

ANALYSIS OF THE HOUSEHOLDS PROSPERITY OF MANGO FARMERS IN SITUBONDO THROUGH THE GOOD SERVICE RATIO APPROACH

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Abstract: This study aimed to determine the level of household prosperity of mango farmers in Situbondo Regency. The study area was determined purposively on the members of the Makmur Jaya I Farmer Group, Jangkar District, Situbondo Regency. Samples were 25 respondents taken by using saturated sample techniques. The data were analyzed with a formula by using the Good Service Ratio (GSR) which compares food expenditure with non-food expenditure. The results of this study showed that the food expenditure of the mango farmers as the members of Makmur Jaya I Farmer Group was higher than the non-food expenditure resulting in a $GSR > 1$, namely 1.28, which means that the mango farmers households were mostly in the less prosperous category.

Keywords: Farmer Prosperity, Good Service Ratio, Food

1. Introduction

Family expenditure is often used as an indicator to measure the level of family prosperity. Family expenditure consists of two types, namely food expenditures and non-food expenditures. Food consumption expenditures refer to the monetary value of food groups of grains, fish, meat, eggs, vegetables, nuts, oils, fats, and fruits. Meanwhile, non-food expenditures include costs for housing, fuel, lighting and water, goods and services, clothing and other durable goods. Food expenditure largely dominates low income family expenditures (Firdaus Apriliani, & Wijaya, 2013; Girsang, 2012; Muflikhati, 2010; Rambe, Hartoyo, & Karsin, 2008) in Widyaningsih, E., & Muflikhati, I. (2015). Engel's law stated that when household income increases, the percentage of income spent on food decreases.

Situbondo residents' income is mainly obtained through mango farming production. Situbondo is a regency in East Java Province with a high mango production. Mango is one of the leading commodities in Situbondo Regency with an increase in production every year. Based on BPS data (2020), mango production has increased by 19% from the previous year, with details in 2018 amounting to 15,851.5 tons and increasing in 2019 to 23,311.7 tons. Thus, the abundant potential of the superior mango products will ultimately increase the level of community income which has a major impact on improving the prosperity of their families. The level of household prosperity can actually be measured from the level of income compared to the

minimum requirement for a decent life. BPS (2008), explained that the main determinant of the level of community economic prosperity is purchasing power, this indicates that if the purchasing power decreases, the ability to fulfill various needs of life will also decrease, so that the level of prosperity will decrease.

This study aimed to determine the level of household prosperity of mango farmers in Situbondo Regency. The urgency of measuring the level of prosperity of mango farmers is very important, because it is needed to determine the extent of optimization of stakeholder activities and as initial findings for recommendations to stakeholders in developing farmer empowerment systems through strategies that will be implemented by farmers, so that the mangoes produced by Situbondo farmers can be directly proportional to the prosperity of farmers.

2. Literature Review

Previous Research

Research on the analysis of the level of farmer welfare has been done before. Research on the income and welfare of organic farmers of SLPTT participants in Pagelaran District, Pringsewu Regency was conducted by Putri, T. L., Lestari, D. A. H., & Nugraha, A. (2013) using the Sajogyo method. Based on the results of calculations that have been made by most of the SLPTT participants (36 respondents). Households that are categorized as quite feasible because the rice consumption per capita per year is less than 960 kg.

Meanwhile, Mitha, S. D., Haryono, D., & Rosanti, N. (2015) conducted a study entitled Analysis of Oyster Mushroom Producers' Income and Welfare in Metro City. The welfare of Oyster Mushroom producers was analyzed using Sajogyo theory and the Good Service Ratio (GSR) method. Sajogyo's poverty criteria indicate that most of the oyster mushroom producer households live quite (52.38%) and are decent (26.2%), while some are classified as poor (11.9%) and almost poor (9.52%). Households that are classified as near poor are identified as having a large number of dependents and having a low income. Meanwhile, the results of calculations using the GSR obtained a percentage of 63.56% which indicates that the oyster mushroom producers in Metro City are prosperous.

