Priviet Social Sciences Journal
E-ISSN 2798-866X
P-ISSN 2798-6314
DOI:10.55942/pssj.v5i6.451

Volume 5
Issue 6
June Edition 2025

The boomerang effect of the cassava floor price policy: An analysis of the impact of the governor of Lampung's directive on the tapioca industry and farmers' welfare

Ulfa Umayasari* & Goestyari Kurnia Amantha

Department of Government Studies, Lampung University, Prof. Dr. Sumantri Brojonegoro St., Rajabasa, Bandar Lampung 35141, Lampung, Indonesia
e-mail: ulfaumayasari@fisip.unila.ac.id

Received 13 May 2025
Revised 28 June 2025
Accepted 30 June 2025

ABSTRACT

This study analyzes the impact of Governor of Lampung's Instruction No. 2 of 2025, which sets a floor purchasing price for cassava at IDR 1,350 per kilogram, with a maximum deduction (rafaksi) of 30% and without consideration of starch content. Although the policy aimed to protect farmers from plummeting prices, it triggered a complex chain reaction. Employing a case study approach and analyzing secondary data from news sources and relevant literature, this study finds that the policy directly led to the temporary shutdown of most tapioca factories in Lampung. While farmers initially welcomed the price benchmark, factory closures resulted in difficulties in absorbing harvested cassava and posed the risk of significant losses for farmers. The analysis revealed that the policy's disregard for quality factors, particularly starch content, and failure to consider the economic viability of the processing industry were key drivers of resistance from factory owners. Subsequent interventions by regional and national governments, including the proposal of a Limited Import Ban (Lartas) on tapioca and the involvement of the Food Task Force, along with negotiations involving business associations, eventually pressured many factories to resume operations and comply with new pricing. Nonetheless, this episode highlights the vulnerability of farmers, the complexity of price interventions in agricultural commodity markets, and the urgent need for a holistic policy approach. This study recommends a reformulation of floor price policies that incorporate quality-based incentives, promote equitable partnership models, strengthen farmers' capacity, ensure better coordination between regional and central governments, and include well-calibrated import regulations.

Keywords: price intervention, cassava, agricultural policy, starch content, Lampung

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1. INTRODUCTION

The province of Lampung holds a central position as Indonesia's primary cassava production hub, with the sector making a substantial contribution to both the regional economy and national food security (Saputra, 2025). Data indicate that Lampung not only leads to cassava output, but also faces persistent challenges related to productivity and the supply of raw materials to the expansive tapioca processing industry (Zakaria et al., 2025). However, behind its strategic importance, the cassava sector in Lampung is frequently plagued by chronic issues, most notably, price volatility at the farmer level. Cassava prices often fall below production costs, causing widespread social and economic unrest. This phenomenon reached a critical point in early 2025 when prices plunged below IDR 1,000 per kilogram (Saputra, 2025), prompting mass protests by thousands of farmers demanding immediate government intervention (Saputra, 2025b).

In response to mounting public pressure, the Provincial Government of Lampung issued Governor's Instruction No. 2 of 2025, which established a floor price for cassava. While the policy aimed to protect farmers, the reactive nature of the intervention reflected long-standing structural issues within the sector. These include potential oligopsonistic practices by processing plants, a protracted and inefficient marketing chain, information asymmetry, seasonal supply fluctuations, and suspicion of imported tapioca entering the market. Thus, a policy driven primarily by socio-political urgency, without a thorough analysis of root causes or an assessment of its potential impact on the broader industrial ecosystem, carries a high risk of unintended consequences, such as widespread plant closures as an immediate industry response.

This context reveals a notable gap in academic literature on the impact assessment of province-level agricultural commodity price interventions in Indonesia. Research on the political economy of cassava policy, particularly those offering a critical examination of the complex interactions between public policy, strategic responses from the industrial sector, and the often-unforeseen repercussions on smallholder farmers, remains limited. Existing studies tend not to explore in depth why floor price policies may fail to achieve their objectives and instead provoke adverse market dynamics such as the shutdown of processing operations. This study aims to address this gap by providing a comprehensive analysis of Governor's Instruction No. 2 of 2025, evaluating both the direct and indirect impacts of its implementation on the operation of tapioca factories and the socioeconomic well-being of farmers. Moreover, this study seeks to identify the fundamental factors that contribute to the policy's unintended outcomes. The ultimate goal is to develop strategic, adaptive, and evidence-based policy recommendations that are more holistic.

Accordingly, this study is expected to make a significant contribution by presenting a rigorous empirical case study that can serve as a valuable lesson in other regions. Additionally, the study offers a critical analysis that can inform evidence-based decision-making for policymakers, industry actors, and farmer organizations, helping them design more effective and sustainable models of intervention and collaboration. Ultimately, this research aims to formulate actionable recommendations for achieving stable and fair cassava prices that benefit all stakeholders across the value chain in Lampung Province.

