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Dynamics of Food Consumption in West Java Province

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ABSTRACT

West Java Province is the most populous province in Indonesia, facing significant food insecurity challenges, particularly among poor households. With a growing population and increasing poverty rates, understanding food consumption dynamics is critical for policy-making. his study aims to analyze the impact of price, income, and socio-demographic factors on food consumption in poor households in West Java Province, both in urban and rural areas. The analysis method was carried out using the Linear Approximation Almost Ideal Demand System (LA-AIDS) model. The results of the study show that the food consumption of poor households in West Java is generally influenced by the own price of the commodity, the price of other commodities, income, number of household members, type of region (rural/urban), education of the household head (average years of schooling of the head of household) and the type of work of the head of the household (agriculture/non-agriculture). The overall expenditure elasticity of poor households shows the results of positive expenditure elasticity. This means that all groups of food commodities are normal goods and some of them fall into the category of luxury goods. The government should make a policy to control food demand through controlling food prices, through decreasing food prices so that household food demand increases.

Keywords: LA-AIDS, food expenditure share, social demographic variables, price and income elasticity, poor households, West Java

INTRODUCTION

Food availability is an important issue faced by the government in an effort to improve people's welfare. Food is a basic need other than clothing and shelter, which is consumed every day, so its availability is very important. The population is quite large and tends to increase from year to year, causing food demand to continue to increase. In addition, the share of food consumption is quite high, so food still dominates the household budget allocation. Food prices that fluctuate and tend to increase from time to time also reduce the purchasing power of the community, especially the poor (Maipita, Fahrurrozy, Wahyudi, & Fitrawaty, 2020). Food issues are one of the points discussed in the Sustainable Development Goals (SDGs), namely, ending hunger through achieving food security and better nutrition and supporting sustainable agriculture. One of the targets to be achieved from these goals is to end hunger by 2030 and ensure access for all people, especially the poor and those in vulnerable situations, including infants, to safe, nutritious and sufficient food throughout the year (von Braun, Chichaibelu, Torero Cullen, Laborde, & Smaller, 2021).

The share of food expenditure is an indicator that can describe the degree of food security at the household level. The higher the share of food expenditure of a household, the lower its food security. In other words, households with high food expenditure tend to have low food security or are food insecure (Berkowitz, Basu, Meigs, & Seligman,

2017). According to research by Ilham and Sinaga (2004), the share of food expenditure has a close relationship with food security measures, namely consumption levels, food diversity and income. The greater the share of food expenditure indicates lower food security. One of the indicators used to measure the level of household welfare is household income and expenditure, while the level of shifts in expenditure composition can indicate changes in the welfare level of the population (Ligon, 2020). The level of household expenditure is also one way to determine the level of community life. Household expenditure consists of food and non-food expenditure. The amount of total expenditure spent on food from a household can be used as an indication of the household's welfare level (Deaton, 2016).

In 2022, DKI Jakarta Province with a food expenditure share of 39.94 percent is the province with the lowest food expenditure share, while the province with the highest expenditure share is West Java Province at 51.01 percent (Panjaitan, Nuryartono, & Pasaribu, 2024). This illustrates that the share of expenditure in West Java Province is mostly used for food, so it tends to have lower food security. This indirectly shows that in Java Island, households in West Java Province are still far behind the level of food security compared to households in DKI Jakarta Province (Nurhasan et al., 2022). Even though the geographical location of West Java Province is close to DKI Jakarta Province.

The West Java Provincial Government, as part of the Central Government, is committed and plays an active role in overcoming the problems of food shortages and hunger, malnutrition and poverty (Noventi, 2020). The development policy in the field of food security in West Java Province based on the Regional Medium-Term Development Plan (RPJMD) and the Strategic Plan (RENSTRA) of the Food Security Agency of West Java Province 2017-2022 is to increase the availability, access and safety of food (BKP, 2017). The quality of food consumption of the people of West Java Province as indicated by the Pola Pangan Harapan (PPH) score is quite good although it has not yet reached the ideal condition. In 2022, the West Java PPH score reached 85.2, still below the national PPH score of 96.4. The dominance of food expenditure that relies on food groups of grains indicates the quality of food consumption in a region. The high contribution of grains is due to the pattern of community consumption which is still dominated by rice (Jiao & Lu, 2020). In line with Miranti et al. (2022) in their research suggested that the share of household food expenditure in urban and rural areas of West Java Province was dominated by food groups of grains. Urban households have a higher level of food diversification than rural areas due to the fact that the average price of rice in urban areas is lower than in rural areas (Sayeed & Yunus, 2018).

This study provides important empirical contributions, among others: first, it analyzes the consumption of poor households categorized by the type of occupation of the household head (agricultural/non-agricultural) (Chakrabarti, 2023). Research involving the type of employment of poor household heads is still very rare or few. The type of employment of poor household heads affects the income level of poor households. The income of poor household heads who work in the agricultural sector is lower than those who work in the non-agricultural sector (Neglo, Gebrekidan, & Lyu, 2021). Second, this study uses Susenas cross section data, making it vulnerable to fundamental problems in the observed data, namely endogeneity problems (Rusmawati, Hartono, & Aritenang, 2023). Endogeneity is a condition where explanatory variables are correlated with errors (Sande & Ghosh, 2018). In this study, endogeneity is

suspected to occur in the total food expenditure variable. The total food expenditure of households may be correlated with the error because the amount of total expenditure is influenced by several factors, where these factors are captured in the error. If this endogeneity problem is not taken into account, it is likely to produce biased parameter estimates (simultaneity bias) and undermine the validity of the findings obtained from regression analysis (Khatib, 2024).

This study aims to identify factors that influence the allocation of food consumption expenditure of poor households in West Java Province, both in urban and rural areas. In addition, this study also aims to analyze the response of changes in food consumption demand among poor households in the province in the context of changes in food prices and income. Through the study of the types of food consumed and the proportion of food expenditure of poor households, the results of this study are expected to make a significant contribution to the formulation of policies related to food security and poverty alleviation. The results of this study are expected to be utilized by the government in formulating planning and evaluation of food provision to meet consumption needs in a region, especially for poor households.

RESEARCH METHOD

Object and Place of Research

This study uses a sample of households from West Java Province based on the March 2017 Susenas data, with a focus on poor households. The categorization process is done through the following steps: calculating total household expenditure as a proxy for income, dividing total expenditure by the number of members to obtain per capita expenditure, determining the poverty line (GK) according to BPS (2017), categorizing households with per capita expenditure below GK as poor, and making poor households the unit of analysis. Out of 23,756 samples, 1,691 households were identified as poor.

