

COMPARATIVE ANALYSIS OF THE SALES FISH EFFICIENCY ONLINE AND OFFLINE AT CISAAT SUBDISTRICT IN SUKABUMI DISTRICT

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ABSTRACT

Cisaat sub-district is a potential area for the cultivation and marketing of koi fish in Sukabumi District. However, marketing agencies have not been entirely efficient because farmers have not innovated to market koi products by online and still sell offline to collector traders so that the profits of farmers are still considered less than the traders and wholesalers who have made online sales. This study aims to analyze the marketing channels of koi fish by online and offline in the Sukabumi area and analyze the level of efficiency of Koi fish marketing institutions by online and offline. The technique of taking respondents uses Snowball sampling, which is an approach to finding key informants who have a lot of information, while the number of respondents is 17 people. The analysis used is quantitative analysis by calculating marketing margins, Market Share, farmers share and BCR. The results show there are three marketing channels that do marketing online and offline, while the largest total marketing margin is obtained by offline marketing channels with a value of IDR. 60,000 per channel, the largest Market Share value is obtained by the collector at marketing channel III online with a value of 71.42%, and the largest BCR value is obtained by large traders on the marketing channel I online with a value of 13.2. Channeling channel III by using an online marketing system is the most efficient channel with the highest farmers share value of 40%.

Keywords : farmer share, koi fish, online, offline, marketing

INTRODUCTION

Cisaat Subdistrict is a potential area for the cultivation and marketing of koi fish in Sukabumi District. In 2015 koi fish production reached 21.88 fish million or equivalent to IDR 176 billion. In 2016 koi fish production reached 23.14 fish million or equivalent to

IDR 185 billion. In 2017 koi fish production reached 24.39 fish million equivalent to IDR 195 billion and in 2018 the production of koi fish reached 25.11 fish million or equivalent to almost IDR 200 billion (Department of Marine and Fisheries, Sukabumi District 2018).

The increasing number of koi fish lovers and lovers in Cisaat Subdistrict, Sukabumi

District is proven by the existence of several koi fish communities including Sugoi's which is under the auspices of the Koi Owner of Indonesia Society (KOIS) and Sukabumi Bersatu Koi Club (SBKC) under the auspices of the Indonesian Koi Lovers Association (APKI) as well as large farms such as Mizumi Farm Koi. According to data obtained from the Sukabumi District Marine and Fisheries Service, it was explained that the Sukabumi area became the center of koi fish production in West Java with the increasing production of koi fish every year. Koi fish is one of the most popular ornamental fish because of its beautiful body shape and color, besides that koi fish have high economic value because the price is relatively above the average freshwater ornamental fish in general, for the price of koi fish Grade with a size of 5 cm – 10 cm can reach IDR 10,000 - IDR 15,000 / head.

The increasing number of internet users has turned out to be utilized as best as possible by business people including the fisheries sector. Many business people intentionally create a website, blog, or create account Facebook, Instagram, or video YouTube to market their products to increase profits and marketing efficiency. The increasing number of ornamental fish marketing agencies in the Sukabumi area, especially koi fish, tends to be in line with technological developments, which are starting to market koi with an marketing system online through several social media

such as YouTube, Instagram and Facebook and it is expected that this enlargement system will be more efficient if used correctly.

In this regard, it is quite interesting to conduct a study on the comparison of the level of efficiency of selling koi fish online and offline in the Sukabumi area, this study also discusses what and how the biggest obstacle is in selling fish online and offline.

RESEARCH METHODS

Method used in this research is a case study method using primary data and secondary data. Case study is a series of scientific activities carried out intensively, in detail and in depth about a program, event, and activity, both at the individual level, a group of people, or an organization to obtain in-depth knowledge of the event (Raharjo 2017).

Collection methods used in this research include interviews with questionnaire help to respondents, direct observation, and study of literature / documents.

Respondents were taken using Snowball sampling, an approach to finding key informants who had a lot of information. Using this approach, a number of potential respondents were contacted and asked if they knew other people with characteristics as intended for research purposes. Initial contact will help get other respondents through recommendations. To achieve the research objectives, this technique is also supported by

interview techniques and field surveys. The searches for determining respondents were obtained from various social media such as Facebook, Instagram, Youtube and Blogspot while those for fish sales respondents offline will be conducted directly in the field.

