

IDENTIFICATION OF FISH QUANTITY MARKETED BY MARKET OPERATOR IN EVERY MARKETING CHANNELS IN LHOK PAWOH FISH LANDING CENTER

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ABSTRACT

One of the important industries in Aceh is Marine and fisheries. Most of the Acehnese depended on this industry for their livelihood. As a result, the industry generates big potential market. In PPI Lhok Pawoh, there are 5 marketing channels that generates values through exchange process of fish. This study aims to identify the quantity of fish flowed through the channels in order to discover the capacity of every channel in distributing the fish. The research was conducted in PPI Lhok Pawoh, Sawang Sub-District, South Aceh District and followed qualitative and quantitative of data collection. The research revealed that 84.89 % of fish was selling through Channel I which link to food processors located in North Sumatera and only 15.1 % is absorbed by local market within South Aceh District through Channel II, III, IV and V. Hence, in general, Channel I play significant role in marketing the fish produced from PPI Lhok Pawoh, while Channel II and III is experiencing big number of fish sold in the local market. The study follow qualitative survey method to explore the factors linked to discover the capacity of every channel in distributing the fish.

Keywords: Fish marketing; Marketing channel; Market operator; PPI Lhok Pawoh; Fish quantity

INTRODUCTION

In Aceh - Indonesia, Fish Landing Center (PPI) plays important role in marine and fisheries sectors, especially in capture fisheries. Its main role is promoting capture fisheries in the region which include production, processing, and marketing (Mardiana, 2010). Based on data publish by Ministry of Marines and Fisheries (KKP) in 2015, fish production in Aceh is increased since 2006. Fish production in 2006 is at 126,400 tons and increases to 159,500 tons in 2014. The increase of fish production is also followed by Acehnese fish consumption index. Acehnese fish consumption index is 45.83 kg/cap/year which is above the national index that only at 38.14 kg/cap/year (Ditjen PDSPKP, 2015). It can be assumed that capture fish has generated a big market size in the province. The fulfillment of fish with good quality and security for the consumer will only be achieved by an effective organization of marketing system (FAO, 2004). The big generated fish market in Aceh is needed to be explored to identify some important information in order to discover how the market being organized by market operators. Most fishes are marketed through marketing channels which consisted of some market operators. In Vietnam, fish product flow can follow various channels from the fish producer including fisherfolk and aqua culturalist to the final consumer and can involve varying number of stages (FAO, 2004). At Jamua River in Bangladesh, fish was channelized through ten different channels from the fisherman to the consumers (Amin & Nabi, 2019). While in Aceh, a case study in Lhok Pawoh Fish Landing Center (PPI Lhok Pawoh) done by Amri et al. (2019) revealed that the fish landed in PPI Lhok Pawoh is sold through 5 marketing channels with 5 types of market operators to fulfill the need of fish within and outside of South Aceh District. As the function of marketing channels are transactional, logistical, and facilitating (lumenlearning.com), it is important to identify the capacity of every channel in distributing the fish. This case study is aimed to identify how the fish is flowed through the market operators in every fish marketing channels that exist in PPI Lhok Pawoh. Therefore, it is expected that the research will come out with some significant output which is a fish flowchart of every marketing channel in PPI Lhok Pawoh.

LITERATURE REVIEW

Market and Marketing

In a simple way, a market is a medium to exchange goods and services (Heyne, 2014). Other experts define market as a place that allows sellers and buyers to interact each other for the purpose of goods/services; it can be

physical market or virtual market (Waheed, et.al., 2017) and a group of people who have a desire to be satisfied, money to spend, and a willingness to expend (Stanton, 1994). From those description, it may be concluded that every market is consisted of facilities to do transactions, seller and buyer who interested and agreed in exchanging product or services. By then, product produced by producer will be distributed to the consumer. Hence, the product flow from producer to consumer is one of important point in a market. While marketing focuses on the activities of people or organizations in exchanging products and services. According to American Marketing Association (2017), marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large and Kotler (2009) defines marketing as a societal process by which individuals and groups obtain what they need and want through creating, offering and freely exchanging products and services carrying value. It indicates that there are 4 activities, or components of marketing:

- 1) Creating. The process of collaborating with suppliers and customers to create offerings that have value.
- 2) Communicating. Broadly, describing those offerings, as well as learning from customers.
- 3) Delivering. Getting those offerings to the consumer in a way that optimizes value.
- 4) Exchanging. Trading value for those offerings (University of Minnesota, 2015).

