

The Local Government's Supply Chain Strategy to Empower the Traditional Fishermen in Southern Coast of Java Island

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ABSTRACT

This study aims to investigate how to determine the supply chain system strategy of the price efficiency for traditional fishermen in the southern coast of Java Island, and to find out how to determine the market selling price of the fish to improve the competitiveness of traditional fishermen. This study employed qualitative method with a critical paradigm based on Karl Marx thought to answer the problem of economic competitiveness of traditional fishermen. This study's respondents are traditional fishermen and Head of Fishery Department in Pangandaran, Pandeglang, Cilacap and Gunung Kidul. The results show that the role of fish auction places that has been organized by the Fishery Department of district government can reduce the supply chain-gap from fishermen to fish processing companies and household consumers. Moreover, the supervisor of fishery department acknowledged that the managers of fish auction place located in every district on the south coast of Java Island is still hampered by *bakulan*/the middlemen. *Bakulan* in each fish auction place determines the market price of fishes and provides working capital to the fishermen when they start working to find fishes in the sea. Furthermore, the results also show that the fishermen - fish auction's location – fish processing industries/consumer is the To enhance the fisherman's economic competitiveness, the Department of Fishery must oversee the operating activity of fish auction and establish a fair price index of every type of fish caught by fishermen in every district.

Type of Paper: Empirical

Keywords: Traditional fishermen, Supply chain strategy, Fair index price of fish

1. Introduction

The supply chain system of the integrated products which consists of production site, transportation, warehouse location and consumer has an essential role in increasing the value-added of the production process (Carter and Price, 1993; Dale et al, 1994; Womack and Jones, 1994; Chen and Paulraj, 2004). How the local government policies can support the supply chain model of fishermen catches so it can improve competitiveness among the fishermen, particularly traditional fishermen in Southern Coast of Java Island. This thought should be criticized. The mechanism of supply chain of traditional fishermen fish catches has some characteristics depend on the quality and freshness of the fish.

The Indonesian government has issued several policies to improve the competitiveness among fishermen, especially traditional fishermen. One of the policies issued is the Government Regulation Number 50 of 2015 on Small Scale Fishermen Empowerment and Small Fish Farmer Indonesian Government, through the Ministry of Marine Affairs and Fisheries, aims to improve the welfare of small scale fishermen and optimize their potentials in groups. Small scale fishermen are people who fulfill their daily necessities by catching fishes using the largest size of fishing boat, sized 5 (five) gross tons (GT). The empowerment of small scale fishermen can be done by improving the ability of Small Scale Fishermen or traditional fishermen. In this way, they will have the opportunity to become small fish farmers and do a better job in their activities.

Traditional fishermen need the support of government. This can be done by providing comfort and safety from the threat of middlemen, foreign and illegal fishing entrepreneurs that always affect the selling price of fishes caught by traditional fishermen. Owing to the fact that Indonesia aims to transform into global maritime axis, maritime defense and protection from upstream to downstream are compulsory. This phenomenon occurs due to economic liberalization as the consequence of international trade that should not undermine the government's efforts in protecting traditional fishermen. The main purpose of such trade is to protect national economic interest from negative influences and from adverse or unfavorable situation/condition of international economy/trade and for traditional fishermen.

On the contrary, based on the census carried out by the Central Bureau of Statistics, in 2015 there had been a significant decrease in the number of traditional fishermen in Indonesia of about 1.6 million households to 364 thousand households. Conversely, the number of small fish farmer showed a positive trend, increasing from 85,000 to 1.2 million households. Responding to the census results, the Minister of Marine Affairs and Fisheries was surprised by the decreased number of traditional fishermen in Indonesia, which can be caused by the change of profession of most fishermen on that period.

Thus, this research intends to criticize and offer the supply chain model of fish catches. The supply chain model is expected to have a considerable impact on fishermen welfare and fishermen desire to retain their profession. Another problem raised in the research is how policy of each local government can overcome the decreased number of traditional fishermen and improve their welfare and implement the government regulation into the rules applicable in their area. A big problem that needs solution from the local government is the role and impact of the existence of bakulan at every fish auction in all districts.