BCR Analysis

Identification of the short term Benefit Cost (B / C) ratio is the ratio between total benefit and total cost aimed at knowing the efficiency of business results. B / C ratio is expressed in the following formula:

$$BC \text{ Ratio} = \frac{TB}{TC}$$

Description

BC = Total Benefit

TC = Total Cost

BCR less than one (BCR < 1) means inefficient enterprises.

More than one BCR (BC > 1) means efficient effort.

BCR is equal to one (BCR = 1) means the business breaks even.

Marketing Margin Analysis

Margin analysis is used to see the level of efficiency of Koi Fish products. Marketing margin is the difference in prices paid to producers and prices paid by consumers (Saefudin and Hanafiah 1986). The calculation of marketing margin analysis is carried out to determine the difference in price per unit at the producer level or consumer level

that occurs in the marketing chain (Sudiyono 2001).

Mathematically can be formulated as follows:

$$M_i = PKI - P_{pi}$$

Where:

M_i = margin market marketing rate of all i

PKI = The purchase price of consumer-level i-th

P_{pi} = The selling price of the manufacturer of i

Farmer's Share Analysis

Farmer's Share is one of the indicators useful in looking at the efficiency of marketing activities by comparing the farmer's share to the prices paid by end consumers (Limpong and Sitorus, 1987). The formula for calculating the farmer's share is:

$$F_s = \frac{P_f}{P_r} \times 100\%$$

Description:

F_s = farmer's share

P_f = farmgate prices

P_r = price at the consumer level

Rule-making by Downey and Erickson (1992):

$F_s \geq 40\%$ = efficient

$F_s \leq 40\%$ = inefficient

Market share Analysis

Market share is a comparison between the selling price in the market and the total price of the channel expressed in percentage. The

amount of market share can be formulated mathematically as follows:

$$Ms = \frac{HP}{Ht} \times 100\%$$

Description:

Ms = Market share

Hp = Selling price at the marketing market

Ht = Total channel price

RESULTS AND DISCUSSION

Marketing Efficiency Analysis

Efficiency is the desire and goals to be achieved by every marketing institution (farmers, collectors, wholesalers, retailers). The efficiency of marketing is an indication of the welfare of the actors of economic activity in agricultural production including producers, marketing institutions and consumers. The high and low efficiency of marketing channels also influences prices in the hands of farmers (Muslim and Dervish 2012).

Online Marketing Channels

Channels according to Kotler and Keller (2009) explain that marketing channels (marketing channels also called trade channels or distribution channels) are groups of organizations that are interdependent and involved in the process of making products and services provided for use or consumption and are a set of channels followed by products or services after production, ending in purchases and used by end users. The marketing channel online is a group /

organization that conducts marketing activities using media online such as Google, websites and social media such as Facebook, you tube, Instagram and whats app.

The marketer channel online in Cisaat Subdistrict, Sukabumi District is shown in the picture

Channel I: Cultivators - Collector Traders - Wholesalers - Consumer

Channel II: Cultivators - SBKC Groups - Wholesalers - Consumer

Channel III: Cultivators - Collectors Mizumi - Consumer

Marketing Channels Offline

Channel marketing offline is marketing institutions involved in delivering a product in the traditional way without the use of the system online via social media, google or website but their face-to-face between marketing agencies to engage in a transaction the following picture explains the marketing channel offline existing in Cisaat Subdistrict, Sukabumi District.

Channel I: Cultivators - Merchant Traders - Wholesalers - Retailers - Consumer

Channel II: Cultivators - SBKC Groups - Collector Traders - Wholesalers - Retailers - Consumer

Channel III: Cultivators - Collectors Mizumi - Wholesalers - Consumer

Comparison Analysis of Online and Offline Marketing

Efficiency comparison can be used as a reference or reference material for marketing agencies when starting a business so that they know the purpose and the benefits to be gained by using every marketing system both online and offline.

The level of efficiency in the marketing channel online

If viewed from the total marketing channel III profit is the marketing channel with the highest total profit value compared to other marketing channels and the costs incurred are not higher than other marketing channels, so channel III can be said to be the most efficient channel on the marketing system online based on the aspects of the benefits obtained, as for the institutions involved in marketing channel III there are only two, namely farmers and collectors so that in terms of cost is not too large while the profits are greater. Achieving marketing efficiency can be seen from the indicators of marketing margins, farmers share, market share and profit ratio to cost, efficiency from the perspective of farmers can be seen from the indicator farmers share, channel III is the most efficient marketing channel because it has value farmers share approximately 40% the benefits received by farmers with the purchase price incurred by the end consumer can be said to be satisfactory,

then if viewed from the marketing channel III marketing margin value is still said to be the most efficient compared to other channels because the total margin obtained by channel III is IDR 30,000 others are higher.

