



Analysis of Price Fluctuations and Stability of Six Major Horticultural Commodities Based on Daily Data in Ambon City in 2025

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ABSTRACT

This study aims to analyze the price fluctuations and stability of six major horticultural commodities in Ambon City in 2025, namely red cayenne pepper, red curly pepper, tomato, water spinach, mustard greens, and spinach. The study employed a descriptive quantitative approach using daily price data from January to December 2025. Data were collected through documentation and analyzed using the mean, standard deviation, coefficient of variation (CV), and Price Stability Index (PSI). The results showed that all six commodities experienced high price fluctuations, with CV values ranging from 19.44% to 25.21%. Tomatoes recorded the highest price fluctuation, with a CV of 25.21%, while mustard greens recorded the lowest at 19.44%. The PSI values ranged from 3.97 to 5.14, indicating that price stability varied from fairly stable to stable. Mustard greens recorded the highest stability, with a PSI of 5.14, whereas tomatoes recorded the lowest, at 3.97. The findings indicate that supply conditions, weather, commodity characteristics, and distribution conditions are associated with price dynamics. Strengthening distribution systems and post-harvest management is needed to support horticultural price stability and food security in Ambon City.

INTRODUCTION

Horticultural commodities play an important role in meeting food needs and supporting regional economic activity. In addition to serving as a source of food consumption, horticultural commodities are also an important part of agricultural trade and the income of agricultural businesses. However, the perishable nature of horticultural products, their relatively short production cycles, and their sensitivity to environmental conditions cause supply availability to vary. These changes can affect the balance between supply and demand and contribute to price fluctuations.

Price fluctuations are an important concern because they affect various actors along the marketing chain. Large price changes can reduce the certainty of farmers' income, increase business risks for traders, and affect consumers' purchasing power. For commodities with short shelf lives, changes in supply can be quickly reflected in prices because market participants have limited capacity to store the products. Weather conditions, production disruptions, and distribution problems can further increase these risks. Previous studies cited in this research indicate that production, seasonality, weather, and distribution are among the factors associated with changes in horticultural commodity prices.

These issues are particularly relevant in the context of Ambon City. As an archipelagic region, the availability of several horticultural commodities in Ambon City is closely related to the smooth distribution of supplies from outside the region. Transportation disruptions, including shipment delays caused by weather conditions, can reduce the supply entering the market and subsequently trigger price changes. Mardika Market, as one of the major centers of horticultural trade and distribution in Ambon City, plays an important role in price formation through the interaction between supply and demand.

The six commodities examined in this study, namely red cayenne pepper, red curly pepper, tomato, water spinach, mustard greens, and spinach, have different characteristics. Red cayenne pepper and red curly pepper were selected because they are strategic commodities known for relatively high price fluctuations. Tomatoes are highly perishable, while water spinach, mustard greens, and spinach represent leafy vegetables that are relatively more readily available but remain vulnerable to weather and distribution disruptions. These six commodities also have a high frequency of daily trading and sufficient daily price data for analysis.

Analyzing price fluctuations and stability is important because average prices alone cannot adequately describe the extent of price changes over a given period. Statistical measures such as standard deviation and the coefficient of variation make it possible to measure and compare the relative level of price fluctuations across commodities. Meanwhile, the Price Stability Index (PSI) can be used to describe price stability based on the relationship between the average price and its standard deviation. This approach provides a more objective measure of the price movement characteristics of each commodity.

Although numerous studies have examined price fluctuations in food commodities, several research gaps remain. Some studies use monthly or annual data, which may not adequately capture short-term price changes occurring at the market level. For horticultural commodities, however, daily price movements are important because these products are traded fresh and have limited storage capacity.

Another gap concerns the scope of commodities and study areas. Previous studies have often focused on a single commodity, particularly chili, whereas studies that simultaneously compare several horticultural commodities over the same observation period remain limited. In addition, studies of price fluctuations based on daily data in

Maluku, particularly Ambon City, remain relatively limited compared with research conducted in Java and Sumatra.

Based on these gaps, this study uses daily price data from January to December 2025 to analyze six horticultural commodities simultaneously. The use of daily data is intended to capture short-term price dynamics in greater detail, while the comparison of six commodities allows differences in price fluctuation and stability to be identified across commodities. Thus, this study is expected to provide empirical evidence on horticultural price behavior in an archipelagic region and provide information that can support price stabilization efforts in Ambon City.