Data Collection Technique

The data used in this study are secondary data from the March 2017 BPS National Socio-Economic Survey (SUSENAS), which covers household socio-economic data, including consumption and expenditure. The March 2022 SUSENAS questionnaire underwent changes, including the addition of questions on food access to measure food insecurity. Data were categorized into food (222 commodities) and non-food (116 commodities) groups. The household sample included 29,950 households, with 23,960 households in March and 5,990 in September. BPS uses the ability to meet basic needs approach to measure poverty, showing that the poor in West Java Province are mostly in rural areas, with urban poverty lines higher than rural areas.

Data Processing and Analysis

The method of analysis in this study uses descriptive and econometric approaches to describe the conditions and relationships between the phenomena studied. Descriptive analysis provides an overview of food consumption expenditure of poor households, while econometric analysis is conducted through the LA-AIDS equation model to study the influence of economic and socio-demographic factors on food consumption. The LA-AIDS model used is a modification of the original model of Deaton and Muellbauer (1980), which was added with characteristics such as the number of household members, type of region, education of the household head, and type of employment of the household head. The model specification includes the proportion of household expenditure and related variables.

The weakness of this approach is the lack of data on income and commodity prices. Income variables are estimated from total food expenditure, while prices use unit values, which may result in bias. To overcome this, a correction is made with a differential price approach that involves regressing the unit value difference with socio-demographic variables. The analysis covers eight main food commodity groups, namely grains, tubers, animal foods, vegetables, fruits, nuts, processed foods, and other foods.

RESULT AND DISCUSSION

1. Zero Expenditure Value

The problem that must be overcome so that the results of the estimation of the demand function are not biased is the problem of selectivity bias. According to Moeis in Yuliana, selectivity bias of the data occurs because there are households that do not consume one of the food commodities due to several things, for example, the household's dietary pattern as a vegetarian so that it does not consume meat and animals, or due to the very short enumeration time (a week) so that at the time of enumeration the household happened not to consume certain commodities. Not including households that do not consume these commodities in the estimation will result in biased parameter estimates.

The use of Susenas data in demand analysis may contain household data that has no expenditure on a commodity or commodity group during the observation period. In Susenas data, the zero expenditure problem occurs on two sides, namely the quantity and amount of expenditure from households in buying a commodity. To anticipate this selectivity bias is to combine or group commodities so as to make the analyzed commodity group larger. In this study, commodities in Susenas were aggregated into eight main commodity groups, namely grains, tubers, animal foods, vegetables, fruits, nuts, processed foods and other foods (Mayasari et al, 2018).

If after aggregation there are still empty values, the zero expenditure in this study is overcome by adding the variable Inverse Mills Ratio (IMR) of each commodity or commodity group as an independent variable. The function of adding the IMR variable is to take into account households that did not consume the commodity or commodity group in question at the time of the survey. The IMR variable was obtained by conducting a two-step estimation of the Heckman test with probit regression. Thus, the LA-AIDS equation (3.1) becomes: where, wi is the proportion of household expenditure on the i-th commodity group, lnpj is the natural logarithm of the price of the j-th commodity group, ln(y/I) shows the natural logarithm of total food expenditure divided by the Stone price index, Stone price index: Log p* = $\sum 14 wi$ Logpi , jart is the number of household members, d_lok indicates the region dummy (rural=1, other=0), rls indicates the average years of schooling of the household head, d_tani indicates the occupation dummy of the household head (working in the agricultural sector =1, other =0), IMR indicates the value of the Inverse Mills Ratio (IMR),εi is the error of the i-th commodity, and α, β, γ, μ, τ, ρ, θ are LA-AIDS model parameters.

2. Endorgeneity Problem

This study uses Susenas cross section data, making it susceptible to fundamental problems in the observed data, namely the endogeneity problem. Endogeneity problem is a condition where the explanatory variables are correlated with the error of the regression equation. If the problem is not taken into account, it is likely to produce biased parameter estimates (simultaneity bias), thus undermining the validity of the findings obtained from regression-type analysis (Sande & Ghosh, 2018). The next step

before estimating the system of demand equations is to address the endogeneity problem in total food expenditure.

The instrumental variable used to overcome the endogeneity problem for the household monthly expenditure variable for food consumption is total income which is approximated by total household expenditure (total food consumption plus total non-food consumption). The analysis conducted by previous authors shows that household income is a good IV for consumption expenditure of households. The conditions that must be met for a variable to be used as an IV are that the instrument variable is correlated with the instrumented variable and uncorrelated with the error in the main equation (Ullah, Zaefarian, & Ullah, 2021).

The results of testing the relevance condition show that the coefficient of the total expenditure variable is significant at the 1% level. This means that the total expenditure variable is correlated with the total household expenditure variable for food. Thus, the first condition of the total expenditure variable as an instrument variable for total household expenditure on food can be fulfilled. The second requirement that must be met by the total expenditure variable in order to be used as an instrument variable for total household expenditure on food is exogeneity. The endogeneity test results show that, the null hypothesis (Ho) which states that the total household expenditure variable for food is an exogenous variable in all demand equations is rejected. This means that the variable total household expenditure on food is an endogenous variable.

The results of data processing indicating that simultaneously the independent variables which include household expenditure as a proxy for income, food commodity prices and socio-demographic variables in the LA-AIDS model are able to be used in estimating the food expenditure share (budget share) of food commodity groups. This can be seen from the chi square value of all commodity group budget shares showing a significant value at the 1 percent level with the coefficient of determination (R-squared) ranging from 2.51 to 57.13 percent. The low value of R-squared is because the data used is cross section data which has a high level of heterogeneity. Gujarati (2010) in Mayasari et al. (2018) suggests that cross section data involves several observations and has a high level of diversity so that the low R square value is not a problem.

3. Price Variable

The price variable itself has a positive and significant influence in determining the budget share of all food commodity groups of poor households except the processed food group which shows a negative influence. This condition is in line with research conducted by Mayasari et al. (2018) which states that the variable price of food commodities has a significant influence in determining the proportion of food expenditure of poor households. The estimation results show that of the 72 coefficients, 63.89 percent of them have a significance value at a significance level of 1 percent to 10 percent.

