ANALYSIS OF CONSUMER PREFERENCES IN SELECTING PROCESSED FISH PRODUCTS (Case Study at Pancasila Market, Tasikmalaya City)

Heldi Hermayanto, Atikah Nurhayati, Yuli Andriani, and Zuzy Anna University of Padjadjaran, Faculty of Fisheries and Marine Science, Department of FisheriesEmails : heldi17001@mail.unpad.ac.id

Abstract

This study aims to analyze processed fish products that are consumer preferences in Pancasila Market Tasikmalaya City and analyze the attributes that consumers consider the most in choosing processed fish products at the Pancasila Market in Tasikmalaya City. The method used in this research is a case study method using descriptive analysis. Data were collected by direct interview technique to respondents who were in Pancasila Market using a questionnaire. The results showed that the processed fish product that became the consumer's preference in the Pancasila Market was fish rolls. The things that are most considered in choosing a fish roll product are the color of the clear packaging, the type of packaging is plastic, the color of the product is natural, the taste is original, and the price of fish rolls is Rp. 15,000 – Rp. 20,000. The most important thing to consider in choosing a fish otak-otak product is the color of the clear packaging, the type of packaging is plastic, the color of the natural product, the original taste, and the price of the processed fish otak-otak product is Rp. 10,000 – Rp. 15,000. The things that are most considered in choosing fish dumpling products are the color of the clear packaging, the type of packaging is plastic, the color of the natural product, the original taste, and the price of the fish dumpling product is Rp. 15,000 – Rp. 20,000.

Introduction

Based on Service Agriculture and Fishery City Tasikmalaya,is known icon sumption fish City community Tasikmalaya Enough height. Matter This Of is how by data icon Sumption percapita per year for icon sumption fish City Tasikmalaya is as big 20,51 kg on year 2020, and on year 2021 increased become 21,05 kg, in the city of Tasikmalaya there has been socialization about the fond of eating fish where the purpose of the socialization is to increase fish consumption in the city of Tasikmalaya. Enhancement icon sumption the is how description general about by icon sumption the people of Tasikmalaya City Which in creased on fish consumption (Rima, 2018). Increasing fish production can be done by increasing production from the aquaculture sector. Aquaculture fisheries in Tasikmalaya City also have considerable potential to be developed. Aquaculture fisheries, if managed properly, can be used as a driving force for the economy and absorb energy.

The city of Tasikmalaya has eight traditional markets spread across each district. Pancasila Market is one of the traditional markets located in the center of Tasikmalaya City, in the Tawang sub-district to be precise. Processed fishery products at the Pancasila Market vary, for example various kinds of fresh fish and processed fish.

Futre brown processed fish very good for body own feel which nice and content nutrition wich no lost was compared to with processed meat cown or meath other. Matter this made fish as choice which very good for public, especially for news which currently in time growth. Content which be found on fish protein height contain sour amino essential which is required by body, beside that mark biological reach 90% with network a litt le so that easy digested (Adwayah, 2007).

The people of Tasikmalaya City have food consumption patterns and nutritional needs, one example is processed fish products that are easy to reach in traditional markets, there are many kinds of processed fish products and the prices are very affordable. YesOfbyconsumptionisshape (structure) productionindividualorgroup-inframeworkcondemnationgoodsandserviceresultsproductionusefulfilneed. Families spend their income mainly to meet their living needs in the form of food and housing, after income increases food expenditure increases so that food becomes varied (Samuelson and Nordhaus, 2004).

Prefect next consumer is something attitude consumer to one brand product which formed through evaluation above various like brand in various choice which available (Kotler and Keller, 2009). With study preference consumer can is known what need and desire consumer, matter this very important in respond hancement request product which produced. The attributes that limit the purchase of processed fish products are product color, packing color, type of packing, taste, and product price each unit (Tri and Sasti, 2017). Consumer behavior and preferences for a product will continue to change from time to time, and the growth of the food and beverge industry is influenced by rapid changes in customer preferences (Nisar, 2014)

RESEARCH METHOD

Research Location
Research on consumer preference analysis in choosing processed fish products (a case study at the Pancasila market in Tasikmalaya City) was conducted puppies on moon September 2021 until with moon December 2021. Place implementation study of Market Pancasila Lengkongsari, Subdistrict Tawang, Tasikmalaya City, West Java.