This study has practical significance because horticultural price stability is related to supply continuity, business certainty for marketing actors, consumer purchasing power, and regional food security. Information on commodities with higher levels of price fluctuation can serve as a basis for determining priorities for strengthening production, distribution, and postharvest management. Through analysis based on daily data, price stabilization policies are expected to be formulated more appropriately according to the characteristics of each commodity.

Based on the above considerations, this study aims to: (1) analyze the level of daily price fluctuations of six major horticultural commodities in Ambon City during 2025; and (2) analyze price stability and compare price fluctuation patterns across commodities based on daily data.

LITERATURE REVIEW

Horticultural Commodities and Prices

Horticultural commodities have significant economic value, but they are generally highly perishable and sensitive to agroclimatic conditions. Changes in weather, production, quality, and supply availability can affect the quantity of products available in the market and, consequently, influence prices. The six commodities examined in this study, namely red cayenne pepper, red curly pepper, tomato, water spinach, mustard greens, and spinach, have different production characteristics, postharvest durability, supply patterns, and demand conditions, which may result in different levels of price fluctuations.

Prices of horticultural commodities are determined through the interaction of supply and demand and are influenced by seasonality, production conditions, costs, distribution, and marketing structures. In an archipelagic region such as Ambon City, transportation and distribution also play an important role in maintaining supply availability. Disruptions in distribution may reduce market supply and trigger short-term price changes.

Price Fluctuations and Stability

Price fluctuation refers to changes in prices that move upward or downward over a given period. In agricultural commodities, such changes may be influenced by seasonality, weather, production, demand, and distribution. In this study, price fluctuations are measured using the *Coefficient of Variation* (CV), which is the ratio of the standard deviation to the average price. Based on Pimentel-Gomes (1985), a CV of less than 10% indicates low fluctuation, 10-20% indicates moderate fluctuation, 20-30% indicates high fluctuation, and more than 30% indicates very high fluctuation.

Price stability refers to a condition in which price changes remain relatively controlled. Stability is influenced by the continuity of supply, smooth distribution, production conditions, and changes in demand. This study uses the Price Stability Index (PSI) as a complementary measure to the CV. The CV indicates the degree of price

variation, while the PSI describes the level of price stability based on the relationship between the average price and standard deviation.

Previous Studies and Research Position

Previous studies have shown that changes in agricultural commodity prices are associated with various factors. Al Wahyub (2025) found differences in price volatility among food commodities and its association with weather, production, demand, and government policies. Emba and Wadu (2025) showed that fluctuations in chili prices were related to product quality, weather conditions, supply and demand, inflows of products from outside the region, and market conditions. Akbar et al. (2025) examined trends and factors affecting cayenne pepper prices, while Hsb et al. (2025) showed that price fluctuations were also associated with product quality, stock availability, pricing policies, and the marketing chain.

Although previous studies have examined price volatility, trends, and factors affecting agricultural commodity prices, studies that specifically use daily price data to compare several horticultural commodities within the same region and period remain limited. This study addresses this gap by analyzing six horticultural commodities in Ambon City using daily price data from January to December 2025. The level of price fluctuation and stability of each commodity is compared using the mean, standard deviation, CV, and PSI. This approach provides a more detailed picture of differences in price movements among horticultural commodities.

METHODS

Research Design

This study employed a descriptive quantitative approach. The quantitative approach was used because the research data consisted of numerical data in the form of daily prices of horticultural commodities. Meanwhile, the descriptive approach was used to describe the level of price fluctuations and price stability during the observation period without examining causal relationships among variables. The analysis focused on price movements in a time-series framework, allowing the characteristics of price changes for each commodity to be compared objectively.

The study was conducted at Mardika Market, Ambon City, which is one of the major centers for the trade and distribution of horticultural commodities in Maluku Province. The market was selected because of its important role in the trading activities and price formation of various horticultural commodities in Ambon City. The daily price data covered the period from January to December 2025, while the research activities were conducted on May 11, 2026.

Population and Sample

The population of this study consisted of all daily price data for six major horticultural commodities traded at Mardika Market during 2025. The six commodities were red cayenne pepper, red curly pepper, tomato, water spinach, mustard greens, and spinach. The study employed a census method, in which all available daily price data during the observation period were used as the sample. This method was selected because the study aimed to obtain a comprehensive description of price fluctuations and stability over a one-year period. Therefore, using all available data was considered more appropriate than selecting only a portion of the data.

