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Number of Family Member and Previous Period Prices Affect Demand for Cayenne Pepper in Malang City

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ABSTRACT

Even though the price of cayenne pepper has increased quite significantly, demand remains high, and cayenne pepper has even become the commodity that contributed the most to inflation in Malang City in November 2023. The aim of this research is to determine the factors that influence the demand for cayenne pepper in Malang City. The research location was chosen purposive in Malang City and and selection of sample size using a roscoe formula of 70 respondents. Analysis was carried out using the multiple linear regression method. The results of the study indicate that the price of cayenne pepper in the previous period and the number of family members have a positive effect on the demand for cayenne pepper. In addition, there are other factors that have a negative effect on the demand for cayenne pepper, including the price of shallots and the price of red chilies, which means that these two commodities are complementary goods for cayenne pepper. With several factors that influence the demand for cayenne pepper in Malang City, efforts are needed to maintain the stability of cayenne pepper prices by providing assistance in the form of agricultural inputs, counseling on cultivation methods that optimize yields and proper planting patterns.

Keywords*: cayenne pepper, chili, demand factors, price*

BACKGROUND

Cayenne pepper is a strategic horticultural product whose existence is very important for the people of Indonesia. Cayenne pepper is a type of chili that is widely consumed by the public as the main ingredient of chili sauce and additional spices for everyday cooking. The variety of dishes that use cayenne pepper as a raw material makes the need for cayenne pepper in the people of Indonesia quite high. However, the availability of cayenne pepper is sometimes insufficient to meet public demand, resulting in fluctuating prices. Price fluctuations themselves are a serious matter that can affect the inflation rate (Yuditya et al., 2023).

Based on data from the Central Statistics Agency called (Badan Pusat Statistik Indonesia, 2023), cayenne pepper production in Indonesia in 2022 reached 1.54 million tons. This volume increased by 10.79% compared to the previous year which reached 1.39 million tons. Consumption of cayenne pepper by the household sector in Indonesia is quite high, reaching 569,650 tons in 2022. The amount increased by 7.86% compared to the previous year which was 528,140 tons. However, consumption of cayenne pepper in Indonesia is not only from the household sector but also from the food and beverage processing industry sector and consumption from restaurants and food stalls, so demand is always high.

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Sourced from information from (Badan Pusat Statistik Indonesia, 2023), East Java is the province with the largest cayenne pepper production in Indonesia with production reaching 612,409 tons in 2022. This amount is equivalent to 39.6% of the total national cayenne pepper production of 1.55 million tons throughout last year. East Java Province has great potential in the food and agribusiness sectors, especially in cayenne pepper commodities. One of the cities with high cayenne pepper production potential is Malang City. Malang City is the second largest city in East Java after Surabaya. Where, the area of cayenne pepper harvest in Malang City has the second highest ranking after large chilies compared to other vegetables.

Tabel 1. Vegetable Crop Harvest Area in Malang City (ha)

No	Commodity Type	Year		
		2019	2020	2021
1	Cayenne pepper	13	10	14
2	Red chili	38	34	48
3	Water spinach	6	9	9
4	Cucumber	2	3	0
5	Mustard greens	12	12	7

Source: (Badan Pusat Statistik Kota Malang, 2023)

The price of cayenne pepper in Indonesia, including in Malang City, has continued to fluctuate in recent times. From the news made in (Rizky Martyasari, 2023), it was stated that the price of cayenne pepper touched IDR 120,000/kg at the end of 2023. As in Malang City, prices can go up and down unpredictably where the average price of cayenne pepper in Malang City in October 2023 was IDR 41,300 while in November 2023 the price of chili experienced a fairly high increase of IDR 79,167. The increase in the price of cayenne pepper will certainly have an impact on the demand for cayenne pepper in Malang City. The increase in the price of cayenne pepper will certainly have an impact on the demand for cayenne pepper in Malang City. Sociologically, people in East Java in general and Malang City in particular have a taste for food with a high spicy taste. This certainly has implications for household demand for consumption of cayenne pepper commodities will continue to exist and also continue to increase even though the price of chili has increased quite high, where cayenne pepper is one of the commodities that contributes the most to inflation in Malang City in November 2023.