Sampling
Only 1 recruitment sample which used in study this is *accidental sampling. Accidental Sampling* is take respondents as sample based on as it happens, that is who just which regular is happens found suitable as source data (Sugiyono, 2010). Study this ise 100 respondents, according to Tribagus (2013) amount sample no less 50 respondents and more recommended that amount sample should reach 100 respondent or more as well as recruitmen sample this going on during one moon.

Validity Analysis

The definition of validity according to Sugiyono (2010) exists that's it degrees determination on we buy data whis happen on object study with one which can reported by study. Data which valid is data whis no different between data which reported by researcher with data which indeed happen on object study. Like already explained on method study that for see valid nope something tool measuring used approach regulary statistics, that is through mark coefficient correlation score grains statement, when coefficient the correlation more big os same with 0.3 for statement the specified valid.
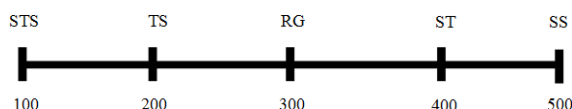
Test Reliability

Test reliability according to Sugiyono (2010) language. I am for know how mus far results measurement still consistent when done measurement is time or more be found stymptoms which same with use tool measuring same. Reliability respectivelyi respectively instrument which used writer use coefficient *Cronbach alpa* (a) by using statistical product and facilities service solution (SPSS) version 20 for type measurement interval. For see reliable nope something tool measuring used approach regularly statistics, that is through coefficient reliability and when coefficient its reliability more big from 0.60 for regulary whole statement the specified reliable (real-iable).

Consumer Preference Analysis

$$X^2 = \sum_{i=1}^{k} \left(\frac{fo - fh}{fh}\right)^2$$

Dap scale at used as tool collection daya study. Will the likert used for measure attitude, opinion, and perception someone or bunch people about phenomenon social. Based on study, phenomenon social set regulary specific by researcher, which furthermore called as variable study. User scale likert will show variable which will be measured which then explained become indicator variable. Indicator variable made as point reject for short item-item instrument which can form statement or question (Sugiyono, 2014). Example amount score ideal (criteria) for whole item hands multiplied with amount respondents.

STS	TS	RG	ST	SS
100	200	300	400	500

Attribute Analysis of Processed Fish Products

Analysis of the attributes of processed fish products using the test *whos squares*. According to Sugiyono (2004) uji *spendsquare* (x2) one sample is teachnique statistics whis used for test hypothesis was in population consistant above two or more clases where the data is normal and the sample is large.

Information :

χ^2: Ch i sq to be careful

fo: Fre kuensi ya of diam and return that research

fh: Freak ence of in front but not from penis litian

k : Kate burn atr pull it out lam varia ble prod uk though an i kan di Pa Sar Pancas except

From where:

$$fh = \frac{n}{k}$$

Information:

n : Number of respondents (people)

k : Attribute categories in the processed fish product variable at the Pancasila Market

Ho: There is no difference in consumer preferences for the attributes of processed fish products

Ha : There are differences in consumer preferences for the attributes in processed fish products

Testing at a 95% confidence level with the following test criteria:

Ho is rejected if χ^2 count $> \chi^2$ table

Ho is accepted if χ^2 count $\leq \chi^2$ table

RESULTS AND DISCUSSION

Research on consumer preferences in choosing processed fish products using 100 people as respondents. The characteristics of the respondents in the study were divided into 6 categories, namely gender, age, level of education, employment, income and number of family members.

Gender

Justis sex is wrong one characteristics which very influential to decision consumer in choose something product. table 1 served consumer in study based on type sex.

Table 1. Consumer characteristics based on gender

No	Gender	Number of people)	Percentage (%)
1	Man	42	42
2	Woman	58	58
	Total	100	100

Ha will study show consumer Which buy product processed fish is Woman as much as 58% and consumer man - man as much as 41%. According to (Pascual*And*al, 2015), women enjoy the shopping process while men only shop as a manifestation of their needs. Matter This can happen Because Woman have not quite enough answer for arrange need food in House ladder.

