

## **MARKETING SYSTEM EFFICIENCY OF THE SCAD (*Decapterus russelli*) IN AMBON (STRUCTURE, CONDUCT, PERFORMANCE APPROACH)**

Wicliel Pinoa; Revalda Amanda Yacoba B. Salakory

Department of Geography Education, Pattimura University, Indonesia

### **ABSTRACT**

This study aims to analyze the market system of the scad (*Decapterus russelli*) in Ambon, which could be achieved by (1) analyzing the market structure of the scad (*Decapterus russelli*), (2) analyzing the market conduct of the scad (*Decapterus russelli*) and (3) analyzing the market performance of the scad (*Decapterus russelli*). This research is a quantitative research. Data were collected through interviews, documentation, and observation. Method analysis employed was descriptive, vertical market integration, elasticity of price transmission and pricing efficiency. The market system of the scad (*Decapterus russelli*) in Ambon at the time research was inefficient, if based on market structure and conduct approach. But market performance describes that the market system of scad (*Decapterus russelli*) in Ambon was efficient.

**Keywords:** market system efficiency, market structure, market conduct, market performance

### **INTRODUCTION**

As the capital city of Maluku, Ambon is the administrative and the economic center of the local government. Located and surrounded by seaports and airports, Ambon is considered to be strategic in connecting other districts among Maluku and among other provinces in Indonesia. The large amount of population alongside the high purchasing power results in Ambon being a potential market in Maluku. Such high purchasing power is indicated by the habit of the community's consumption of fish leading Ambon to achieve the highest level of fish consumption nationally in 2012 of 49.19 kg per capita (Tuhuteru, 2013). The high consumption level, however, is not proportional to the availability of fresh fish on the market. Such issue indicates that the demand for fresh fish in Ambon is not proportional to the supply.

One of the fresh fish commodities of which demand is not proportional to the supply is the scad (*Decapterus russelli*). At certain time, the availability of the scad (*Decapterus russelli*) is yet to meet the consumer needs. Such condition occurs outside of peak fishing season (around February – August) since the fishermen do not undertake any fishing activity which results in the lack of

fish supply in the market; due to such condition, the fish sellers raise the price of the scad (*Decapterus russelli*). The scad (*Decapterus russelli*) which was previously sold at Rp 20,000/stack of seven (7) fish or 0.7 kg, is reduced to four (4) fish or 0.4 kg of the same price. Although the price offered is usually fixed price, the reduction in the amount of fish indirectly increases the selling price (Tribun Maluku.com, 2014).

The disproportion between consumption and supply of the scad (*Decapterus russelli*) in the Ambon market requires an efficient marketing system in order that the supply of the fish remains maintained in terms of quality so that the market justice can be achieved. A system is considered to be efficient if the price given to the economic agent is in accordance with the risk and the economic agent sets appropriate price for consumers based on the product's quality with the regard of the parties involved in the marketing process (Hasan et al., 2007). The marketing system can be analyzed through the structure-conduct-performance (SCP) approach (Ramadhani et al., 2012). The structure-conduct-performance (SCP) approach can be used as a framework in testing the competitive power of marketing (Funke et al., 2012). This study aims to analyze the efficiency of marketing system of the scad (*Decapterus russelli*) in Ambon through the structure-conduct-performance (SCP) approach.

## **METHODOLOGY**

### **Research Location**

This research conducted in two center market in Ambon is Mardika dan Transit Passo Market, since September to December 2014, involves 45 respondents. Respondents is the seller of the scad.

### **Data Collection and Analysis**

Data were collected by employing the following methods: (1) Interviews with respondents based on questionnaires, to obtain data on respondent characteristics (including gender, age, education, number of family members and livelihoods), operational cost and selling price of the scad, 2) Documentation, to collect secondary data on relevant literature and 3) Observations made through field surveys of observed objects.

Collected data were then analyzed using the following methods: (1) vertical integration to analyse market structure of the scad, (2) elasticity of price transmission to analyze market conduct of the scad and (3) marketing margin and the share percentage obtained by fisherman to analyze market performance of the scad.

