Analysis of Households Prosperity of Mango Farmers in Situbondo Regency

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***Abstract**.*

Farmers' household income is an indicator of the level of prosperity by looking at the amount of expenses and family expenses. Mango production, which has increased every year, needs to be assessed according to the level of household poverty. The purpose of this study was to determine the household level of mango farmers in Situbondo Regency. The research location was determined purposively in the Makmur Jaya I Farmers Group, Jangkar District, Situbondo Regency. Population and sample with saturated sampling technique with a population as well as a sample of 25 respondents. Data were collected through primary data (direct interviews using a questionnaire) and secondary data from related agencies and literature related to this study. The data were analyzed by using quantitative descriptive analysis which was measured using Sajogyo's poverty theory. The prosperity level of the members of the Makmur Jaya I Farmer Group is in the decent living category of 64% and the moderate category of 36%. None of the mango farmers in this group are below the poverty line.

***Keywords**: Prosperity, Poverty Level, Sajogyo, Mango Farmers*

1. INTRODUCTION

Situbondo Regency is classified as a regency with a large number of poor population, although it is experiencing a decreasing trend every year. In 2012, the number of poor population in Situbondo Regency was 94,460 people (14.34%). Meanwhile, in 2019 it decreased to 76,440 people (11.20%) of the total population of 682,978 people [1]. Most of the poor households are farmer households. According to [2], governmental funds is highly required to provide prosperity and a decent life for them.

According to [3] income is considered as one of the most important things in prosperity, because several aspects of household prosperity depend on the level of income. Fulfillment of household needs is limited by income, particularly for low income households. The higher the household income, the smaller the percentage of income for food. In other words, if the increase does not change the consumption patterns of a household, then the household can be said to be prosperous. Conversely,

if the increase in household income can change the consumption patterns, the household will not be prosperous.

The meaning of prosperity according to the Indonesian dictionary comes from the word prosperous which means safe, secure, prosperous, and safe from all kinds of disturbances, difficulties, and so forth [4]. The word prosperous contains the meaning of the Sanskrit language "*catera*" which means *406itera*. In the context of prosperity, "*catera*" is a person who is prosperous, specifically a person whose life is free from poverty, ignorance, fear, or worry, so that his/her life is safe and secure, both physically and mentally [5]

The definition of prosperity in the concept of the modern world is said to be a condition in which a person can fulfill his/her basic needs which include the need for food, clothing, shelter, clean drinking water and the opportunity to continue education and have adequate work which can support a person's quality of life so that they can have the same social status as other citizens of the country. When viewed from a human rights perspective, the definition of prosperity explains that every man or woman, adolescent and child has the right to live properly in terms of health, food, drink, housing and social services, and if their rights are not obtained by them, then this is said to violate human rights [6]

Situbondo residents' income is mainly obtained through mango farming production. Situbondo is one of the regencies in East Java Province with a high mango production. Mango is one of the leading commodities in Situbondo Regency with production that continues to increase every year. [1]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. Farmers' household income can encourage them to be able to access food so that it has an impact on food security in farmer households.

The high number of families classified as pre-prosperous in Arjasa, where the majority of the population was farmers, do not really reflect the role of the agricultural sector in improving the prosperity and standard of living of the community. Whereas most people live very dependent on the agricultural sector, particularly mango plantations. This requires the attention of the local government, especially related agencies, to find solutions by striving to improve the prosperity that can provide many benefits for mango farmers as a whole.

The specific objective of this study was 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 preliminary 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 the farmers.

II. METHODS

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 1 Farmer Group. Makmur Jaya 1 Farmer Group is a farmer group engaged in the production of arum manis mango. The population in this study was 25 farmers who were members of the Makmur Jaya I Farmer Group who cultivated the arum manis mangoes. This population was also used as the study sample, because the number of respondents was less than 30. Data in this study was collected through primary data (direct interviews using questionnaires) and secondary data from related agencies and literature related to this study. The data that has been collected in this study were then analyzed by using quantitative descriptive analysis.