The price variable causes two effects in determining the budget share of food commodity groups, namely positive and negative effects. A positive sign indicates that an increase in price will increase the budget share of the food commodity group, while a negative sign indicates the opposite effect, namely an increase in price will cause a decrease in the budget share of the food commodity group. These two influences (positive and negative) occur because the food expenditure share is the result of the division between the value of commodity group expenditure and total food expenditure. This condition is in line with the research of Mayasari et al (2018) and Surjono et al. (2013) which states that there are two effects of price variables on the budget share of

the food groups studied, namely positive and negative. The value of food group expenditure is obtained from multiplying the unit value (price proxy) by the amount consumed. So that if the price increase is greater than the decrease in the amount consumed, the budget share will increase (positive effect), the opposite condition applies if the price increase is smaller than the decrease in the amount consumed, the budget share will decrease (negative effect).

The influence of the variable price of the commodity group of cereals showed a positive and significant value on the budget share of cereal commodities, which amounted to 0.1419. This condition illustrates that if there is an increase in the price of the cereal commodity group by 1 percent, it will increase the budget share of cereal commodities by 0.1419 percent (ceteris paribus). The increasing demand is due to the fact that cereals are the main commodity for most poor households in West Java, so the price increase on this commodity does not decrease the budget share of this commodity. Poor households prioritize consumption for carbohydrates or calories, just to relieve hunger without paying attention to the nutritional needs of the food that must be consumed. This condition is in line with the research of Mayasari et al (2018) which found that the variable price of rice/ tubers commodities showed a positive and significant value on the budget share of rice/ tubers commodities. The increasing demand is because rice/ tubers are the main commodity for most poor households in East Java. To see the response of price changes, both the price itself and the price of other goods to the amount demanded can be seen in the value of demand elasticity, which will be explained in the next section.

4. Income Variable

The household income variable, proxied by total food expenditure that has been deflated by the stone price index, relatively shows a significant value at the 1-10 percent significance level in influencing the budget share of food commodity groups of poor households in West Java Province, except for other food commodity groups that do not show a significant effect. This means that the food expenditure share of other food commodity groups is not influenced by the income level of poor households. This is possible because the components in other food groups consist of seasonings, beverage ingredients, and other consumption, so that the need for consumption of these food components is not influenced by the income level of poor households.

5. Socio-demographic Variables

The socio-demographic variables included in the LA-AIDS demand system are intended to capture the consumption preferences or choices of poor households in West Java Province. Several previous studies found that it is necessary to include socio-demographic variables in the study of food demand or consumption. One of these studies was conducted by Widardjono (2013) examining food demand in Yogyakarta Province. Some of the socio-demographic variables included are type of region, household size, age of household head, education of household head, and gender of household head. Table 5 shows that the coefficient values of the LA-AIDS demand system estimation results, not all socio-demographic variables have an influence in determining the budget share of food commodity groups of poor households in West Java Province. The estimation results show that of the 32 coefficients formed, about 50 percent have an influence at the 1-10 percent significance level. The following is an explanation of the influence of socio-demographic variables in determining the food consumption of poor households in West Java Province.

a. Number of Household Members

The variable definition of household members used in this study is all people, either who have lived for 6 months or more, or who have lived for less than 6 months but intend to stay/plan to stay for 6 months or more. Based on data processing, the results show that the number of household members has a significant effect at the 1 percent to 10 percent level on the budget share of all food commodity groups of poor households in West Java Province except for the processed food commodity group.

The results of data processing show that the number of household members has a negative effect on all food commodity groups for poor households in West Java Province, except for the positive effect on the paddy commodity group. The negative effect shows that when there is an increase in the number of family members, it will cause a decrease in the budget share of the commodity group. This condition is in line with previous research conducted by Firdaus et al. (2013) stated that the number of household members will affect the level of consumption and household expenditure. An increase in the number of household members with the condition that the level of other variables remains constant (ceteris paribus) can reduce the amount of household food consumption. The number of family members is the number of people who are the burden or dependents of the family. The number of people in the family is closely related to the distribution of income, especially for household consumption needs and other purposes. The number of household members illustrates the economic situation that each family bears towards the welfare of the household.

Meanwhile, the positive effect shows that an increase in the number of household members will increase the budget share of the food commodity group. This condition occurs because the food commodity group is a priority group in the consumption of poor households in West Java Province, so the addition of household members results in an increase in the budget share of the food commodity group. Previous research conducted by Siahaan et al. (2016) suggested that the number of household members has a positive effect on the demand for food groups. The number of family members is one of the factors that influence household consumption patterns. the more the number of family members, the higher the consumption pattern of each household member.

b. Employment Type of Head of Household

The type of employment of the household head can be divided into household heads working in the agricultural sector and those working in the non-agricultural sector. As a result of data processing, it is known that the type of employment of the household head has a significant effect on all commodity groups except animal food, fruits and nuts. The variable type of employment of the household head has a positive influence on the budget share of all food commodity groups analyzed except the processed food group (negative effect). The positive influence on commodity budget share is because most of the types of commodity groups analyzed are agriculture-based commodities such as grains, vegetables and other foods, so that many are obtained from household production itself. This condition is in line with the research of Mayasari et al (2018) which found that poor households working in the agricultural sector have a positive and significant influence in determining the budget share of rice/ tubers, fish/meat/eggs/milk and other food commodities.

c. Household Area Type

In the variable of typology of residence, poor households in rural areas and poor households in urban areas are distinguished. Based on the results of the analysis, it is found that the type of household area has a significant effect on the commodity groups of grains, animal food, and vegetables. Poor rural households in West Java have a larger food consumption budget share in the commodity groups of grains, tubers, beans, and vegetables compared to poor households in urban areas. This is because in rural areas these commodity groups are easily obtained and rural households are synonymous with agricultural areas.

Meanwhile, the budget share of animal food commodity groups is greater in urban households than in rural areas. This is because poor households in urban areas prioritize their consumption patterns on commodity groups that have high nutritional content, namely animal food groups. The commodity groups of fruits, nuts, processed foods, other foods and other foods did not show a significant effect.

d. Average Years of Schooling (RLS) Head of Household

The last socio-demographic variable is the average years of schooling of the household head (RLS), the RLS level of the household head has a positive and significant influence in determining the consumption budget share of animal and other food commodity groups. Meanwhile, the RLS level of the household head has a negative and significant influence in determining the budget share of the grains commodity group. This indicates that the RLS level of the household head is decisive in making decisions about the commodities that will be consumed by the household. The higher the RLS of the head of a poor household in West Java Province, the more the head of the household understands the nutritional needs of his/her household members and tends to prioritize his/her food consumption budget share on animal food, processed food, and other food commodity groups.