## RESULT AND DISCUSSION

### Market Structure of the Scad (*Decapterus russelli*)

An approach used to identify the market structure of the scad (*Decapterus russelli*) is by employing the vertical integration analysis. Based on the analysis, it is obtained that the regression coefficient ( $\beta_1$ ) is 0.860. This value indicates that the market structure of the scad (*Decapterus* sp.) in Ambon is not significantly integrated and leads to oligopoly due to the fact that the regression coefficient ( $\beta$ ) of 0.860 is less than 1. Such argument is supported by Apituley (2013) stating that the fresh fish market in the Central Maluku area in 2011 fairly focuses on the oligopoly market structure. In the oligopoly market structure, the fisherman is the price taker and the seller is the price maker (Bassey at al., 2014).

Based on the result, the market structure of the scad (*Decapterus russelli*) in Ambon is an oligopoly with the following elements:

#### 1. The number of sellers and buyers is relative

In the studied market (Mardika market and Transit Passo market), there are approximately 45 people who function as the intermediary including 5-8 sellers handling more than four (4) fishing nets, with an average of 20-30 pans of fish from one fishing net. Based on the result, it is known that the number of fishermen is relatively more compared to the sellers (both dealers and retailers) of the scad (*Decapterus russelli*) which results in a dependency between the fishermen and the dealers which later weaken the bargaining position of the fishermen. Even though the fish sold is the fishermen haul, the fishermen are not entitled to the pricing and negotiation process which means that the dealers dominate the negotiation process. The dealers continue to regard the market condition to later fix the selling price to the retailers.

#### 2. Product differentiation

In general, the scad (*Decapterus russelli*) sold by fishermen and dealers is of the same quality without any product differentiation which means that the price is relatively similar for each kilogram despite the size. The scad (*Decapterus russelli*) is mostly sold in fresh condition without undergoing any special treatment; however, a number of sellers boil the fish in salt and certain spices prior to being sold to add its value. The scad sold by retailers is usually stored in ice to maintain its quality and price. The quality and freshness of the scad (*Decapterus russelli*) constitute the parameters in determining the price or in dominating the market; thus, the Indian scad (*Decapterus russelli*) market is oligopoly.

#### 3. Market drawback

The main drawback of the scad (*Decapterus russelli*) to enter the market is due to the oligopoly implementation by the dealers. Fishermen merely sell their catch to the regulars, making it difficult for other retailers to directly purchase fish from fishermen. Nearly every the *purse seine, pole and line* and chart fisherman have had dealers in the market and there has been an established agreement that if the fisherman deliver his catch to the market, the one who sells the catch to the retailers is the dealers be it during peak fishing season or not. There has been cooperation between fishermen and dealers established decades ago. It constitutes the drawback for other sellers to involve themselves within the scad (*Decapterus russelli*) market.

#### 4. Knowledge on price and pricing structure among market agents

Lack of information and market conditions causes the fisherman bargaining position of to weaken. It constitutes an opportunity for the dealers to suppress the amount of money paid to the fishermen in order to form an oligopoly market, since the dealers principally are more informed regarding the price, cost and market condition in the scad (*Decapterus russelli*) market compared to the fishermen; thus they are the price maker.

#### **Market Conduct of the Scad (*Decapterus russelli*) Market**

In analyzing the market conduct of the scad (*Decapterus russeli*) in Ambon, the elasticity of price transmission developed by Azzaino (1982) in Kruniasih (1999) is in use. The analysis shows that the value of the price transmission elasticity ( $E_t$ ) is 0,776. The price transmission elasticity ( $E_t$ ) value of 0,776 indicates that price change of 1% at the consumer level ( $P_r$ ) results in price change of 0.776% at the fisherman level ( $P_f$ ). It can also be seen that the value of the price transmission elasticity ( $E_t$ ) is less than 1. Azzaino (1982) in Kruniasih (1999) states that if the  $E_t < 1$  means that price change of 1% at the consumer level results in price change of less than 1% at the fisherman level. In other words, the marketing system for the scad (*Decapterus russeli*) in Ambon is not efficient.