Age group

The following presents data on consumer characteristics group by age group with the following details:

Table 2. Consumer Characteristics by Age Group

No	Age group	Number of people)	Percentage (%)
1	17-26	63	63
2	27-36	22	22
3	37-46	7	7

4	>47	8	8
	Total	100	100

Based on the results of the study, the age of the youngest consumers ranged from 17-26 years by 63%, the group 27-36 years by 22%, the group 37-46 years 7%, the group over 47 years by 8%. The 17-26 age group is the most dominant consumer in choosing processed fish products. Age over 47 years less in consuming processed products. Respondents aged over 60 years consume less food because at this age a person is more careful in choosing and consuming food, preferring foods made from vegetables (Hermanianto and Andayani, 2002).

Level of education
According to Teguh Triwiyanto, education is an attempt to draw something in humans as an effort to provide programmed learning experiences in the form of formal, non-formal and informal education at school and outside of school that lasts a lifetime with the aim of optimizing individual abilities so that in the future they can be played. proper life roles.

Table 3. Characteristics of Respondents According to Education

No	Level of education	Number of people)	Percentage (%)
1	SMA	50	50
2	Diploma	2	2
3	S1	48	48
	Total	100	100

Menu show that respondents the most originate from high school that is 50 people, diploma that is as much as 2 people and S1 as much as 48 people.

Income Level
According to Sumardi (2014) income is the total real income of all family members donated to meet the collective and individual needs of the family.

Table 4. Percentage of population by income level

No	Income	Number of people)	Percentage (%)
1	< 1.000.000	20	20
2	1.000.000-2.000.000	21	21
3	2.000.000-3.000.000	21	21
4	>4.000.000	38	38
	Total	100	100

The percentage that has the highest level of income is >Rp. 4,000,000 as much as 38%, the lowest level of income and level of income is < Rp. 1,000,000 as much as 38%. Based on the percentage results above, it can be assumed that processed fish products can be enjoyed by all groups, but residents who have high income levels have the

intention to buy processed fish products more often than residents who have low income levels. This is because people with high income levels have the opportunity to buy processed fish products more than once a month (Sudon Sukino, 2005).

Work

In human life always hold various activities. One of these activities is manifested in movements called work. Work implies carrying out a task that ends with the fruit of work that can be enjoyed by the human being concerned.

Table 5. Percentage by Type of Work

No	Work	Number of people)	Percentage (%)
1	State Officer	8	8
2	Private Officer	37	37
3	Self-employed	16	16
4	Housewife	14	14
5	Student	20	20
6	Doesn't work	5	5
	Total	100	100

The percentage value by type of work shows that private employees have the highest percentage, namely 37% and the lowest percentage, shows that they are not working, namely 5%. The type of work will affect the income they receive. This income will then influence the purchasing decision process and consumption patterns (Mangkunegara, 2005).

Number of Family Members

The number of family members is an important factor in influencing the decision to buy processed fish products.

Table 6. Percentage of Number of Family Members

No	Family members	Number of people)	Percentage (%)
1	Members 1-2	4	4
2	Members 3-4	49	49
3	Members 5-6	40	49
4	Members 7-8	7	7
	Total	100	100

The highest percentage score is in families with 3-4 members, namely 49%, and the lowest percentage value in families with 1-2 members, namely 4%. Wardle and Steptoe (2003) explained that the more the number of family members, the greater the amount of food that must be provided.

Consumer behavior

Laundry to consumeris decision which taken by consumer which use source-source like time, money, and effort for changed with goods for consumed. Behavior purchase consumer important for studied reason with understand

and know what which needed consumer will guied marketer on policy marketing which appropriate and efficient.

Habit of Consuming Processed Fish Products

Baird asarkan results survey which already done as much as 94 from 100 respondents own habit consume fish. This shows that the level of fish consumption in Tasikmalaya City is very high and is shown in the following table:

Table 7. Habit of Consuming Processed Fish Products

No	Fish Consumption	Number of people)	Presentase (%)
1	Yes	94	94
2	No	6	6
	Total	100	100

Purchase Frequency

The highest frequency of buying processed fish products per month at the Pancasila market in Tasikmalaya City is more than 4 times for 41 people, consumers consume processed fish products 3 times for 32 people, 1 time and 2 times frequency respectively 6 and 21 people. Based on interviews conducted, consumers who consume fish more than 4 times because their families like side dishes made from processed fish and the price of the products offered are also cheaper than other processed products. The nutritional content in fish is also higher, according to Pandit (2005) Fish is a food ingredient that contains a variety of substances, apart from being generally cheaper, fish protein is higher than other animal products such as beef and chicken, because Fish meat has shorter protein fibers than beef protein fibers.