Consumers with higher education levels will have better accessibility to information compared to consumers with low education levels. Information on health and nutritional content will influence consumer behavior and subsequently food demand. Apart from information on nutritional content and health, consumers' level of education also determines the level of rationality in their consumption behavior. With a higher level of education, the desire to divert to expenditures other than consumption will be higher, such as for investment, health, recreation/entertainment, education, and others.

6. Inverse Mills Ratio (IMR)

The Inverse Mills Ratio (IMR) parameter has a significant effect at the 5 percent to 10 percent level for the commodity groups of beans, other foods and cigarettes. This indicates that the problem of sample selectivity bias is evident in the commodity groups of beans, other foods and cigarettes. By adding the IMR variable, the estimated parameters in the budget share equation for the legumes, other food and cigarette groups are not biased. Then, the influence of the IMR variable is not significant for the commodity groups of grains, vegetables, fruits, and processed foods. This shows that the problem of selectivity bias does not occur for these commodity groups.

7. Instrumental Variable

In this study, the instrumental variable used to overcome the endogeneity problem in the monthly food consumption expenditure variable of households is total household expenditure as a proxy for household income. The results of data processing show that the instrument variable parameters have a significant effect at the 1 percent level. The

total expenditure instrument variable positively affects the budget share of the commodity groups studied except for the processed food and cigarette commodity groups. This shows that most of the commodity group budget share is influenced by the level of household income used as an instrument variable in this study.

Table 1. Parameter Estimation Results of *Budget Share of* Food Consumption of Poor Households in West Java Province in 2017

Variables	***Budget Share* paddy**	***Budget Share* animal food**	**Vegetable *Budget Share***	***Budget Share* beans**	***Budget Share* fruit**	***Budget Share* ready-made food**	***Budget Share* other food**	***Budget Share* cigarettes**
Grain prices	0,1419***	-0,424***	-0,0542***	-0,0248***	-0,0038	0,0565***	-0,0212***	0,0566***
	(0,0126)	(0,0111)	(0,0062)	(0,0053)	(0,0052)	(0,0211)	(0,0070)	(0,0111)
Root vegetables price	-0,0236***	-0,0193***	0,0012	0,0004	0,0009	0,0727***	0,0031	0,0309***
	(0,0056)	(0,0051)	(0,0030)	(0,0024)	(0,0026)	(0,0094)	(0,0086)	(0,0051)
Animal food prices	-0,0303***	0,0127***	-0,0053**	-0,0028	-0,0003	0,0031	-0,0044*	0,0202***
	(0,0051)	(0,0045)	(0,0026)	(0,0021)	(0,0024)	(0,0086)	(0,0028)	(0,0047)
Vegetable prices	-0,0219***	-0,0181***	0,0092***	-0,0017	-0,0009	0,0289***	-0,0076***	0,0119***
	(0,0040)	(0,0035)	(0,0019)	(0,0017)	(0,0015)	(0,0066)	(0,0022)	(0,0037)
Nut price	-0,01684	-0,0407***	-0,0018	0,0269***	-0,0053	0,0869***	-0,0142**	-0,0368***
	(0,0119)	(0,0108)	(0,0061)	(0,0052)	(0,0046)	(0,0199)		(0,0110)
Fruit price	-0,0381***	0,0041	0,0102***	0,0195***	0,0123***	-0,0180	0,0091**	0,0043
	(0,0077)	(0,0068)	(0,0038)	(0,0032)	(0,0032)	(0,0129)	(0,0043)	(0,0071)
Price of processed food	0,0234*	-0,0103	-0,0311***	-0,0418***	-0,0039	-0,04242***	-0,0075**	0,1154***
	(0,0150)	(0,0134)	(0,0074)	(0,0064)	(0.0062)	(0.0250)	(0.0083)	(0,0138)
Other food prices	-0,0272**	-0,0204*	-0,0235***	0,0033	-0,0009	0,0879***	0,0169**	-0,0334***
	(0,0132)	(0,0119)	(0,0064)	(0.0057)	(0,0063)	(0,0021)	(0,0073)	(0,0122)
Cigarette price	-0,0097	-0,0071	-0,0067*	-0,0140***	--0,0059**	0,0067	0,0050	0,0316***
	(0,0077)	(0,0068)	(0,0038)	(0,0032)	(0,0028)	(0,0129)	(0,0043)	(0,0071)
Revenue	-0,1381***	-0,0923***	-0,0391***	-0,0359***	0,0094***	0,0982***	-0,0019	0,2221***
	(0,0058)	(0,0051)	(0,0028)	(0,0024)	(0,0032)	(0,0096)	(0.0032)	(0,0058)
jart	0,0233***	-0,0080***	-0,0051***	-0,0026***	-0,0019**	0,0004	-0,0051***	-0,0030*
	(0,0022)	(0,0019)	(0.0611)	(0,0009)	(0.0008)	(0,0036)	(0,0011)	(0,0020)
rls	-0,0034***	0,0014**	-0,0002	0,0000	-0,0001	0,0009	0,0007*	0,0008
	(0,0007)	(0,0006)	(0,0004)	(0,0003)	(0,0003)	(0,0012)	(0,0004)	(0,0006)
d_lok	0,0118***	-0,0144***	0,0038*	-0,0013	-0,0033	-0,0041	0,0007	0,0013
	(0,0042)	(0,0037)	(0,0021)	(0,0018)	(0,0015)	(0,0069)	(0,0023)	(0,0038)
d_tani	0,0269***	-0,0009	0,0041*	-0,0015	0,0002	-0,0395***	0,0002	0,0089**
	(0,0041)	(0,0037)	(0,0021)	(0,0017)	(0,0018)	(0,0068)	(0,0022)	(0,0038)
Instrument Variable	0,0474***	0,1463***	0,3507***	0,0323***	0,0078**	-0,1015***	0,0106*	-0,1866***
	(0,0110)	(0,0098)	(0,0878)	(0,0047)	(0,0038)	(0,01830	(0,0061)	(0,0101)
IMR	-0,0035	0,0047	0,0040	0,0153*	-0,0307	0,0059	0,0153*	0,0068***
	(0,0051)	(0,0164)	(0,0117)	(0,0089)	(0,0236)	(0,0078)	(0.0102)	(0,0025)
Constant	0,1673	-0,2261	0,3507***	0,0112	0,0482	-0,0963	0,1958**	0,3715**
	(0,1787)	(0,1579)	(0,0878)	(0,0747)	(0,0622)	(0,2980)	(0,0991)	(0,1658)
R-Square	0.4902***	0.2343***	0.1994***	0.2270***	0,0251***	0.1861***	0,0558***	0,5713***
Chi2	1629.44	517,03	422,99	495,57	46,01	386,07	103,86	2246,82

