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The Impact of Import Policy on Farmers' Welfare and Price Stability of Agricultural Commodities in Indonesia

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ABSTRACT

The agricultural sector plays an important role in both economic growth and national food security. The adequacy of domestic production must be able to meet the needs of the community. If not, then the government seeks to import. Fruits are one of the public consumption goods and provide a potential market for local farmers. However, field data shows that Indonesia's fruit imports still tend to be high. This condition further causes the welfare of local farmers to decline. In addition, from a macroeconomic perspective, import policies cause disruptions to price stability in Indonesia. This study aims to explore the impact of import policies on farmers' welfare and price stability in Indonesia. This research is conducted using a qualitative approach based on data from the Central Bureau of Statistics. The results of this study show that the import policy has a negative impact on local fruit farmers and disrupts price stability.

1. INTRODUCTION

Indonesia is renowned as an agriculturally based country, indicating that agriculture is pivotal to the nation's economy. Given its rich natural resources, there is significant potential to enhance and expand the agricultural sector to compete with and complement other major sectors such as industry and trade. The development of agriculture is critical not only for its contribution to national food security but also because it fulfills a strategic objective in the government's Nawacita initiative, which aims to drive development from the periphery by empowering regions and villages in a unified state framework. This initiative specifically targets the mobilization of agriculture to tap into local rural potentials, thereby boosting the prosperity of rural communities and fostering economic growth in these areas.

The challenges of ensuring price stability and improving farmer welfare within the Indonesian agricultural sector are complex and multifaceted. Despite numerous efforts to address these issues, farmers face persistent challenges due to the volatility of agricultural commodity prices, which are susceptible to abrupt changes in supply and demand. For example, an abundant harvest may lead to a sharp decrease in prices, whereas a poor harvest can cause prices to spike. Additionally, global market dynamics can influence domestic commodity prices, further complicating the economic landscape for farmers.

Addressing these issues requires a multifaceted strategy that includes not only the government and private sector but also direct engagement with the farming communities. Recent trends highlight a growing focus on climate-adaptive agricultural practices, which include adopting crop varieties resistant to extreme weather conditions and implementing more efficient irrigation techniques. Research by the Institute for Development Economics and Finance (INDEF) underscores commodity price volatility as a principal factor impacting farmer welfare, leading to unstable incomes and increased economic pressures.

The agricultural challenges in Indonesia are diverse, spanning issues from production to pricing and farmer welfare. Efforts to enhance infrastructure, integrate modern technologies, refine pricing policies, and reduce the impacts of climate change are crucial. Only through a holistic and collaborative approach that involves all stakeholders—from government bodies and private entities to the farmers themselves—can Indonesia hope to establish a more sustainable and equitable agricultural system. This comprehensive strategy is essential not only for the sector's advancement but also for the broader goal of rural development and national economic stability.

Various policies have been formulated by the government in an effort to support the continued existence of the agricultural sector in Indonesia (Waryanto et al., 2019). This policy is expected to increase the production of agricultural commodities to meet the needs of the community. Nevertheless, facts in the

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field often present a decline in the production of agricultural products, causing a gap between demand and supply. Based on the results of the ASF Survey, in 2021, the rice harvest area reached around 10.41 million hectares or decreased by 245.47 thousand hectares (2.30 percent) compared to 2020. The Central Statistics Agency (BPS) noted that melon production in Indonesia reached 129,147 tons in 2021. This number decreased by 6.54% compared to the previous year which amounted to 138,177 tons.

Domestic production is not enough to meet demand, forcing the government to import foreign products. Agricultural products often intersect with import policies. This is because all agricultural commodities are primary needs that must always be fulfilled (Clapp, 2017). If there is a shortage, the government will fulfill it through imported products (Purwandari et al., 2019). Focusing on the agricultural sector of the horticulture sub-sector, this paper examines the impact of fruit imports on fruit farmers and price stability in Indonesia. Based on the facts on the ground, fruit farmers are very vulnerable to import policies taken by the government (Lencucha et al., 2020). The influx of foreign fruits will have a significant impact on the income of local fruit farmers.