Then to find out the level of efficiency on each channel, a Benefit coast ratio can be calculated, the data obtained from the highest total BCR is obtained by the marketing channel I with a value of 4.15 so that channel I can be said to be the most efficient if it is reviewed using the Benefit Cost Ratio method.

The level of efficiency in the marketing channel offline

Offline marketing channel different with online marketing chanel. This can be seen from the characteristics of each institution that meets directly or transactions at the place of sale. To find out the high efficiency of the sale of koi fish based on my research, it uses the method farmers share, income margin, market share and price.

Based on farmers' share of sales online, there is actually no efficient criteria because all values farmers share less than 40% while the number of farmers shares largest received by farmers is on marketing channel III with a value of 30%, Farmers share in marketing channels is offline not efficient due to consumer prices the high end while the difference is quite far from the selling price at the farmer level.

If viewed from the marketing margin, all channels on marketing are the offline same, IDR. 60,000, the value is quite high so that the share received by farmers is quite low, then when viewed from the benefit cost ratio channel II is the most efficient channel because it has the highest BCR value of 4.37 which means that the channel can be said to be worth continuing.

Comparative analysis of online and offline marketing efficiency

Cost Marketing

Costs marketing costs include the costs of packaging, transportation, levies, storage, loading and unloading, sorting, labor, mobile and quota fees or data packages. Marketing costs at the marketing channel I costs incurred by farmers and collectors both online and offline are the same because both institutions, both cultivators and collectors, do not sell online, while sales are online done when entering enlargement institutions, compared to costs incurred by traders. Large online and offline is certainly different for marketing online costs incurred by IDR. 2,100/ seed while the costs incurred marketing offline amounted to IDR. 2,500/ seed so that it can be said that the costs incurred online are less than the costs of marketing offline. Marketing Channel II costs incurred by farmers and groups both online and online are equally large because the two institutions do not make sales

online, while marketing online starts to be done by large traders so that the costs incurred online are different from the costs made offline, marketing costs online IDR. 2,300/ seed, while the cost of marketing is offline IDR. 2,800/ seed, and the costs incurred by each institution in the third channel of supply for cultivators are no different because they do marketing, offline which is direct selling koi to collectors, while for broadcasting costs there is a difference between online and offline, for marketing costs online of IDR. 2,700/ seed and marketing offline of IDR. 3,200/ seed.

Based on the costs incurred by the institution on each channel, it can be analyzed that institutions that do not sell online the marketing costs incurred tend to be no different because the institutions sell koi fish offline to collectors and groups, while institutions that do marketing online costs issued different from the costs incurred offline, as for the causes of costs incurred marketing is online lower than marketing online based on the results of interviews in the field shows that the cost of marketing online can be reduced to a minimum and stocks sold in accordance with the wishes of sellers who install products online through the media social, such as Facebook, Instagram or Whatsapp group while the use of social media is used for almost 24 hours, even when large traders or collectors do work outside of marketing online, consumers on social media I will still be able to monitor and contact the seller's contact so that the

interaction occurs and if it continues then the transaction activities will be carried out according to the time agreement, as for the packing costs and shipping costs the marketing costs will be borne by the end consumer so as to reduce marketing costs incurred by marketing agencies.

Benefits

Marketing are the difference in prices paid to producers and prices given by consumers. The distance that delivers production from producers to consumers causes a difference in the magnitude of marketing benefits (Soekartawi 1993).

The profit received by farmers and collectors is no difference between online and offline or the farmer sells directly to the collector then the collector sells to large traders, the difference in profits is obtained by large traders because they do marketing online and offline, As for the profits gained by large traders online for IDR. 27,900 / seed (69.23%) while the profits from marketing are offline IDR. 17,500/ seed (29.22%) of the total channel.

The advantage gained by each institution in the marketing channel II is for farmers and groups there is no comparison because it only sells koi offline or directly, retailers are the same as farmers and groups so the benefits are the same, while marketing agencies online sell koi fish online and offline so that there are

differences in profits, while the profits received from marketing are online IDR. 25,700 / seed (64.25%) and offline IDR. 20,200 / seed (33.39%) of the total channels.