Source: Susenas March 2017, processed

Notes: - ***, **, * indicate 1%, 5%, and 10% significance levels,

Values in parentheses indicate standard *error* values

8. Own Price Elasticity

Price elasticity itself shows how much a change in the price of the commodity group itself affects its demand. Price elasticity is an easy way to measure the demand response of poor households to price changes in food commodities. (Mayasari et al., 2018) If the value of own price elasticity is greater than one, it means that the effect of price changes is greater than the effect of changes in demand (elastic). Meanwhile, if the value of own price elasticity is less than one, it means that the effect of price changes is smaller than the effect of demand changes (inelastic).

Table 1 shows that the own price elasticity of poor households in West Java Province for all food commodity groups is negative. This value indicates that if there is an increase in the price of a food commodity group, the demand for the food commodity group will tend to decrease. The results of this study are consistent with the demand theory, where there is an inverse linear relationship between price and demand.

The results of the calculation of own price elasticity values show that almost all food commodity groups have own price elasticity values less than 1 except for the processed food commodity group. This illustrates that price increases in each commodity group do not affect the consumption of food commodity groups much (ceteris paribus). Among the seven groups, the most inelastic groups are the grains and fruits groups because they have the lowest own price elasticity values of 0.3591 and 0.4571, respectively. This condition occurs because in the grains group, one of the components is rice. Rice is the staple food for poor households in West Java Province and is consumed by almost all households. Therefore, the price increase is less responded by poor households. This condition is in line with Bennet's law which states that households with low income levels, their food consumption will prioritize energy-dense foods derived from carbohydrates, but in line with the increase in income, their food consumption patterns will be increasingly diversified and there will generally be an increase in food consumption of commodities with high nutritional value.

Meanwhile, other groups such as processed food have a price elasticity of more than 1, which is 1.2624. This means that when there is an increase in food prices in the processed food group, it will be responded by a decrease in demand for the processed food group (ceteris paribus). An elasticity value of more than 1 indicates that the processed food group is an elastic good. This condition is in line with previous research (Widarjono and Rucbha, 2016) that elasticity in low-income households tends to be responsive (elastic) to price changes compared to high-income households, this condition is because generally poor households have low purchasing power.

Table 4.6 shows the elasticity by rural and urban area type. The elasticity value of commodity groups is inealstic because it has a value of less than 1 except for the commodity groups of vegetables, processed food and other food. The elasticity of the vegetable group for poor households in rural areas reached a value of 1.0453. This means that when there is an increase in price by 1 percent, the household will be responsive by reducing the demand for vegetables by 1.0453 percent (ceteris paribus). This condition occurs because households in rural areas are identical to agricultural sector producers. So that when there is an increase in the price of vegetables, households will reduce their consumption because it is more profitable if the vegetables are sold to urban areas. Along with the price increase, rural households will switch to food groups that have the same nutritional value, such as fruits and nuts.

The vegetable group is an elastic item for poor households in rural areas, this is in line with the research of Faharuddin et al. (2015) which found that the vegetable group in poor rural households has an elasticity value of more than 1 so that when there is a 1 percent increase in price, households will respond by reducing their consumption by more than 1 percent.

Based on the employment category of the household head, it can be seen that the most inelastic commodity group is the grains and fruits commodity group. This means that grains and fruits are the main food groups for households in these household categories. Thus, when there is an increase in the price of both commodity groups, there is less response (inelastic) with a decrease in consumption of both food groups.

Table 2. Comparison of Own Price Elasticity Values of Poor Households in West Java Province by Type of Region and Type of Employment of Household Heads

Commodity Group	Overall RT	Rural	Urban	Agriculture	Non-Agriculture
Grains	-0,3591	-0,3766	-0,2990	-0,2711	-0,3655
Animal Food	-0,8014	-0,8074	-0,8053	-0,8500	-0,7809
Vegetables	-0,8172	-1,0453	-0,8714	-0,6893	-0,8381
Nuts	-0,5174	-0,5116	-0,5056	-0,5591	-0,5236
Fruits	-0,4571	-0,6041	-0,4233	-0,1065	-0,5896
Finished Food	-1,2624	-1,4390	-1,2560	-1,5691	-1,1325
Other Food	-0,7879	-1,0080	-0,6886	-1,0384	-0,6873
Cigarettes	-0,9125	-0,9009	-0,8579	-0,5748	-0,8782

Source: SUSENAS March 2017, processed

9. Cross Price Elasticity

The response of a price increase in a commodity not only affects the commodity itself, but can also affect changes in demand for other commodities. Cross-price elasticity shows the effect of changes in the price of other commodity groups on the demand for the commodity group. Cross-price elasticity will determine whether a commodity or commodity group is complementary or substitutable. If the value of cross-price elasticity is positive, it means that an increase in the price of a commodity group will increase the demand for another commodity group or is a substitute. Meanwhile, if the cross-price elasticity value is negative, it means that an increase in the price of a commodity group will reduce the demand for other commodity groups or is complementary (Mayasari et al, 2018).

Table 3 shows some interesting things from the results of the calculation of cross-price elasticity for poor households as a whole in West Java Province, including most of the commodity group cross-elasticity values have very small elasticity values ranging from 0.0058 to 0.4494. Of the 35 cross elasticity values generated, 23 elasticities are negative, meaning that the related food commodity groups are complementary. Meanwhile, the remaining 12 elasticities are positive, indicating that the related food commodity groups are substitutable. Based on the analysis of the cross-price elasticity of poor households in West Java Province, it can be seen that some commodity groups have cross-price elasticities that are complementary or substitutable. For example, grains are complementary to animal food, and animal food is complementary to grains. However, this does not apply to the processed food group, where grains are complementary to processed food. Meanwhile, processed food is a substitute for the grains group. This is because increases in other food prices relatively do not affect consumption (Faharuddin et al. 2015).

