyze the blue crab supply chain in Pangandaran. Descriptive analysis representing the type of statistics used to analyze data by describing or analyzing the data collected to produce conclusions that are needed for generality or generalization. Supply chain development can be done by using :

- a. Network Structure. The structure of the chain is examined using a member of the chain that explains who each member or party involved in the supply chain contributes to their respective roles. Commodity flows from upstream to downstream and is distributed to various locations, with the help of members, and the supply chain, as well as partnerships carried out from various parties.
- b. Chain Objectives. The chain objectives are examined using a target market that explains the model of the supply chain that occurs in the marketed product which discusses who the customer is and what is needed from the product he wants.
- c. Chain Management. Chain management is examined using (1) management structure that explains the parties that become the regulator and the main supply chain in terms of activities in the supply chain, (2) partnerships explain the partnership relationships formed and between the members of the chain, (3) regulate contractual and transaction systems explain the form contractual agreement agreed upon in establishing a cooperative relationship between the transaction system and the parties involved, (4) government support explains the role of government as a policymaker in managing and supporting the supply chain process.
- d. Chain Resources. Chain resources look at the potential resources possessed by supply chain members to know the potentials that can support the supply chain. Chain resources are examined using physical resources, technological resources, human resources, and capital resources.
- e. Chain Business Process. The business process chain explains the processes that occur in the supply chain to find out whether the entire supply chain flow has been well-integrated or not and explains how through a certain strategic actionable to realize an established and integrated supply chain. Chain business processes are examined using business process relationships between members of the supply chain, distribution patterns, trust-building, and risk aspects.

Supply chains in abnormal conditions, some risks can threaten the sustainability of the supply chain, both those that are easy to replace and those that are not easy to replace quickly within their management timeframe [12]. This risk value is referred to as the risk consequence (α) which can be calculated using the following formula:

$$\alpha = \frac{\delta \text{ replace}}{\delta \text{ collapse}}$$

Information:

α = consequences of the risk of a product in the supply chain

- δ replace = the time required for a supply chain to replace a sub-product or time needed to handle disruptions from one product flow, and return to normal scheduling conditions with the same quality level.
- δ collapse = the time of the sub-product fails to be completed before the supply chain loses at a critical point in its market service.

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions. Authors are strongly encouraged not to call out multiple figures or tables in the conclusion—these should be referenced in the body of the paper.

Assessment indicators for supply chain sustainability risks are presented in Table 2

Table 2. Value of risk consequences

Consequences	Information	α
Urgent	Irreplaceable	1,0
Needed	Not easy to replace	0,6
Required	Easily replaced	0,3
Wanted	Easily replaced	0,1

Marketing margin is the difference in the price of blue crab at the consumer level with prices at the producer or fisherman level. The difference in price or marketing margin is due to the profits taken by marketing institutions and the costs incurred in marketing blue crab. Margin can be expressed as a payment given to them for their services. The marketing margins are systematically formulated as follows:

$$M_p = P_r - P_f$$

Information:

- M_p : Blue crab marketing margin (Rp/pcs)
- P_r : Blue crab prices at the consumer level (Rp/pcs)
- P_f : Blue crab prices at the producer level.

A distribution system is said to be efficient if the level of marketing margin is less than 50 percent of the price level paid by consumers.

According to Azzaino fisherman's share is an approach to measure how much a business actor gets a share of the price at the consumer level [13]. In this study fisherman's share measures how much fishermen get a share of the price at the consumer level. The formulation of fisherman's share is to compare prices at the fisherman level with prices at the consumer level using the Fisherman's Share formula as follows:

$$FS = \frac{P_f}{P_r} \times 100\%$$

Information:

- FS : Fisherman's share or share of the price received by fishermen (%)
- P_f : Purchase price at fisherman level (IDR / kg)
- P_r : Retail price at consumer level (Rp / kg)

Market share analysis is the proportion of the company's ability to the sales of all competitors, including the sales of the company itself. The market share rate is expressed as a percentage. Based on these figures, the position of the company and the position of all its competitors in the market can be seen Often the level of market share is used as a guideline or standard for the company's marketing success in a position with its competitors [14]. Mathematically, in determining the market share, it can be formulated mathematically as follows:

$$Ms = \left(\frac{H_p}{H_t} \right) \times 100\%$$

Information:

- Ms : Market share

Hp: Selling price of marketers

Ht: The total marketing selling price.