The analysis of mango farmer household prosperity will be measured by using the poverty theory proposed by [7]. In measuring the criteria proposed by Sajogyo, an approach to household expenditure is needed by calculating daily, weekly and monthly needs. Per capita household expenditure by year is calculated based on the total expenditure of farmer households, both food and non-food expenditure in a year divided by the number of household dependents. Per capita household expenditure by year is converted into a measure of the equivalent of rice per kilogram to measure the poverty level of farmer households [7]. The level of per capita expenditure by year in producer households and the level of per capita expenditure by year which is equivalent to rice are formulated as follows:

$$\text{Expenditure Per Capita/Year (Rp)} = \frac{\text{Household Expenditure/Year (Rp)}}{\text{Number of Family Dependents}}$$

$$\text{Expenditure/Capita/ Year of Rice Equivalent (Kg)} = \frac{\text{Expenditure/Capita/Year (Rp)}}{\text{Price of Rice (Rp/Kg)}}$$

Sajogyo (1997) classified poor farmers into six types, including:
1. Most Poor: if the expenditure per family member is 180 kg which is equivalent to rice/year
2. Very Poor: if the expenditure per family member is 181-240 kg which is equivalent to rice/year
3. Poor: if the expenditure per family member is 241-320 kg which is equivalent to rice/year
4. Almost poor: if the expenditure per family member is 321-480 kg which is equivalent to rice/year
5. Moderate: if the expenditure per family member is 481-960 kg which is equivalent to rice/year
6. Decent living: if expenditure per family member >960 kg which is equivalent to rice/year

III. RESULT AND DISCUSSION

Poverty is considered as an economic inability to meet basic food and non-food needs as measured by the poverty line [8]. The measurement of the level of poverty was carried out by using the poverty theory proposed by Sajogyo by calculating household consumption/expenditure which was equivalent to the exchange rate of rice/person/year to determine the poverty line.

Table 1. Average Annual Food and Non-Food Expenditures

No	Type of Expenditure	Total	Percentage (%)
1	Food Expenditures	17.478.096	56,14
2	Non-Food Expenditures	13.650.792	43,86
	Total Expenditures	31.128.888	100

Source: primary data processed (2020)

Food expenditure for members of the Makmur Jaya I Farmer Group was amounted to Rp. 17,478,096 or 56.16% of the total expenditure. Meanwhile, non-food expenditure was amounted to Rp. 13,650,792 or 43.86%. Expenditures on food were 12.28% higher than non-food expenditures.

A family consists of two or more people who are connected by blood, marriage, and live in the same place of residence. Family is an important element in analyzing farmer household prosperity. First, the family is the unit of use and purchase of the number of products. Second, family is the main influence of per capita expenditure for food portions. The distribution of the number of family members in the Makmur Jaya I farmer group is the number of family members who live in the same house as the mango farmer. Characteristics of respondents based on the number of family members can be seen in Table 2.

Table 2. The Number of Family Members

No	Family Members	Total	Percentage (%)
1.	1-2	7	28
2.	3-4	15	60
3.	5-6	3	12
	Total	25	100

Source: primary data processed (2020)

The results obtained in Table 2 show that the members of the Makmur Jaya I Farmer Group were dominated by farmers who have 3 to 4 family members, specifically 15 members of the Makmur Jaya I Farmer Group, which indicated that the level of food needs varies with the number of family members. Farmer who have 1 to 2 family members out of 7 mango farmers will certainly have different levels of food and non-food needs, as well as farmer who have 5 to 6 family members out of 3 respondents, they will certainly have more various types of food and non-food purchased to meet their family needs. Expenditures for food are highly dependent on the number of family members, household income, and the intensity and pattern of eating.

The results of calculating per capita expenditures can be found by dividing annual household expenditures by the number of family dependents.

