

Market Opportunity Analysis of Fermentative Floating Feed Products Non-Extrusion of High Protein Empirical Study in Bogor District, West Java Province

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ABSTRACT

The purpose of this study is to find out the market opportunities and marketing strategies of High Protein Non-Extrusion Floating Feed-in Bogor Regency, West Java Province. Research method with descriptive approach. The population in this study were all freshwater fish farmers in Bogor Regency, West Java Province, and samples used in this study were freshwater fish farmers, especially catfish in Bogor Regency, West Java Province. Data collection methods: observation, interview, and documentation study. Data analysis method with descriptive statistics. The results showed that the market opportunities for High Protein Non-Extrusion Floating Feed products in Bogor Regency, West Java Province were very high, dominated by the Catfish culture market by 82.397%, the remaining 11.165% by Ornamental Fish cultivators, and 6.438% by Gurame Fish cultivators. For the marketing strategy carried out, especially the distribution strategy (place) and promotion strategy, the product strategy and price strategy have their own advantages and uniqueness compared to other catfish feed competitors.

Kkeyword: Market, opportunities, strategies

INTRODUCTION

Indonesia has an area of 5,193,250 km (covering land and sea). Indonesia is ranked the 7th largest country in the world after Russia, Canada, the United States, China, Brazil, and Australia. Compared to the size of countries in Asia, Indonesia ranks 2nd and when compared to countries in Southeast Asia, Indonesia places itself as the largest country in Southeast Asia. Indonesia also places itself as the largest archipelagic country in the world because Indonesia is an archipelagic country, so Indonesia's territory consists of land and sea. One-third of the area is land and two-thirds is an ocean (Jamil, 2020; Saraswati & Setiyono, 2017).

Indonesia's land area is 1,919,440 km which occupies Indonesia as the 15th largest country in the world. Indonesia is also often referred to as the archipelago. This can be seen from the existence of islands which amount to no less than 17,508 islands in the territory of Indonesia. It is mathematically calculated that Indonesia's marine area is 96,079.15 km². Indonesia is the largest archipelagic country in the world. The coastline is about 81,000 km. The sea area is about 70% of the total area of Indonesia (Mustika, 2022).

Therefore, the area of Indonesia is very much dominated by waters such as seas, lakes, bays, and rivers. The existence of these waters provides benefits for the lives of the Indonesian people, especially from the fisheries sector which contributes protein to the community. According to the Minister of Maritime Affairs and Fisheries (Pudjiastuti, 2018) explained that "the quality of Human Resources (HR) will be largely determined by the supply of quality food and fish is the best alternative to meet the protein needs. Currently, the need for fish will continue to increase in line with the level of fish consumption of the community which shows

an increasing trend from year to year, from 36 kg/capita/year to 43 kg/capita/year in 2017. For this reason, the aquaculture sub-sector will continue to be encouraged to supply food needs. fish-based for the community” (Pudjiastuti, 2018).

Fish cultivation can be done by utilizing the vast waters to produce alternative sources of high protein. One of the areas in Indonesia whose geographical conditions are strategic for fish cultivation is the Bogor Regency, West Java Province.

According to the information the author got from the Central Statistics Agency (Badan Pusat Statistik, 2018) that "The area of Bogor Regency has an area of 2,301.95 Km², meaning that Bogor Regency is about 5.19% of the area of West Java Province. Geographically, it is located between 6.19 0 North Latitude – 6,470 South Latitude and 1060 1' - 1070 103' East Longitude with varied regional morphological types, from relatively low plains in the north to highlands in the south, which is around 29.28%. are at an altitude of 15 - 100 meters above sea level (asl), 42.62% are at an altitude of 100 - 500 meters above sea level, 19.53% are at an altitude of 500 - 1,000 meters above sea level, 8.43% are at an altitude of 1,000 - 2,000 meters above sea level and 0.22% are at an altitude of 2,000 - 2,500 meters above sea level ".

