

## ANALYSIS OF HOUSEHOLD CONSUMPTION AND WELFARE LEVEL OF WATER APPLE FARMERS IN TEBING GERINTING UTARA VILLAGE, SOUTH INDRALAYA SUB-DISTRICT, OGAN ILIR REGENCY

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### ABSTRACT

This study aims to analyze household consumption and the level of welfare of water apple farmer households in Tebing Gerinting Utara Village, South Indralaya District, Ogan Ilir Regency, South Sumatra. The research location was determined purposively with the consideration that the majority of the population in Tebing Gerinting Utara Village are water apple farmers. Sampling was taken randomly and only 30 samples were taken from a total of 613 water apple farmers. The analysis was carried out to answer the objective, namely using descriptive analysis and the Household Food Expenditure Share test and the Good Service Ratio (GSR) test to analyze the level of welfare of water apple farmer households. The research results obtained in this study are the household expenses of water apple farmers in Tebing Gerinting Utara Village is IDR 12,518,200/year which is divided into two categories, which is food expenditure is IDR 5,401,200/year with the largest expenditure being the purchase of rice and non-food expenditure is Rp. 7,116,800/year with the largest expenditure is for purchase farmer's tobacco consumption. From the results of the PPP and GSR tests, it was found that water apple farmers in Tebing Gerinting Utara Village were able to buy and meet the main needs of their households and economically, farmer households were considered to be prosperous.

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### 1. INTRODUCTION

Household income cannot be separated from household expenditures. One of the main factors determining expenditure patterns is income level. This is because income is defined as the ability to conduct transactions and save [1]. Consumption is the cost that must be incurred by an individual or group to meet consumption needs, which usually come in the form of goods [2]. According to Keynes' consumption theory in his book titled *The General Theory of Employment*, there is a relationship between current income received and current consumption. This means that an individual's income over a certain period of time will affect their consumption at that time. Therefore, if a person's income increases, their consumption will also increase.

Factors affecting consumption levels are divided into two categories: economic and non-economic factors [3]. Economic factors include household income, household wealth, interest rates, household expectations for the future, government policies to reduce income distribution inequality, and retirement programs. Non-economic factors include frugality.

Farmers make decisions about production which directly affect the amount of income received, and income levels affect household consumption decisions for farmers [4]. Farmer household consumption expenditures are divided into food and non-food expenditures.

In general, household consumption is divided into two categories: primary needs and supporting needs. Primary needs are clothing, food, and housing. Supporting needs are those that are not a primary need [5]. Consumption patterns refer to the distribution of income spent by an individual to purchase primary and supporting needs (Ramadini, 2020). Factors influencing an individual's consumption patterns are income level, taste, and desire [6].

The level of farmer welfare is needed to determine whether farmers are able to meet their own and their family's needs. If farmers are able to meet their basic needs, they are considered prosperous, but if they cannot meet their basic needs, they are considered not prosperous. The level of farmer welfare is not only viewed from an economic perspective but also from two perspectives: economic and social welfare [7].

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To measure the level of farmer welfare from an economic perspective, the level of household welfare can be seen from household consumption expenditures, which are divided into two broad categories: food and non-food. Household welfare can be seen from the amount of income spent on food needs. It can also be interpreted that the higher the expenditure on food, the lower the level of household welfare, and vice versa.

In 2020, there was an increase in the amount of food consumption in households in Ogan Ilir Regency compared to the previous year, from 52 percent to 56.36 percent [8]. Based on this description, the researcher is interested in examining household consumption expenditures and the level of welfare of water apple farmers in Tebing Gerinting Utara Village, Indralaya Selatan District, Ogan Ilir Regency.

## 2. METHOD

This research was conducted in Tebing Gerinting Utara Village, Indralaya Selatan District, Ogan Ilir Regency. The location was purposely determined based on the consideration that Tebing Gerinting Utara Village has the highest number of water apple farmers in Indralaya Selatan District. The research was carried out from October 2022 to November 2022.

The research method used a survey approach, targeting households of water apple farmers to collect data and information related to household income and expenditure. Simple random sampling was used to select 30 respondents from the total population of 613 water apple farmers in Tebing Gerinting Utara Village, Indralaya Selatan District, Ogan Ilir Regency.