Import is a policy taken by the government when domestic supply has decreased (Limenta & Chandra, 2017). Fruit import policy occurs because domestic production of fruits has decreased. The decline in production has an impact on the supply and demand price balance of agricultural products in Indonesia. In the context of price equilibrium, a decrease in production will reduce the quantity offered, indicated by a shift in the supply curve from S0 to S1. Assuming demand remains constant, the impact of this decrease in supply is an increase in prices. This price increase, if it lasts long enough and covers almost all domestic products, will cause inflation. The occurrence of inflation causes a push to import, so that domestic needs are still met.

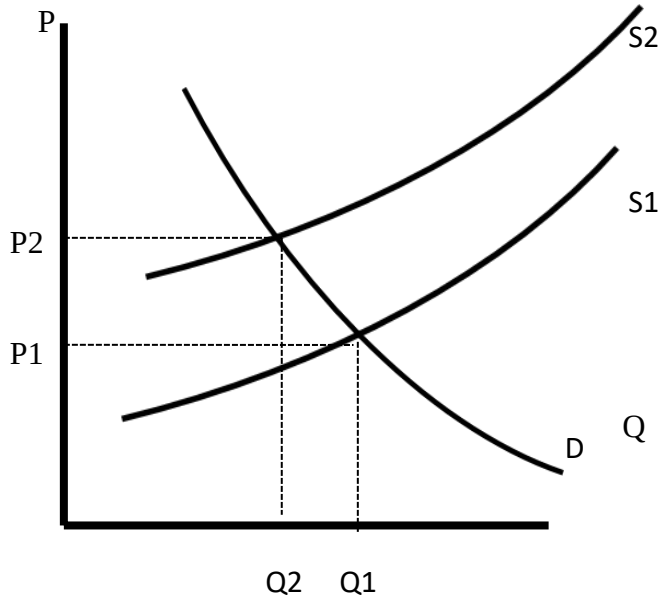


Figure 1. Demand and Supply of Agricultural Products

The government's import policy often draws public opposition, especially for those who are involved in the agricultural sector and earn their livelihood as farmers. This policy is considered to displace the existence of local farmers in the market. Imported products, which are of high quality, have the opportunity to dominate the domestic product market, which is still of low quality. Based on this explanation, this paper was prepared with the title "The Impact of Import Policy on Farmers' Welfare and Price Stability in Indonesia (case study on fruit farmers)". This study aims to analyze the impact of import policies on the welfare of fruit farmers and price stability in general in Indonesia.

The impact of agricultural import policies is actually felt the most by farmers as domestic producers (Bernues et al., 2016). Therefore, it is important to know how imports affect the welfare of farmers in Indonesia, given that domestic agricultural products must compete with imported agricultural products in the market. Measuring the welfare of farmers generally uses the farmer exchange rate index which has also been published by BPS. The farmer exchange rate index is calculated based on the comparison of the price received by farmers from each commodity produced/sold with the price paid by farmers for the consumption of food, non-food, production costs and additional capital goods from the commodities consumed or purchased by farmers (Riyadh, 2015).

$INTP$ = IT/IB+
$HT = \sum ai * PTi$
$HB = \sum b * PBi$

Description:
INTP = Farmer Exchange Rate Index
IB = Price Index Paid by Farmers
IT = Price Index Received by Farmers
HT = Price Received by Farmers
HB = Price Paid by Farmers
ai = Weight of Each Subsector
PTi = Commodity Group Price in Subsector to
i b = Weight of the i-th commodity
PBi = Price of i-th Product Purchased by Farmer

Import policies taken by the government will generally cause shocks to other economic variables, such as prices and the rupiah exchange rate (Fahad & Abdurrazaq, 2022). In the macroeconomic context, Indonesia, as a country with an open economic system, includes import variables as one of the components in the planned aggregate expenditure equation (Luwihana et al., 2021). In addition, imports will also determine how much net exports of goods and services are.