The advantage gained by each institution on channel III for large farmers and traders is that there is no difference between online and offline but the difference in profits occurs with retailers, for the benefit of marketing, online which is IDR. 27,300 / seed (69.45%) while marketing is offline IDR. 21,800 / seed (34.71%) of the total channel.

Based on the description of the benefits received by each marketing agency above, it can be analyzed that marketing online gets a greater advantage than marketing offline, this is due to lower marketing costs and higher selling prices because the target market is directly to end consumers or koi lovers. While the marketing costs incurred are higher and the selling price of marketing offline is lower than marketing online, because koi is sold to wholesalers or retailers directly and there is a bargaining price so that profits will be lower.

Margin of Marketing

Margin is the difference between the price paid by the end consumer and the price received by the craftsman (Sudiyono 2002: 94) the intended craftsman is koi fish farmers, this margin will be accepted by the marketing agency involved in the marketing process. The longer the trading system (the more

commercial institutions involved) the greater the trading margin (Daniel 2004).

The total marketing margin on the marketing online channel on channel I is IDR. 40,000, channel II is IDR. 37,000, and channel III IDR. 30,000 while on the marketing channel the online total marketing margin of each channel is IDR. 60,000 of the total value of the marketing margins online and offline obtained results in a marketing channel offline larger indicating more marketing institutions and higher selling prices for the final marketing institution so that marketing online can be said to be more efficient because fewer marketing agencies are involved and end consumers will be more interested in buying because prices on marketing are online relatively cheaper. This difference in margin is in accordance with the opinion of Amalia et al (2013) that the more intermediary traders involved in the marketing channel, the higher the price consumers must pay. Marketing channel 3 is the Online most efficient compared to other marketing channels because there are fewer institutions, namely farmers and collectors, so that arwana fish can quickly reach consumers.

Market share

Market share can be interpreted as a part of the market that is controlled by a company, or a sales presentation of a company to the total sales of its biggest competitors at a particular time and place (William JS 1984 in

Sibirian et al 2017). The value of market share received by institutions in a channel can be compared between marketing online and offline.

Market share received by institutions in the marketing channel I as follows: Market share received by cultivators in the marketing channel is online 17.64% while on channels is offline 10%, then market share received by collectors on channels online 23.52% and offline 13, 33%, market share received by large traders on channels online 58.82% and offline 26.66% and market share received on channels online does not exist while on channels offline 50%. Furthermore, the market share received by each institution on channel II market share received by cultivators on channels online 17.24% while offline is 9.5%, then the market share received by the group on the marketing channel is online 25.29% and offline 14.66% , then the market share received by wholesalers of marketing channels online 57.47% and offline 28.66% and the market share received by retailers on the marketing channel online does not exist while offline 47.77%. Furthermore, the market share received by the marketing channel III market share received by the cultivators on the marketing channel online 28.57% and offline 13.33%, then the market share received by the traders on the channel online 71.42% while offline 31, 03%, and there is no market share received by large traders on the marketing channel online while offline is 55.17%.

Based on the description of the market share obtained by each institution from the three channels, it can be analyzed that the market share received by all institutions from the start of the farmer, the traders and wholesalers get a higher market share value than marketing offline, while the value of the market share received by each institution greater because the marketing channel has a online shorter marketing chain than marketing offline so that the dividing variables are fewer and the share received will be greater.

Farmers share

Farmers share is part of the consumer price received by farmers, and is expressed as a percentage of consumer prices. This is useful to know the portion of prices that are applicable at the consumer level enjoyed by farmers (Kohls and Uhls, 1985)

Based on the comparison of farmers share values from each channel online and offline, the highest farmers share value is obtained by channel III marketing online with a value of 40% and value farmers share is offline worth 25% while the lowest is obtained by marketing channels I and II online 20% and offline 30%, while according to Downey and Erickson (1992) explained that $FS \geq 40\%$ of profits received by efficient farmers and $FS \leq 40\%$ profit received by inefficient farmers so that the results obtained on marketing channels are online more efficient compared to marketing offline because marketing channels

online tend to be shorter than marketing offline, this is in line with the research of Apriono et al (2012) that the shortest marketing channel is retailer producers - consumers are delivery channels the most efficient principle.