Types and Sources of Data

The data used in this study were secondary data. The primary data consisted of daily prices of six horticultural commodities obtained from official sources providing food price information. Supporting data were obtained from publications of Statistics Indonesia (BPS), the Ministry of Agriculture, the National Food Agency, scientific journals, reference books, and previous studies relevant to the research topic. The price data were arranged chronologically to form a daily time series. The data covered the period from January to December 2025 and were used to identify changes in the price of each commodity over time.

Data Collection Technique

Data were collected using a documentation technique. Daily price data were obtained from official documents, reports, and databases related to horticultural commodity prices. The data were subsequently examined and organized according to the observation period to form a daily price time series. The documentation covered the daily prices of each commodity from January to December 2025. The use of daily data was intended to provide a more detailed description of price changes than the use of monthly or annual data.

Data Analysis Method

The data were analyzed using descriptive statistical analysis to measure the level of price fluctuations and stability of the six commodities. The analysis employed four main measures: mean price, standard deviation, coefficient of variation, and Price Stability Index (PSI).

Mean Price

The mean was used to determine the average price level of each commodity during the observation period. The formula used was:

Mean:

$$\bar{x} = \frac{\sum x}{n}$$

Where:

$\bar{x}$ = Mean price

$\sum x$ = Sum of all price data

n = Number of observations

Standard Deviation

Standard deviation was used to measure the extent to which prices deviated from their mean value. A larger standard deviation indicates greater absolute price variation during the observation period. In this study, standard deviation was used as one of the components in calculating the coefficient of variation and Price Stability Index. The formula used was:

Standard Deviation:

$$\sigma = \sqrt{\frac{\sum (x_i - \mu)^2}{N}}$$

Where:

σ = Standard deviation

x_i = Value of the (i)-th observation

μ = Population mean

N = Total number of observations in the population
 Σ = Summation of the data

Coefficient of Variation

The level of price fluctuation was analyzed using the coefficient of variation (CV), which represents the ratio of the standard deviation to the mean price:

Coefficient of Variation (CV):

$$CV = \frac{\sigma}{\bar{x}} \times 100\%$$

Where:

CV = Coefficient of variation (%)

σ = Standard deviation

$\bar{x}$ = Mean price

The criteria for the level of price fluctuation according to Pimentel-Gomes (1985) are as follows:

Coefficient of Variation	Price Fluctuation Level
$CV < 10\%$	Low
$CV 10\%–20\%$	Moderate
$CV 20\%–30\%$	High
$CV > 30\%$	Very high

A higher CV indicates greater price variation relative to the mean price. Conversely, a lower CV indicates relatively more controlled price movements.

Price Stability Index

Price stability was analyzed using the Price Stability Index (PSI). This index indicates the extent to which the price of a commodity remains relatively close to its mean value during the observation period. The PSI was calculated by comparing the mean price with the standard deviation:

Price Stability Index (PSI):

$$PSI = \frac{\bar{X}}{\sigma}$$

Where:

PSI = Price Stability Index

$\bar{X}$ = Mean price

σ = Standard deviation of price

A higher PSI value indicates smaller price variation relative to the mean price, meaning that the price is considered more stable. Conversely, a lower PSI value indicates greater relative price variation and a lower level of stability.

The price stability criteria used in this study are as follows:

Price Stability Index (PSI)	Stability Level
$PSI > 10.00$	Very stable
$PSI 5.00–10.00$	Stable
$PSI 3.33–5.00$	Fairly stable
$PSI < 3.33$	Unstable

These classifications were obtained through a mathematical transformation of the coefficient of variation criteria used in the study.

Comparison among Commodities

The CV and PSI results were subsequently compared across commodities to identify the commodities with the highest and lowest levels of price fluctuation, as well as those with the highest and lowest levels of price stability. This comparison was used to address the research objective concerning differences in the price movement patterns of the six horticultural commodities in Ambon City during 2025.

RESULTS

Overview of Horticultural Price Movements

This study analyzes the daily prices of six horticultural commodities traded at Mardika Market, Ambon City, from January to December 2025. The six commodities include red cayenne pepper, red curly pepper, tomato, water spinach, mustard greens, and spinach. Mardika Market was selected because it is one of the major food trading centers in Ambon City and serves as a meeting point between the supply and demand for various horticultural commodities.