Table 8. Purchase Frequency

No	Frequency (Per-Month)	Presentase (%)
1	1 time	6
2	2 times	21
3	3 times	32
4	>4 times	41
	Total	100

Place to Purchase Processed Fish Products

Where to buy products is one of the strategies to make a product have added value, this is because a place that is easily accessible or visited by consumers will make consumers more interested and make it easier for consumers to fulfill their needs. According to the results of a survey that was conducted on 100 respondents at the Pancasila Market in Tasikmalaya City, the selection of places to buy fish by respondents is described in the following table:

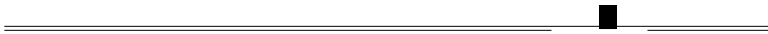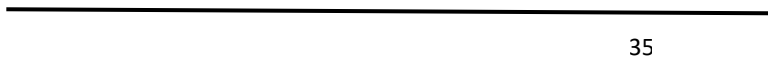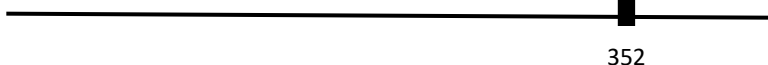**Table 9.** Place to Purchase Processed Fish Products

No	Place of Purchase	Presentase (%)
1	Traditional market	58
2	Supermarket	24
3	Street vendors	3
4	Other	15
	Total	100

As many as 58 respondents chose to buy processed products at traditional markets, 24 respondents bought at supermarkets, 15 respondents chose to buy at stalls that provide processed fish and vegetable products, and 3 respondents bought at street vendors.

Consumer Preferences

Rather the country consumer to product processed fish of market Pancasila City Tasikmalaya can analyzed scale measrment attitude. Preference consumer in buy product processed fish of market Pancasila can is know from respondent which choose attribute-attribute from product processed fish which researched where consumer in buy product processed fish of Market Pancasila can is know from respondents which choose attribute-attribute of the product processed fish which researched where attribute the is color packaging, type packing, color product, feel, and price. Prference consumer to three product the explained as following : (Table 10).

Table 10. Attitude Measurement Scale Towards Processed Fish Products

Product name	Strongly Disagree (1-100)	Don't agree (101-200)	Doubts (201-300)	Agree (301-400)	Strongly agree (401-500)
Fish Roulade				■	
Brains Fish				35	
Siomay Fish				■ 352	

That most consumer preferences like processed fish products in the form of fish brains. Based on the results of the attitude calculation scale, tilapia otak got 359, while fish rolade got 341, and fish dumplings got a score of 352.

Test the Validity and Reliability of Fish Rollade

The results of the validity test on consumer preferences for fish rolls:

Table 11. Test the Validity of Fish Rollade

Preference	Validity Value

Packaging Color	0.674
Product Color	0.800
Packaging Type	0.826
Feel	0.819
Price	0.863

The validity value of each attribute of the fish roll product is declared valid because the validity value of each attribute is greater than 0.3.

Table 12. Fish Roll Reliability Test

Cronbach's Alpha	Total Item
0.892	5

According to Sugiyono (2010) a study is said to be reliable if the Cronbach's alpha value is greater than 0.6 so that consumer preference data for fish roll products is said to be reliable because the Cronbach's alpha value is 0.892.

Based on table 13, the calculated chi-square value is 99.2. Based on dk = 4 with an error of 5%, the square value of the table can be obtained 9.48. Each attribute of processed fish rolls was observed significantly with a significant level of 95% meaning that the null hypothesis (Ho) was rejected and the alternative hypothesis (Ha) was accepted because X^2 count is greater than X^2 table.