Grain commodities are a basic need for all poor households in West Java Province, so they have the largest budget share in the consumption patterns of poor households in West Java Province. The cross-price elasticity of the cereal commodity group has more negative values than positive values. This means that the grains group has more complementary relationships with other food commodities than substitution relationships. This condition is in line with the research of Miranti et al (2016) which found that in households in West Java Province, the rice group had more complementary relationships than substitution with a very small complementary elasticity value. This indicates that the demand for rice is not responsive to changes in the price of complementary goods.

The cereal commodity group has the largest substitution relationship with the processed food commodity group with a value of 0.2094. This means that if there is an increase in the price of the cereal commodity group, it will be responded by increasing the demand for the processed food group (ceteris paribus). This condition implies that there is a shift in the consumption pattern of poor households in West Java, where the dominance of cereal commodities is slightly replaced by the processed food commodity group. Meanwhile, the grains commodity group has a complementary relationship with the animal food, vegetables, fruits, nuts and other food groups. This condition indicates that when there is an increase in the price of cereals, it will cause a decrease in demand for all food commodity groups except processed food commodity groups and cigarettes (ceteris paribus).

The grains group has the largest complementary relationship with the fruits commodity group, valued at 0.1239. This means that if there is an increase in the price of the commodity group of grains will be responded with a decrease in demand for the fruit group (ceteris paribus). This condition is in line with previous research which states that an increase in the price of rice (one of the components of grains) will reduce consumption (complementary) of milk, tubers, meat, fruits and other foods.

The processed food commodity group with the second highest budget share in the consumption patterns of poor households in West Java has a complementary relationship with the demand for all commodity groups except for vegetables, nuts and other foods. The strongest complementary relationship is with the grain commodity group with a cross-elasticity value of 0.3255. This condition indicates that an increase in price in the processed food group will result in a decrease in the grains group (ceteris paribus).

Meanwhile, the substitution relationship of the processed food group occurs with vegetables, legumes and other foods. The strongest substitution relationship is with the nuts group, with an elasticity of 0.3129. This value indicates that an increase in the price of the processed food commodity group by 1 percent will be responded by increasing the demand for the beans group by 0.3129 percent (ceteris paribus). This condition is in line with the research of Saliem which states that the processed food group is substituted with the vegetable, legume and other food groups.

Table 3. Comparison of Cross-Elasticity Values of Overall Household, by Area Type and Employment Type of Household Head

Commodity Group		Cross-elasticity				
		Overall RT	Region Type		Employment Type of Head of Household	
			Rural	Urban	Agriculture	Non-Agriculture
Grains	Animal food	-0,0488	0,0103	-0,0885	-0,0847	-0,0058
	Vegetables	-0,0463	-0,0590	-0,0614	-0,1020	-0,0327
	Nuts	-0,0302	-0,1083	0,0645	-0,0826	-0,0091
	Fruits	-0,1239	-0,0423	-0,0814	-0,1059	-0,1351
	Finished Food	0,2094	0,3717	0,1159	0,4494	0,1767
	Other Food	-0,0573	-0,0228	-0,0481	0,0139	-0,0899
	Cigarettes	0,0157	0,0262	-0,0481	0,1356	0,0100
Animal food	Grains	-0,1366	-0,3447	0,0282	-0,2732	-0,0888
	Vegetables	-0,1018	-0,1978	-0,0120	-0,0741	-0,1128
	Nuts	-0,2932	-0,2524	-0,4494	-0,3485	-0,2036
	Fruits	0,0525	-0,0154	0,1217	-0,0018	0,0405
	Finished Food	0,1130	0,0437	0,1807	0,1491	0,0849
	Other Food	-0,1092	-0,1354	-0,1145	0,0723	-0,1311
	Cigarettes	0,0370	-0,0320	0,0411	-0,0155	-0,1158
Vegetables	Grains	-0,6765	-0,7926	-0,6426	-0,2732	-0,5615
	Animal food	-0,0100	-0,0097	0,0247	-0,0741	-0,0121
	Nuts	0,0646	-0,0483	0,1236	-0,3485	0,0232
	Fruits	0,1734	0,0737	0,2429	-0,0018	0,1882
	Finished Food	-0,3280	-0,0883	-0,4843	0,1491	-0,3199
	Other Food	-0,3182	-0,4804	-0,2262	0,0723	-0,2707
	Cigarettes	-0,0425	-0,1357	-0,0532	-0,0155	-0,0361
Beans-Legumes	Grains	-0,2434	-0,3247	-0,3251	-0,3305	-0,2978
	Animal food	0,1172	0,2324	0,0961	0,2930	0,1045
	Vegetables	0,0095	0,0222	0,0229	0,1137	-0,0125
	Fruits	0,3366	-0,2094	0,3957	0,3351	0,3374
	Finished Food	-0,5383	-0,4955	-0,4146	-0,7815	-0,5005
	Other Food	0,1034	0,2818	0,1301	-0,1177	0,1834
	Cigarettes	-0,1719	0,2360	-0,2253	-0,5334	-0,1404
Fruits	Grains	-0,0479	-0,1139	0,3512	-0,3092	0,0505
	Animal food	0,0334	-0,5690	0,3274	-0,1195	0,0345
	Vegetables	-0,0137	-0,1449	-0,0002	-0,0092	0,0239
	Nuts	-0,2082	-0,4648	-0,0198	-0,2289	-0,2755
	Finished Food	-0,0650	1,2003	-0,9032	0,5048	-0,0658
	Other Food	-0,0082	0,0579	-0,1795	-0,1209	0,2412
	Cigarettes	-0,2149	0,2849	-0,1531	-0,0043	-0,2918
Finished Food	Grains	-0,3255	-0,2590	-0,3717	-0,3538	-0,2614
	Animal food	-0,0333	-0,1188	-0,0067	-0,0087	-0,0303
	Vegetables	0,0874	0,1299	0,0431	0,0857	0,0820
	Nuts	0,3129	0,4255	0,2991	0,3346	0,2590
	Fruits	-0,0783	-0,1190	-0,0147	-0,0649	-0,0678
	Other Food	0,3091	0,3285	0,3306	0,3617	0,2303
	Cigarettes	-0,0045	0,0514	-0,0163	-0,0594	-0,0351
Food More	Grains	-0,2576	-0,6153	-0,0944	-0,6783	0,0874
	Animal food	-0,0521	0,0726	-0,0396	0,1235	-0,0697
	Vegetables	-0,0929	-0,0302	-0,0927	-0,0281	-0,0918