$AE \equiv C + I + G + EX - IM$

2. METHODS

This research employs a qualitative approach to thoroughly examine and interpret the complexities of the agricultural sector in Indonesia. Utilizing a systematic and standardized procedure, data collection is achieved through the Documentation Method, which, rather than interacting directly with research subjects, relies on the analysis of credible documents. In this context, credible data comprises secondary data sourced from authoritative and reliable publications by the Central Bureau of Statistics.

Secondary data refers to information that has been previously collected and reported by entities external to this research project. This type of data is typically considered original data as it is originally collected by governmental bodies or other organizations for various purposes. It is accessible through official agencies, libraries, or acquired from other relevant stakeholders. In the realm of qualitative research, the Documentation Method involves an extensive process of collecting, analyzing, and interpreting documents to extract valuable insights into the targeted phenomenon, in this case, Indonesia's agricultural sector.

The utilization of secondary data from the Central Bureau of Statistics and other pertinent sources ensures a robust foundation for the research. The data collected provides comprehensive insights into various facets of the agricultural sector, supporting a detailed analysis of the current conditions, challenges, and opportunities within this critical industry.

The analytical process in this study is meticulously structured through several key stages:

1) Pre-field Stage: Initial preparations are made, including the formulation of research objectives, hypothesis, and the methodological framework.
2) Field Work Stage: Although this research primarily uses secondary data, this phase could involve observational visits or informal discussions with subject matter experts to supplement the documented data.
3) Data Analysis Stage: This crucial phase consists of three main activities:
    - Data Reduction: Simplifying and refining the data to focus on relevant information that directly addresses the research questions.
    - Data Presentation: Organizing the reduced data into a coherent and interpretable format, facilitating easier analysis and understanding.
    - Conclusion Drawing: Synthesizing the data to formulate conclusions that are supported by the evidence gathered and analyzed.
4) Reporting Stage: The final stage involves compiling the research findings into a comprehensive report that outlines the insights gained, supported by empirical data and theoretical analysis.

This methodological approach ensures a thorough exploration of the agricultural sector, highlighting significant trends and patterns that influence policy-making and strategic planning in Indonesia. By relying on credible, pre-existing data, the study maintains a high level of reliability and

validity, providing stakeholders with well-founded analysis and recommendations based on robust evidence.

3. RESULTS AND DISCUSSIONS

Results

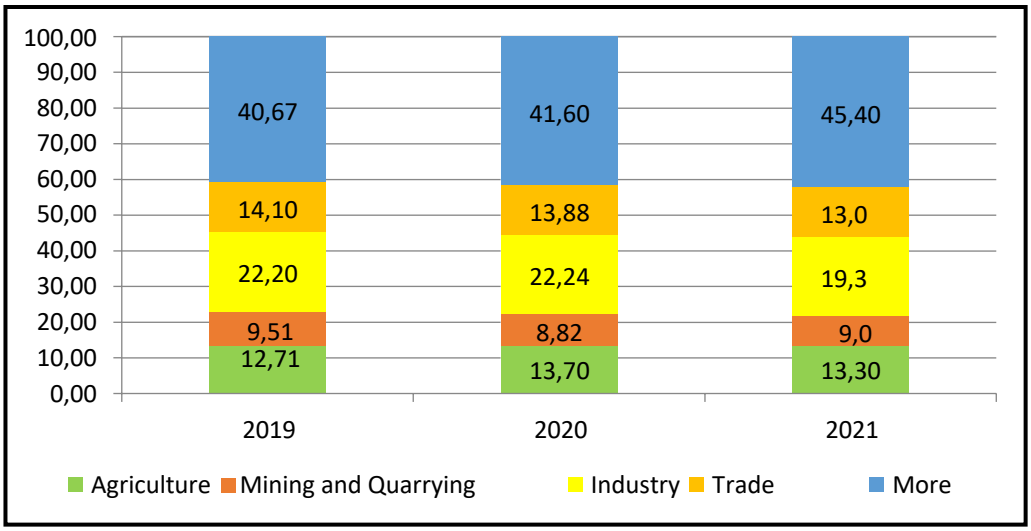
Results are the main part of scientific articles, containing: final results without data analysis process, hypothesis testing results. Results can be presented with tables or graphs, to clarify the results verbally.