The analysis of the level of welfare of sugarcane farmers in Bantul Regency was carried out by Rohmah, W., Suryantini, A., & Hartono, S. (2014) using the Share of Food Expenditure (PPP) and Good Service Ratio (GSR) methods. The percentage of GSR <1 is greater at 97%, so it can be concluded that as many as 97% of sugarcane farmers in Bantul Regency are more prosperous households.

From several previous studies, it can be seen that the difference between farmers and the types of products being cultivated. This study analyzes the welfare of mango farmers. The similarity with this research lies in the method of calculating the level of welfare. However, this study will use several methods of calculating the level of welfare so that a more real comparison of the level of welfare will be seen from the Sajogyo method, the Good Service Ratio and the Share of Food Expenditure.

Definition of Welfare

The meaning of welfare according to the Indonesian dictionary comes from the word prosperous which means safe, secure, prosperous, and safe regardless of all kinds of disturbances, difficulties, and so on (W.J.S. Poerwadarminto, 1999: 887). The word prosperous contains the meaning of the Sanskrit language "catera" which means itera. In the context of welfare, "catera" is a person who is prosperous, that is, a person who in his life is free from poverty, ignorance, fear, or worry so that his life is safe and secure, both physically and mentally (Fahrudin, 2012: 8).

The definition of Welfare in the concept of the modern world is a condition in which a person can meet basic needs, be it the need for food, clothing, shelter, clean drinking water and the opportunity to continue education and have adequate work that can support his quality of life so that he has a social status. which leads to the same social status to other citizens' elements. If according to human rights, the definition of welfare more or less says that every man or woman, youth and child has the right to live properly in terms of health, food, drink, housing and social services, otherwise this violates human rights (Ikhwan Abidin Basri, 2005: 24)

Welfare is one aspect that is quite important to maintain and foster social and economic stability, where this condition is also necessary to minimize the occurrence of social jealousy in the community. So every individual needs prosperous conditions, both prosperous in material terms and in non-material terms so that a harmonious atmosphere can be created in society. There are eight indicators used to determine the level of welfare, namely family income, consumption or expenditure, housing conditions, residential facilities, health of family members, ease of accessing health services, ease of enrolling children into education, and ease of accessing transportation facilities.

1. Income indicators are classified into 3 items, namely:

- a. High (> Rp. 10,000,000)
- b. Medium (Rp. 5,000,000)
- c. Low (<Rp. 5,000,000)

2. Expenditure indicators are classified into 3 items, namely:

- a. High (> Rp. 5,000,000)
- b. Medium (Rp. 1,000,000 - Rp. 5,000,000)
- c. Low (<Rp. 1,000,000)

3. There are 5 indicators for housing that are assessed, namely the type of roof, walls, ownership status of the house, floor and floor area.

According to Mosher (1987), the most important thing about welfare is income, because several aspects of household welfare depend on the level of income. Meeting needs is limited by household income, especially for those with low income. The higher the household income, the less the percentage of income for food will be. In other words, if the increase does not change the consumption pattern, the household will be prosperous. Conversely, if an increase in household income can change consumption patterns, the household will not be prosperous.

According to another concept, welfare can be measured through monetary and non-monetary dimensions, for example inequality of income distribution, which is based on differences in the income levels of the population in an area. Then the problem of vulnerability (vulnerability), which is a condition where the opportunity or physical condition of an area makes someone poor or poorer in the future. This is a serious problem because it is iterative and fundamental, resulting in socio-economic risks and it will be very difficult to recover. Vulnerability is a key dimension in which individual behavior in investing, production patterns, coping strategies and their perceptions will change in achieving prosperity.