Based on the survey results, the increase in the price of this commodity reached 81.94% with an inflation contribution of 0.1793%. From this, inflation occurs because the demand or attraction of the community tends to be strong for cayenne pepper, the demand for the long term is needed by the community in large quantities (Yusuf Assidiq, 2023). The increase in the price of cayenne pepper certainly affects household consumption patterns, because even though the price continues to increase, the community's need for cayenne pepper remains high. This is due to the very strong culture of consuming chili in society, especially in Malang City, which is famous for its taste for spicy food. In addition, cayenne pepper is an important ingredient in everyday cooking, so even though the price has increased sharply, demand remains.

Cayenne pepper commodities have unstable and highly fluctuating price characteristics. This is because cayenne pepper plants are seasonal, so during certain seasons, such as the rainy season,

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chili prices increase sharply due to high demand, but low stock. The seasonal characteristics of cayenne pepper plants cause the plants to rot easily during the rainy season if there is too much water. The demand for cayenne peppers also increases during big days such as Eid al-Fitr, because they are widely used as cooking spices (Siregar et al., 2021).

Seeing the needs of the people of Malang City who predominantly consume chili, the demand for chili prices will continue to exist even though the price of chili has increased quite high. In Malang City, it is often found that the price of chili tends to be high and tends to be low and even tends to be uncertain, this is the problem why it can happen. Is it because the taste of chili tends to be spicy or because the people of Malang City really like chili or are there other factors that influence the price of chili (Palar et al., 2016).

Demand is the amount of goods purchased at a certain price level and a certain time. Mariyah et al., (2023) are stated that the demand for commodities is influenced by the price of the goods themselves, the price of other goods (substitutes/complements), income, and the number of family members. According to (Rusmadi, 2017) the influence of the price of chilli included cayenne pepper on inflation is quite high, because the price of cayenne pepper is often fluctuating sharply, so chili is an important commodity contributing to the rate of regional inflation (including Malang City). The factors that influence household demand for cayenne pepper are not only determined by the price of the commodity itself. But also determined by the price of related commodities(Septiadi et al., 2020). Previous studies tend to analyze the demand for cayenne pepper against consumer demographics, segmentation, and socio-economics. However, this study digs deeper into the variation in demand for cayenne pepper between households. This will allow us to identify specific factors that influence the consumption decisions of each household including the existence of other substitute commodities that also affect the demand for cayenne pepper in Malang City, one of which is red chili and shallots. The public taste factor and the price of cayenne pepper in the previous period are strongly suspected to have an influence on household demand for cayenne pepper consumption. This makes the demand for cayenne pepper in Malang City an interesting thing to study. Based on this, researchers are interested in studying "Cayenne Pepper Demand Factors in Malang City".

RESEARCH METHODS

This study was conducted to determine the factors that influence the demand for cayenne pepper in Malang City. The selection of Malang City was chosen purposively on the grounds that in Malang City, cayenne pepper is a horticultural commodity with a fairly large harvest area and the demand for cayenne pepper in Malang City is high considering that the community likes culinary with a spicy taste. The limitations of this research are on the analysis of demand factors for cayenne pepper in traditional markets. The population of this study were consumers who purchased cayenne pepper in traditional market in Malang City. However, the population size is unknown so that sampling was carried out by accidental sampling. Determination of the number of samples using the formula from Roscoe, namely if the factors used in the study are many, then the sample size is at least 10 times or more than the number of variables. So that the number of sample members is at least 10 times the number of variables studied (Sugiyono, 2014). The number of samples used was 70 respondents with the consideration that the number of variables was 7 times 10.

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Market demand includes the quantity of a good or service sought in that market, and increases in price and income over a period of time indicate an increase in demand. According to the theory of demand, if demand increases, prices should increase proportionately, and if demand decreases, prices should also decrease proportionately (Zuwardi et al., 2023).