Bakulan is someone or a team of people who decided into two types. First, Bakulan who only buy the fish catches with low price at the place of fish auction. This second type does harmful for the fishermen, because this Bakulan who lends funds to fishermen as their capital for sailing but then they should sell their catches to Bakulan then Bakulan will give(s) the price, the low price, and sell them to some companies with high price. Not until that, all the money that Bakulan has been lend must be given back with interest.

Bakulan is legal profession but it also not registered in local government law and regulation, example the law of local government in Cilacap does not prohibits of the existense of Bakulan in Cilacap. As a matter of fact, the legal institution which is in the Cilacap Regional has regulation about cooperative and the place of fish auction. If this regional regulation can be not

only worked but also supervised by Cilacap regional government, the cooperative (regional government) as the source and controller of the fund for every fisherman and fish auctions that have been pointed by main government to build higher price than Bakulan has done, it will be possible all those fishermen can reach better prosperity level.

3. Literature Review

3.1 Strategy to Empower and Increase the Competitiveness of Traditional Fishermen

The competitiveness and sustainability of traditional fishing business in Indonesia is threatened because of the poor infrastructure, fishermen lag, rampant fish theft, weather issue, lack of technology for fishing equipment, import flow hitting competitiveness, the absence of fishery logistics system that supplies fish as raw materials for sustainability of fish processing industry and government policies that does not consider traditional fishermen as an important part of the economy. Other factors that caused the low competitiveness of traditional fishermen in Indonesia are the problem of capital and fuel oil. To solve this problem, it requires a comprehensive policy from the government, so that traditional fishermen can have a strategic role as a provider of protein food for the civilization of people in Indonesia (Kompas, 2012).

Among the policies made by the Government is the marine and fishery industrialization policy that focuses on the downstream industry. During the period of 2010-2014, the government provided aid program of 1,000 fishing vessels with a weight of 30 tons. However, after being assessed by the Head of Multipurpose Business Cooperative, Ahmad Muttaqin, the program was judged as a mistake since when the vessel was received, the fishermen needed to repair and maintain the vessel, which requires a lot of money.

According to Riza Damani, the Chairman of Indonesian Traditional Fishermen Association (KNTI), The National Medium Term Development Plan (RPJMN) 2015-2019 has some weaknesses. The provision of 10% venture capital, according to him, is not for strengthening the value-added fishery products, but rather for increasing the production. Moreover, the marine security defense policy is unable to optimize the role of fishermen.

3.2 Supply Chain System- Exploration Management Accounting.

Supply chain system is a different system from traditional methods. It began to be known and evolved in raw material purchasing system and logistic practices in the 1960s and ended its popularity in the 1990s. The development of the supply chain system becomes integrated to enhance the added value of the production process (Carter and Price, 1993; Dale et al. 1994; Womack and Jones, 1994; Chen and Paulraj, 2004). Appropriate Dynamic Industry theory (Industrial Dynamics) which started by forestry worker raises antecedents on distribution and logistics costing approach (Heckert and Miner, 1940; Lewis 1956). Quality of raw material supply chain from ship to fish auction place then to consumer.

Consumer fishermen can be divided into two groups, namely the final consumer groups (households and culinary service business owners) and fish processing industry groups. The quality of the supply chain requires an integrated system so that the fish catch is kept up without the use of harmful preservatives. How the policy of the central government and local government in supporting the supply chain system of fish raw materials to traditional fishermen

becomes an important thing that need to be revealed in this research. During this time, fishermen using large vessels have a storage warehouse with a freezer system representative, able to accommodate the number of fish in the amount of more than 2 Ton. While traditional fishermen should think many times to rent storage warehouse with freezer system because the rental price is not comparable with the catch. Traditional fishermen are difficult to compete to increase their potential with fishermen who use large vessels.

