

# MARKET STRUCTURE OF GROUPER FISH IN INDONESIA

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**ABSTRACT:** This paper focuses on the market structure of grouper fish in Indonesia. The high value of grouper in international trade resulted in an increased demand for this type of fish. Based on the data from the Central Statistics Agency (BPS), in 2013 the export of live groupers reach a value of US \$ 19.8 million with a volume of 2,552 tonnes. Aim of Research is To analyze the structure of Grouper fish market in Indonesia. Method of research is descriptive study, aiming to portray accurately the properties of an individual, situation, symptoms or special things in the community. The structure of grouper fish market is partnership pattern of PonggawaSawi. The partnership between Ponggawa (leader) and Sawi (fishermen) are strongly influenced by the economic aspects that are symbiotic mutualism or mutual need. Mutualistic relationship that has existed since a long time is able to survive because it is an open and dynamic. This causes them to dominate the information about the locations of the market, price changes and be involved in market relations.

**Keywords:** Grouper fish, Punggawa-Sawi, Qualitative, Market Structure, Market Relation.

## 1. INTRODUCTION

Marine fish grouper commodity is a commodity and demand from export market (Singapore, Malaysia and Hong Kong) continued to increase from year to year. Grouper has become a special menu in the hotel and top-notch restaurants in Indonesia, Malaysia, Hongkong, Taiwan, Japan and Singapore. International market demand will groupers tend to increase, providing a great opportunity for Indonesia to improve its catch [6], [7], [8]. The high demand of the international market due grouper has a high nutritional content. Moreover, to the nutritional content, cultural factors also affect demand for grouper. for example Hong Kong, Chinese people believe that red grouper can bring good luck. Therefore, demand will increase when the new year china.



Figure (1). *Plectropomusleopardus*

The high value of grouper in international trade resulted in an increased demand for this type of fish. Consequently, grouper experiences heavy pressure and in some areas experience overfishing [5]. The International Union for the Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species in 2006 include some groupers such as humpback grouper (*Cromileptesaltivelis*), estuary grouper (*Epinepheluslanceolatus* and *Epinepheluscoioides*) and groupers (*Plectropomusleopardis*) as a species threatened. Otherwise, grouper fish has long been exploited by the coastal communities as a food source and intensified when the ships collectors of Hongkong began to enter into the

territory of Indonesia since the 1990s. Based on this condition, grouper fish resources need to be managed well in order to accommodate the economic interests of fishing communities and the conservation of resources of grouper.

Based on the data from the Central Statistics Agency (BPS), in 2013 the export of live groupers reach a value of US \$ 19.8 million with a volume of 2,552 tonnes. Export destinations are Hong Kong live groupers that reached almost 90% of total export value. Exports of live groupers to Hong Kong for this type is done via two modes of transport, namely air transportation (air) and marine fish transport vessels. Hong Kong buyers own freighter to Hong Kong that has been operating in Indonesia 100%. The ship will have access to take fish directly from the centers of cultivation so that the export process cannot be controlled optimally [3][6].

According to Ahong businessman export live groupers from Selayar Island states live groupers which exported its four tons per week were transported by ship to Bali regularly two times a week, bringing the total grouper exported 16 tons per month from one source respondents [6], besides many foreign vessels were free to enter the Selayar Island regularly once a month transporting live groupers approximately eight tons per ship, where the foreign ships that came less than five units per month [7].

According to Sutinah [6], the normal price of life-size groupers super kind valued at US \$ 45 (0,5-1kg / tail), and highest price, especially during the Chinese New Year reached US \$ 100. This super-size grouper is a fish being mature gonads that will soon spawn in the country of destination, which has prepared a hatchery industry was massive (hatchery) such as those in Malaysia, Singapore and Hong Kong [8]. Therefore, government needs policies in handling this case. Besides exported in life, groupers is also exported in frozen form, and processed (dry). Only the price is lower if the baby size (<0.5 kg / head) or large size (> 1.2 kg / head), this also due to this bisexuals grouper that will turn into males when it spawn 2-3 times. That is why the price of super-size grouper had become more expensive due

to being overcooked gonat that will soon spawn in the State of destination.