Discussion

Overview of Agriculture Sector Conditions

The agricultural sector, a foundational element of the Indonesian economy, is under examination for its evolving role and performance in the national economic framework. According to data from the Central Bureau of Statistics (2023), as visualized in Figure 6, the sector's contribution to Indonesia's Gross Domestic Product (GDP) remains modest and has shown a declining trend in recent years. Specifically, the agricultural sector's share averaged 13.7% annually, reflecting a slight but noticeable decrease from 2020 to 2021.

This period of decline underscores the sector's weakening performance amidst the broader economic landscape of Indonesia, which is predominantly influenced by the more robust industrial sector. The industrial sector's contribution stands prominently higher, averaging 19.8% over the same period, illustrating a stark disparity in economic contributions between these sectors. Such comparisons reveal the agricultural sector's limited competitiveness and highlight a significant gap that persists between agriculture and other key business sectors, particularly industry.



Source: Central Bureau of Statistics (2023)

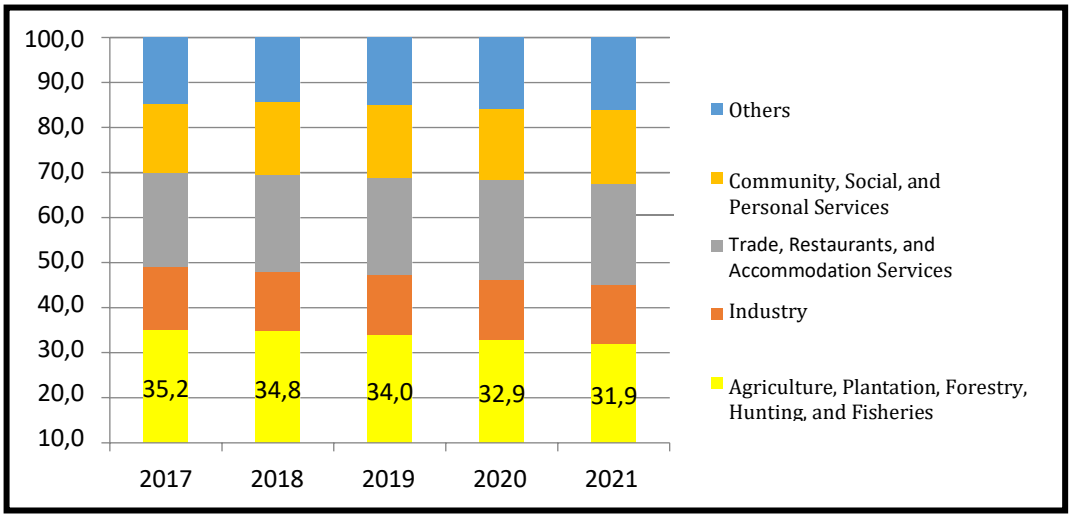
Figure 6: Structure of the Indonesian Economy (percent)

The agricultural sector's pivotal role in labor absorption underscores its socio-economic importance, despite its smaller GDP footprint. Over the last two years, agriculture has continued to play a crucial role in providing employment, remaining the predominant sector for labor engagement in Indonesia. This aspect is particularly critical in a country where a significant portion of the population relies on agricultural activities not only for employment but also for subsistence.

The challenges facing the agricultural sector are multifaceted. The observed decline in its economic contribution could be attributed to several factors including lessened productivity, issues related to scalability, market access, and perhaps most critically, the impacts of global and local environmental changes which affect crop yields and farming practices. Additionally, the increasing automation and technological advances in industrial sectors may also divert attention and investment away from agriculture, exacerbating the competitive gap.

Addressing these challenges requires a strategic focus on enhancing agricultural productivity and sustainability. Investments in agricultural technology, improved market infrastructure, and better access to financial services for farmers are essential. Furthermore, policies aimed at stabilizing agricultural output and prices could help mitigate some of the volatility faced by this sector. Strengthening the agricultural sector's position within the Indonesian economy will not only enhance its GDP contribution but also bolster national food security and improve the livelihoods of a significant portion of the population.