Table 3. Average Expenditure/Capita/Year of Respondents of Makmur Jaya I Farmer Group

No	Household Expenditures/Year	The Number of Dependents	Expenditure/Capita/Year
1	21,120,000	2	10,560,000
2	29,226,000	2	14,613,000
3	39,126,000	3	13,042,000
4	26,424,000	5	5,284,800
5	38,784,000	4	9,696,000
6	57,240,000	3	19,080,000
7	35,160,000	3	11,720,000
8	28,404,000	2	14,202,000
9	35,019,000	3	11,673,000
10	29,106,000	4	7,276,500
11	54,096,000	6	9,016,000
12	29,520,000	3	9,840,000
13	19,603,200	2	9,801,600
14	37,851,600	5	7,570,320
15	27,414,000	1	27,414,000
16	18,720,000	3	6,240,000
17	22,416,000	3	7,472,000
18	29,640,000	2	14,820,000
19	22,116,000	3	7,372,000
20	30,732,000	4	7,683,000
21	28,032,000	3	9,344,000
22	37,256,400	2	18,628,200
23	30,108,000	3	10,036,000
24	25,800,000	4	6,450,000
25	25,308,000	4	6,327,000
Total Expenditures/Capita/Year			275,161,420
Average Expenditures/Capita/Year			3,483,055.95

Source: primary data processed (2020)

Based on the data in table 3, the level of farmer prosperity can be analyzed by using the theoretical analysis proposed by Sajogyo. Per capita household expenditure by year was converted into a measure of rice equivalent per kilogram to measure the poverty level of a farmer household as shown in Table 4. Members of the farmer group paid for the purchase of low quality rice per kg at a price of Rp. 9,000, -

Table 4. Classification of Prosperity Level of Members of the Makmur Jaya I Farmer Group

No	Expenditure/Capita/Year of Rice Equivalent	Classification
1	1,173.33	Decent Living
2	1,623.67	Decent Living
3	1,449.11	Decent Living
4	587.20	Moderate
5	1,077.33	Decent Living
6	2,120.00	Decent Living
7	1,302.22	Decent Living
8	1,578.00	Decent Living
9	1,297.00	Decent Living
10	808.50	Moderate
11	1,001.78	Decent Living
12	1,093.33	Decent Living
13	1,089.07	Decent Living
14	841.15	Moderate
15	3,046.00	Decent Living
16	693.33	Moderate
17	830.22	Moderate
18	1,646.67	Decent Living
19	819.11	Moderate
20	853.67	Moderate
21	1,038.22	Decent Living
22	2,069.80	Decent Living
23	1,115.11	Decent Living
24	716.67	Moderate
25	703.00	Moderate

Source: primary data processed (2020)

Based on the classification of household poverty levels according to the concept of poverty line proposed by Sajogyo, the overall members of the Makmur Jaya I farmer group can be seen in table 5.

Table 5. Poverty Level of Mango Farmers Households of Makmur Jaya I Farmer Group

No	Category	Indicator (kg/th)	Total Respondents	Percentage
1.	Most Poor	180	0	-
2.	Very Poor	181 – 240	0	-
3.	Poor	241 – 320	0	-
4.	Almost Poor	321 – 480	0	-
5.	Moderate	481 – 960	9	36%
6.	Decent Living	>960	16	64%
	Total		25	100%

Source: primary data processed (2020)

Based on the classification of household poverty levels, none of the members of the Makmur Jaya I farmer group is below the poverty line (the category of Most Poor, Very Poor and Poor). Most of 64% or 16 members of farmer groups were in the decent living category and 36% or 9 members of farmer groups were in the moderate category. The number of family dependents amounted to 3-4 people, also affected the level of prosperity of the farmers. The greater the number of family dependents, the more vulnerable the family is to be below the poverty line if it is not balanced with the high income. High expenditures and low number of dependents make farming families live in a decent way. [9]Household prosperity is influenced by the income and number of family dependents. [10] This is in line with the study conducted which showed that households that are classified as Almost Poor are identified as households that have a large number of dependents and have low income. Meanwhile, the results of the study conducted by [11] indicated that 60.97% of farmer households in Sumber Agung Village were categorized as Almost Poor and Poor, this was due to the high basic needs because of the large number of dependents in each family.

IV. CONCLUSION

Based on the theory proposed by Sajogyo, the prosperity level of the members of the Makmur Jaya I farmer group was amounted to 64% of farmers in the decent living category and 36% in the moderate category. Based on the classification of the household poverty levels, none of the members of the Makmur Jaya I farmer group is below the poverty line (the category of Most Poor, Very Poor and Poor).

V. ACKNOWLEDGMENTS

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