According to Fauzi and Anna [2] that base in the management of fish resources is how to utilize the resources that generate high economic benefit to the user, but its sustainability is maintained. Sadovy [2] reported that the stock Groupers in Indonesia has decreased. This is in line with the results of research Arfiansyah King (2015) showed that the actual conditions of resource utilization in the coral trout grouper Spermonde Islands are already experiencing overfishing both biologically and economically. Based on these results, it is necessary to conduct further research to analyze the biological and economic aspects of Groupers Sunu in the province of South Sulawesi Indonesia.

**2. EXPERIMENTAL DETILES**

This research aims To analyze the structure of Grouper fish market in Indonesia and the relationship between *Ponggawa - Sawi*.

Method of this research is descriptive study, aiming to portray accurately the properties of an individual, situation, symptoms or special things in the community. This study also uses swot analysis to determine the relationship patterns anatar*Ponggawa - Sawi*. This kind of research may already exist hypothesis, but there is no hypothesis, depending on the presence or absence of knowledge of the issues examined . Descriptive study seeks to provide a careful and complete picture of the object studied . Usually have a lot of references that can be used as a guide to establish hypotheses , but could have been symptoms had not yet established a pattern of systematic thinking . We conducted this research in Selayar Island.

**3. RESULTS AND DISCUSSION**

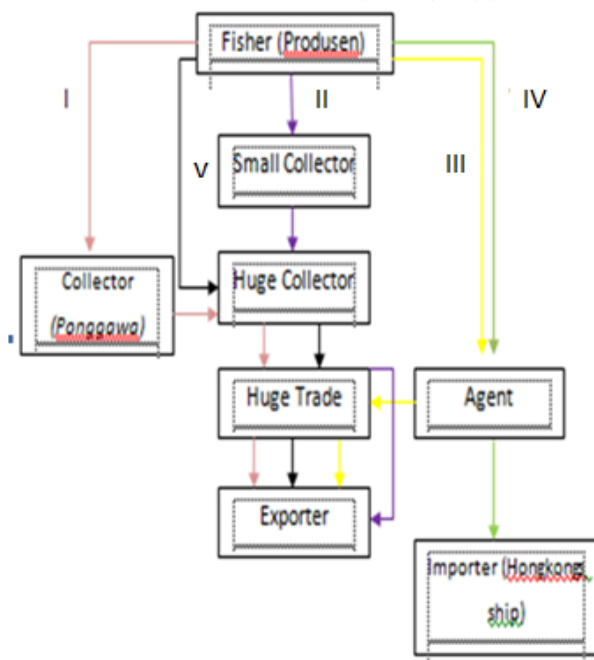
**A. Marketing Network Wide**

Network of marketing is the number of marketing agencies through which an item from the producer to the consumer. In conducting the activity, these institutions carry out a number of marketing functions. While the extent of marketing concerning distribution of the catch area.

Based on the above understanding, the marketing agency of live fish in the area identified Selayar are: fishermen, local traders, small traders, middlemen (agents), *Ponggawa* and wholesalers. The study found five forms of live fish marketing network in the region Selayar. Schematic flow of the live fish trade show distribution channel as seen on the figure [2].\

Explanation:

- ▶ Marketing Model I
- ▶ Marketing Model II
- ▶ Marketing Model III
- ▶ Marketing Model IV
- ▶ Marketing Model V



**Figure(2). Marketing Network Scheme**

Thus, form - the form of live fish marketing network is :

1. Fisher → Huge Collector → Huge Trade → Eksporter
2. Fishers → Small Collectors → Huge Collectors → Eksporters
3. Fishers → Agents → Huge Trades → Exporters
4. Fisher → Ponggawa → Huge Collectors → Huge Trades → Exporters
5. Fisher → Agents → Importers (Hongkongs Fish Ship)

**B. Relationship Model**

The structure of grouper fish market is partnership pattern of *Ponggawa - Sawi*. The partnership between *Ponggawa* (leader / traders) and *Sawi* (fishermen) are strongly influenced by the economic aspects that are symbiotic mutualism or mutual need. The driving factor or motive to be *Sawi* is the desire to defend itself and develop life. It is social and there are aspects that are economies to be achieved, while *Ponggawa* is the owner of capital as a leader of the fishermen who provide operational support for catching grouper to fishermen on the condition grouper catch to be sold to *Ponggawa* can not be sold to others. Moreover, *Ponggawa* also has a strategy to tie fishermen to provide funding for the purposes of family life, such as a sudden need for example if a family illness or death, as well as with other needs such as the need for his son's wedding in which the funds needed for traditional marriage Bugis-Makassar very expensive, needs aqiqah his birth and who also need a lot of money, where it is the dominant religion of Islam that embraced this coastal community, requires slaughter goats for children two male goats and one for girls. Much more needs of fishermen who often gets help from *Ponggawa* such as education funding, buying household furniture (refrigerator, Gas Stove, guest chairs, etc.), so that fishermen can accumulate debt and it will be transmitted to posterity. Therefore, one of which *Sawican*