In summary, while the agricultural sector's contribution to Indonesia's GDP has seen a decline, its crucial role in employment and national food security remains undiminished. Strategic efforts to revitalize this sector are essential to enhancing its productivity, competitiveness, and sustainability, thereby securing its role in Indonesia's economic future.



Source: Central Bureau of Statistics (2023)

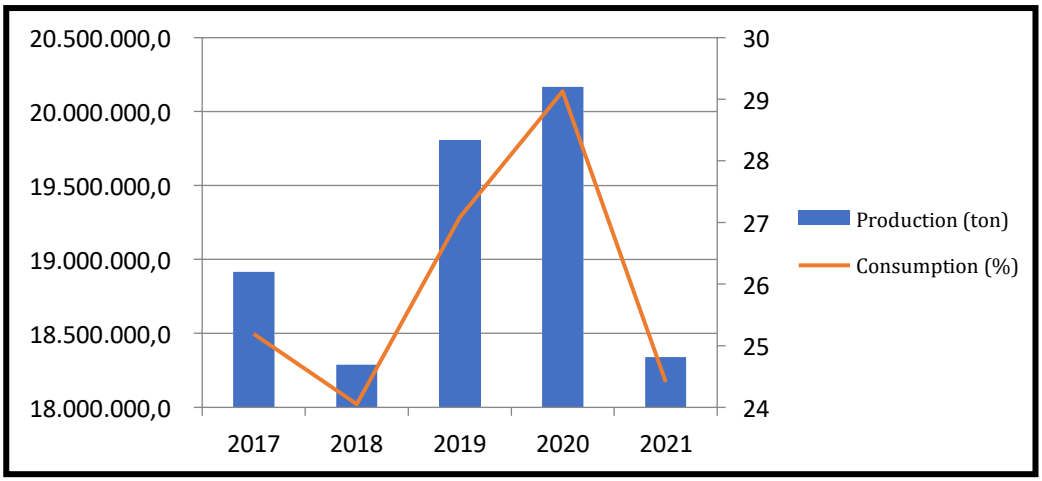
Figure 7: Employment per Business Sector in Indonesia

Despite its dominance in labor absorption, it appears that from year to year the absorption capacity continues to decline. This indicates the decline of the agricultural sector in its role in providing employment. If this continues, it can be predicted that the growth rate of the agricultural sector will decline further. In addition, the next impact will be a decline in production yields, which will impact on the level of farmers' welfare. Furthermore, by juxtaposing Figure 6 and Figure 7, it can be seen that there is income inequality that leads to social resistance in Indonesia. It appears from Figure 6 that the share of the agricultural sector is still smaller than the industrial sector. In contrast, the labor absorption of the agricultural sector is higher than the industrial sector. This condition shows that a very small amount of income in the agricultural sector is contested by many workers in the sector. In contrast, a large amount of income in the industrial sector is contested by a handful or a few workers in the industrial sector.

Impact of Import Policy on Farmer Welfare and Price Stability

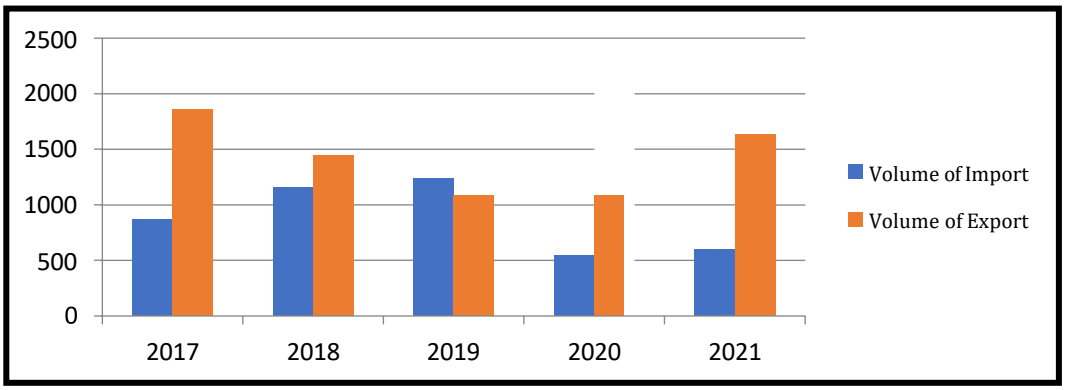
As a consumer good, the price stability of fruits is important to receive attention from the government. Instability in fruit prices, such as a drastic increase in fruit prices, will affect the level of public consumption, ceteris paribus. The following shows data on fruit production and consumption in Indonesia. Based on the Figure 8, it can be seen that domestic fruit production experienced a sharp decline in 2021, which previously tended to increase from 2017 to 2020. It is suspected that this decline in local fruit production is caused by several factors, including weather disturbances, pest attacks and the low production technology used by local fruit farmers (Powell & Reinhart, 2016). Based on the law of supply and demand explained earlier, the decline in production causes the supply of fruit in the market to decrease, which in turn causes domestic fruit prices to increase. Furthermore, the increase in domestic fruit prices causes the demand for domestic fruit to decrease.