When viewed from the facts in the field, it is stated that every farmer feels sufficient and prosperous from earning koi fish farming, because being able to support his family starts from clothing, food and shelter so that the koi fish cultivation business is still being developed and implemented, but it would be better if every farmer can play an active role in selling online so that sales can go directly to the end consumer and the benefits will be higher than marketing offline.

Benefit Cost Ratio

Benefit cost ratio is a comparison between total benefit and total cost aimed at knowing the efficiency of business results. The BCR value obtained from the division between the benefits obtained is divided into costs incurred if the BCR value > 1 can be said to be efficient while < 1 business is inefficient. Based on BCR data obtained from the calculation of each institution in channels online and offline for the BCR value of cultivators in all channels there is no difference while the BCR value obtained by all farmers is more than one, so the business is said to be efficient and feasible, then the BCR received by collectors on channel I, both

channels online, and offline did not address differences, namely BCR obtained worth 7.33 can be said to be efficient and feasible to develop, then channel II did not involve collecting traders and in marketing channel III there was a difference in BCR values for collectors collectors on channel III do marketing online and offline while the BCR value on marketing is online 10.1 while the marketing BCR value offline 6.18 both BCR values are said to be efficient because of more

than one but the difference is due to the costs incurred by the collecting traders online is less than the cost of marketing offline while the benefits of marketing are online higher than marketing offline.

Table Comparison of Online and Offline Marketing Efficiency

Marketing Agencies	Cost (IDR / Seed)		Profit (IDR/ Seed)		Marketing Margin (IDR / Seed)		Market Share (%)		Farmer Share (%)	
	On	Off	On	Off	On	Off	On	Off	On	Off
Channel I										
Cultivator Group	7,000	7,000	8,000	8,000			17,64	10	30	20
Collection Large Traders	600	600	4,400	4,400	5,000	5,000	23,52	13,33		
Retailer Traders	2,100	2,500	27,900	17,500	30,000	20,000	58,82	26,66		
		5,000		30,000		35,000		50		
Channel II										
Cultivator Groups	7,200	7,200	7,800	7,800			17,24	9.5	30	20
Collectors	1,500	1,500	6,500	5,500	7,000	7,000	25,29	14,66		
Large Traders	2,300	2,800	25,700	20,200	28,000	23,000	57,47	28,66		
Retailers		3,000		27,000		30,000		47,77		
Channel III										
Cultivator Group	7,700	7,700	12,000	11,000			28,57	13,33	40	25
Collection Large Traders	2,700	3,200	27,300	21,800	30,000	25,000	71,42	31,03		
Retailers Traders		5,000		30,000		35,000		55,17		

Conclusion

Based on the result there are several conclusions from this research that is:

1. There are three marketing channels in Cisaat subdistrict i.e. First, marketing channel starts from farmers, traders, wholesalers, then for marketing channels. Second, start from farmers, groups, and wholesalers, and marketing channels. Third, institutions involved were only cultivators and collectors, while in the marketing channel offline there were additional institutions in each channel, for marketing channels one and two there were additional institutions namely retailers and in the marketing channel three had additional institutions from wholesalers. The three marketing channels are considered to be the most efficient without comparing between marketing in online and offline terms of channel length, total profits and total channel costs as well as greater profits received by farmers compared to other marketing channels.

2. Marketing institutions that use the online marketing system more efficient than offline marketing system. on the first marketing channel, most efficient institution is obtained by wholesaler in terms of marketing costs online of IDR. 2,100 / seed while offline is IDR. 2,500/ seed, then profit IDR. 27,900 / seed (69.23%) while offline is IDR. 17,500 / seed (29.22%); then the market share received by wholesaler on first marketing channel, online is 58.82% and offline is 26.66%. The most efficient institution on the marketing channel II is obtained by wholesalers at a cost / seed to get online IDR. 2300 while offline IDR. 2,500, the

profits obtained online are IDR. 25,700 (64.25%) while offline IDR. 20,500 (33.39%) and market share online 57.47% while offline 28.66%. The most efficient institution on the marketing channel III is obtained by the collector at a cost / seed online IDR. 2,700 while offline IDR. 3,200, the profits obtained online are IDR. 27,300 (69.46%) while offline IDR. 21,800 (34.71%) and market share online 71.42% while offline 31.03%.

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