Geographical and demographic strategic potential in the Bogor Regency area, there are many people who do fish cultivation, especially freshwater fish cultivation. This is due to the increasing trend of protein needs every year, but there are many obstacles in the field at the cultivator level, including production costs, especially the price of fish feed, which is very high compared to the price of fish. Then the conditions of fish ponds that are not conducive, such as water as a living medium for fish, must meet the standards for fish. For growth and development, fish require several value requirements for several water quality parameters, namely (Alabaster & R, 1982; Boyd, 1982; Environmental Protection Agency, 1973; Krismono & Y, 2009; Stiekney, 1979). Then there is pollution of fish pond water due to materials that sink into the pond which causes fish to be polluted and die. In addition, there is also silting of the pond, while according to Huet in (Indartono et al., 2020; Mashur et al., 2020; Nugroho & Hardjomidjojo, 2017b; Syamsunarno & Sunarno, 2016), that the water depth for rearing freshwater fish ranges from 0.50 to 0.80 cm. If there is siltation, especially from the rest of the feed itself, this will have an adverse effect on the condition of the fish which will lead to the cultivator himself, because the fish die and or the fish growth and development is stunted.

On the other hand, it is also necessary to pay attention to the protein content for fish contained in the feed (pellets). According to the Indonesian National Standard (SNI) 01-4087-2006 in (Ahidin et al., 2018), that the requirements for the protein content of fish feed are protein content ranging from 20.35%, fat ranging from 2-10%, shellfish ash content than 12%, and water content less than 12%. The above phenomenon requires a practical solution of a fish feed (pellet). Therefore, in this study, a fish feed (pellet) will be investigated. This product is the result of research between (Ahidin et al., 2018). This fish feed is to provide a solution to freshwater fish cultivators, especially cultivators in Bogor Regency, West Java Province, in line with the trend of community protein needs which continue to rise every year.

The fish feed products through this research are reviewed from the marketing management perspective, the extent of market opportunities and marketing strategies, so that the producer, in this case CV Rama Teknik, can be taken into consideration for decision making. Therefore, the author wants to analyze market opportunities and marketing strategies for High

Protein Non-Extruded Fermentative Floating Feed products in Bogor Regency, West Java Province.

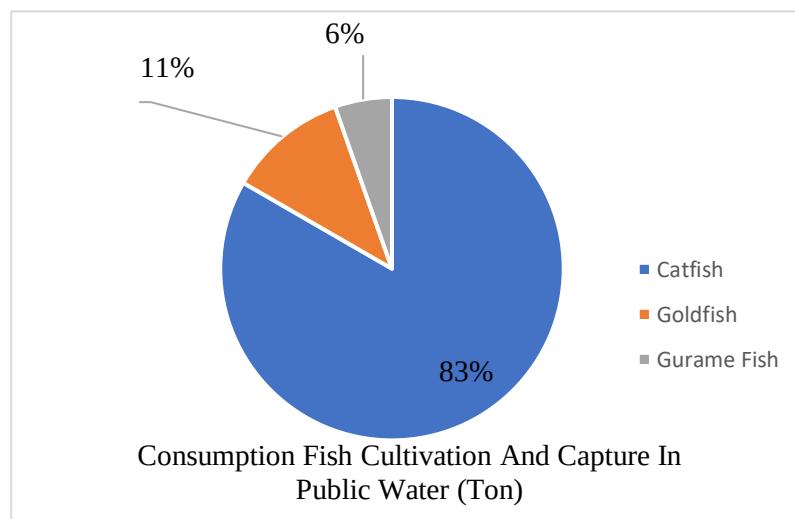
METHOD

This research method with a descriptive approach. The object of this research is freshwater fish cultivators in Bogor Regency, West Java Province. Method of collecting data; observation, interview and documentation study. Data analysis method with descriptive statistics (percentages, graphs and tables).

RESEARCH RESULTS AND DISCUSSION

Market Opportunity of High Protein Non-Extruded Fermentative Floating Feed Products

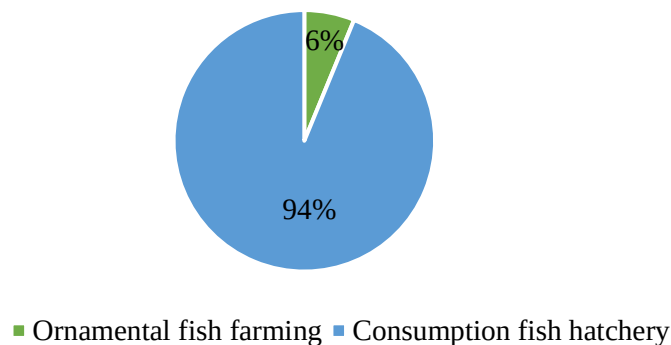
Based on the results of research through data processing, the authors can describe the results of market opportunity analysis as follows:



Source: Data processing results (2019)

Figure 1. Market Opportunities for Consumption and Catching Fish Cultivation in Public Waters

Information from image data 1. above it can be concluded that consumption and fishing fish cultivation in public waters consists of; The probability of catfish cultivation is 82.397%, carp cultivation is 11.165%, and carp cultivation is 5.316%. This means that the product of High Protein Non-Extruded Fermentative Floating Feed has a very high market opportunity in the Bogor Regency, Banten Province. Furthermore, when viewed from the hatchery of freshwater fish as shown in the Figure 2:



Source: Data processing results (2019)

Figure 2. Market Opportunities for Freshwater Fish Hatchery

Information from the data Figure 2. The above it can be concluded that the cultivation of freshwater fish hatcheries consisting of consumption fish is 94% and ornamental fish hatcheries are 6%. This means that the product of High Protein Non Extruded Fermentative Floating Feed has a very high market opportunity in the Bogor Regency, Banten Province for the development of freshwater fish hatcheries.

Therefore from Figure 1. and Figure 2. The above, that Non-Extruded High Protein Fermentative Floating Feed products have a very high market opportunity in the Bogor Regency, Banten Province, both for the development of hatcheries and the development of fish enlargement, especially for consumption, namely Catfish.

DISCUSSION

Market Segmentation of High Protein Non-Extruded Fermentative Floating Feed Products

The results of this study obtained information that the market group (Market Segmentation) targeted by High Protein Non-Extruded Fermentative Floating Feed Products were freshwater fish cultivators in Bogor Regency, West Java Province (Source: Observation results, 2018).

Determination of the Target Market for High Protein Non-Extruded Fermentative Floating Feed Products

The results of this study obtained information that the target market group targeted by High Protein Non-Extruded Fermentative Floating Feed Products were catfish cultivators in Bogor Regency, West Java Province (Source: Observation results, 2018).

Market Positioning for High Protein Non-Extruded Fermentative Floating Feed Products

The results of this study obtained information that the positioning of High Protein Non-Extruded Fermentative Floating Feed Products is "High Protein Floating Feed" with a protein content of 20% - 30%. and the duration of floating in fresh water for 60 minutes or 1 (one) hour (Source: Observation results, 2018).

Strategi Produk (Product Strategy)

The results of this study obtained information that in marketing High Protein Non-Extruded Fermentative Floating Feed Products when viewed from the product strategy, that this product has its own advantages and uniqueness, so it is expected to provide solutions to the problems faced by freshwater fish cultivators, especially fish. Catfish (Nugroho & Hardjomidjojo, 2017a; Oktaviandi, 2020). In the floating feed product, we can see the content if we compare it with commercial feeds on the market today, especially those in the Bogor Regency, West Java Province. The information is as in table 1. below this:

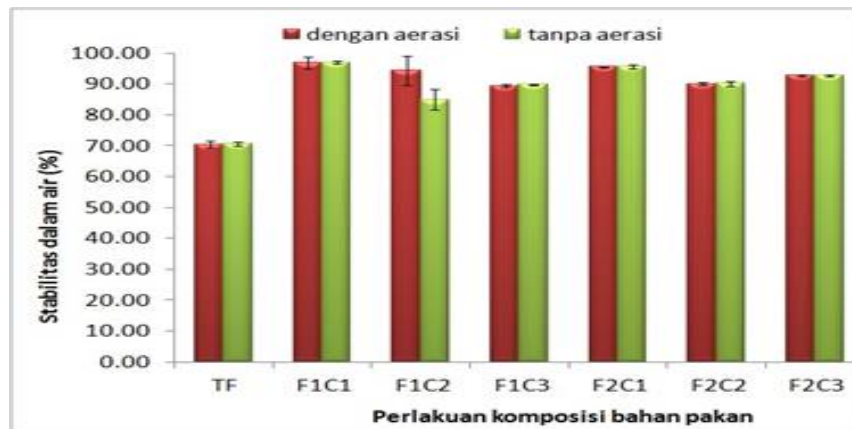
Table 1.
Comparison of Non Extrusion Fermentative Floating Feed with Commercial Feed