In this study, the variables studied came from previous studies consisting of the price of cayenne pepper (Fauzi et al., 2023), the price of cayenne pepper in the previous period is a novelty in this study, while the variables of the price of shallots and the price of red chilies are complementary goods (Rahman et al., 2023), consumer income, number of family members (Loanga Nifta A et al., 2023), and public taste are also novelties in this study. The model in this study is as follows:

$$Y = a + \beta 1\, X1 + \beta 2\, X2 + \beta 3\, X3 + \beta 4\, X4 + \beta 5\, X5 + \beta 6\, X6 + \beta 7\, X7 + e$$

Where = Y = dependent variable (cayenne pepper demand/kg)

A = Constant

β = regression model parameters for variables

X_1 = cayenne pepper price variable (IDR/kg)

X_2 = red chili price variable (IDR/kg)

X_3 = shallots price variable (IDR/kg)

X_4 = consumer income variable (IDR/month)

X_5 = family member variable (persons)

X_6 = public taste variable

scale 1 : not spicy

scale 2 : slightly spicy

scale 3 : quite spicy

scale 4 : spicy

scale 5 : very spicy

X_7 = cayenne pepper price in previous period (IDR/kg)

α = constant value

e = Other independent variables outside the regression model

The multiple linear regression equation model has been formed, then the classical assumption test is carried out, which can be tested using the normality test, heteroscedasticity test, multicollinearity test and autocorrelation test. The classical assumption test is used to avoid false data so that if the data is not false and the classical assumption is not detected, data processing can be continued using statistical tests. Statistical tests can be tested using the coefficient of determination test (R^2 test), F test (simultaneous test), and t test (partial).

RESULT AND DISCUSSION

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This study aims to determine the factors that are suspected of influencing the demand for cayenne pepper in Malang City. There are 7 variables used for demand, namely the price of cayenne pepper, the price of shallots (complementary goods), the price of red chili (complementary goods), consumer income, the number of family members, public tastes, and the price of cayenne pepper in the previous period. These variables are suspected as factors that influence the demand for cayenne pepper in Malang City. The following table presents data on the price of cayenne pepper, the price of shallots, the price of red chili, consumer income, the number of family members, public tastes, and the price of cayenne pepper in the previous period.

Table 2. Statistical Description of Analysis Variables

No.	Variables	Minimum	Maximum	Mean	Std. Deviation
1	Demand for cayenne pepper (Kg) (Y)	0.1	5	0.54	0.85
2	Price of Cayenne pepper (IDR/Kg) (X1)	30,000	80,000	41,943	9567.28
3	Price of Shallots (IDR/Kg) (X2)	20,000	48,000	31,314	5216.76
4	Price of Red Chili (IDR/Kg) (X3)	36,000	80,000	60,900	8332.14
5	Consumer Income (IDR/month) (X4)	200,000	3,500,000	2,024,285	1915795.19
6	Number of Family Members (X5)	2	8	4	1.16
7	Consumer Taste (X6)	3	5	4	0.69
8	Price of Chili Peppers in the Previous Period (IDR/Kg) (X7)	45,000	65,000	51,186	6032.02

Source: Primary data processed, 2024

Based on the descriptive statistical analysis table above, the lowest recorded price for cayenne pepper is IDR 30,000/Kg. This means that there are several transactions or conditions in the market where the price of cayenne pepper is sold at that minimum price. The highest recorded price for cayenne pepper is IDR 80,000/Kg. This shows that there are also conditions or transactions where the price of cayenne pepper is sold at a higher price, which may be caused by certain factors, such as scarcity, quality of chili, or seasonal fluctuations. The average price of cayenne pepper is IDR 41,943/Kg. This means that, overall, the price of cayenne pepper in traditional markets in Malang City is in this range. The fairly high standard deviation value, which is 9,567.28, indicates that there is quite a large variation in price around the average value. In other words, the price of cayenne pepper can vary greatly from one place or time to another. This large price fluctuation can be caused by several factors such as weather, supply, seasonal demand, or uneven distribution.