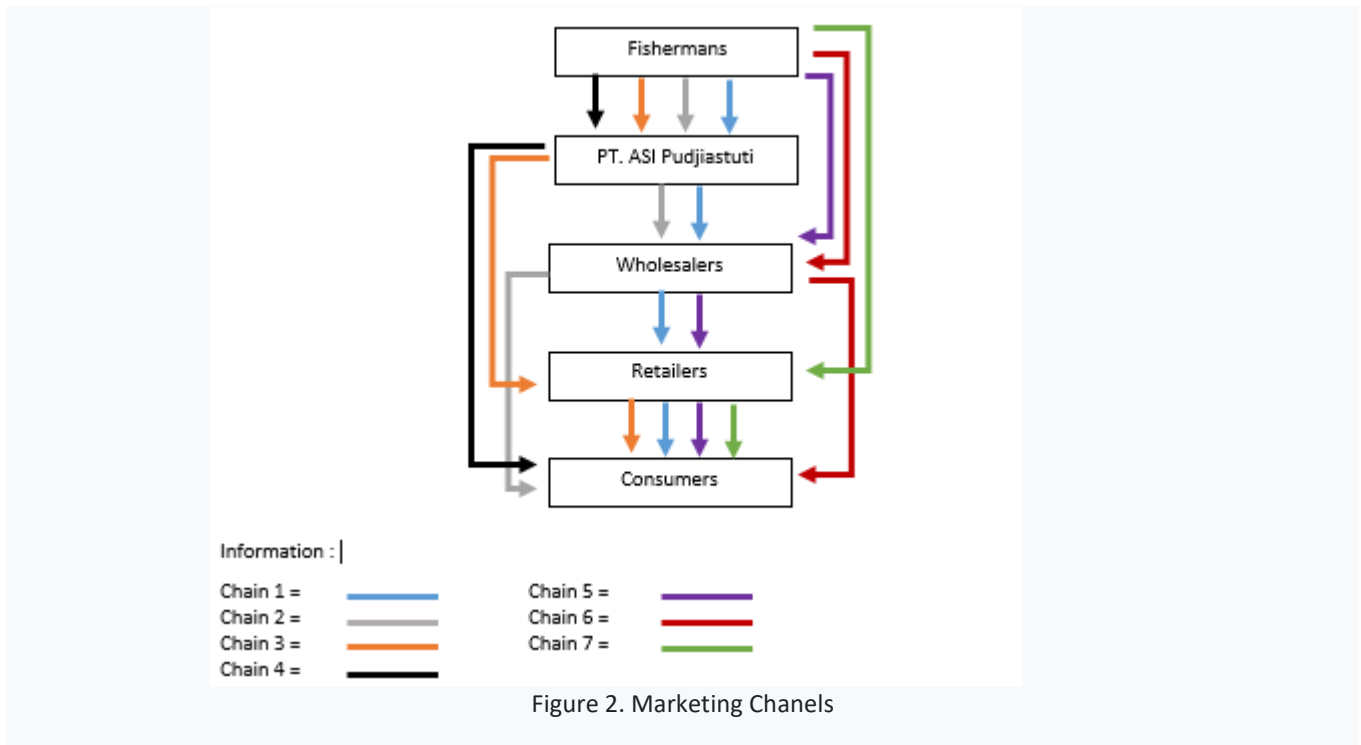
3. RESULT AND DISCUSSION

3.1 Product Flow Analysis, Information Flow and Financial Flow of The Blue Crab

The condition of the supply chain of blue crab in Pangandaran was analyzed descriptively including chain structure, chain management, chain resources, and chain business processes. The results of the analysis of product flow, information flow, and supply chain financial flows of the blue crab in Pangandaran can be seen in detail in Table 3.

