

Cassava Price Dynamics in Lampung Province: Economic and Social Factors That Influence

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ABSTRACT

Cassava prices in Lampung, one of the largest cassava producers in Indonesia, experience fluctuations influenced by various economic and social factors. This study aims to identify and analyze the factors that influence the dynamics of cassava prices in Lampung province. The method used in this study is descriptive analysis with qualitative and quantitative approaches. The results of the study indicate that the main factors influencing cassava prices in Lampung include weather conditions, government policies related to prices and subsidies, transportation costs, and domestic and export market demand. Social factors, such as the socio-economic conditions of farmers and the relationship between traders and consumers also play an important role in determining prices. This study provides recommendations on policies that can be implemented to reduce price fluctuations and improve the welfare of cassava farmers in Lampung.

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1. INTRODUCTION

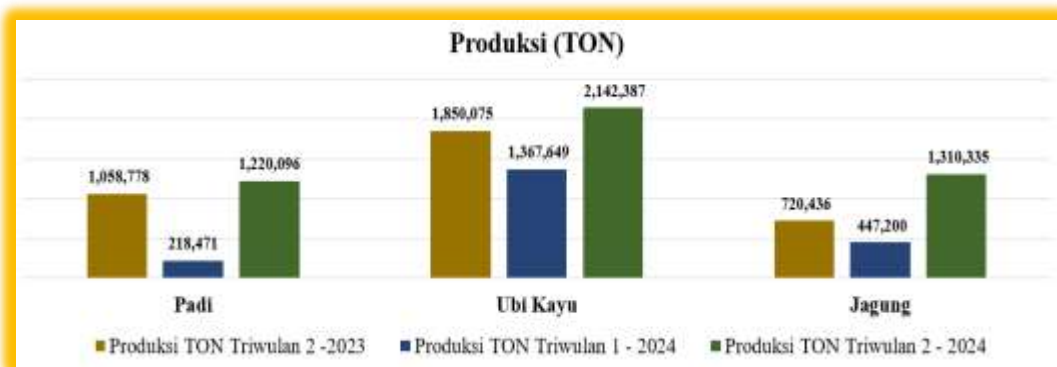
According to Gardjito & Murdijati (2013), cassava is spread across several continents, including in Asia, namely in Thailand, Vietnam, India, and China, in Africa, namely in Nigeria, Congo, Ghana, Mozambique, Angola, and Uganda, and in the Americas, the largest cassava production comes from Brazil. Cassava entered Indonesia in 1852 through the Bogor Botanical Gardens, and then spread throughout the archipelago when Indonesia was short of food, namely in 1914-1918 (Purwono & Purnamawati, 2009). According to Rismayani (2007), cassava is one of the plants that contains a lot of carbohydrates. Therefore, cassava can be used as a source of carbohydrates other than rice, and can also be used for industrial raw materials such as tapioca flour, pellets, cassava, granulated sugar, gasohol, single-cell protein, and citric acid.

Theory of Supply and Demand, Adam Smith (1776) in his famous work "The Wealth of Nations" explained that market prices are influenced by the interaction between supply and demand. Although not for a specific commodity such as cassava, this principle is still relevant in determining the price of cassava. Alfred Marshall (1890) in "Principles of Economics" developed the concept of elasticity of demand and supply, which can be applied in the analysis of cassava prices, to understand how prices are affected by changes in the amount of supply and demand. Production Costs, T. W. Schultz (1964) in his work *Transforming Traditional Agriculture* discusses how production costs and agricultural technology affect production efficiency and the prices of agricultural commodities.

According to Kotler (2001), demand for a product can be viewed from two perspectives, namely demand made by individuals and demand made by everyone in a market. Cassava (*Manihot esculenta*) is one of the important agricultural commodities in Indonesia, especially in Lampung Province, which is known as one of the largest cassava producing areas. This commodity not only has high economic value, but is also a much-needed food and industrial raw material. However, the price of cassava in Lampung often experiences quite significant fluctuations, which affect the welfare of farmers and market stability.

Fluctuations in cassava prices are influenced by various interacting economic and social factors. Economic factors such as changes in market demand, production costs, and government policies can affect cassava prices. On the other hand, social factors, such as the socio-economic conditions of farmers, marketing networks, and relationships between farmers and traders, also contribute to price determination.