The price of red chili (X2) shows quite significant fluctuations in the market. With a minimum value of IDR 20,000/Kg and a maximum of IDR 48,000/Kg, the price of red chili can vary widely, reflecting the dynamics of supply and demand. The average price of red chili was recorded at IDR 31,314/Kg, which describes the middle price often found in the market. However, with a standard deviation of 5,216.76, the price of red chili has a fairly high level of variation, indicating that the price

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can fluctuate significantly from the average value, possibly influenced by factors such as weather conditions, seasons, and supply availability in the market.

The price of shallots (X3) shows quite a large variation in the market, with a minimum value of IDR 36,000/Kg and a maximum of IDR 80,000/Kg, indicating significant price fluctuations. The average price of shallots was recorded at IDR 60,900/Kg, which indicates a price that is often found in the market, but with a high standard deviation of 8,332.14, indicating that the price of shallots can vary greatly, both well below and above the average value.

Consumer income (X4) shows a very wide range, with a minimum value of IDR 200,000/month and a maximum of IDR 3,500,000/month, illustrating significant inequality in consumer income levels. The average income is recorded at IDR 2,024,285/month, which provides an overview of general consumer income, but with a very high standard deviation of 1,915,795, indicating a large level of variation between consumers. This large fluctuation indicates income inequality among consumers, which is influenced by various factors such as different jobs, locations, and economic conditions.

The variable number of family members has a minimum value of 2, a maximum value of 8, an average value of 4 and a standard deviation value of 1.16. It can be concluded that the number of family members in the dataset varies from 2 to 8, with an average of around 4 members and most families have between 3 and 5 members considering the standard deviation. The distribution of the data shows a variation that is not too large from the average, indicating that most families have a size that is relatively close to the average.

The public taste variable shows the level of spiciness preferred by the people in Malang City. With a scale of 1 indicating not spicy, a scale of 2 indicating slightly spicy, a scale of 3 indicating quite spicy, a scale of 4 indicating spicy, and a scale of 5 indicating very spicy. Based on the results, the minimum value is 3, the maximum value is 5, the average value is 4 and the standard deviation value is 0.69. Based on these results, it shows that the people of Malang City prefer a spicier taste than a lighter taste. Overall, these results illustrate that the majority of the people of Malang City prefer or are more tolerant of strong to very strong spicy flavors. The standard deviation value is 0.69 with relatively small variations among respondents.

Furthermore, the price of cayenne pepper in the previous period had a minimum value of IDR 45,000/Kg, a maximum value of IDR 65,000/Kg, an average value of IDR 51,186/Kg and a standard deviation value of 6032.02, it can be concluded that during this period, the price of cayenne pepper experienced quite significant fluctuations, with the lowest price of IDR 45,000/Kg and the highest price of IDR 65,000/Kg, and an average price of around IDR 51,186/Kg with a variation of around IDR 6,032.02 from the average, meaning that the previous price of cayenne pepper had a high level of data variation.

Demand Factor Analysis Using Multiple Linear Regression

The classical assumption test is a statistical requirement that must be met in multiple linear regression analysis. To ensure that the regression model obtained is the best model, in terms of estimation accuracy, unbiased, and consistent, it is necessary to conduct a classical assumption test (Mardiatmoko, 2024). The classical assumption test is to ensure that the regression equation used is correct and valid. Before conducting multiple regression analysis and hypothesis testing, several

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classical assumption tests must be carried out which aim to determine whether the regression model used is free from assumption deviations and meets the requirements for obtaining good linearity. There are several classical assumption tests carried out including normality, multicollinearity and heteroscedasticity tests. Before conducting multiple linear regression analysis, the researcher ensured that there were no deviations from the results of the classical assumption test where the variables used were normally distributed, there was no multicollinearity between the variables and it was homoscedastic.

In formulating the relationship between demand and variables that are suspected of influencing it, the multiple linear regression method is used. Statistical testing is carried out by looking at the R square value, t test (partial), and f test (simultaneous test).