Commodity Group		Cross-elasticity				
		Overall RT	Region Type		Employment Type of Head of Household	
			Rural	Urban	Agriculture	Non-Agriculture
	Nuts	-0,1754	-0,2137	-0,1861	-0,0669	-0,2551
	Fruits	0,1142	0,1283	0,1058	0,1992	0,0868
	Finished Food	-0,0877	-0,4130	-0,0013	-0,4634	-0,0083
	Cigarettes	0,0647	-0,1604	0,0122	-0,1757	0,0515
Cigarettes	Grains	-0,0595	0,1499	-0,1930	0,5196	-0,2353
	Animal food	-0,0632	-0,0212	-0,1091	-0,2965	-0,0372
	Vegetables	-0,0227	-0,0094	-0,0347	-0,0947	-0,0267
	Nuts	-0,4923	-0,3784	-0,4447	-0,5061	-0,4629
	Fruits	-0,0083	0,0840	-0,1381	-0,0784	0,0221
	Finished Food	0,5686	0,5846	0,5528	1,1236	0,3312
	Other Food	-0,5025	-0,1981	-0,6345	-0,5581	0,1123

Source: Susenas 2022, processed

Meanwhile, if poor households are categorized based on the type of household area (rural and urban) as well as the type of occupation of the household head (agricultural and non-agricultural), the results show that in all household categories, the grains group has the largest substitution relationship with the processed food group. This means that price increases in the cereal commodity group will be responded by poor households by increasing their demand for the processed food commodity group (ceteris paribus). This is in line with the research of Mayasari et al. (2018) which found that there was a shift in consumption patterns in poor households, where the dominance of grains commodities was slightly replaced by processed food commodities.

The largest complementary relationship between the cereal commodity group based on the type of household area (rural and urban) is with the legume commodity group. This means that an increase in the price of the cereal commodity group will be responded by poor households by reducing their demand for the legume commodity group (ceteris paribus). Meanwhile, the largest complementary relationship of the grains group based on the type of occupation of the household head (agricultural and non-agricultural) is with the fruits group. This means that an increase in the price of the grains commodity group will be responded by poor households by reducing their demand for the fruits commodity group (ceteris paribus).

10. Income Elasticity

Income elasticity measures the response of changes in demand for food commodity groups when there are changes in income levels. Income elasticity is proxied by the total food expenditure of poor households, henceforth referred to as expenditure elasticity. Income elasticity will explain the nature of commodities or commodity groups whether they are inferior goods, normal goods, or luxury goods. Based on the results of data processing, the overall income elasticity of poor households shows positive income elasticity results. This means that there are no inferior goods found in poor households in West Java Province. The existing food commodities are all normal goods and some of them are included in the category of luxury goods. This condition is in line with research conducted by Faharuddin et al. and Mayasari et al. (2018) which found that food groups have a positive income elasticity value so that they are categorized as normal goods and luxury goods.

Based on Table 3, it is known that the processed food and cigarette group has the highest elasticity value in all categories of poor households, namely an elasticity value of more than 1. This means that if there is an increase in income for poor households in West Java, the increase will be allocated more to the consumption of the processed food and cigarette commodity group (ceteris paribus). This phenomenon is supported by the fact that there are more and more businesses providing processed food and beverages in each region. This result is in line with the research of Widarjono and Mayasari et al. (2018) which found that the poorer the economic status of households, the more responsive the income elasticity of processed food commodities.

The cigarette group has the highest income elasticity value for all categories of poor households. This condition shows that when there is an increase in income, poor households will respond by increasing consumption of the cigarette group. Judging from the magnitude of the income elasticity value, the cigarette group in poor households is considered a luxury good (income elasticity >1). This condition is in line with the research of Miranti et al. (2016) which states that the cigarette group has an income elasticity of more than 1 and the absence of substitute goods is not good and must be anticipated. Cigarettes are goods that produce a bad impact if consumed. The adverse impact of cigarettes on health will result in a decrease in labor productivity and a decrease in life expectancy which has an impact on the obstruction or decrease in economic development in West Java Province, even national development.

The large income elasticity for cigarette consumption must be watched out for, because it will be a dilemma with the results of poverty alleviation programs that always aim to increase the income of poor households. Recommendations suggested to overcome this include providing a no-smoking requirement to poor households that receive assistance such as through BLSM, both assistance in the form of money and in the form of cost relief.

The lowest income elasticity is found in the animal food commodity group. This condition indicates that the animal food group is a commodity group needed by poor households in West Java Province and can hardly be abandoned by the community in their daily consumption. This happens because one of the components in the group is salted fish. In addition to being affordable and easy to obtain, salted fish can be consumed regardless of age, ranging from children, adults, to parents can taste the delicacy of salted fish and one of the favorite foods for poor households in West Java province (DKPP, 2014).

By household area type, the income elasticity of poor urban households is lower than that in rural areas (except for the grains and fruits group). This indicates that the prices of these commodity groups are more affordable for poor households in urban areas because the average income in urban areas is higher than that in rural areas. This condition is in line with the research of Faharuddin et al. who found that the income elasticity of food groups in urban areas is lower than in rural areas and the values for all food groups are positive and normal goods.

As with poor households in urban areas, the average income of household heads working in the non-agricultural sector is higher than in the agricultural sector. This condition has an impact on the price of food groups that are more affordable for poor households with household heads working in the non-agricultural sector, so that income elasticity in the non-agricultural sector is lower (less responsive) than in the agricultural sector.

Table 4. Comparison of Income Elasticity Values of Poor Households in West Java Province by Type of Region and Type of Employment of Household Heads

Commodity Group	Overall RT	Rural	Urban	Agriculture	Non-Agriculture
Grains	0,5107	0,4880	0,5221	0,5752	0,4770
Animal Food	0,2295	0,2924	0,1968	0,2871	0,2082
Vegetables	0,3876	0,4488	0,3407	0,4577	0,3580
Nuts	0,4038	0,5054	0,3341	0,4668	0,3612
Fruits	0,5937	0,6385	0,7054	0,4782	0,5663
Finished Food	1,3795	1,4028	1,3504	1,1576	1,4284
Other Food	0,9757	1,0404	0,9475	0,9949	0,9672
Cigarettes	3,1796	3,1814	3,1674	3,2913	3,0978

Source: Susenas March 2022, processed

11. Robustness check

Robustness check aims to test whether the variables in the resistance model or relatively unaffected by the presence of influential variables outside the model. If the regression coefficient remains statistically significant, it can be concluded that the model is valid so that it can produce good analysis (Lu and White, 2014).