not escape from the shackles *Ponggawa*. In the province of South Sulawesi, especially in the District Selayar relationship *Ponggawa-Sawi* is the economic relationship, but the relationship is actually very complex relationship, it is influenced by the customs of an egalitarian society and adheres to the principle of reciprocity and kinship is a factor that affects *Ponggawa* relationship-Sawi [6].

*Ponggawa-Sawi* partnership pattern that describes the pattern of rights and responsibilities of each party can be seen in the following scheme (Figure 3).

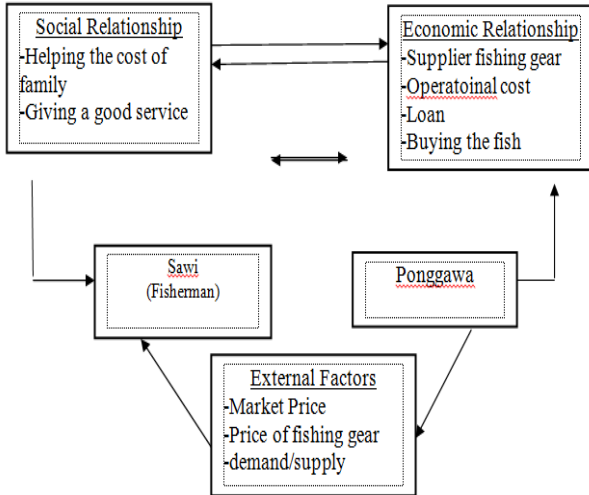


Figure (3). Scheme of the role and activity between *Sawi* and *Ponggawa* in managing live grouper fish

*Ponggawa-Sawi* partnership pattern that exists shows that each of the parties to support and complement the activities. The above scheme is *Ponggawa-Sawi* areas of cooperation in the management and marketing activities live groupers. Based on Figure 1 that the arrest fishermen operations supported by *Ponggawa* in case the equipment needs of the fishermen catching. The skills and knowledge are owned by fishermen catch, appreciated by *Ponggawa* in the form of capital and fulfillment of the needs of fishermen with others *Sawi* consequences must submit their catch to sell to *Ponggawa* [7].

However, this partnership also has a negative side where mechanism *Ponggawa-Sawi* system found in the field that can harm *Sawi* among others, is the sale value of grouper by *Sawi* has a low partnership more Rp. 5,000 - Rp. 10.000, - / kg when compared to the fishermen who do not partner. In addition, if the debt *Sawi* had almost paid off then *Ponggawa* have tricks / how that *Sawican* not be separated from its bond, by offering new loans to *Sawi* in the form of household needs in the form of goods such as televisions were large, gas stove, refrigerator and others, so that the debt *Sawi* will increase continuously. The advantage gained during partnership of *Sawiwih SawiPonggawais* meeting the needs of current every time either use capital and daily needs are met instantaneously and without collateral. One of the activities of this study to analyze the potential for integration

*Ponggawa- sawi* in partnership intended to know strength or the relationship reciprocal interaction, which basically can be seen from the aspect of access and control. Access is the ability to seek or utilize the resources, while the control is a role that is done, in the form of authority manages and or use resources in their behavior to achieve certain goals. The ability to access and control the study respondents shown in the following table.