1. *Coefficient of Determination (R Square)*

The coefficient of determination R Square is a test that shows how much the independent variable can explain the dependent variable. The coefficient of determination value can be seen in the following table:

Table 3. Determination coefficient value

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.914[a]	.836	.818	.25952

a. Predictors: (Constant), Price of Cayenne Pepper, Price of Shallots, Price of Red Chili, Number of Family Members, Consumer Income, Public Taste, Previous Price of Cayenne Pepper,

b. Dependent Variable: demand for cayenne pepper

Source: Primary data processed, 2024

The model summary table shows the magnitude of the correlation/relationship (R) which is 0.914. From the output, the coefficient of determination (R-square) is obtained as much as 0.836 which means that the independent variables (price of cayenne pepper, price of shallots, price of red chili, consumer income, number of family members, public taste, price of cayenne pepper in the previous period affect the dependent variable/demand for cayenne pepper (Y) simultaneously by 83.6%, while the remaining 16.4% is explained by other variables outside the model.

2. Simultaneous Test (F test)

The F test is used to determine whether the independent variables (price of cayenne pepper, price of previous period, price of shallots, price of red chili pepper, consumer income, number of family members, and public taste) studied together have an effect on the demand for cayenne pepper in Malang City. The f-count value can be found based on the following table:

Table 4. F Rest Result Values

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.305	7	3.044	45.191	<.000[b]
	Residual	4.176	62	.067		
	Total	25.481	69			

a. Dependent Variable: Demand of cayenne pepper

b. Predictors: (Constant), Price of Cayenne Pepper, Price of Shallots, Price of Red Chili, Number of Family Members, Consumer Income, Public Taste, Previous Price of Cayenne Pepper,

Source: Primary data processed, 2024

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Based on the table, the F-count value of 45.191 with a significance of 0.001 at a 99% confidence level indicates that H1 is accepted and H0 is rejected. This means that the variables (price of cayenne pepper, price of shallots, price of red chili, consumer income, number of family members, public taste, and previous price of cayenne pepper) simultaneously have a significant effect on the demand for cayenne pepper in Malang City.

3. T-Test and Multiple Linear Regression

This study aims to determine several factors that are suspected of influencing the demand for cayenne pepper and how much influence it has on the demand for cayenne pepper in Malang City. This analysis formulates the existence of a relationship that influences the independent variables (price of cayenne pepper, price of shallots, price of red chili, consumer income, number of family members, public taste, and price of previous period) with the dependent variable of demand for cayenne pepper. This study uses a confidence level of 95% (0.05) and significance of 0,001 at a 99% confidence level. The regression coefficient value of the cayenne pepper demand model in Malang City can be seen in the following table:

Table 5. T-test results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.347				.002
	Price of cayenne pepper	-.004	.003	-.128	-1.193	.238
	Price of shallots	-.005	.002	-.116	2.001	0.50*
	Price of red chili	-.018	.002	-.503	9.023	<.001**
	Consumer income	.000	.000	-.103	-1.878	.065
	Number of family members	.657	.111	.329	5.898	<.001**
	Public taste	-1.199	.199	-.341	-6.009	0.072
	Price of cayenne pepper in the previous period	.029	.005	.633	6.284	<.001**

a. Dependent Variable: Demand for cayenne pepper
b. Significance : 95 % (0.05)*
99 % (0.001)**

Source: Primary data processed, 2024

Based on the test results in Table 5 above, it can be seen that the variables of shallot price, red chili price, number of family members, and public taste, the price of cayenne pepper in the previous period have a significant effect on the demand for cayenne pepper in Malang City. Meanwhile, the variables of cayenne pepper price and consumer income do not affect the demand for cayenne pepper in Malang City. A more detailed explanation of the data results is as follows:

a) Cayenne Pepper Price

In the theory of demand, it is stated that the demand for a good is caused by the price of the good itself. From the results of the regression analysis, it is known that the price of cayenne pepper has a significance value of 0.238, which means more than 0.05. These results indicate that the price of cayenne pepper does not have a significant effect on the demand for cayenne pepper. According to (Septiadi et al., 2020) Cayenne pepper is one of the daily necessities, so when the price increases,

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consumers will still buy it to meet their needs even though the price increases. Thus, regardless of the price of cayenne pepper, consumers will still buy cayenne pepper. Astami et al., (2018) stated that cayenne pepper has become a consumption necessity as a cooking ingredient for consumers who like spicy dishes so that it does not affect consumer demand for cayenne pepper.

