

Household Food Security Level Viewed from the Consumption in South Sumatra

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Abstract— This study aims to analyze the level of household food security in terms of consumption in South Sumatra. The research was carried out in South Sumatra, data collection in May to August 2012. Secondary data was collected in this study. The data was collected using the documentation method. The results showed that Rural households are more vulnerable food than households in urban areas when viewed from the side of consumption. Percentage of population in urban areas are still vulnerable food only at 14.89 percent, while 85.11 percent are resistant food. In rural areas as much as 95.99 percent of households are still vulnerable food, while food life of only 4.01 percent. For the percentage of urban and rural households vulnerable to food by 71.67 percent and household food hold at 28.33 percent. It can be concluded that rural households are more vulnerable food than households in urban areas.

Keywords—Food security, household, consumption.

I. INTRODUCTION

FOOD is a basic need of major human to survive. Foodstuffs should always be available in sufficient quantity, quality, medically appropriate and safe for consumption. The increase in the number of people with an average growth rate of 1.97 percent per year, rice consumption per capita is still relatively high, diversified foods is low, resulting in an increase of food need especially rice in Indonesia along with the growth of population [2].

South Sumatra has broad 97209.25 km², consisting of the District/City geographically between the District/Municipal different kind of broad, income and culture. The differences between the other area, which will broadly reflect whether as a producer or as a consumer, will reflect the purchasing power of income, culture will be reflected in the habit of consuming commodities, such differences could affect the demand for food itself. South Sumatra province established itself as a regional food storage it must be maintain the stability of food the community needs [8].

The availability of sufficient food in an area does not guarantee food security at household level or individual. Analysis of household food

security level will provide information on whether households in South Sumatra was on food resistance level or food insecurity. Based on it then objectives of this study was to analyze the level of household food security in terms of consumption in South Sumatra.

II. LITERATURE REVIEW

[4] measuring the regional food security analysis approach to provincial energy availability than the norm of energy sufficiency. While the degree of food security at household level is measured with two cross-classification of food security indicators, the share of food expenditure and energy consumption sufficiency.

[5] receipts 4 indicators that must be met in order to achieve food security conditions to measure food security at the household level. The fourth indicator is the sufficiency of food availability, stability of food supply without fluctuation from season to season or from year to year, accessibility / affordability of food and the quality / food safety. It is a leading indicator for food security indices. Measure of food security at the household level gradually calculated by combine four components of food security indicators, in order to obtain a food security index.

Availability of food in the household were used in the measurement refers to sufficient food and are available in quantities to meet domestic consumption needs. The determination of the availability period of the staple food in rural areas are usually seen by considering the distance between the planting season to the next season [7].

Stability of food availability at the household level is measured by the adequacy of food availability and frequency of household members eat in a day. Frequency of eating can actually describe the sustainability of food availability in the household. In one household, one way to maintain the availability of food in a certain period of time is to reduce the frequency of eating or combine the staples (eg rice with cassava). Research conducted PPK-LIPI in several areas in West Java also found that reducing the frequency of eating is one of the strategies of households to extend their food security [6].

III. RESEARCH METHOD

The research was carried out in South Sumatra, data collection in May to August 2012. Secondary data was

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collected in this study. The data was collected using the documentation method are obtained by collecting data, records and reports objective data obtained from the source. Data collected from relevant agencies of the Central Bureau of Statistics South Sumatra Province.

The level of household food security was analyzed by dividing the coverage analysis differentiated by urban and rural areas as well as the aggregate based on

TABLE I

FOOD SECURITY, ENERGY SUFFICIENCY AND FOOD SHARE EXPENDITURES

Energy consumption per adult equivalent unit	Food Share Expenditures	
	Low (≤60 % total expenditure)	High (>60 % total expenditure)
sufficient (>80 % terms of energy sufficiency)	1. <i>Secure Food</i>	2. <i>Vulnerable Food</i>
insufficient (<80 terms of energy sufficiency)	3. <i>Minus Food</i>	4. <i>Insecure Food</i>

Resources: Jonsson and Toole, 1991 in Maxwell and Frankenberger, 1992

data Susenas 2010. To measure the degree of food security at household level, cross-classification used two indicators of food security, namely the share of food expenditure and adequacy of energy consumption (kcal) [3] as shown in Table I. In the table it appears that the limit 80 percent of the energy consumption (per adult equivalent unit) will be combined with the share of food expenditure > 60 percent of total household expenditure.

IV. RESULT AND DISCUSSION

Household total income can be used to determine the state of household food security. With regard to the level of income / expenditure distribution of population / household income as a proxy can be used also to determine the state of security-related household food consumption.

Average expenditure per capita of South Sumatra population in 2010 was recorded at Rp.453.722 per month consisting of expenditures for food and non-food for Rp.258.507 and Rp.195.215. Food expenditures per capita biggest per month in 2010 is used to spending the grains and the foods and beverages about Rp.48.910 and Rp.35.410. As for non-food expenditure per capita in the biggest month used for housing, fuel and water as well as for the purposes of various goods and services about Rp.15.657 and Rp.37.553. When viewed by region classification average consumption per capita of urban residents is greater when compared to the rural population. In 2010, the average consumption per capita of urban residents amounted Rp.557.139 or 43 percent greater than the consumption of the rural population amounting Rp.388.416 [1].