The level of household prosperity can actually be measured from the level of income compared to the minimum requirement for a decent life. The main determinant of the level of community economic prosperity is purchasing power, this indicates that if the purchasing power decreases, the ability to fulfill various needs of life will also decrease, so that the level of prosperity will decrease. Household prosperity can be calculated by using the Good Service Ratio (GSR), which compares foods consumption expenditures with services consumption expenditures. The GSR value is obtained from a comparison between the total expenditure for foods consumption (primary needs) and services consumption (secondary needs). If the value of the GSR is getting

smaller, the more income that the community gets will be used to meet secondary needs (services) after primary needs (Dampa, 2003)

Soekartawi (1988) argued that the amount of cash income of farmer households is part of the measure indicator of farmer household prosperity. Furthermore, Wie (1980) in Yusria (2010) described poverty as a state of inadequate income levels to meet basic needs, namely food, clothing, housing, health and education. Very low household cash income for farmers can be an indicator of poverty/destitution. According to Esmara (1978), the poverty line is a measure of the minimum income that a person or a family must have in order to live properly which is closely related to the concept of basic human needs.

3. Method

The selection of the study area was determined based on purposive sampling technique. This study was conducted in the area of arum manis mango production center, Jangkar District, Situbondo Regency in Makmur Jaya I Farmer Group. Makmur Jaya I Farmer Group is a farmer group that focuses on arum manis mango production. The population of the study was 25 farmers who were members of the Makmur Jaya I Farmer Group who cultivated the arum manis mango. This population was also used as the study sample, because there were less than 30 respondents.

Data in this study were collected through primary data by means of direct interviews using questionnaires, and through secondary data from related agencies and literatures related to this study. Data were then analyzed by using quantitative descriptive analysis.

To find out the level of household prosperity, it was measured by using the Good Service Ratio (GSR) with the formula as follows:

$$\text{GSR} = \frac{\text{Expenditures for food needs}}{\text{Expenditures for non-food needs}}$$

Information:

GSR > 1 means that the household economy is less prosperous

GSR = 1 means that the household economy is prosperous

GSR < 1 means that the household economy is more prosperous

4. Result and Discussion

There are various indicators that can be used to measure a person's level of prosperity. The indicator in this study was the prosperity of the economy as measured by using the GSR (Good Service Ratio). Good Service Ratio analysis is a prosperity analysis tool that compares food expenditures with non-food expenditures. A household can be said to be prosperous, if non-food expenditure is higher than food expenditure. This shows that the ability of farmers to fulfill their daily needs is not limited to food expenditure, but rather is spent on non-food needs.

Table 1. Distribution of GSR Value for Mango Farmers in Makmur Jaya I Farmer Group

Category	Number of Respondents	Percentage (%)
GSR <1	5	20
GSR = 1	0	0
GSR >1	20	80
Total	25	100

Source: Primary data processed, 2020

Based on table 1, the members of the Makmur Jaya I Farmer Group were divided into the more prosperous and less prosperous categories. Each household had different income and expenses according to the ability of each household. There were 5 respondents or 20% who were categorized as more prosperous, because the GSR value < 1. These respondents obtained GSR values of 0.61, 0.99, 0.3, 0.84, and 0.67. (Table 2)

Table 2. Distribution of GSR Categories for Mango Farmers in Makmur Jaya I Farmers Group

Respondent	GSR	Category
1	1.39	less prosperous
2	0.62	more prosperous
3	0.99	more prosperous
4	1.33	less prosperous
5	1.35	less prosperous
6	0.30	more prosperous
7	1.80	less prosperous
8	2.58	less prosperous
9	1.06	less prosperous
10	2.89	less prosperous
11	1.51	less prosperous
12	0.84	more prosperous
13	2.37	less prosperous
14	1.20	less prosperous
15	3.08	less prosperous
16	1.97	less prosperous
17	1.67	less prosperous
18	1.14	less prosperous
19	1.45	less prosperous
20	1.96	less prosperous
21	1.58	less prosperous
22	1.38	less prosperous
23	0.68	more prosperous
24	1.02	less prosperous
25	3.69	less prosperous

Source: Primary data processed, 2020

Non-food expenditure in this more prosperous category is higher than food expenditure. They had fixed monthly expenses for vehicle installment costs, which also results in higher gasoline costs. In addition, they also purchased clothes and had higher taxes than farmers who were in the less prosperous category. Meanwhile, there were 20 respondents or 80% of the members of the Makmur Jaya I Farmer Group who were less prosperous based on the results of the GSR analysis. Food expenditure is higher than non-food expenditure, resulting in a GSR value > 1. The respondent's food expenditure is shown in table 3.