The research aimed to analyze household consumption and the level of household welfare from an economic perspective. The first objective was analyzed descriptively and presented in tabulation, while the second objective was analyzed using two tests: the Food Expenditure Share (FES) and the Good Service Ratio (GSR). The FES can be calculated as follows [9]:

$$FES = FE/TE \times 100\%$$

Where:

FES = Food Expenditure Share (%)

FE = Expenditure on food (Rp/year)

TE = Total Household Expenditure (Rp/year)

The results of the above calculation will yield a percentage that can be categorized according to the following criteria:

Table 1 Percentage of Food Expenditure

Percentage of Total	Food Expenditure Category
< 60 %	Low
≥ 60 %	High

The Good Service Ratio (GSR) method is formulated as follows [9]:

$$GSR = \frac{\text{Expenditure on food needs}}{\text{Expenditure on non-food needs}}$$

**Note:**

GSR > 1, indicates a less prosperous household economy

GSR = 1, indicates a prosperous household economy

GSR < 1, indicates a more prosperous household economy

## 3. RESULT AND DISCUSSION

### Social Conditions in the Village

The social phenomena that are currently happening in Tebing Gerinting Utara Village are patriarchal systems, addiction to illegal drugs, and the habit of stealing vegetables from neighboring gardens to meet food needs. The strong patriarchal system in the village makes men dominant in the family. Currently, the social phenomenon is the head of the family or their eldest child engaging in illegal drug transactions to fulfill their worldly desires.

The patriarchal nature of the society makes the head of the family the most powerful, and they tend to prioritize their own needs such as buying cigarettes. This forces their wives to economize on household

food expenses, and they go to the river or flooded fields to catch fish and take vegetables from neighboring gardens as their main source of food.

### Respondent Characteristics

The characteristics of the respondents observed were land size, age, education, and length of farming experience. Older farmers have less ability to absorb and understand innovations and technological developments in agriculture [10]. 70 percent of the sampled farmers are entering an older age (>50 years old), which means they may not be able to absorb the latest technology in the cultivation of water apple crops.

The higher the level of education of farmers, the better their knowledge in managing agricultural land. The sampled farmers still have low education levels, with only 46.66 percent of the 30 farmers having completed elementary school (SD) [11].

The larger the land area owned or cultivated by farmers, the greater the opportunity for them to achieve higher production [10]. The land size cultivated by the respondent farmers is small, with 93.33 percent of them having an average land area of >1 ha, resulting in insufficient income to meet their needs, which is a driving factor for farmers to seek other sources of income.

The longer the farming experience of farmers, the more capable they are in managing land and making decisions in dealing with problems. The average farming experience of the sampled water apple farmers is 13 years [11].

### Household Income Analysis

As for the income of water apple farmer households, it is divided into three sources of income, namely water apple farming, non-water apple farming, and non-agricultural income, with the following details.

Table 2 Income of Water Apple Farmer Household.

No.	Source of Income	Average Income (Rp/year)	Percentage (%)
1.	Guava farming	11.529.355	053,64
2.	Farming other than water guava	000914.712	004,38
3.	Outside Agriculture	0 9.023.571	041,98
<b>Total Household Income</b>		<b>21.494.639</b>	<b>100,00</b>

Based on the research conducted by the researcher in Table 2, the average income of water apple farmer households in Tebing Gerinting Utara Village, Indralaya Selatan Subdistrict is IDR 21,494,639 per year, which consists of three sources of income, namely water apple farming, non-water apple farming, and non-farming income. This household income source is not only generated by the head of the family but also by the working spouse and children of the farmers.

### Household Expenditure Analysis

Household expenditures are divided into two categories: food and non-food. One of the factors that affect household expenditure is the level of household income [12]. The researcher analyzed using reference from the Central Statistics Agency in writing the table to calculate household expenditures, which are divided into two categories: food and non-food.

Table 3 Average Expenditure of Water Apple Farmer Household.

No.	Consumption	Rupiah (per year)	Percentage (%)
	Food	<b>05.401.200</b>	<b>043,15</b>
1.	Rice	04.140.800	076,66
2.	Milk	00 454.000	008,41
3.	Meat and Processed Products	00 128.800	002,38
4.	Egg	00 259.200	004,80
5.	Vegetable	00 100.000	001,85
6.	Fish	00 284.000	005,26
7.	Coffe / Tea	000 34.400	000,64
	Non Food	<b>07.116.800</b>	<b>056,85</b>
8.	LPG gas 3 kg	00 537.600	009,95
9.	Fuel	00 364.800	005,13

