

Development of Fresh Fish Marketing in Maluku

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Abstract

In modern marketing concepts, markets are no longer positioned at the end of the process, but in the beginning of production. By that means, the ultimate goal of a production is markets or consumers. Geographical condition of Maluku which has thousands of small islands leads for its abundant fresh fish. However, characteristics of fresh fish such as seasonal and perishable, added by the distance of production and consumption center as well as inadequate facilities, resulted in the need of development of island-based marketing. The purpose of this study is to develop marketing of fresh fish in Maluku which is known as one of the archipelago provinces in Indonesia. Based on the results of Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis, the position of fresh fish marketing system in Maluku is in Growth Oriented Strategy. It means that the strategy adopted in this condition should support the aggressive growth policy. These strategies are: 1) improving the infrastructures of production and marketing of fresh fish, 2) integrating facilities and infrastructures of production, marketing and processing, 3) improving skills of fisher folks in fish handling and processing, 4) increasing cooperation with financial institutions in the provision of venture capital, 5) improving function of marketing institutions and 6) establishing an agency that has a mandate to stabilize prices of fisheries products.

Keywords: archipelago, fisheries products, Growth Oriented Strategy, policy, SWOT analysis

Introduction

Fresh fish are highly perishable and damaged; the production centrals are scattered and far from consumption centers. As they are seasonal, while the consumption of them is stable throughout year, a special treatment is required to maintain their quality and durability (GALLEGATI *et al.* 2011, HANAFIAH and SAEFUDDIN 2006). The price of fresh fish is fluctuated, leads to complicated of business prediction, both in the calculation of profit and loss, as well as risk management (BRINSON *et al.* 2011).

Unimplemented properly cold chain in post-harvest handling lower the fishermen bargaining position (HANAFIAH and SAEFUDDIN 2006), so they tend to get results that are not in accordance with the risk level of their jobs. To make these activities well developed, some requirements are needed, such as high quality of products and able to take advantage of market opportunities.

Maluku has 1,340 small islands, divided in one city and ten regencies. Those islands spread with inadequate infrastructures which make transportation to and from those islands

are very dangerous. This condition is also influenced the marketing process of fisheries products in Maluku that could lead to the lower fishermen revenue. Therefore, this paper is aimed to analyze the strategy of fresh fish (fisheries products) marketing in Maluku.

Research Method

Fresh fish marketing system survey was conducted to all stakeholders (fishermen, collectors, retailers and bureaucrats) who involved in that system by using questionnaire and observation. Strategy of fresh fish marketing was developed through Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis. Each SWOT factor was scored from 1 (most important) to 0 (unimportant) and rating was scaled 4 to 1. For internal factors (strength and weakness): strength rating will be 4 when the factor is very strong, and vice versa. Weakness rating will be -1 when the factor is very weak, and on the contrary it will be -4 when it is weak. For external factors (opportunity and threat): the bigger the opportunity, the higher (4) the rating, and vice versa. The rating threat will be -1, when it is high, and will be -4 when it is low (RANGKUTI 2002).

Results and Discussion

Internal and external factors of fresh fish marketing

Based on the SWOT analysis, the condition of fresh fish marketing system in Maluku is in Quadrant I (0.8; 2.2) (Fig. 1, Table 1), which means support aggressive strategy or Growth Oriented Strategy (RANGKUTI 2002). By that, the strategy produced should support aggressive development policy.

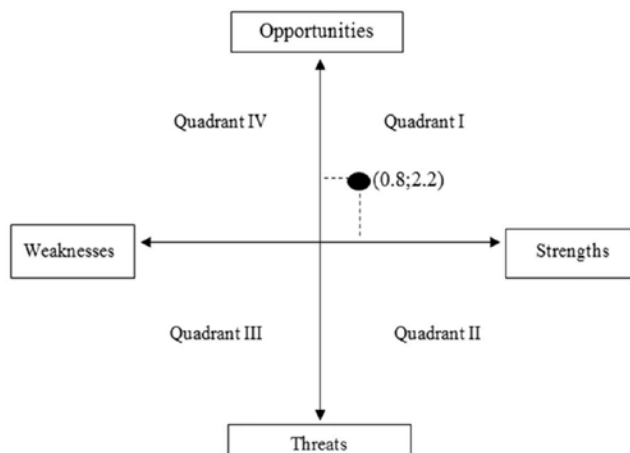


Fig. 1. Grand Strategy Diagram of fresh fish marketing in Maluku.

Development of Fresh Fish Marketing in Maluku

Table 1. Analysis of internal and external factors.