In addition to price increases, the decline in fruit production has caused a gap between the availability and demand of fruit. To cover the gap, the government decided to import fruit products from abroad. The following presents data on imports and exports of several types of fruits in Indonesia.



Source: Central Bureau of Statistics (2023)

Figure 8. Production and Consumption Level of Fruit in Indonesia

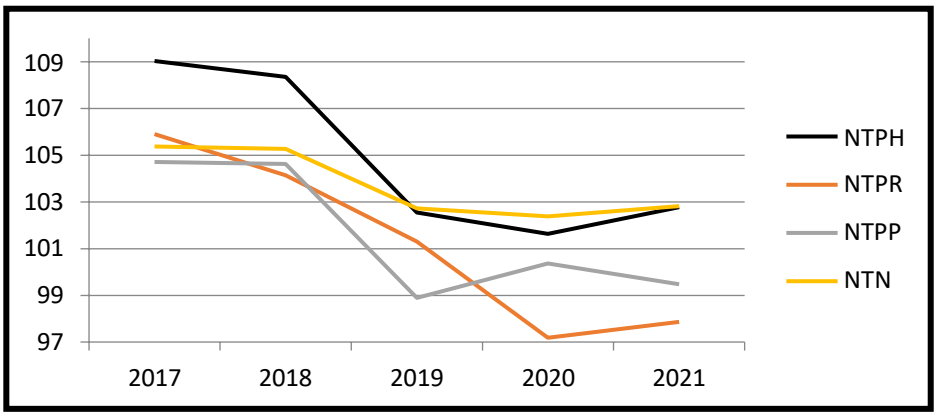


Source: Central Bureau of Statistics (2023)

Figure 9. Export and Import Volume of Fruit in Indonesia

Figure 9 above shows how the trade balance of fruits in Indonesia performed. It appears from the figure that although the number of exports in 2017-2018 was still higher than imports, the volume of imports during the year continued to increase, while the volume of exports tended to decline. The worst condition occurred in 2019, where the value of fruit imports exceeded exports. Furthermore, in 2020 the fruit trade balance showed a fairly good figure, indicated by a drastic decrease in imports and an increase in exports. This condition was supported by an increase in the amount of fruit production, so that the government reduced the amount of fruit imports. In addition, the covid19 pandemic also influenced the low import and export in 2020. Furthermore, as a result of the decline in fruit production in 2021, the value of fruit imports in that year has increased, and of course exports have decreased.