4. Research Methodology

This research used Karl Marx's critical theory paradigm (1818-1883) to answer all problems related to local government strategy that has been performed in improving the competitiveness of traditional fishermen in the coastal areas of Java Island. The use of this paradigm is intended to assert an ontology based on historical realism that Indonesia is known as maritime nation with the strength of tough fishermen. Transactional epistemology and a dialogical and dialectical methodology. The sociology of K. Marx's critical thinking on historical materialism is in accordance with the context of traditional fishermen problems: [1] Social circumstance may create social consciousness, [2] General law of social development, [3] Class and class struggle, [4] Role of mass and leader in history.

This study aims to find out the transformation of a fisherman and the cause of decrease in the number of traditional fishermen as stated in the data submitted by Central Bureau of Statistics (CBS) in the Press Release of the Ministry of Maritime Affairs and Fisheries on November 13th, 2015. Critical paradigm was utilized to find out internal and external elements that will lead to the change in previously known elements through certain processes such as local government support for fishermen so they can sustain their life as fishermen; supply chain strategy of traditional fishermen catches; and transformation process in social order of a traditional fisherman. The root cause of fishermen transformation can be the demand for a better life or the desire to escape poverty. This is due to the closeness of traditional fishermen's life to poverty. Lifestyle changes and technological developments can also be origin of the transformation.

The data were collected through in-depth interview method, document observation, participatory observation and triangulation. Some key informants of traditional fishermen in the Southern Coast of Java Island [Pangandaran, Pandeglang, Gunung Kidul, and Cilacap], the Head of Fisheries Department, the Ministry of Marine Affairs and Fisheries at district level, Middlemen, administrator of Fish Auction Place, and family members of traditional fishermen were interviewed. The result of this study is expected to uncover the strategies used by both central and regional governments to strengthen the competitiveness of traditional fishermen.

5. Results

According to some literatures, the fishermen are characterized by the poverty, low-educated children, slum neighborhood and low health level. The reality of traditional fishermen life in the southern coastal areas of Java Island such as Cilacap and Gunung Kidul is not like what is written on literatures. Traditional fishermen in Gunung Kidul and Cilacap wanted to have a comfortable house and send their children to a good university. However, sometimes they are forced to hire their children who are still in elementary or junior high school to work as the ship crew. The lack of ship crews becomes the reason why fishermen bring their underage son



Figure 1. Local Government Strategy in Managing the Supply Chain of Traditional Fishermen Fish Catches

to go to work on the sea. This condition is much different from the fishermen in Pangandaran and Pandeglang areas who live in slum neighborhood and experience the lack of clean water, bad sanitation and low education level of children. The aforementioned issues become the main concern of the researchers.

Although the neighborhood condition, environmental concern and motivation to improve the children’s educational quality of these traditional fishermen communities are different, they have similar perspective on social life and fish catches that “Fortune has been provided by the almighty God in the sea”. Traditional fishermen are obliged to maintain the sustainability of fish catches that provided by the universe. Engine or boat, human, weather condition, storage method in the sea, and fishing location determine the quantity and quality of fish catches. The quantity and quality of fish caught by traditional fishermen affects the selling price at Fish Auction Place (FAP) or Village Unit Cooperative (VUC). According to the authors’ observation, traditional fishermen condition represents a series of social constructions that are formed as the consequence of local government policy.

FAP and VUC have the role as suppliers for consumers (fresh fish processing company, fresh fish exporter, and household consumer). Some fishermen are reluctant to sell their fish catches to FAP or VUC, they prefer to sell their fish catches to middlemen. The reason is that middlemen have given loan money for fisherman’s capital to buy supplies to go to the sea while the price of fishermen fish catches by middlemen is like FAP or VUC. Fishermen are aware that they will be dependent on Middlemen. This is something that needs to be criticized.

Figure 1 explains that middlemen is illegal individual supplier for FAP organization and Fisheries Department in each District because the Middlemen can directly sell the fishermen fish catches to fish processing industry or household consumers. If FAP administrator is not actively buying the fishermen fish catches, then the fishermen production recorded in each district will consistently decrease. Local government feels unease about the conspiracy of middlemen that buys the fish catches massively. The performance of fishermen production in each district will have an impact on the performance of legal FAP or VUC organization. Economic condition of traditional fishermen makes them closer to middlemen so their social awareness is only focused

on getting money quickly to meet their needs of life. According to Marx's critical thinking, the condition of fishermen's social awareness is affected by their geographical condition and production method (Darsono, 2007). Middlemen as illegal individual supplier knows the fishermen's financial condition.