	Internal and External Factors	Weight	Rating	Score
Strengths				
1	High potency of fish resources	0.10	3	0.30
2	Many islands make fish available anytime	0.07	2	0.14
3	Transportation available	0.05	2	0.10
4	Maluku was declared as National Fish Granary	0.10	3	0.30
5	Ambon was determined as minneapolis area	0.10	3	0.30
6	Maluku was determined as one of economic development accelerating corridor in East Indonesia	0.10	3	0.30
7	Availability of cold storage	0.05	2	0.10
Weaknesses				
1	Low of fishermen awareness in maintaining fish quality	0.05	-1	-0.05
2	Limited capital	0.04	-1	-0.04
3	Low of fishermen bargaining position	0.04	-1	-0.04
4	Production areas spread and far from consumption areas	0.03	-2	-0.06
5	Fish Auction Place is only in Ambon and not functioned	0.03	-3	-0.09
6	Limited marketing infrastructures	0.04	-2	-0.08
7	High marketing cost	0.02	-3	-0.06
8	Fluctuation of fish price	0.04	-2	-0.08
9	Market structure tend to oligopoly	0.05	-1	-0.05
10	Low of market integration	0.05	-1	-0.05
11	Low market information	0.02	-4	-0.08
12	Limited alternative of processed product diversification	0.02	-3	-0.06
Total score strengths-weaknesses		1.00		0.80
Opportunities				
1	Increasing of population in Maluku	0.10	3	0.30
2	Increasing of community's awareness in eating fish	0.10	3	0.30
3	Potential market outside Maluku	0.20	4	0.80
4	Increasing of income per capita and purchasing power	0.10	3	0.30
5	Government attention to fishermen	0.20	4	0.80
Threats				
1	Illegal, Unreported and Unregulated fishing in Maluku	0.10	-1	-0.10
2	Unregularly sea patrols	0.10	-2	-0.20
Total score opportunities-threats		1.00		2.20

Development strategy of fresh fish marketing system in Maluku

Aggressive marketing development policy means a policy of marketing system from upstream to downstream. That policy covers product availability, production infrastructure provision, product handling and processing, fishermen capacity building and marketing infrastructure support development. Table 2 shows strategies produced based on external and internal factors identification.

Table 2. Qualitative SWOT analysis of fresh fish marketing in Maluku.

Internal Environment	Strengths (S)	Weaknesses (W)
	External Environment	1 High potency of fish resources 2 Many islands make fish available anytime 3 Smooth transportation 4 Maluku was declared as National Fish Granary 5 Ambon was determined as minneapolis area 6 Maluku was determined as one of economic development accelerating corridor in East Indonesia 7 Availability of cold storage
Opportunities (O)	SO strategies	WO strategies
1 Increasing of population in Maluku 2 Increasing of community's awareness in eating fish 3 Potential market outside Maluku 4 Increasing of income per capita and purchasing power 5 Government attention to fishermen	1 Develop environment insight of capture fishery (S1,2,4,5,6; O1,2,3,4) 2 Integration development of processing and marketing infrastructures (S1,2,3,4,5,6,7; O1,2,3,4,5) 3 Increasing skills of fish handling and processing (S1,2, 3,4,5,6; O1,2,3,4,5)	1 Improving cooperation with finance institutions in providing capital for fishery business (W2,8;O1,2,3,4,5) 2 Increasing skills of fish handling and processing (W1,3,11,12; O1,2,3,4,5) 3 Improving marketing institutions function (W4,5,6,7,9,10; O1,2,3,4,5) 4 Forming institution that has mandate to stabilize fresh fish price (W7; O1,2,3,4,5)
Threats (T)	ST strategies	WT strategies
1 Illegal, Unreported and Unregulated fishing in Maluku 2 Unregularly sea patrols	1 Integrated control by involving local community (S1,2,3,4; T1,2) 2 Tighten mechanism and controlling function (S1,2,3,4,5,6; T1,2) 3 Improving raw material distribution (S1,2,3,4,5,6,7; T2)	1 Improving sea security capacity (W3;T1) 2 Improving infrastructure of fish production and marketing (W1,2,3,4,5,6,7,8,9,10,11,12; T1,2) 3 Tighten mechanism and controlling function (W1,2,3,5,6,7,8,9,10,11; O1,2)

SO strategies

When strengths (S) are combined with opportunities (O) that happened due to current global economic improvement, it will result some SO strategies as below.

- 1) Improvement the environment insight of capture fishermen
- 2) Integration of processing and marketing infrastructures
- 3) Increasing skills of fish handling and processing

Increasing of population and awareness of fish consumption as well as community's income and purchasing power are challenges for fishermen to catch fish at most. Imbalance of fish resources exploitation and reproduction capacity resulted in catching pressure in some places in Maluku. Fishery resources condition in Fishery Management Area (FMA) Maluku in 2010 showed that almost all kinds of fish were in maximum exploitation/fully exploited and over fishing (PURBAYANTO 2011). The essence of environmental fisheries development is to manage fisheries resources in sustain. Limitation input control on catching efforts is one of management strategies, in addition to regulation of catching gears selectivity and catching time limitation (PURBAYANTO 2011). Furthermore, WIDODO and SUADI (2006) stated that, the principle of fisheries regulation can be approached by two methods: 1) input arrangements such as catching restrictions through licensing, size of vessels and fishing gears, as well as catching time and 2) output arrangement such as determination of catching allowed and dividing quota according to fleets, companies and fishermen.