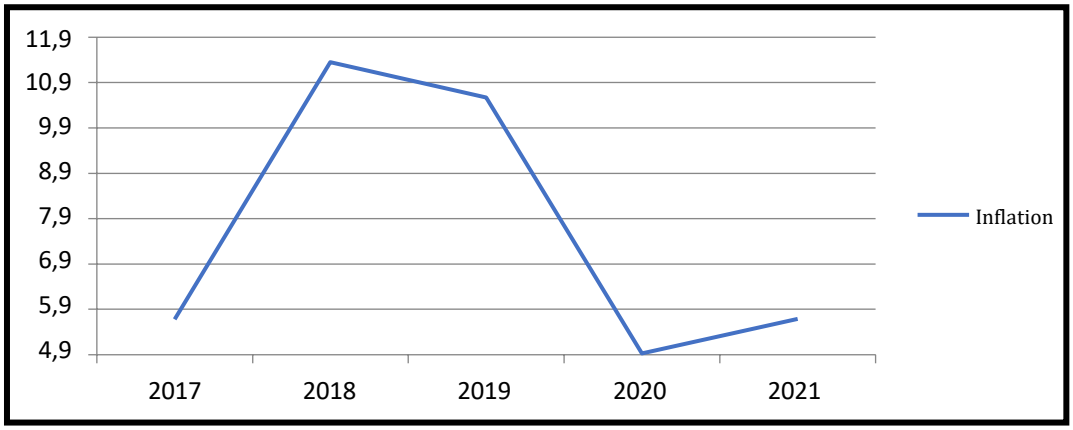
Import policies have a direct impact on the welfare of farmers. The presence of imported fruit tends to displace local fruit in the market. This is due to several reasons, such as the high price of local fruit compared to imported fruit, the low quality of local fruit, and other factors that result in decreased demand for local fruit. Based on the law of supply and demand, a decrease in demand causes prices to decrease. The decline in the selling price of local fruit will harm local fruit farmers. The reason is that a decrease in the selling price of the product means a decrease in farmers' income. Based on the farmer exchange rate analysis, a decrease in farmer income causes the farmer's acceptance index to decrease, so that the farmer exchange rate also decreases, or in other words, the level of farmer welfare decreases. The following presents the farmer exchange rate index per sub-sector.



Source: Central Bureau of Statistics (2023)

Figure 10. Farmer Exchange Rate Index by Sub-sector

Based on the figure above, it can be seen that the average level of farmer welfare in Indonesia has decreased. Especially in 2019, INTP showed a sharp decline. INTPH, which is the horticulture sub-sector farmer exchange rate index, showed a sharp correction compared to other farmer exchange rate indices. This condition is in accordance with the import data of fruits as one of the horticultural sub-sector commodities which experienced a fairly high increase in the number of imports compared to the previous year. In addition to the decline in farmers' welfare, the import policy is also allegedly causing price stability disturbances in Indonesia. Based on a theoretical point of view, the import policy causes the rupiah to depreciate, which in turn causes price increases or inflation. The following presents data on price fluctuations based on consumer goods expenditure.



Source: Central Bureau of Statistics (2023)

Figure 11. Price Fluctuations/Inflation by Goods Expenditure

It appears from the figure above (figure 12) that price fluctuations follow the pattern of fruit imports shown in figure 10. The upward trend in imports in 2017-2019 and 2021 causes prices to continue to rise. Conversely, the decline in imports in 2020 caused prices to decline as well.

The impact of import policies on farmer welfare and price stability of agricultural commodities in Indonesia is an important and complex topic. Import policies can have a variety of effects, both positive and negative, on the agricultural sector. Imports can help stabilize prices by providing adequate supplies when domestic production is inadequate. For example, rice imports can address domestic rice supply shortages and reduce price spikes. Import policies have complex impacts on farmer welfare and price stability of agricultural commodities. While import policies can help stabilize prices and ensure product availability, there are significant risks to domestic farmer welfare and dependence on foreign products. A balanced policy approach, which includes sensible import regulation, support for domestic farmers, and increased domestic production capacity, can help minimize negative impacts and promote a more sustainable and equitable agricultural sector.

4. CONCLUSION

Based on the discussion above, it can be concluded that import policies have a negative impact on local fruit farmers and disrupt price stability. The import policy causes a decrease in farmers' welfare and an increase in prices (based on expenditure). Considering the negative impact of import policies on local farmers, the government should reduce or eliminate imports. This condition will be achieved if domestic production can fulfill its needs. Therefore, the government is expected to adopt policies that can boost the productivity of local farmers. The government can provide assistance in the form of fertilizer subsidies, superior seeds and advanced technology for local farmers' production. If this goes well, then the nawa cita promoted by the government can be realized and as an added value in evaluating government performance.

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