Those activities are running actively by many parties in order to make a product reach consumer by bridging the gap between producer and consumer. Every person or organization who participate in every level of marketing is called market operator (FAO, 2004) or market actor (Ojo, 2016) and the interaction among them will create marketing channels.

Marketing Channel

The term, marketing channel was first described as a trade channel bridging producer and consumer (Lewis E.E., 1968). As the evolution of knowledge, marketing channel is also experiencing the evolution of its meaning. Rosenbloom, B. (2004) said that a marketing channel is the external contractual organization that management operates to achieve its distribution objectives. In the relation of marketing as the exchange process, Pelton et al., (2016) defines marketing channel as an array of exchange relationships that create customer value in the acquisition, consumption,

and disposition of products and services. Therefore, any connection between individuals and/or organizations that allows or contributes to the occurrence of an exchange is a marketing channel (Pelton et al., 2016). Nowadays, marketing channel decisions are as important as the decision's companies make about the features and prices of products (Littleton, 2007). In fish industry, marketing channel may describe as a route or path through which fishes are shifted from the harvesting or capturing spots to the ultimate consumers (Amin & Nabi, 2019). Hence, in the case of fish marketing where the product is easily defective, marketing channel plays very important role in facilitating the exchange process of the fish among market operators to create the value for the business.

In PPI Lhok Pawoh, all fish marketing channels are starting from *Toke bangku* and consist of 5 fish marketing channels. Those channels are operated by 5 market operators which are *Toke Bangku*, *Toke Ikan*, *Muge Besar*, *Muge Lapak*, and *Muge Motor* (Amri A., 2019). The channels are presented in Figure 1 below.

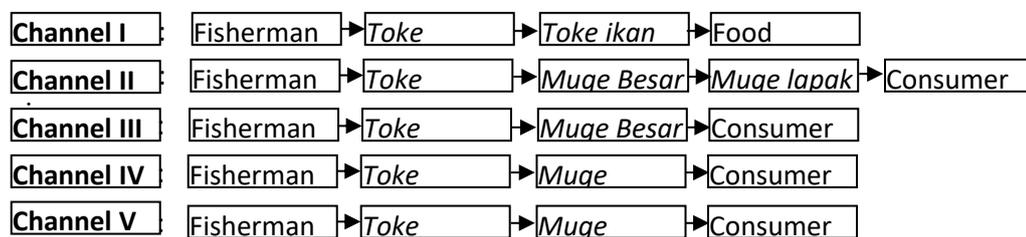


Figure 1. The fish marketing channels in PPI Lhok Pawoh (Amri A., 2019)

Fish Landing Center / PPI (Pangkalan Pendaratan Ikan)

Based on the regulation of Indonesian Ministry of Marine Affairs and Fisheries No. Per.08/Men/2012 about fisheries port, fisheries port is divided into 4 ports, which are Oceanic fisheries port (*Pelabuhan Perikanan Samudera-PPS*), Archipelagic fisheries port (*Pelabuhan Perikanan Nusantara-PPN*), Coastal fisheries port (*Pelabuhan Perikanan Pantai-PPP*), and Fish landing center (*Pangkalan Pendaratan Ikan-PPI*). Fish landing centre or PPI has some criteria technically and operationally. It is listed as bellow:

Technical criteria consist of:

- 1) Capable of servicing fisheries boat which operate in Indonesian waters;
- 2) Having facilities to moor and anchor minimum 5 GT fisheries boat;

- 3) Having at least 50-meter length and 1-meter depth;
- 4) Capable to moor and anchor at least 15-unit fisheries boat or 75 GT fisheries boat in total; and
- 5) Managing area of at least 1 ha.

Operational criteria - There are at least 2 tons of fish download/uploading and marketing activities every day on the site. Some of the important infrastructures in marketing capture fish from waters is fisheries port (*Pelabuhan perikanan-PP*) and fish landing centre (*Pangkalan pendaratan ikan-PPI*) (Muninggar, R. 2008). Hence, PPI facilitates fish distribution from producer to consumer by being used for landing and marketing the fish capture.