The price movements of the six commodities exhibited different characteristics. These differences are reflected in the mean price, standard deviation, and coefficient of variation. Differences in product characteristics, supply continuity, weather conditions, and distribution efficiency are considered to be associated with variations in price fluctuations across commodities. In the context of Ambon City as an archipelagic region, distribution disruptions can quickly affect the availability of commodities in the market and subsequently influence price formation.

Table 1. Mean Price, Standard Deviation, and Coefficient of Variation of Horticultural Commodities in 2025

Commodity	Mean Price (Rp/kg)	Standard Deviation (Rp/kg)	CV (%)	Category
Red Cayenne Pepper	81,924.66	19,837.81	24.21	High
Red Curly Pepper	53,164.38	12,380.73	23.29	High
Tomato	21,417.81	5,399.40	25.21	High
Water Spinach	14,631.51	3,215.84	21.98	High
Mustard Greens	16,610.96	3,229.26	19.44	Moderate
Spinach	16,847.95	4,032.17	23.93	High

Source: Secondary Data, Processed in 2026.

Based on Table 1, the CV values of all commodities ranged from 19.44% to 25.21%. Tomato had the highest CV, while mustard greens had the lowest. These findings indicate that although all six commodities belong to the horticultural commodity group, their price changes relative to their respective mean prices were not uniform.

Price Fluctuations of the Six Commodities

The analysis shows that tomato had the highest price fluctuation, with a CV of 25.21%. This value indicates that tomato prices exhibited relatively large variation during the observation period. This finding is noteworthy because horticultural price volatility is often associated primarily with chili, whereas the results of this study show that tomato had the highest relative price variation among the six commodities analyzed.

The high price fluctuation of tomato can be associated with its perishable nature. When supply increases, limited storage capacity may encourage traders to sell the products quickly, causing prices to decline. Conversely, when production decreases due to weather conditions, pest and disease disturbances, or distribution disruptions, market supply may decline and prices may increase within a relatively short period. This finding is consistent with Mariyanto (2025) regarding the influence of climatic factors on horticultural price volatility and Lusiyana et al. (2025) regarding the perishable characteristics of horticultural products.

Red cayenne pepper ranked second in terms of price fluctuation, with a CV of 24.21%. This commodity had the highest mean price, at Rp 81,924.66/kg, with a standard deviation of Rp 19,837.81/kg. A high mean price does not indicate price stability. Instead, the standard deviation and CV show that red cayenne pepper prices experienced substantial changes during the observation year.

The high fluctuation of red cayenne pepper prices can be associated with the commodity's sensitivity to changes in production, weather, distribution, and demand. When supply decreases, particularly when interregional distribution is disrupted, prices may increase rapidly. This condition is relevant to the characteristics of Ambon City, where part of the horticultural supply depends on distribution from outside the region. This finding is consistent with Rahmat et al. (2024), who showed that chili prices are highly sensitive to production, distribution, and market conditions, as well as Supriadi and Sejati (2018), who emphasized the importance of smooth interregional trade for price stability.

Red curly pepper had a CV of 23.29%, lower than that of red cayenne pepper, but it still exhibited high price fluctuation. This difference indicates that although both commodities are similarly vulnerable to changes in supply and weather conditions, the intensity of their price movements is not identical. This difference may be associated with variations in marketing patterns, demand structures, and distribution mechanisms. The findings of Wikrawardana et al. (2025), as cited in this study, also identify the effectiveness of price transmission among market participants as one aspect associated with chili price stability.

Water spinach had a CV of 21.98%, while spinach had a CV of 23.93%. These results indicate that leafy vegetables are not completely free from price fluctuations. Although they are relatively easy to cultivate, changes in weather conditions, distribution disruptions, and variations in supply availability can still affect their prices. For water spinach, a CV above 20% indicates that price variation relative to its mean remained relatively high.

In contrast to the other commodities, mustard greens had the lowest CV, at 19.44%. Based on the criteria used in this study, this value falls into the moderate fluctuation category. The relatively low CV indicates that mustard green prices were more controlled than those of the other five commodities. This condition is presumed to be associated with its relatively short production cycle, production continuity, and more consistent supply availability. This finding is consistent with Hidayat et al. (2026), who identified production continuity as one of the important factors in maintaining the stability of agricultural commodity prices.

Overall, the CV results indicate differences in price vulnerability among the commodities. Commodities characterized by high perishability and greater sensitivity to changes in supply tend to exhibit greater price variation. In contrast, commodities with more consistent supply tend to have relatively lower price fluctuations. This finding supports Auliasari et al. (2025), who found that differences in commodity characteristics can result in differences in the level of price fluctuations among food commodities.