Table 3. Analysis of product flow, information flow, and financial flow

Component	Supply chain conditions
Chain Structure	There are seven chain structures with chain members consisting of fishermen (produsen), PT. ASI Pudjiastuti Marine Products (distributor), wholesalers, retailers, and end consumers. In detail can be seen in Figure 2.
Chain Objectives	The target chain is aimed at the domestic market with the target market being intermediary traders, namely PT. ASI Pudjiastuti Marine Products, wholesalers and small traders in the East Priangan region which includes Pangandaran Regency, Ciamis Regency, Banjar City, Tasikmalaya Regency and City, Garut Regency and City, Sumedang Regency, Cimahi City, Bandung Regency and City and its surroundings.
Chain Management	Fishermen are members of the supply chain who have an important role. The partnership that is formed is not bound, namely fishermen are free to sell their catch to any party who, according to him, is more profitable. The transaction system used is cash which is then given directly to fishermen. The government provides operational assistance such as boats, nets for fishermen and baskets, scales, and other operational tools for middlemen or wholesalers.
Chain Resources	Resource chain consists of physical resources which include production resources such as ships and fishing gear in the form of nets. There are only 2 to 3 fishermen in catching blue crab in human resources per trip, 10 employees of PT. ASI Pudjiastuti Marine Products, 6 workers at large traders and 1 person for each small trader. Technological resources include communication aids in the form of cellular telephones, digital and analog scales, and means of transportation in the form of motorbikes, cars and trucks to transport products. The capital resources of each business actor come from private capital
Business Process Chains	There are differences in product flow cycles in the first, second, third and fourth chains with the fifth, sixth and seventh chains, namely the involvement of PT. ASI Pudjiastuti Marine Products in its product stream.



a. Chain 1: Fisherman → PT. ASI Pudjiastuti Marine Product → Wholesalers → Retailers → Consumers

The first chain is the longest chain because it involves all the main members starting from fishermen, PT. ASI Pudjiastuti Marine Product, wholesalers, small traders and end consumers. Fishermen sell their blue crabs to PT. Pudjiastuti Marine Product ASI which was later purchased by wholesalers. Usually, big traders buy blue crabs weighing 2 - 3 ounces per fish according to the fishermen's catch. Furthermore, the wholesalers routinely sell the blue crabs to small traders and then resell the blue crabs to the end consumers.

b. Chain 2: Fisherman → PT. ASI Pudjiastuti Marine Product → Wholesalers → Consumers

The second chain includes fishermen, PT. ASI Pudjiastui Marine Products, wholesalers and end consumers. The second chain has similarities to the first chain, but when it is in the hands of large traders, it is directly sold to the end consumer without involving small traders as sales targets. The final consumers who buy the blue crabs directly from the wholesalers are usually consumers who have subscribed to shop at the wholesalers, generally the wholesalers will resell the blue crabs to the final consumers in the area around the place of sale.

c. Chain 3: Fisherman → PT. ASI Pudjiastuti Marine Product → Retailers → Consumers

The third chain includes fishermen, PT. ASI Pudjiastui Marine Products, small traders and end consumers. In this chain, when small traders finish buying blue crabs at PT. ASI Pudjiastui Marine Product without a big trader as intermediary, then the blue crab is sold directly to the end consumer.

d. Chain 4: Fisherman → PT. ASI Pudjiastuti Marine Product → Consumers.

The fourth chain includes fishermen, PT. ASI Pudjiastui Marine Products, and end consumers. In this chain, the final consumer can directly buy the blue crab by visiting PT. ASI Pudjiastuti Marine Products or can buy it online through the official website of PT. ASI Pudjiastuti Marine Product .

e. Chain 5: Fisherman → Wholesalers → Retailers → Consumers

The fifth chain includes fishermen, large traders, small traders, and end consumers. The fifth chain is similar to the first chain, but in this chain the fishermen sell their catch of the blue crabs directly to the big traders. This usually happens because PT. ASI Pudjiastuti Marine Product, where the place to sell fishermen's catch is closed or not operating, usually during national holidays. The price obtained by fishermen is according to the wishes of the wholesaler.

f. Chain 6: Fisherman → Wholesers → Consumers

The sixth chain includes fishermen, wholesalers and end consumers. The sixth chain has something in common with the second chain, namely when it is in the hands of a wholesaler, it directly sells to the final consumer, but not through PT. ASI Pudjiastuti Marine Product.

g. Chain 7: Fisherman → Wholesers → Consumers

The seventh chain includes fishermen, small traders and end consumers. This chain has the same case as the third chain, namely the small traders who get the blue crab from the fishermen selling to the final consumer, usually the small traders are neighbors of the blue crab fishermen or traders who are used to subscribing to the fishermen. Then consumers in this chain are consumers who buy fresh blue crab which will be processed by themselves.

Based on the description of the supply chain structure above, it shows that all the main members play their respective roles according to their position in the supply chain. The most important aspects of good supply chain management are good collaborative relationships and centralized information from all parties involved. All parties carry out their duties properly to achieve the same goal, namely to provide satisfaction to consumers and be able to achieve prosperity for all parties involved in the supply chain.