b) Shallot prices

Shallots are a staple ingredient in Indonesian cooking. Shallots are a complement to dishes that use cayenne pepper, including in making chili sauce. W Adiyoga (2011)stated that shallots are a daily need for consumers, so price perception (cheap/expensive) tends to be indifferent to purchasing decisions. The results of the regression analysis on the shallot variable show a significance value of 0.050 ($p \leq 0.05$) and has a regression coefficient value of -0.005, which means that every 1 rupiah increase in the price of will decrease the amount of demand for cayenne pepper by 0.005 kg. The conclusion is that the price variable of shallots has a significant negative effect on the demand for cayenne pepper in Malang City. This is in accordance with the research of (Ratag et al., 2018) that the price variable of shallots also has a a significant negative effect on the factors that influence the demand for cayenne pepper. In addition, (Palar et al., 2016) stated that the price of shallots had a negative effect on consumer demand. Shallots are said to be complementary goods if they are used together or complement other goods such as cayenne pepper. Therefore, if the price of other goods increases, this will affect the amount of consumption of complementary goods. In this study, shallots are assumed to be complementary goods to cayenne pepper. Shallots have the same use as cayenne pepper, namely as a kitchen spice or cooking seasoning, so even though the price of shallots increases, consumers will still buy shallots for cooking spices (Mariyah et al., 2023). When the price of shallots increases and cayenne pepper increases, consumers tend to choose to buy shallots, so that when shallots increase, consumers will still buy cayenne pepper for cooking spices.

c) Red Chili Price

The demand for chili is simultaneously related to various types of different chilies because they are substitutes or complements. Red chilies can be a substitute or complement commodity for cayenne pepper in Indonesian cuisine. The results of the regression analysis on the red chili price variable have a significance value of 0.001 ($p \leq 0.01$) and the regression coefficient has a value of -0.018 which means that every 1 rupiah increase in the price of red chili will decrease the amount of demand for cayenne pepper by 0.018 kg. The conclusion is that the red chili price variable has a very significant negative effect on the demand for cayenne pepper in Malang City. So, when the price of red chili increases, the demand for cayenne pepper decreases, this makes red chili a complementary item. This is also similar to research conducted by (Yutriani et al., 2020) which analyzed the negative effect between the price of red chili and the demand for cayenne pepper. Because red chili is combined with cayenne pepper to make various sambal and home-cooked dishes (Septiadi et al., 2020). However, this study is not similar to research conducted by (Astami et al., 2018) which states that red chili does not affect the demand for cayenne pepper, this is because consumers do not buy red chili because according to consumers, red chili is not spicy enough.

d) Consumer Income

Income is the total amount of income received by a person as compensation in the form of money from all the results of their work or business, both from the formal and non-formal sectors, which is calculated within a certain period of time. Based on the results of the analysis of the cayenne

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pepper demand model in Malang City, it can be seen that the amount of consumer income does not have a significant effect on the demand for cayenne pepper in Malang City. Statistically, it can be seen that the significance value of the income variable is 0.065> 0.05, which means that there is no significant effect between the income variable and the demand for cayenne pepper. The results of the study are in line with (Yutriani et al., 2020) that income has no effect on the demand for chili. When viewed from consumer income, the average consumer income is 2 million rupiah. With this income, consumers are still able to buy cayenne pepper at a price of of IDR 30.000 – Rp 80.000. When income increases, the demand for cayenne pepper does not change as previously explained that consumers like spicy flavors. Thus, regardless of consumer income, consumers will continue to consume cayenne pepper in order to achieve satisfaction with their tastes.