Price Stability Based on the Price Stability Index

The analysis of price fluctuations needs to be complemented by a measure of price stability to determine the relative position of price variation in relation to the mean price. The PSI values for the six commodities are presented in Table 2.

Table 2. Price Stability Index of Horticultural Commodities in 2025

Commodity	Mean Price (Rp/kg)	Standard Deviation (Rp/kg)	PSI	Category
Red Cayenne Pepper	81,924.66	19,837.81	4.13	Fairly Stable
Red Curly Pepper	53,164.38	12,380.73	4.29	Fairly Stable
Tomato	21,417.81	5,399.40	3.97	Fairly Stable
Water Spinach	14,631.51	3,215.84	4.55	Fairly Stable
Mustard Greens	16,610.96	3,229.26	5.14	Stable
Spinach	16,847.95	4,032.17	4.18	Fairly Stable

Source: Secondary Data, Processed in 2026.

The PSI values ranged from 3.97 to 5.14. Based on the classification used in this study, five commodities were categorized as fairly stable, while mustard greens were categorized as stable. Mustard greens had the highest PSI value at 5.14, whereas tomato had the lowest at 3.97. This pattern is consistent with the CV results, in which commodities with lower CV values also had higher PSI values.

Mustard greens had the highest level of price stability. Its mean price of Rp 16,610.96/kg and standard deviation of Rp 3,229.26/kg resulted in an PSI of 5.14. This condition indicates that mustard green prices were relatively more controlled than those of the other commodities. Possible explanations include a relatively continuous production pattern, a short growing period, and more consistent supply availability. When supply can be maintained, the likelihood of extreme price changes becomes lower. This finding is consistent with Hidayat et al. (2026), who emphasized the importance of production continuity in maintaining agricultural commodity price stability.

In contrast, tomato had the lowest PSI, at 3.97. This value indicates that tomato prices were the least stable among the six commodities. This condition is consistent with the tomato CV, which was also the highest at 25.21%. Thus, tomato requires greater attention in price stabilization strategies.

The relationship between high price fluctuation and low stability in tomato can be explained by its perishable nature. When production increases, abundant supply must be quickly absorbed by the market because storage capacity is limited. Conversely, production or distribution disruptions can cause supply shortages and price increases. In the context of Ambon City, dependence on supplies from outside the region may increase this sensitivity, particularly when transportation is disrupted by weather conditions. This finding is consistent with Mariyanto (2025).

Red cayenne pepper had an PSI of 4.13 and was therefore categorized as fairly stable, although its CV reached 24.21%. This result shows that the term "fairly stable" does not mean that prices did not experience fluctuations. The PSI indicates the relative position of price variation in relation to the mean price, whereas the CV measures the magnitude of relative variation as a percentage. Therefore, red cayenne pepper still requires attention because it experienced a high level of price fluctuation, even though its PSI did not place it in the unstable category.

Red curly pepper had an PSI of 4.29, while water spinach had an PSI of 4.55. Both values were classified as fairly stable, with water spinach showing relatively higher stability. Spinach had an PSI of 4.18 and was also categorized as fairly stable. These differences indicate that each commodity has distinct market and supply characteristics; consequently, price stabilization policies should not necessarily be applied uniformly across all commodities.

DISCUSSION

General Interpretation of the Results

The findings reveal an interesting pattern in which most commodities had high levels of price fluctuation based on their CV values, while their stability levels remained within the fairly stable category based on the PSI. This indicates that price fluctuations did occur, but the changes did not necessarily represent prolonged instability. In this context, price stability does not mean that prices remain unchanged; rather, it indicates that prices can continue to move around their average level without consistently producing extremely large deviations.

Overall, these dynamics indicate that market mechanisms were still able to adjust to changes in supply and demand. However, the ability to adjust differed across commodities. Tomato and red cayenne pepper require greater attention because the combination of high CV values and relatively low PSI values indicates greater vulnerability to price changes.

The findings also indicate that price stability is not determined solely by production. Strengthening production without improving distribution and postharvest handling may not be sufficient to reduce price fluctuations effectively. For perishable commodities such as tomatoes and leafy vegetables, maintaining product quality after harvest is an important part of supply management. Meanwhile, in an archipelagic region such as Ambon, smooth interregional distribution is an inseparable factor in maintaining price stability.