10.	Education	01.696.000	023,83
11.	Health	0000000 0	0000 0
12.	Electricity	01.362.000	019,14
13.	Telephone/Toll	00 216.400	003,04
14.	Tobacco	02.940.000	041,31
15.	Hat	0000000 0	0000 0
16.	Shoes	0000000 0	0000 0
17.	Dress	000000 00	0000 0
18.	House renovation	000000 00	0000 0
19.	Service	0000000 0	0000 0
20.	Program	0000000 0	0000 0
<b>Total RT Expenditures</b>		<b>12.518.200</b>	<b>100,00</b>

Based on the data presented in Table 3, it is known that the largest household expenditure of jambu air farmers is on non-food expenditure, amounting to IDR 7,116,800 or 56.85 percent of the total household expenditure. The largest expenditure is on tobacco, amounting to IDR 2,940,000 per year. This is very unfortunate because the expenditure for tobacco is very high, even higher than the expenditure on the education of their children.

From the tabulation, it can be seen that the expenditure on tobacco is very large, which can depict the social condition that is happening in the North Tebing Gerinting village at the moment. The current social phenomenon is that jambu air farmers prefer to spend their household budget to buy cigarettes and do not pay attention to the nutritional value of their food and the education of their children. Although the education cost is the second-largest expenditure in non-food items, many children of farmers in North Tebing Gerinting village are currently dropping out of school because there is a bad phenomenon happening, which is the consumption of drugs that are circulating among farmers. Heads of households consume drugs secretly and let their children drop out of school while their wives search for food sources in the river/fields and neighbors' vegetable gardens.

### Household Welfare Analysis

The welfare analysis is conducted to assess the economic condition of the farmer's households. In household economics, welfare level is measured from the income and expenditure of the household [9]. In this study, to know the welfare level of farmers, two methods of tests were used, namely the Food Expenditure Share (FES) and the Good Service Ratio (GSR). If the value is < 60 percent, the expenditure is considered high, and if the value is  $\geq$  60 percent, the expenditure is considered low. For the calculation of GSR, if the value of GSR is < 1, then the farmer's household is considered more prosperous. The value of GSR = 1 means that the farmer's household is considered prosperous. The value of GSR > 1 means that the farmer's household is less prosperous.

Table 4. Results of Food Expenditure Share (FES) Test of Jambu Air Farmers in North Tebing Gerinting Village

PPP	Number of people	Percentage (%)
PPP < 60%	28	093,33
PPP $\geq$ 60%	02	006,66
<b>Amount</b>	<b>30</b>	<b>100,00</b>

Based on Table 4., the results show that the number of FES < 60 is greater, namely 93.33 percent. Thus, it can be concluded that 93.33 percent of jambu air farmer households in North Tebing Gerinting village are food-insecure households because they have low food expenditure but consume less energy. This condition is supported by the results of household expenditures, which show that the allocation of household funds for food (energy) is smaller than non-food expenditure, namely tobacco.

According to the law of working (1943), household expenditure share and household expenditure are negatively related, meaning that the higher the value of the food expenditure share, the lower the food resilience. Meanwhile, for household welfare, if the food expenditure share is smaller, the higher the welfare. In Table 1.4, it is known that 93.33 percent of farmers have low food expenditure share, meaning that 28 out of 30 respondents' households are already prosperous.

Table 5. Results of Good Service Ratio (GSR) Test of Jambu Air Farmers in North Tebing Gerinting Village

GSR	Number of people	Percentage (%)
GSR < 1	19	63,33
GSR = 1	01	03,33
GSR > 1	10	33,33
Amount	30	100,00

Based on Table 5, it was found that the percentage of GSR < 1 was greater, which is 63.33%, meaning that 19 out of 30 sampled farmers were able to buy their household needs and their households were considered prosperous economically. From both tests on household prosperity that have been conducted, it can be concluded that guava farmers in Tebing Gerinting Utara Village are already prosperous in their household economy.

#### 4. CONCLUSION

From the conducted research on the household expenditure of guava farmers in Tebing Gerinting Utara Village, it can be concluded that the largest household expenditures are divided into food and non-food expenses. However, based on the PPP and GSR tests, the households of farmers are considered prosperous because they can buy and fulfill their primary household needs. Nevertheless, it is recommended that guava farmers be wiser in buying goods, especially non-food expenses that are not good, such as tobacco or cigarettes, by allocating the funds for tobacco to purchase nutritious food instead. Furthermore, for further research, it is suggested to investigate the well-being of farmers and their consumption patterns, which can also serve as a reference for the allocation of household income to more important expenditures.

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