Parwanti and Hayati (2008) and Lilimantik (2011) suggest a number of factors causing the price transmission elasticity value being less than 1:

a. The oligopoly power as a result of cooperation/collusion among several dealers controls the price at the producer level (Bloch et al., 2014). Similar condition is found in the marketing system of the Indian scad (*Decapterus russelli*) in Ambon. In certain locations, such as Tulehu, Waai and Hitu villages, the marketing system is via dealers according to the local regulations; the dealers are fully responsible for both the quality and pricing of the Indian scad (*Decapterus russelli*). In the marketing of the scad (*Decapterus russelli*), the dealers act as a price maker in which the price is determined by taking the market condition and situation into the consideration.

b. A long marketing chain allows a biased and increasing accumulation in terms of price transmission (Suharso, 2006). The market system of the scad (*Decapterus russelli*) in Ambon involves four (4) marketing institutions to form a long chain. A long marketing chain leads to high price for consumers to pay (Madugu et al., 2011). Insignificant price transmission and market information result in bargaining position inequality, especially between fishermen and dealers (Odemero, 2012).

### **Market Performance of the Scad (*Decapterus russeli*)**

Market performance is the combination of the structure and conduct of the scad market (*Decapterus ruselli*). Market performance is measured based on marketing margin and the share percentage obtained by fisherman, also known as fisherman's share. A long marketing chain is a result of the involvement of many marketing institutions causing the margin to gain and indicating inefficiency; on the contrary, a short marketing chain consists of small marketing margin indicating efficiency (Mallawa et al., 2010). In addition, the longer the marketing chain is the smaller the share obtained by fishermen; on the other hand, the shorter the marketing chain is the greater the share obtained by fishermen (Tety et al., 2012). Based on the analysis, the market performance of the scad (*Decapterus russelli*) in Ambon shows that the marketing system is efficient, since the fisherman share is  $> 50\%$ .

### **CONCLUSION**

Overall, the market system of the scad (*Decapterus russeli*) in Ambon at the time research was inefficient, if based on market structure and conduct approach with the regression coefficient ( $\beta$ ) of 0.860 and the value of the price transmission elasticity ( $E_t$ ) is 0,776. But market performance describes that the market system of the scad (*Decapterus russeli*) in Ambon was efficient since the fisherman share is  $> 50\%$ .

The output of the scad (*Decapterus russelli*) market system analysis can be used as an input and reference for stakeholders in developing the marketing policy in the fishery sector to control the scad (*Decapterus russeli*) price fluctuation and to set the floor and the ceiling price in order to create stability. Moreover, the market structure of the scad (*Decapterus russelli*) is not well-integrated due to the practice of oligopoly by the dealers. Thus, the fisherman's dependence on the dealers must be reduced by providing low interest loans, especially outside the peak fishing season in order that the fisherman's bargaining position can increase.

### **ACKNOWLEDGEMENT**

In relation to the completion of this writing, the authors extend their appreciation and gratitude to the parties who have provided assistance, both substantially and financially. Without the

opportunity, guidance, input and spirit support from CPC / mother, of course, this writing will not be realized as it is today. May God always delegate His Grace and His Gift to us all in carrying out the devotion to the glory of our beloved country and nation. Amen.