Table 13. The results of the Chi Square analysis of the attributes of processed fish rollade products

No	Fish Rollade Products	fo	fh	fo-fh	$(fo-fh)^2$	X^2
1	Packaging Color	6	20	-14	196	9,8
2	Product Color	7	20	-13	169	8,25
3	Packaging Type	5	20	-15	225	11,25
4	Feel	57	20	37	1369	68,45
5	Price	25	20	5	25	1.25
	Total	100	100	0	-	99,2

Test the Validity and Reliability of Fish Brains
The results of the validity test on consumer preferences for otak-otak products:

Table 14. Test the Validity of Fish Brains

Preference	Validity Value
Packaging Color	0,794

Product Color	0,875
Packaging Type	0,825
Feel	0,923
Price	0,853

The validity value of each attribute of the fish roll product is declared valid because the validity value of each attribute is greater than 0.3.

Table 15. Fish Brain Reliability Test

Cronbach's Alpha	Total Item
0,925	5

According to Sugiyono (2010) a study is said to be reliable if the Cronbach's alpha value is greater than 0.6 so that consumer preference data for otak-otak products can be said to be reliable because the Cronbach's alpha value is 0.925.

Based on table 16 menu show it that mark spend - square count 170.3. Based on dk = 4 with fault 5 % for can obtained mark square table that is 9,48. respectively - respectively attribute product processed rolade fish- which observed different regularly real with level significant 95% that is means hypothesis nol (To) rejected and hypothesis alternative (Ha) accepted reason X^2 count more big from on X^2 table.

Table 16. Analysis results*Who Square* on the attributes of processed fish brains products

No	Product Attributes of Fish Brains	fo	Fh	fo-fh	$(fo-fh)^2$	X^2
1	Packaging Color	5	20	-15	225	11,25
2	Product Color	9	20	-11	121	6,05
3	Packaging Type	4	20	-16	256	12,8
4	Feel	72	20	52	2704	135,2
5	Price	10	20	-10	100	5
	Total	100	100	0	-	170,3

Test the Validity and Reliability of Fish Dumplings

The results of the validity test on consumer preferences for fish siomay products:

Table 17. Fish Dumplings Validity Test

Preference	Validity Value
Packaging Color	0,680
Product Color	0,773
Packaging Type	0,849
Feel	0,538
Price	0,766

The validity value of each attribute of the fish siomay product is stated to be valid because the validity value of each attribute is greater than 0.3.

Table 18. Fish Siomay Reliability Test

Cronbach's Alpha	Total Item
0,858	5

According to Sugiyono (2010) a study is said to be reliable if the Cronbach's alpha value is greater than 0.6 so that consumer preference data for fish siomay products can be said to be reliable because the Cronbach's alpha value is 0.858.

The results of the chi-square calculation are shown in table 19, indicating that the calculated chi-squared value is 199. Based on dk=4 with an error of 5%, it can be obtained that the squared value of the table is 9.48. Malien respectively attribute product processed siomay fish which observed different regularly real with level significant 95% which means hypothesis nol (To) rejected and hypothesis alternative (Ha) accepted reason X^2 table.

Table 19. Analysis results *Chi-Square* processed fish dumplings

No	Siomay Fish Product Attributes	Fo	fh	fo-fh	$(fo-fh)^2$	X^2
1	Packaging Color	2	20	-18	324	16,2
2	Product Color	3	20	-17	289	14,5
3	Packaging Type	7	20	-13	169	8,45
4	Feel	76	20	56	3136	157
5	Price	12	20	-8	64	3,2
	Total	100	100	-	-	199

Conclusion

At storm product processed which consumer in take decision buy product rolade fish Of Market Pancasila City Tasikmalaya is color packaging clear, type packaging is plastic, color product experience, feel original, and price rolade fish Rp. 15,000 – Rp. 20,000. Attribute product brain-brain fish which preferred by consumer is color packaging clear, type packaging plastic, color product experience, feel original, and price processed product and brain fish Rp. 10,000 – Rp. 15.000. Attribute product siomay fish which preferred by consumer is color packaging clear, type packaging plastic, color product experience. Feel original, and price product siomay fish Rp. 15,000 – Rp. 20,000.

Suggestion

Advanced research man genes analysis comparative preference consumer in choose product processed fish Of supermarket and small micro medium enterprises.

Producer expected can provide product processed fish which in accordance with preference consumer with notice attribute-attribute which in accordance with taste consumer.

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