Based on the results of data processing, the regression coefficients of own price variables, other commodity prices and income variables have the same sign and significance level between the regression equation model with and without including socio-demographic variables. Based on the robustness check results, it can be concluded that the equation model in this study is valid and able to produce a good analysis. Robustness check results can be seen in Table 5.

Table 5. Parameter Estimation Results of Budget Share of Food Consumption of Poor Households in West Java Province in 2017 (Without Demographic Variables, IMR and Instrument Variable/Robustness Check)

Variables	*Budget Share* paddy	*Budget Share* animal food	Vegetable *Budget Share*	*Budget Share* beans	*Budget Share* fruit	*Budget Share* ready-made food	*Budget Share* other food	*Budget Share* cigarettes
Paddy price	0,1608***	-0,0187*	-0,0444***	-0,0189***	-0,0016	0,0821***	-0,0209***	0,0219*
	(0,0139)	(0,0121)	(0,0063)	(0,0053)	(0,0042)	(0,0214)	(0,0069)	(0,0136)
Tuber price	-0,0354***	-0,0200***	0,0030	0,0003	0,0015	0,0823***	0,0040	0,0239***
	(0,0062)	(0,0054)	(0,028)	(0,0023)	(0,0019)	(0,0095)	(0,0031)	(0,0060)
Phewani price	-0,0354***	0,0193***	-0,0026	-0,0043**	-0,0020	0,0035	-0,0043*	0,0082*
	(0,0139)	(0,0049)	(0,0025)	(0,0021)	(0,0017)	(0,0087)	(0,0028)	(0,0055)
Vegetable prices	-0,0152***	-0,0120***	0,0104***	-0,0006	-0,0015	0,0255***	-0,0082***	0,0014
	(0,0043)	(0,0038)	(0,0019)	(0,0016)	(0,0013)	(0,0067)	(0,0021)	(0,0042)
Bean price	-0,0198*	-0,0474***	-0,0018	0,0235***	-0,0029	0,0909***	-0,0130**	-0,0276**
	(0,0132)	(0,0115)	(0,0060)	(0,0050)	(0,0040)	(0,0204)	(0,0062)	(0,0129)
Fruit price	-0,0310***	0,0165**	0,0119***	0,0216***	0,0010***	-0,0224*	0,0082**	0,0124*
	(0,0085)	(0,0074)	(0,0038)	(0,0032)	(0,0026)	(0,0130)	(0,0042)	(0,0083)
Price of processed food	0,0625***	-0,00332**	-0,0184***	-0,0320***	-0,0067*	-0,0783***	-0,0130**	0,0444***
	(0,0165)	(0,0143)	(0,0074)	(0,0062)	(0.0050) *	(0.0252)	(0,0082)	(0,0161)
Other food prices	-0,0440***	-0,0329***	-0,0283***	0,0018	-0,0073*	0,1043***	-0,0180**	-0,0102
	(0,0147)	(0,0128)	(0,0066)	(0.0056)	(0,0045)	(0,0226)	(0,0073)	(0,0144)
Cigarette price	-0,0010	-0,0071***	-0,0052	-0,0118***	--0,0046*	0,0028	0,0029	0,0101
	(0,0084)	(0,0074)	(0,0038)	(0,0032)	(0,0025)	(0,0130)	(0,0042)	(0,0083)
Variables	Budget Share paddy	Budget Share animal food	Vegetable Budget Share	Budget Share beans	Budget Share fruit	Budget Share ready-made food	Budget Share other food	Budget Share cigarettes

Variables	***Budget Share* paddy**	***Budget Share* animal food**	**Vegetable *Budget Share***	***Budget Share* beans**	***Budget Share* fruit**	***Budget Share* ready-made food**	***Budget Share* other food**	***Budget Share* cigarettes**
Revenue	-0,0031***	-0,0135***	-0,0161***	-0,0200***	0,0031***	0,0360***	-0,0052***	0,0101***
	(0,0029)	(0,0025)	(0,0028)	(0,0024)	(0,00008)	(0,0044)	(0.0014)	(0,0083)
Constant	0,1673	-0,2261	0,3507***	0,0112	0,0482	-0,0963	0,1958**	0,3715**
	(0,1787)	(0,1579)	(0,0878)	(0,0747)	(0,0622)	(0,2980)	(0,0991)	(0,1658)
R-Square	0.3655***	0,0712***	0.1432***	0.1926***	0,0204***	0.1400***	0,0422***	0,3915***
Chi2	974,27	129,59	282,71	403,45	35,18	275,24	74,55	1087,87

Source: Susenas March 2017, processed

Notes: - ***, **, * indicate significance levels of 1%, 5%, and 10%, Values in parentheses indicate standard error values

CONCLUSION

There are several findings from the research results that can be concluded. First, independent variables such as food commodity group prices, household food expenditure as a proxy for income, and socio-demographic variables in the LA-AIDS model are effective in estimating the food expenditure share (budget share) of food commodity groups. Price and household income variables have a significant effect on budget share, except for other food commodity groups. Not all socio-demographic variables are influential, but the number of household members shows a significant influence on all commodity groups, except for processed food. Meanwhile, own-price elasticity shows negative values for almost all commodity groups, with grains and beans being the most inelastic. Cross-price elasticities indicate complementary and substitution relationships among food commodity groups. In general, grains are the staple needs of poor households, while expenditure elasticities show that most commodities are normal goods.

Second, some suggestions based on the results of this study are the need for further research that includes expected food patterns and non-food commodity expenditure variables. Compensating variation (CV) analysis is also recommended to find out the money needed to keep households at the previous utility level. This study has limitations, in that the existing demand model does not fully describe the behavior between income groups and regions. For improvement, the Quadratic Almost Ideal Demand System (QUAIDS) model can be used. Policy implications of this study include the need for the government to increase food diversification, control rice prices, and improve supervision of processed food products. Socialization programs on quality consumption patterns also need to be promoted, as well as attention to cigarette consumption among poor households. In addition, the function of food product marketing institutions needs to be improved for food distribution and price stability, as well as the promotion of nutrition awareness at the family level.

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