## REFERENCES

- [1] Tuhuteru, A. 2013. Laporan Perkembangan dan Kegiatan Konsultan Pemasaran Rantai Pasok. Kementerian Kelautan dan Perikanan Republik Indonesia
- [2] Tribun Maluku. 2014. Inflasi Kota Ambon Sebesar 2,25 Persen. <http://www.tribun.com/2014>, , diunduh 09-10-2014
- [3] Hasan, F., Haribowo, R. Y. K. 2007. Analisis Keterpaduan Pasar Gula Pasir Domestik dan Internasional Volume 4 Nomor 2 Desember 2007 Halaman 107-113
- [4] Ramadhani, D. Rahayu, S., Setyowati. 2012. Analisis Efisiensi Pemasaran Jagung (*Zea mays*) di Kabupaten Grobongan (Studi Kasus di Kecamatan Geyer). Skripsi Fakultas Pertanian Universitas Sebelas Maret. Surakarta
- [5] Funke, O., Raphel, B., Kabir, S. 2012. Market Structure, Conduct and Performance of Gari Processing Industry in South Western Nigeria. *European Journal of Business and Management* Volume 4 Nomor 2 Page 99-112
- [6] Suharyanto, Parwati, I. A. P, Rinaldy, J. 2005. Analisis Pemasaran dan Tataniaga Anggur di Bali. Balai Pengkajian Teknologi Pertanian Bali. Bali
- [7] Kruniasih, I. 1999. Perilaku Harga dan Struktur Pasar Dalam Agribisnis Bawang Merah di Kabupaten Bantul. Tesis. Program Pascasarjana, Universitas Gajah Mada. Yogyakarta
- [8] Apituley, Y. M. T. N. 2013. Model Pengembangan Sistem Pemasaran Ikan Segar di Kawasan Maluku Tengah. Disertasi. Sekolah Pascasarjana, Institut Pertanian Bogor. Bogor
- [9] Bassegy, N. E., Uwemedimo, E. O., Uwem, U. I. 2014. Analysis of the Determinants of Fresh Fish Marketing and Profitability among Captured Fish Traders in South Nigeria: The Case of akwa Ibom State. *British Journal of Economics, Management and Trade* Volume 5 Nomor 1 September 2014 Page 35-45
- [10] Purwanti, Y. E., Hayati, B. 2008. Analisis Struktur Pasar Kedelai Sebagai Alternatif Peningkatan Posisi Tawar Petani. *Jurnal "Dinamika Pembangunan"*, Volume 5. No. 1 Juli 2008. Surakarta Halaman 81-94
- [11] Lilimantik, E. 2011. Struktur, Perilaku dan Penampilan Pasar Usaha Budidaya Ikan Mas (*Cyprus caprio*) Dalam Karamba di Kabupaten Banjar Provinsi Kalimantan Selatan. *Jurnal "J-PAL"*, Volume 1, Nomor 2 Februari 2011
- [12] Bloch, H., Eaton, B. C. Rothschild, R. 2014. A Dynamic Model of Oligipolistic Market Structure, Featuring Positioning Investments. *International Journal of The Economics of Business*. Volume 21 Issue 3 Page 1-12

- [13] Suharso. 2006. Elastisitas Produksi Perikanan Tangkap Kota Tegal. Tesis. Sekolah Pascasarjana Universitas Diponegoro. Semarang
- [14] Madugu, A. J., Edward, A. 2014. Marketing and Distribution Channel of Processed Fish in Adamawa State, Nigeria. *Global Journal of Management and Business Research* Volume 11 Issue 4 March 2011 Page 871-883
- [15] Odemero, A. F. 2012. Price Transmission and Households demand Elasticity for Frozen Fish under Fuel Subsidy Reform in Delta State, Nigeria. *International Journal of food and Agricultural Economics* Volume 1 Nomor 1 Page 119-127
- [16] Mallawa, A., Syafruddin, Palo, M. 2010. Aspek Perikanan dan Pola Distribusi Ikan Cakalang (*Katsuwonus pelamis*) di Perairan Teluk Bone Sulawesi Selatan. *Jurnal Ilmu Kelautan dan Perikanan "Torani"* Volume 20 Nomor 1 April 2010 Halaman 17-24
- [17] Melania. 2007. Struktur, Perilaku dan Keragaan Pasar. *Jurnal Eksekutif*, Volume 4 Nomor 3 Desember 2007 Halaman 10-17
- [18] Tety, E., Maharani, E., Setiawan, M. 2012. Analisis Transmisi Harga Tandan buah segar (TBS) dari Pabrik Kelapa Sawit (PKS) ke Petani Swadaya di Kelurahan Sorek Satu Kecamatan Pangkalan Kuras Kabupaten Pelalawan. *Pekbis Jurnal*, Volume 4 Nomor 1 Maret 2012 Page 34-43