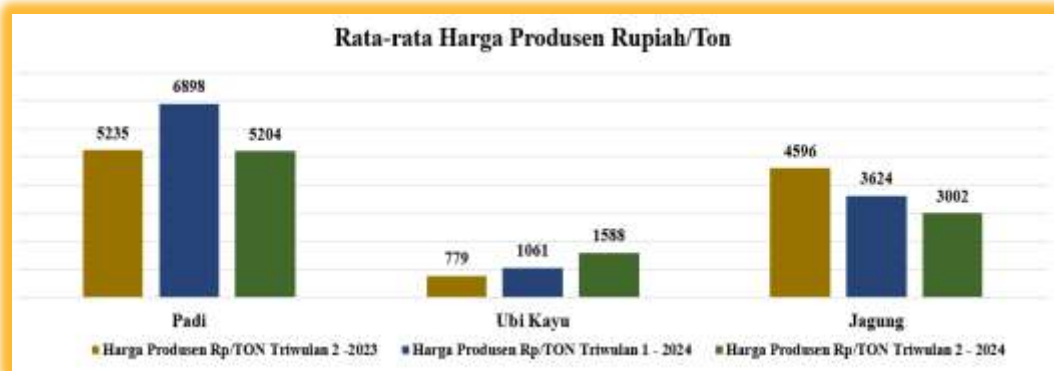
This study aims to analyze the economic and social factors that influence the dynamics of cassava prices in Lampung. With a deeper understanding of these factors, it is hoped that solutions can be found to stabilize prices and improve the welfare of cassava farmers.



Source: Lampung Province KPTPH Service Q2 2024

The production of sweet potatoes, rice, and corn in Lampung Province plays a crucial role in food security and the regional economy. The largest production is in the cassava sector reaching 2,142,387 tons in Quarter 2 - 2024. Based on the production trend, the three commodities show Quarter 2 with the largest ton production period.

With an integrated approach, including research, technology development, and policy support, it is hoped that the production of this agricultural commodity can continue to increase to support the food needs and welfare of the people of Lampung Province.



Source: Lampung Province KPTPH Service Q2 2024

Based on the price graph against the average producer price, it shows that the cassava price with the largest production actually gets the lowest award. This illustrates how the demand for derivative products for cassava agricultural products has not yet made cassava prices competitive. Other conditions show the existence of the highest rice prices, so this condition needs to be watched out for. Given the community's dependence on rice products as the main source of ingredients, it can have an impact on household economic conditions if rice prices are not controlled.

This is one of the potentials that Indonesia has as a provider of cassava stock and raw materials for its derivative products, both to meet domestic consumption in the form of industrial or household needs and exports (Seta, 2019). Food needs in Indonesia continue to increase so that it must be balanced with high food crop production. The low rate of increase in food production and the decline in production are caused by the low productivity of food crops which decreases every year. The decreasing area of planting in productive food agricultural land on Java Island has resulted in a decline in production growth from year to year (Hutapea & Mashar, 2010).

2. METHOD

This study uses a mixed methods approach, combining qualitative and quantitative analysis. Quantitative data were obtained by collecting cassava price data from various markets in Lampung during the period 2023 to 2024. This data was analyzed using statistical analysis to identify patterns of price fluctuations and their relationship to economic factors.

Qualitative data were collected through in-depth interviews with cassava farmers, traders, and agricultural economists. These interviews aimed to explore their understanding of social factors that influence prices, such as the relationship between farmers and traders, and the socio-economic challenges faced by farmers.

Data analysis was carried out using content analysis techniques for qualitative data and linear regression for quantitative data to determine the relationship between factors that influence cassava prices.

3. RESULTS AND DISCUSSION

The results of the analysis show that there are several factors that influence the dynamics of cassava prices in Lampung:

A. Economic Factors

1. Supply and Demand

According to Mankiw (2014), the basic principle of economics that regulates prices is the law of supply and demand. When demand for a commodity increases, either for domestic consumption or export, prices will tend to rise if supply is limited. Conversely, if supply is excessive or demand decreases, prices will fall. This is very relevant to cassava in Lampung, which in addition to domestic consumption is also used in the processing industry, such as making tapioca flour, which often fluctuates depending on global demand.