Table 1. The ability to access and control *Ponggawa - mustard* in relationship management in the region live groupers Taka Bonerate

No.	Uraian	Acces		control	
		Fisherman	Ponggawa	Fisherman	Ponggawa
1.	Supplies Fishing: • Boats • Engineering • Catching tool • Fuel	+ - + -	+++ +++ +++ +++	+ - + -	+++ +++ +++ +++
2.	Fishing Operation: • Knowledge • Arrest • Oprating Cost	+++ +++ +	- - +++	++ ++ +-	- - +++
3.	Catch: • Groupers life • In additional Gropers	+++ +++	+++ +	- +	+++ +
4.	Marketing: • Location • Price	- -	+++ +++	- -	+++ +++

Sources: Primary Data Processed

Note : +++ =High, ++=Middle, +=Low, -=None

To determine the potential of each - each party in relationships *Ponggawa* mustard cooperate in the management of live groupers, then do pedekatan analysis "SWOT". This analysis is used to determine the Strength, Weakness, Opportunity, Threat owned or which may be faced by fishermen in *Ponggawa* and cooperation. The results of the analysis are presented in Table:

**Table 2. Analysis of Potential Respondents Fishermen and Ponggawa in Relationship Management Cooperation in the Area of Life Groupers Taka Bonerate**

No.	Analisis	Fishermen	Ponggawa
1.	Strength	<ul style="list-style-type: none"> <li>• Knowledge / experience</li> <li>• Direct Operations</li> </ul>	<ul style="list-style-type: none"> <li>• Financial - large capital</li> <li>• Institute a major marketing</li> <li>• Ability to build relationships</li> <li>• Sources of information - innovation</li> <li>• Acceptance of the community</li> </ul>
2.	Weakness	<ul style="list-style-type: none"> <li>• low socio-economic conditions</li> <li>• Low management capabilities</li> <li>• Venture capital less</li> <li>• Relationships are very less</li> <li>• Information about the market</li> <li>• Nature subsystem</li> </ul>	<ul style="list-style-type: none"> <li>• Highly dependent on fishing</li> <li>• There are no guarantees of credit-investment</li> <li>• Control fishermen weak</li> </ul>
3.	Opportunity	<ul style="list-style-type: none"> <li>• Maintain a partnership</li> <li>• Cooperation others</li> <li>• The value of high commodity</li> <li>• Changes the status of the mustard into Ponggawa</li> </ul>	<ul style="list-style-type: none"> <li>• Get help credit</li> <li>• Business development</li> <li>• The value of high commodity</li> <li>• Foreign Demand is high enough</li> </ul>
4.	Threat	<ul style="list-style-type: none"> <li>• Scarcity of resources</li> <li>• Occupational Health and Safety</li> <li>• The emergence of rival</li> <li>• Political trade / globalization</li> <li>• Government policy*)</li> </ul>	<ul style="list-style-type: none"> <li>• Resource Scarcity</li> <li>• Loss of investment</li> <li>• The emergence of rival</li> <li>• The global market</li> <li>• Government policy*)</li> </ul>

Sources : Processed Primary Data

Note : Influential factor doubles

From the above table, the strengths and weaknesses of respondents Ponggawa fishermen and there is a tendency in contrast, where the position of strength for Ponggawa a weakness for fishermen and vice versa.

With reference to the SWOT matrix, it can be analyzed by using internal and external factors mentioned above, to determine some strategies to do, such as:

- SO Strategy, is the strategy chosen by harnessing the power to seize the opportunities that are available, such as:
  - Maintaining a partnership that already exists by pointing it towards a partnership based on our economic development with efficiency.
  - Changing the mindset of the business subsystems into a commercial venture, so that the status of Sawi can be turned into Ponggawa.
  - To collaborate with others more profitable.
- WO strategy, a strategy created to capitalize on opportunities to overcome weaknesses:
  - Increase welfare through the application of appropriate technology in the empowerment of the family members, especially wives with female children of fishermen.
  - Seek venture capital along with technical assistance by mentoring models
  - Socializing continuously on market information from the fishermen so that fishermen can empower themselves.
- Strategy ST, is a strategy developed to harness the power to overcome the challenges. Some of them are :
  - Applying environmentally friendly fishing gear, in order to avoid scarcity of resources.
  - Provides tools arrest of occupational health and safety, and insurance.

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#### 4. CONCLUSION

Based on the analysis above, marketing network forms of Selayar Island's fishery production for live groupers through five (5) marketing channels involve six (6) marketing agencies. Network marketing live fish from this area is also venturing Hongkong. The marketing agencies are Fisher as Producer, Small collector, Huge collector, Huge trade, Ponggawa, Agents, and Importer.

The pattern of relations in the punggawa-sawi is mutualism. Mutualism relationship that h existed since a long time is able to survive because it is an open and dynamic. This causes them to dominate the information about the locations of the market , price changes and be involved in market relations.

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