Table 3. Respondent Farmer Household Food Expenditure Average

Food Expenditure	%	Average (IDR/month)
Grains	23.48	204,360
Tubers	0.47	4,120
Fish	8.89	77,400
Meat	2.59	22,560

Food Expenditure	%	Average (IDR/month)
Eggs and Milk	3.52	30,640
Vegetables	6.40	55,680
Fruits	0.16	1,400
Nuts	2.81	24,480
Oil and fat	6.04	52,520
Seasonings	7.89	68,640
Beverage ingredients		
Sugar	4.63	40,280
Brown sugar	0.23	2,000
Tea	1.06	9,200
Coffee	4.29	37,360
Food and Beverage	1.08	9,360
Tobacco/Cigarettes	26.45	230,200
Total	100	870,200

Source: Primary data processed, 2020

One of the high food expenditures was the purchase of cigarettes which reached 500,000 - 1,000,000 per month. However, this is contrary to the opinion of Ariani (2014) which stated that an increase in the share of food expenditure does not indicate a decrease in prosperity, but it indicates the improvement of these households prosperity. Amaliyah's study results (2011) showed that households with a high level of prosperity are able to fulfill their household food and non-food needs. As is true of Engel's law, which stated that when household income increases, the percentage of income spent on food decreases.

Table 4. Average Household Expenditure on Food and Non-Food Expenditures per Year

No.	Type of Expenditure	Average (Rp/year)
1	Food Expenditure	17,478,096
2	Non Food Expenditure	13,650,792
	Total	31,128,888

Source: Primary data processed, 2020

$$\text{GS Ratio} = \frac{\text{Food Expenditure}}{\text{Non-Food Expenditure}}$$

$$\text{GS Ratio} = \frac{17,478,096}{13,650,792}$$

$$\text{GS Ratio} = 1.28$$

Table 4 shows that food expenditure for members of the Makmur Jaya I Farmer Group is higher than non-food expenditure. The overall GSR values of farmer households in the Makmur Jaya I Farmer Group per year were in the less prosperous category with a GSR value > 1. The average GSR value of the members of the Makmur Jaya 1 Farmer Group was 1.28, so the farmer households were classified as less prosperous.

The results of this study are in line with the study conducted by Wicaksono et al (2013), which stated that the prosperity of farmer households can be calculated by using GSR (Good Service Ratio), which is the comparison between food consumption expenditures and non-food expenditures. The level of prosperity can be calculated from the value of the GSR, which is classified as less prosperous ($GSR > 1$), prosperous ($GSR = 1$) and more prosperous ($GSR < 1$). If the value of the GSR is getting smaller, the more income that the community gets will be used to meet secondary needs (services) after primary needs. The results showed that according to the GSR, 80% of tempe (fermented soy cake) households in the study area were classified as more prosperous ($GSR < 1$) and 20% were classified as less prosperous ($GSR > 1$).

The results of Rohmah's study (2014) explained that in the household economy, the calculation of household income and expenditure can be used to reflect the level of prosperity. To find out the level of prosperity of the farmer household, it is done by comparing the expenditure of food and non-food or known as the Good Service Ratio (GSR) method. If the GSR value is less than 1, the household is considered to be more prosperous. If the GSR value is equal to 1, the farmer household is considered prosperous. If the GSR value is more than 1, the farmer household is considered less prosperous.

5. Conclusions

Based on the data and analysis results in this study, it can be concluded that the household members of the Makmur Jaya I Farmer Group if analyzed by using the good service ratio were in the less prosperous category, because the average GSR value per year > 1 , with a value amounted to 1.28, which means that food expenditure was higher than non-food expenditure.

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