Specification	Non Extrusion Fermentative Floating Feed	Commercial Feed
Size(mm)	3,0	2,2-3,0
Packaging (Kg)	25	30
Proteins (%)	20-30	14-16
Fat (%)	4-16	4-6
Carbohydrates (%)	25-30	25-30
Water content (%)	7-9	9-10
Feeding Rate (%)	7,0-5,0	7,0-5,0
Feeding Frequency Rate (%)	4-5 times/day	5-6 times/day
Price (Rp)	7,000-10,000/Kg	10,000-15,000/Kg
Float Time (minutes)	50-60 minutes	< 50 minutes

Source: Observation Results (2019)

Information from data table 1. above it can be concluded that non-extruded fermentative floating feed products have high protein content, lower water content, larger size, smaller Feeding Frequency Rate so that it is more efficient, low water content < 12%, and cheaper prices compared to commercial feeds. So that this non-extruded fermentative floating feed product has advantages and uniqueness and has a high chance of being accepted by the market because it can meet the solutions to the problems that have been faced by freshwater fish farmers, especially catfish in the Bogor Regency, Banten Province.

Furthermore, the author can describe the stabilization of fermented floating feed products as shown in Figure 3:



Source: Observation Results (2019)

Figure 3. Stabilization of Fermented Floating Feed Products

Information from Figure 3 it can be concluded that the product stabilization of Non-Extrusion Fermentative Floating Feed is as follows: 1). The stability of floating feed fermented in water tends to be stable in conditions with aeration and without aeration, 2). The stability of the unfermented feed decreased which indicated that the fermentation process greatly affected the stability of the feed.

Price Strategy

The results of this study obtained information that in marketing Non-Extruded High Protein Fermentative Floating Feed Products when viewed from the price strategy, that this product has a Cost of Production (HPP) of Rp. 6,601,- (Six Thousand Six Hundred One Rupiah), so that if it is sold for Rp. 10,000,- /Kg (Ten Thousand Rupiah per kilogram) in the market, the price of this High Protein Non Extruded Fermentative Floating Feed product is very competitive because it is below competitors but there is still a margin. profit of Rp. 3.399,-/Kg (Three Thousand Three Hundred Ninety Nine Rupiah per kilogram). This pricing strategy is very strategic to penetrate the market. In more detail, the authors describe as in table 2. below this:

Table 2.
Cost of Floating Feed Production

No.	Formulasi	HPP
1.	F1C1	Rp. 6.728,-
2.	F2C1	Rp. 6.906,-
3.	F1C2	Rp. 6.668,-
4.	F2C2	Rp. 6.850,-
5.	F1C3	Rp. 6.601,-
6.	F2C3	Rp. 6.788,-

Source: Observation Results (2019)

Information from data table 2. above it can be concluded that the price of non-extruded fermentative floating feed products is very competitive when compared to the price of commercial feeds with high protein content above 20% and able to float on the surface of fresh water for 50-60 minutes.

Place Strategy

The results of this study obtained information that in marketing Non-Extruded High Protein Fermentative Floating Feed Products when viewed from the distribution strategy, it was still centered on the floating feed production center, namely in Pamulang Barat Village, Pamulang District, South Tangerang City, Banten Province. There is no special distribution channel to bring floating feed production closer to final consumers and cultivators.

Promotion Strategy

The results of this study obtained information that in marketing Non-Extruded High Protein Fermentative Floating Feed Products when viewed from the promotion strategy it was not optimal. The promotion used is still limited to word of mouth, brochures, but that is still limited. Haven't entered the media website so that it can be easily accessed by computers and or gadgets by anyone and anywhere.

CONCLUSION

The market opportunity for High Protein Non-Extruded Fermentative Floating Feed products in Bogor Regency, West Java Province is very high, dominated by the catfish cultivator market of 82.397%, the remaining 11.165% by ornamental fish cultivators, and 6.438% by carp cultivators. The marketing strategy of High Protein Non-Extruded Fermentative Floating Feed products in Bogor Regency, West Java Province, especially the distribution strategy (place) and promotion strategy has not been maximized, while the product strategy and price strategy has its own advantages and uniqueness compared to fish feed competitors. Another catfish.

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