METHODOLOGY

Study Area

The study was conducted in one of PPI in South Aceh District which is PPI Lhok Pawoh. PPI Lhok Pawoh is located in Lhok Pawoh village, Sawang Sub-district. PPI Lhok Pawoh has at least 13 motorboats, sized 25 – 60 GT, active in caching fish (DKP Aceh Selatan, 2019). It is situated just beside the Indian Ocean and only 15 Km from the capital city of the district, Tapaktuan. Hence, it is easily accessible both geographically and informatively.

Data Collection and Respondent

The research followed qualitative data collection. Data collection were done by utilizing direct interview with some respondents and taking noted fish quantity data from market operators that involve in the fish marketing channels. Finally, observation method was also used to capture the existing fish marketing activities in every marketing channels. Data collection was performed from May to August 2019.

ANALYSIS, RESULT AND DISCUSSION

Through the observation, fish as the product to be delivered from fisherman to the consumer through the marketing channel need to be identified its quantity in order to define which channel is significantly impact to the fish

marketing process. Hence, fish quantity will be considered as a discussed variable to describe the desirable marketing channel in PPI Lhok Pawoh.

Fish Production

After conducting some interviews with some officers of South Aceh Marine and Fisheries Office (DKP Aceh Selatan), fisherman and market operators, fish production in PPI Lhok Pawoh is considered as the result of fish capturing activity from the sea using boats by fisherman. Fish production quantity is counted based on the amount of the fish collected or received by the first market operator in the fish marketing channel, *Toke Bangku*, from fisherman. *Toke bangku* is the one who collect all fish caught by fisherman and organize auction process in the auction market (Amri A., 2019). Therefore, fish quantity data from *Take Bangku* are collected and presented in Table 1.

Table 1. *Fish production at PPI Lhok Pawoh in 2019*

Month	Total fish production (Kg)	Average weekly fish production (Kg)	Average daily fish production (Kg)
January	200,900	50,225	6,697
February	104,150	26,038	3,472
March	175,900	43,975	5,863
April	102,050	25,513	3,402
May	201,500	50,375	6,717
June	163,950	40,988	5,465
July	86,030	21,508	2,868
August	86,900	21,725	2,897
Total	1,121,380	-	-
Average	140,172.5	35,043	4,672

Table 1 shows that total fish production for 8 months in 2019 is 1,121 tons of fish. Based on the data, the average monthly fish production is 140.723 tons, 35 tons weekly and 4.6 tons daily. Those quantity of fish is the number of fish that being distribute in the first phase of fish marketing channel. It is the first exchange process which occurred between fisherman as producer and *Toke Bangku* as the first market operator.

Fish Quantity in every market operator

In this section, quantity of fish in every market operator will be identified. The data were gained from market operators notes, especially *Toke bangku*. Most of information regarding fish quantity distribution are recorded by *Toke Bangku*, because *Toke bangku* is also the one who organize the auction market in PPI Lhok Pawoh. Due to poor notes organization and management, fish quantity in every market operator is only available for 3 months, from June to August 2019 which are listed in Table 2.

Table 2. *Fish flow quantity in every market operator*

Market Operator	Fish Flow Quantity (Kg)			Average (Kg)	Percentage (%)
	June	July	August		
<i>Toke Bangku</i>	163,950	86,030	86,900	112,293	100
<i>Toke Ikan</i>	138,998	72,981	74,000	95,326	84.89
<i>Muge Besar</i>	15,042	7,446	8,156	10,215	9.09
<i>Muge Lapak</i>	8,529	4,744	4,238	5,837	5.19
<i>Muge Motor</i>	1,380	859	507	915	0.81

Table 2 revealed that all fish captured by fisherman are collected by *Toke Bangku*. *Toke Bangku* take all fish to the auction market to be auctioned. On this point, fish are distributed to different market operators which channeling the fish to consumer. Therefore, *Toke Bangku* is the first market operator in PPI Lhok Pawoh and being the main gate of every channels. All market operators that buy fish in the auction market have direct connection to the ending consumer. From all market operators which directly connected to consumer, there is one market operator that capable of marketing the fish in big quantity. It is *Toke Ikan*. The data shows that *Toke ikan* sell 84.89 % fish. Those fish are distributed to food processor in Medan and/or Sibolga North Sumatera Province. While the rest is marketed in the local market, within South Aceh District, Aceh Province. Consequently, most fish produced from PPI Lhok Pawoh are being marketed out of South Aceh District.