Abundantly of fish resources in Maluku is not followed by the ability of fishermen as producers and fish traders to maintain the quality. Therefore, the price of it can be much fluctuated, even in a day sales. Improving of handling and processing skills in harvest and post-harvest time as well as integrating the facilities of processing and marketing is a must, so the system gives balanced share to effort. Fishermen processing skills should also be enhanced for the alternative diversity processed fish in Maluku. By that, the value of fish increase and there will be no more wasted fish into the sea.

WO strategies

WO strategies obtained by minimize the weaknesses in fresh fish marketing in Maluku to utilize currently opportunities. The strategies are as below.

- 1) Increasing collaboration with financial institutions in providing business capital
- 2) Increasing programs of fish handling and processing skills
- 3) Increasing function of marketing institutions
- 4) Establish institution that has mandate to stabilize fish price

Capital limitation is faced by most fishermen from time to time and will continue to happen if there will be no assistance from the Government. Therefore, strategy emerge from

this condition is to increase cooperation with financial institutions in assisting fishermen access credits to broaden their business. In connection to fish price fluctuation, an institution which has mandate to stabilize fish price should be formalized by the Government. This institution will have similar role and function with National Logistic Agency, to market and to secure national food as well as to manage the state-owned food commodities.

Fishermen's skills of fish handling and fish processing should be increased, for the quality of fish can be maintained and able to distribute to consumers who live far from the producers' area.

ST strategies

This strategy obtained by maximized strengths in anticipating threats in marketing of fresh fish in Maluku. Strategies resulted based on analysis as below.

- 1) Integrated control by involving local community
- 2) Restriction of imported fish that contained chemical agents
- 3) Tightening mechanism and function of controlling
- 4) Improving raw material distribution

Illegal, Unreported and Unregulated (IUU) fishing in Maluku causes limited fish resources for the local fishermen. According to NIKIJULUW (2008), practice of IUU fishing near the coastal area can disturb local fishery management system. An organized IUU fishing with modern technology urges fishermen run out from the resources and makes them obtain small income.

The rampant practice of IUU fishing is one of the causes which makes Indonesia was formerly known as the fish export country is now becoming one of the fish import country, including China, India and Pakistan. Fish are basically imported due to the scarcity of them in the processing industry. But, the abuse of import permits and lack of coordination of Government surveillance resulted in uncontrolled circulation of imported fish, so they are easily to distribute in remote areas. Yet the flood of imported fish have been highly detrimental to fishermen and hit the competitiveness of the national fisheries.

Evaluation of import regulation, data of fish necessity for processing industry and the ability of national production to fulfill the need of fishery processing industry as well as open-close system are strategies performed by the Government to solve the problem (KOMPAS 2011). However, those strategies are still raises pros and cons. To some parties, fish import policy is just considered a shortcut way in solving the scarcity of raw material in fish processing industry. In fact, the main problem of fish scarcity in processing industry is chaotic distribution of fish from production centers to the processing places. Therefore, improving fish distribution by providing production and marketing infrastructures, improving marketing agencies function, tightening the mechanism and supervision functions should be conducted, so the life of fishermen will increase.

WT strategies

This strategy obtained by minimize own weaknesses and anticipate threats, or to face possible threats from external environment of fresh fish marketing in Maluku. Some strategies appeared from weaknesses and threats fusions are as below.

- 1) Improving sea security capacity
- 2) Prohibiting imported fish contained chemical agents
- 3) Increasing production and marketing infrastructure
- 4) Tightening sea supervision capacity

Those strategies are presented to overcome some weaknesses such as limited awareness of fishermen in maintaining fish quality and limited capital of fishermen that lower their bargaining position in marketing fresh fish. Scattered production area and far from consumers, malfunction of Fish Auction Place and limited marketing infrastructure can also lead to higher marketing cost and higher of price fluctuation range in the market.

Another challenge in fresh fish marketing in Maluku is IUU fishing, and unsustainable sea patrol operation which causes irresponsible exploitation of fish resources. If this condition could not be overcome, the resources perhaps will be endangered and never be known by future generation.

Conclusion

Strategies to develop fresh fish marketing in Ambon Island are: 1) improving the infrastructures of production and marketing of fresh fish, 2) integrating the facilities of production, marketing and processing, 3) improving skills of fisher folks in fish handling and processing, 4) increasing cooperation with financial institutions in the provision of venture capital, 5) improving function of marketing institutions and 6) establishing an agency that has a mandate to stabilize prices of fisheries products.

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