6. Discussion

As a human, fisherman is only considered as tool to meet other human satisfaction, such as middlemen, FAP/VUC, and local government. Fishermen as the satisfier of needs but have the lowest class in social life structure in an area that has abundant fish resources. The demand to change their state of social structure makes some traditional fishermen are looking for other jobs such as construction worker around their neighbourhood, sea tour guide, and many fishermen in some areas (Cilacap, Gunung Kidul, Pangadaran, and Pandeglang) become workers who migrate to Batam and Malaysia. Pangadaran, Pandeglang, and Gunung Kidul districts experience a significant decrease in the number of fishermen. Meanwhile, the number of fishermen in Cilacap is still sufficient with the average age of over 45 years old.

Another problem faced by local government is that the number of fishermen in Cilacap is not positively correlated with the number of production, which is lower than other regions. Moreover, the selling price of fish catches in Cilacap is lower than Pangadaran and Pandeglang. Therefore, Cilacap fishermen sell their fish catches to FAPs in Pangadaran and Pandeglang. People in the lowest class cannot become the ruler simply by saving their salary or wage, they maximize the methods to make profit of the production process (Schumpeter: 21, 2013)

Mr. Saeful Purnamaji, the Head of Fisheries Department in Cilacap District, explained that: "Fishermen cannot only rely on the work area in Cilacap because it is already full. However, it is not overfishing yet. Now, our problem this time is that the number of fishermen is high while their production is low." (Manuscript 01, Interview March 6, 2017).

Local government as the highest class in the social structure of fishermen community tries to make FAP/VUC organization as the main actor in fish supply chain. Local government role in managing the supply chain of fish catches will greatly affect the welfare of traditional fishermen in Southern Coast of Java Island. Fish catches that can be supplied by suppliers (FAP and VUC) would depend on the competitive strategy (competitive fishermen production) and supply chain strategy (supply chain strategy of fishermen fish catches). The authors adopt and develop the illustration of supply chain decision-making framework (Chopra & Meindl: 58, 2016).

In order for the FAP or VUC to fulfill the fish needs of consumer in accordance with the best product quality standard, the availability of fish supply according to the demand, the quick time of delivery from FAP to processing industry or fish market, and reasonable fish price, the local government's role and commitment are needed, since it has the role in designing competitive strategy and supply chain strategy of fish catches using efficient method and responding to the changes in supply chain towards the better (see figure 2). The availability of facilities, sufficient inventory, transportation, information, resources, and pricing can result to an efficient and responsive supporting structures of supply chain of the fish catches.