Implications of the Findings

The findings have implications for horticultural price management policies in Ambon City. First, tomato and red cayenne pepper require greater attention in efforts to control price fluctuations because both commodities exhibited high levels of price variation. Based on the findings, measures that may be considered include improving production continuity, strengthening supply chains, enhancing postharvest handling, and maintaining smooth distribution.

Second, price stabilization efforts need to consider the characteristics of each commodity. Mustard greens, which had the lowest CV and highest PSI, indicate that supply continuity may be associated with more controlled price movements. This pattern may provide a useful reference for managing other commodities, although its application should still take into account the specific production and market characteristics of each commodity.

Third, strengthening market information systems is important. More timely information on prices, supply availability, and distribution conditions can help farmers and traders adjust their production and marketing decisions. At the local government level, such information can be used to identify commodities that are beginning to experience price volatility and to determine more appropriate interventions.

Overall, the findings reinforce the view that horticultural price stability requires an integrated approach involving production, postharvest management, distribution, and market information. Such an approach is more consistent with the characteristics of horticultural commodities and the geographical conditions of Ambon City than policies focused solely on controlling final prices.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that the prices of the six major horticultural commodities in Ambon City during 2025 experienced relatively high fluctuations, with coefficient of variation (CV) values ranging from 19.44% to 25.21%. Tomatoes recorded the highest price fluctuation, with a CV of 25.21%, followed by red cayenne peppers at 24.21% and spinach at 23.93%. Meanwhile, mustard greens recorded the lowest price fluctuation, at 19.44%. These findings indicate that price movements varied across commodities and were associated with the characteristics of horticultural products, supply conditions, weather conditions, and distribution conditions.

In terms of price stability, the Price Stability Index (PSI) ranged from 3.97 to 5.14, indicating that the six commodities were classified as fairly stable to stable. Mustard greens recorded the highest PSI value, at 5.14, and were classified as stable, whereas tomatoes recorded the lowest PSI value, at 3.97, and were classified as fairly stable. These findings indicate that relatively high price fluctuations did not necessarily result in severe or prolonged price instability. However, commodities with higher levels of fluctuation, particularly tomatoes and red cayenne peppers, require greater attention because their prices are more sensitive to changes in supply and distribution conditions.

The implementation of the research findings indicates that daily price information can serve as an empirical basis for improving horticultural market management in Ambon City. The findings can support the identification of commodities that require closer monitoring, particularly during periods of potential supply disruption. For farmers, the findings can provide supporting information for production and harvesting planning. For traders and distributors, the information can be considered in stock management, purchasing, and distribution decisions. For local governments, the findings can support more responsive price monitoring and stabilization measures, particularly through strengthening supply availability, distribution systems, and post-harvest management.

Recommendations

Based on the findings, several recommendations can be proposed. First, the local government and relevant stakeholders should strengthen the monitoring of daily prices and supply conditions of horticultural commodities, particularly tomatoes and red cayenne peppers, which recorded relatively high price fluctuations. Daily monitoring can provide early indications of changes in market conditions and support timely responses to potential supply disruptions.

Second, the horticultural distribution system should be strengthened, particularly for commodities supplied from outside Ambon and other islands. Improved coordination among producers, distributors, traders, and relevant government agencies is important to reduce the risk of supply shortages caused by transportation and weather-related

disruptions. The findings indicate that maintaining continuity of supply and improving distribution are important components of horticultural price stability.

Third, post-harvest management should be improved, particularly for perishable commodities such as tomatoes and peppers. Appropriate handling, temporary storage, packaging, and transportation can help reduce product losses and maintain the quantity and quality of commodities reaching the market. This is particularly relevant because the perishable nature of horticultural products can intensify short-term price changes when supply is disrupted.

Finally, future research should extend the analysis by using longer observation periods and incorporating variables such as rainfall, production volume, inter-island transportation conditions, supply volume, and consumer demand. Such an approach would provide a more comprehensive understanding of the factors underlying daily price fluctuations and complement the descriptive analysis employed in this study.

FURTHER STUDY

This study has certain limitations that may be addressed in future research. Further studies on the price fluctuations and stability of the six major horticultural commodities in Ambon City are recommended using longer observation periods and more comprehensive analytical approaches. Future research may also examine factors influencing price fluctuations, such as supply availability, weather conditions, distribution, seasonal patterns, and market conditions. Such studies are expected to provide a more comprehensive understanding of horticultural price dynamics and contribute to the development of more effective price stabilization policies in Ambon City.

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