Demand and Supply: Domestic and export market demand is one of the main factors influencing cassava prices. When demand increases, both for domestic consumption and industry, cassava prices tend to increase. Conversely, if supply is excessive or demand decreases, prices will fall.

2. Production Costs

Samuelson and Nordhaus (2009) in their book "Economics" state that production costs play an important role in determining the price of goods in the market. In the context of cassava, the high costs incurred by farmers for fertilizers, pesticides, and direct labor will affect the selling price. When production costs increase, farmers will adjust the selling price to cover these costs. This is relevant to the dynamics of cassava prices in Lampung, where agricultural input costs tend to increase due to external factors, such as increases in fertilizer and fuel prices.

Production Costs: Cassava production costs, including input costs such as fertilizer, labor, and pesticides, have a major influence on prices. When production costs increase, farmers tend to sell cassava at higher prices to cover these costs.

3. Transportation and Infrastructure

According to Todaro and Smith (2012), in their book "Economic Development", limited infrastructure can lead to high transportation costs, which ultimately affect the price of goods in the market. If distribution access to the main market is limited or the road infrastructure is poor, transportation costs become expensive, leading to higher selling prices for consumers. This is clearly relevant in Lampung, where many areas still have obstacles in terms of accessibility to distribution centers.

Transportation and Infrastructure: High transportation costs due to limited infrastructure also contribute to cassava prices. Areas that are difficult to reach increase distribution costs, which in turn affect selling prices.

B. Social Factors

1. Socio-Economic Conditions of Farmers

According to Lewis (1954) in the "Dual Sector" theory, farmers who have low incomes and limited access to modern technology are more vulnerable to market price fluctuations. Such socio-economic conditions often make cassava farmers in Lampung have difficulty dealing with drastic price changes. Lack of access to efficient agricultural technology exacerbates farmers' inability to increase productivity and, ultimately, worsens their dependence on market fluctuations.

Socioeconomic Conditions of Farmers: Most cassava farmers in Lampung have limited incomes and lack access to modern agricultural technology. This makes them more vulnerable to price fluctuations. Uncertainty in cassava prices can affect farmers' decisions in production and marketing.

2. Trader-Farmer Relationship

In the book "The Economics of Agricultural Development" by Eicher and Staatz (1998), it is stated that an unbalanced relationship between farmers and traders often causes injustice in the distribution of profits. Traders who have greater access to the market can often suppress purchase prices from farmers, while selling prices to consumers remain high. This happens in Lampung, where many farmers rely on traders to market their crops, and are often forced to accept prices determined by traders.

Trader-Farmer Relationship: In many cases, traders have the power to determine prices, which can be detrimental to farmers. Farmers' dependence on traders for marketing their produce makes them less able to influence market prices.

C. Government Policies

Policies related to minimum prices, subsidies, and market regulations also play a role in stabilizing or causing price fluctuations. Government programs that support fair cassava prices and better market access for farmers can help stabilize prices.

1. Price and Subsidy Policy

According to Mankiw (2014), government policies such as minimum prices or subsidies can help stabilize prices in the market. Minimum prices can protect farmers from sharp price declines, while subsidies can ease production costs. In the context of cassava, government policies that provide subsidies for production costs or set minimum prices can help farmers cope with uncertain price fluctuations and improve their welfare.

3. CONCLUSION

The dynamics of cassava prices in Lampung are influenced by various interrelated economic and social factors. Economic factors such as market demand, production costs, and transportation play an important role in price fluctuations, while social factors such as farmers' socio-economic conditions and relationships with traders also affect market prices. Government policies also play a role in moderating or worsening cassava price fluctuations.

The conclusion of this analysis shows that the dynamics of cassava prices in Lampung are influenced by various economic, social, and government policy factors. Economic factors such as demand and supply, production costs, and transportation and infrastructure play an important role in determining cassava prices. Social conditions, especially farmers' dependence on traders and limited access to technology, also affect market prices. In addition, government policies that support minimum prices, subsidies, and market regulations can help stabilize cassava prices, although price fluctuations still occur. All of these factors are interrelated and affect farmer welfare and the stability of the cassava market in Lampung.

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Hopefully this work can provide benefits for the development of science and can provide positive contributions to readers and further research.

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