Schematic Fish Flow Diagram

The amount of fish being marketed by market operators flow from fisherman to consumer through channels. Since the existing marketing channels in PPI Lhok Pawoh consisted of 5 channels, the schematic fish flow diagram will have 5 line that representative each fish marketing channels. Channels presented in chapter 2 indicates that there are two operators after *Toke Bangku* that involved in several channels. They are *Muge Besar* and *Muge*

Lapak. Muge Besar has two different output lines and *Muge Lapak* has two different input lines. The connection between *Muge Besar* and *Muge Lapak* create a fish flow. After interviewing some *Muge Besar*, it is discovered that only 70 % of fish, in average, being distributed to *Muge Lapak* from *Muge Besar* and the rest is sold directly to consumer. In the result, the line has a big impact towards *Muge Lapak's* fish supply. In addition, based on the explanation above, PPI Lhok Pawoh has two difference ending target in marketing the fish. They are consumer and food processor. Consumer represent the local market which is within South Aceh District and food processor represent market outside of South Aceh District. Hence, schematic fish flow diagram will be divided into two endings of the fish flow, market within and outside south Aceh District. To have a better understanding, Figure 2 will display the schematic fish flow diagram.

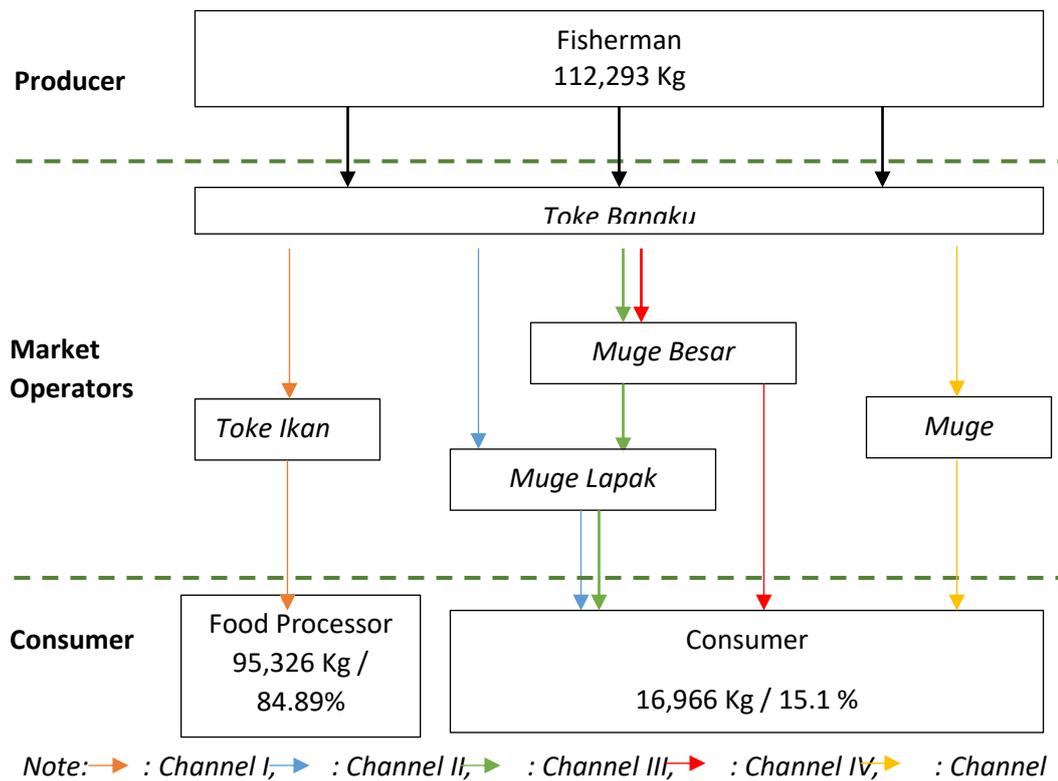


Figure 2. Schematic Fish Flow Diagram

CONCLUSION

PPI Lhok Pawoh is capable of producing 140.1 ton of fish in average every month. All fish are collected by *Toke Bangku* as the first market operator on the site. *Toke Ikan* is the only market operator who marketed fish out of South Aceh District and the rest are selling fish in the local market within South

Aceh District. From total fish production, 84.89 % of fish is selling through Channel I which link to food processor located in North Sumatera and only 15.1 % is absorbed by local market within South Aceh District through Channel II, III, IV and V. Therefore, in general, Channel I play significant role in marketing the fish produced from PPI Lhok Pawoh, while Channel II and III is experiencing big number of fish sold in the local market.

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