3.2 Supply Chain Risks and Consequences of the Blue Crab

The constraints faced in this marketing institution are the availability of blue crabs, late payment and distribution of blue crabs, so a good supply chain management is needed.

When the blue crab stock at the raw material provider is not available, for 10 consecutive days, the big traders and small traders will experience a loss in the sense that they cannot meet consumer demand. It is assumed that within 30 days the demand for the supply of blue crabs has not been fulfilled. This situation is closely related to uncertain weather conditions for fishermen to go to sea, although the fishing for blue crabs is not affected by the weather, but the small fishing fleet in Pangandaran causes fishermen not to go to sea in extreme weather conditions because it endangers the safety of the fishermen themselves. Apart from that, it is also difficult to catch and the number of fishermen who are not too many causes uncertain results. Based on the results of interviews for 3 days, large traders and small traders can return this to its original state by purchasing blue crab from other large traders or outside the city (Cilacap) which is quite a distance away and requires more costs incurred or buying other commodities such as lobster and blue crab that have a similar price and taste. So that the availability of blue crab as the main raw material has a value of 0.3 which means that the risk consequence is that it is easy to replace because of its required nature.

Late payments occur when payments made are not cash, in other words, payments are due. However, this delay condition never lasts long, generally 2-3 days, a maximum of 1 week. This payment due is made in accordance with the agreement agreed by both parties and occurs between small traders and large traders. And it also happens to large traders to fishermen if PT. ASI Pudjiastuti Marine Product is not operating. Some reasons for late payment are at the level of small traders if blue crabs have accumulated and have not been sold to end consumers and the distribution is too massive from the fishermen to the big traders. The agreement for payment due is 2-3 days, up to 7 days, but there has never been a payment due that has exceeded this limit. The resulting value of late payment is 1.0, which means that the risk consequence is irreplaceable because of its important nature.

The success of the distribution of blue crabs in the domestic market is largely determined by 2 things, namely the quality of the blue crabs and the ability of the distributors to distribute from one place to another. When the quality of the blue crabs is poor, the freshness of the blue crabs is not in good condition either, which is dead, hard and has a strong fishy smell before processing. The process of storing the blue crabs is done by using an artificial pond / tub to keep the blue crabs alive. The ability of large traders to distribute from one place to another greatly determines the physical blue crabs. The product that is expected is to have a living condition and intact without defects. Defective conditions in blue crabs greatly affect the selling price, it can even go down by 40% -50% and even do not sell at all. Therefore, if the blue crab quality is good and the distribution is not careful, the traders will experience losses. Both of these conditions cannot be returned to the desired state because they are natural factors. The result value is 1.0, which means that the risk consequences are irreplaceable. The results of the consequence analysis of the risk of the blue crab supply chain are described in detail in Table 4.

Table 4. Results of analysis of risk consequences

Risk	$\frac{\text{replace}}{\text{collapse}}$	Score	Consequences	Information
Blue crab stock availability	$\frac{10}{30}$	0,3	Easily replaced	Required
Late payment	$\frac{7}{7}$	1,0	Irreplaceable	Urgent
Blue crab distribution	$\frac{2}{2}$	1,0	Irreplaceable	Urgent

3.3 Marketing Margin, Fisherman's Share, and Market Share of The Blue Crab Sales

Marketing margins are calculated to determine the difference in price at the level of fishermen with prices at the level of large traders, small traders, restaurants, or end consumers.

Marketing margin is the difference between the price paid by the final consumer and the price received by the previous marketing institution. Marketing costs are all costs incurred to transport products from one institution to the next marketing institution outside the profits obtained by the marketing institution. Marketing margins are often used as an indicator of marketing efficiency. The number of marketing margins in various marketing channels can be different because it depends on the length of the marketing channel and the activities that have been carried out and the expected profits by marketing agencies involved in marketing. The price differ-

ence occurs because of the benefits and costs incurred by each chain member in distributing blue crab to end consumers. The detailed calculation of the marketing margin of blue crab can be seen in Table 5:

Table 5. Blue crab marketing margin

Marketing Institute	Chain I (Rp/Kg)	Chain II (Rp/Kg)	Chain III (Rp/Kg)	Chain IV (Rp/Kg)	Chain V (Rp/Kg)	Chain VI (Rp/Kg)	Chain VII (Rp/Kg)
Fisherman							
Selling price	43.000	45.000	45000	45000	40000	40000	35000
PT. ASI Pud- jiastuti Ma- rine Product							
Purchase price	43.000	45.000	45000	45000			
Selling price	53.000	53.000	55000	65000			
Margin	10.000	8.000	10000	30000			
Wholesalers							
Purchase price	53.000	53.000			40000	40.000	
Selling price	63.000	60.000			55000	55.000	
Margin	10.000	7.000			15000	15.000	
Retailers							
Purchase price	63.000				55.000		35.000
Selling price	70.000				65.000		50.000
Margin	8.000				10.000		15.000
Consumers							
Purchase price	70.000	60.000	63000	65000	65.000	55.000	50.000
Total Margin	28.000	15.000	18.000	20.000	20.000	15.000	15.000
(%)	65,11%	33,33%	40%	44,44%	50%	37,50%	42,85%

Source: Primary Data, Processed in 2020

To find out the results of the sharing of prices received by fishermen compared to prices for final consumers, analysis of fisherman's share is used where the definition of fisherman's share itself is a comparison of the price received by fishermen with the price paid by the final consumer and expressed as a percentage. Fisherman's share can be seen in Table 6.

Table 6. Fisherman's Share of Blue Crab

Marketing Chain	Fisherman's Share (%)
Chain 1	61,42%
Chain 2	75%
Chain 3	71,42%
Chain 4	69,23%
Chain 5	61,53%
Chain 6	72,72%
Chain 7	70%

Source: Primary Data, Processed in 2020

Market share is a comparison between the selling price of each marketing actor and the price received by the blue crab supply chain actors in Pangandaran which is expressed as a percentage. The market share value is calculated from the selling price of marketers divided by the total marketing selling price of the channel or chain, the results of which are expressed as a percentage and calculated from each channel. The following is the market share in each marketing channel in table 7.

Table 7. Market Share of Blue Crab

Market agents	Component	Channel						
		I	II	III	IV	V	VI	VII
Fishermans	Selling Price (Rp/Kg)	43.000	45.000	45.000	45.000	40.000	40.000	35.000
	Market Share (%)	18,78%	28,48%	27,61%	40,09%	25%	42,11%	41,18%
PT. ASI Pudjias- tuti Marine Product	Selling Price (Rp/Kg)	53.000	53.000	55.000	65.000			
	Market Share (%)	23,14%	33,54%	33,74%	59,01%			
Wholesalers	Selling Price (Rp/Kg)	63.000	60.000			55.000	55.000	
	Market Share (%)	27,51%	37,98%			34,37%	57,89%	
Retailers	Selling Price (Rp/Kg)	70.000		63.000		65.000		50.000
	Market Share (%)	30,57%		38,65%		40,63%		58,82%

Source: Primary Data, Processed in 2020

4. CONCLUSION

Based on research conducted on the Analysis of Supply Chain Model of Blue Crab (*Portunus pelagicus*) in Pangandaran, it can be concluded as follows:

In the process of product flow, information flow, supply chain financial flow of blue crab caught in the Pangandaran district there are 8 marketing channels with differences depending on the number of chain actors. The blue crab supply chain involves PT. ASI Pudjiastuti Marine Products fishermen, wholesalers, small traders, and end consumers are doing quite well with regards to distribution from fishermen who have not been supported by fishermen's academic knowledge regarding fish quality. Contractual agreements in chain management still operate informally, making it difficult to predict the quantity of fish that must be sold in each link. The chain business process is constrained by a shortage of product flow if the weather conditions are unpredictable for fishermen to go to sea and also the harvest season for blue crab commodities which is not always available throughout the year. The risks that must be faced by large traders and small traders are the availability of blue crab stock, late payment, and distribution of blue crabs with a value of 0.3, 1.0, and 1.0 respectively, so that the risk value of the availability of blue crab stock is easy to replace and the risk value for late payment and distribution of blue crabs is irreplaceable.

The marketing channel for blue crab catch in Pangandaran Regency shows that the structure of channel II with business actors, namely fishermen → PT. ASI Pudjiastuti Marine Products → wholesaler → end consumer is much more efficient than other chains with a marketing margin of 33.33%, Fisherman's share of 75%. The largest market share value, namely 59.01%, is in chain IV with the marketing actors, namely PT. ASI Pudjiastuti Marine Product.

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