e) The number of family members

The family is the closest environment for consumers. Family members will influence consumers in the decision-making process to buy cayenne pepper (Lisdayani et al., 2021). In the regression analysis results table, the variable number of family members regression coefficient value is 0.657, which means that every increase of 1 in the number of family members will increase the demand for cayenne pepper by 0.657. The results of the regression analysis of the variable number of family members have a significance value of 0.001 ($p < 0.001$), which means that the variable number of family members has a very significant effect on the demand for cayenne pepper in Malang City. This is in line with research conducted by (Lisdayani et al., 2021) that the number of family dependents has a significant effect on the demand for cayenne pepper. Population growth or the number of family members is usually followed by an increase in demand for an item because in these conditions more people will need the item (Ramadhan & Adnan, 2021). The increase in family members will affect the quantity of a commodity's needs, so that the demand for the commodity will also increase. The increase in the number of family members accompanied by an increase in the purchasing power of respondents will increase the need for cayenne pepper in Malang City in one family.

f) Public Taste

The results of the regression analysis on the public taste the regression coefficient value is -1.199, this means that every 1 unit increase in public taste will decrease consumer demand for cayenne pepper by 6.009. The significance value is 0.072 ($p \leq 0.05$), which means that the public taste variable does not affect the demand for cayenne pepper in Malang City. If seen from Table 2, it is known that public tastes in Malang City like spicy flavors with a level of spiciness ranging from quite spicy to very spicy. This taste can be influenced by cultural factors, culinary trends or food trends that are currently trending. With a taste dominated by spicy flavors, the demand for spicy-tasting commodities will remain high, be it cayenne pepper, red chili or other commodities that provide a spicy taste. This is reinforced by the opinion (Miftahuddin, 2020), hat public tastes can change over time, but these changes are relatively stable in the short term.

g) Previous Period Price

In the results of the regression analysis of the previous cayenne pepper price variable, the regression coefficient value was 0.029, which means that every 1 unit increase in the previous cayenne pepper price will increase the demand for cayenne pepper in Malang City by 0.029. Furthermore, the significance value of the previous cayenne pepper price variable, which was 0.001

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($p \leq 0.001$), shows that this variable has a significant effect on the demand for cayenne pepper in Malang City. In general, the price of cayenne pepper in the previous period can affect demand through changes in expectations, purchasing power, consumer behavior in purchasing, use of substitute goods, speculative demand, and the behavior of traders. As an assumption, if consumers know that the price in the previous period was higher, then consumers will make more purchases in anticipation of the price going up again tomorrow. As presented in Table 2. the average price in the previous period was Rp 51,186 from the current price of Rp 41,943, then consumers will buy more tomorrow to increase their stock at home as a form of anticipation of higher price increases in the future. This is in accordance with the results of the study that the price of the previous period has a positive effect on the amount of demand for cayenne pepper at the present time (research time). In this study, the theory of demand for cayenne pepper is strengthened from the previous theory about the price of cayenne pepper, which is a novelty in this study, the variables of the price of substitute goods, consumer income, and also the number of family members, while the latest theory of this study is the price of cayenne pepper in the previous period.

CONCLUSION AND SUGGESTION

Based on the results of the study, it is known that there are several factors that influence the demand for cayenne pepper in Malang City. The factors that influence the demand for cayenne pepper include the price of red chili, the price of shallots, the number of family members, and the price of cayenne pepper in the previous period. The variable that has the most significant influence is the number of family members. The number of family members has a positive effect where every increase of 1 in the number of family members will increase the demand for cayenne pepper by 0.657 kg/week. Next, the price of the previous period also shows a positive effect, because when the price of the previous period was high, consumers tended to make more purchases to increase the stock of supplies at home. For the price of red chili with a negative effect, which means that people in traditional markets in Malang City prefer to combine red chili and cayenne pepper in making dishes. In addition to these three variables, the price of shallots also has a significant effect on the demand for cayenne pepper with a negative effect, which means that it is a complementary item.

Based on the conclusions above, several recommendations can be given, namely the need for efforts to increase the availability and quality of cayenne pepper. This certainly requires the participation of the relevant government in providing input assistance, counseling on optimal cultivation methods and regulating appropriate planting patterns. In addition, the government and authorities need to monitor food prices, especially cayenne pepper, red chili, and shallots, so that there are no price fluctuations that are detrimental to consumers and producers. Price regulation through import policies or subsidies can help reduce the negative impact of price increases on people's purchasing power.

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