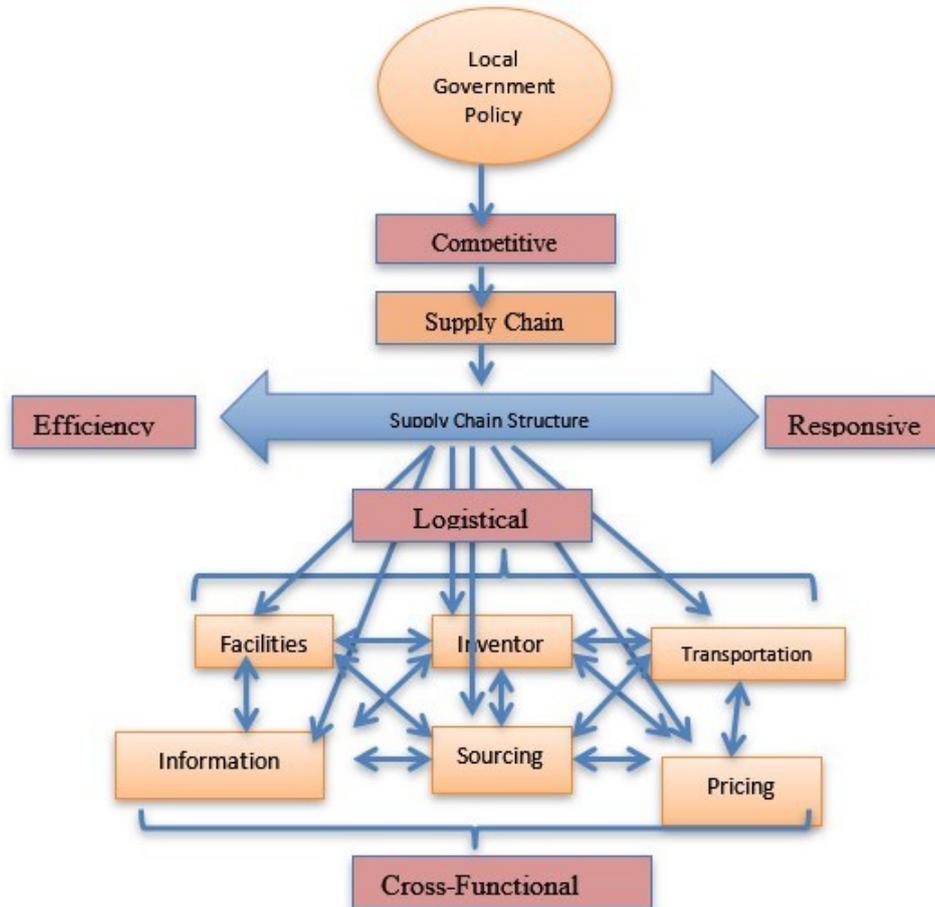


Figure 2. Construction of Supply Chain Strategy of Traditional Fisherman’s Fish Catches

Facilities may affect the cost incurred by supplier and support the supply chain sufficiency (Chopra & Meindl: 59, 2016). They can also affect the fish catches in terms of time efficiency to maintain product quantity and quality. Local government sets up fish auction place on the side of the dock with comfortable and feasible condition. Facilities development in accordance with the needs of [hardware and software] has been performed by local government, but the maintenance and treatment of the sustainability of such facilities require the cooperation and spirits of community self-reliance. Comprehensive assistance to fishermen, FAP or VUC organizations, Indonesian Fishermen Association, and processing industry is very effective way to maintain and develop the facilities of fish auction place, boat, and dock.

Inventory may affect the number of owned assets, storage cost, the ability to respond to demand and offer according to the needs of supply chain strategy (Chopra & Meindl, p 61. 2016). Processing industry or consumers can control quantity and quality of fisherman production. FAP/VUC organization realizes that fish production market determines the selling price of fish. Capital owners and public consumption interest for certain type of fish have not been able to make reasonable selling price of fish. The boat type determines the fishing area so it has the impact on the type of fish obtained by fishermen. For instance, fishermen can get Tuna if they

go to the high seas and use large ship, the fishermen also should bring the freezer to keep the quality of tuna remains good when they arrive in FAP. Fish **pricing** will be reasonable or fair if the selling price can accommodate the operating cost of fishermen, fish quality, the number of fish available in the sea, difficulty level to get such type of fish, fish flavor when processed into main menu or supporting menu, and the price of similar fish. **Transportation** towards the fish processing industry or market fish from fish auction place support integrated and affordable in price and comfort.

According to Karl Marks (Darsono, 2007) local government actions have target, priority scale and requirements. In relation to the actions of local governments, they are targeted to manage the supply chain of catch fish, to increase local fish production, improve prosperity and make fishermen feel proud as fishermen profession. It's all targets are political action, economic action and social action. Priority scale of local government in managing organization policy of fish auction place in managing facility, inventory, price, information technology, catching area and transportation. Local government policy in setting priority scale to reach the target needs standard as requirement.

7. Conclusion

Supply chain strategy of fish catches requires the role of local government policy to manifest fishermen welfare, fish production, local revenues, and fishermen convenience to retain their profession. FAP or VUC organization becomes the supplier of fish production in an area as well as the supplier that is always supervised by its leader and local government. The local government as the highest class in a fishermen community designs the empowerments of fishermen, FAP/VUC, and processing industry. Local government is expected to design all kind fair index price of fishes

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