According to the class of expenditure per capita, expenditure type class population

TABLE II
PROPORTION OF TOTAL CONSUMPTION OF FOOD AND NON-FOOD EXPENDITURE PER CAPITA BY TYPE A MONTH RESIDENTS OF SOUTH SUMATRA IN 2010

Group Expenditure Per Capita Per Month	Urban		Rural		Urban and Rural	
	Total Food Consumption	Total Non Food Consumption	Total Food Consumption	Total Non Food Consumption	Total Food Consumption	Total Non Food Consumption
< 100.000	0,00	0,00	66,10	33,90	66,10	33,90
100.000-149.999	64,59	35,41	69,46	30,54	69,19	30,81
150.000-199.999	66,89	33,11	70,56	29,44	69,96	30,04
200.000-299.999	62,13	37,87	69,73	30,27	68,30	31,70
300.000-499.999	59,85	40,15	66,94	33,06	64,80	35,20
500.000-749.999	56,10	43,90	60,64	39,36	58,03	41,97
750.000-999.999	50,66	49,34	56,59	43,41	52,36	47,64
1.000.000 >	41,21	58,79	38,83	61,17	40,77	59,23
Average per capita	51,97	48,03	64,11	35,89	58,31	41,69

Resources: Central Bureau of Statistics South Sumatra Province, 2011

with spending less than Rp. 1,000,000 per month is more widely used for the consumption of basic needs is food, while belonging to the expenditure of more than Rp. 1,000,000 per month is more widely used for non-food consumption. In general, the population in this group has been able to meet their basic needs so well that began to shift to meet the needs of secondary and tertiary. The proportion of the consumption of food and non-food consumption expenditure per capita based classes a month residents of South Sumatra in 2010 can be seen in Table II.

Based on Table II it can be seen that the average amount of food consumption of urban residents by 51.97 percent while 48.03 percent were non-food consumption. The proportion between the consumption of food and non-food consumption of urban population can be said to be almost comparable. In contrast to the rural population, food consumption amounting to 64.11 percent and the remaining 35.89 per cent is non-food consumption. This is because the average income of the urban population bigger than rural residents. In accordance with Engle Law which states that the higher one's income the smaller proportion

TABLE III
PERCENTAGE OF HOUSEHOLD FOOD SECURITY LEVEL BY REGION IN SOUTH SUMATRA

Region	Vulnerable Food	Secure Food
Urban	14.89	85.11
Rural	95.99	4.01
Urban & Rural	71.67	28.33

of food consumption.

Table III describes the percentage of household food security levels by area in the province of South Sumatra. Coverage analysis differed by rural and urban areas as well as the aggregate based on data Susenas 2010. To measure the degree of food security at household level, cross-

classification used two indicators of food security, namely the share of food expenditure and sufficiency energy consumption (kcal) [3]. Limitation of 80 percent of the energy consumption (per adult equivalent unit) will be combined with the share of food expenditure > 60 percent of total household expenditure.

In 2010 the population of South Sumatra energy consumption of 1989.11 kcal per capita per day. This figure is worth 99.46 per cent when compared with the energy adequacy of Indonesia's population is 2000 kcal per person per day (based on the National Food and Nutrition Widyakarya / WNPG 2004). This means that the energy consumption of sufficiency the South Sumatra exceed limits 80 percent of the energy consumption (per adult equivalent unit).

From Table III it can be seen that in urban areas the percentage of the population is still vulnerable food only at 14.89 percent, while 85.11 percent are resistant food. Households in rural areas are still vulnerable to food percentage is higher than the percentage of households that hold food. A total of 95.99 percent of households are still vulnerable food, while the food life of only 4.01 percent. For the percentage of urban and rural households vulnerable to food by 71.67 per cent and household food hold at 28.33 percent. From the analysis it can be concluded that rural households are more vulnerable food than urban households.

Food security analysis conducted here only in terms of consumption, in the fulfillment of both food and non-consumption of food is affected by the income they earn. Low-income households will spend a greater proportion on food, while high-income people who can remove a greater proportion to the needs of other (non-food) such as housing, education, health, travel, recreation, and others. It can be said that the higher the income, the percentage of expenditure on food consumption is getting smaller while the percentage of non-food expenditure is increasing.

V. CONCLUSION

Percentage of population in urban areas are still vulnerable food only at 14.89 percent, while 85.11 percent are resistant food. In rural areas as much as 95.99 percent of households are still vulnerable food, while food life of only 4.01 percent. For the percentage of urban and rural households vulnerable to food by 71.67 percent and household food hold at 28.33 percent. It can be concluded that rural households are more vulnerable food than households in urban areas.

Rural households are more vulnerable food than households in urban areas when viewed from the side of consumption. This is due to the income of rural residents is lower than the income of urban residents. To improve the food security of households in rural areas it is necessary to increase the household income first. Should the role of government more to help households in rural areas increase their household incomes.

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