2. LITERATURE REVIEW

2.1. Agricultural Price Policy Theory

The agricultural price policy is one of the most commonly used instruments for government intervention in agricultural commodity markets. Key concepts in this policy include the establishment of floor and ceiling prices. In the Indonesian context, the floor price, often referred to as the Government Purchasing Price (Harga Pembelian Pemerintah/HPP) for commodities such as rice paddies, aims to protect producers (farmers) from adverse market price fluctuations, especially during harvest periods when oversupply typically causes price drops (Kumparan, 2025). The goal is to guarantee minimum income for farmers and incentivize domestic production. Conversely, the ceiling price, or Maximum Retail Price (Harga Eceran Tertinggi/HET), is designed to protect consumers from excessive price hikes.

Despite its positive intentions, implementing a floor price policy frequently faces various challenges and can result in market distortions and government failure (IFPRI, n.d.). The success of such a policy depends on several prerequisites: the government's ability to absorb surplus production at a fixed price, availability of adequate storage and distribution infrastructure, and effective enforcement mechanisms. When these conditions are not met, policy risks become ineffective or counterproductive. Studies in developing countries show that price interventions misaligned with fundamental market forces often result in significant efficiency losses and failure to achieve objectives related to price stability or welfare improvements.

Case studies on floor price policy implementation in Indonesia, particularly for rice paddies, offer valuable lessons. Repeated failures of the rice HPP have been attributed to several factors, such as the failure of rice to meet quality standards (moisture content and impurity levels), limited capacity of government warehouses to absorb the harvest, and lengthy marketing chain that causes farm gate prices to remain low despite the HPP (Ramadhan, 2025). Moreover, HPP policies that overlook quality standards may create negative ripple effects, such as an overall decline in product quality because farmers lack incentives to produce higher-grade crops when the purchase price is uniform (Khudori, 2025). International comparisons have yielded mixed results. For instance, in India, Minimum Support Prices (MSP) for selected crops, while offering price assurance, have often led to the overproduction of certain crops regardless of market demand or environmental suitability, and have not consistently benefitted smallholder farmers (IB Monkey Business, n.d.). These domestic and international experiences underscore the importance of carefully designed floor price policies. Success requires a nuanced understanding of market dynamics, consideration of product quality, and a strong implementation capacity. Neglecting these complexities can result in policy failure or unintended adverse outcomes, a caution that is particularly relevant in the context of cassava price policy in Lampung.

2.2. Tapioca Industry Economics and the Cassava Value Chain

The tapioca processing industry represents the primary downstream sector of cassava production, particularly in key production areas such as Lampung. Understanding the industrial economics and structure of the cassava value chain is essential for analyzing the impact of raw material pricing policies. The cost structure of tapioca flour production comprises several main components, with raw cassava typically representing the largest proportion. Other significant components include energy costs for drying, labor, packaging, and factory overheads (Kurniawan et al., 2019). A case study of a small-scale tapioca agro-industry in Tasikmalaya showed that such businesses can be profitable (R/C ratio of 1.13), with production costs of around IDR 19.9 million and revenue of IDR 22.5 million per production cycle. By contrast, cost estimates for large-scale tapioca plants indicate far greater initial investments and operational expenditures (Fahlevi et al., 2023; Kuldasheva et al., 2023).

One of the most critical technical factors in tapioca production is yield, which is the quantity of tapioca flour that can be extracted from a given amount of cassava. This yield is highly dependent on the starch content of cassava roots. A higher starch content translates to a higher flour yield, which directly impacts production efficiency and factory profitability. Research indicates that cassava starch concentration affects both the physical characteristics and the yield of processed products (Hussain et al., 2024). Additionally, processing methods such as milling and washing can lead to starch loss. As such, tapioca factories naturally favor and often provide price incentives for high-starch cassava production. The tapioca market itself is dynamic and influenced by domestic demand from various sectors (food, animal feed, paper, and sweeteners) and export markets. Tapioca flour prices in the domestic market vary depending on its type and quality (Fahlevi et al., 2024). Indonesia also faces competitive pressure from imported tapioca, which frequently reduces local cassava prices. Government proposals and the temporary implementation of import restrictions (Limited Import Ban or *Larangan Terbatas/Lartas*) for tapioca have been introduced to protect domestic producers. However, export data for Indonesian tapioca show fluctuations and declining trends in certain periods.

Lampung's cassava value chain involves multiple actors: farmers, aggregators at various levels, processing plants, and exporters (Zakaria et al., 2025). Farmers generally sell cassava to middlemen or directly to factories when they have access to it. Price information is often asymmetrical, placing farmers in a weak bargaining position (Kumparan, 2025). Despite being a production center, Lampung reportedly faces a cassava supply deficit relative to its installed processing capacity of approximately 9 million tons per year, while the supply averages only 7 million tons annually (Zakaria et al., 2025). The tight link between cassava starch content and the efficiency and profitability of the tapioca industry is particularly relevant in the context of the Lampung Governor's pricing policy, which explicitly ignores starch content in its price determination (Saputra, 2025). This policy fundamentally contradicts the economic logic of the tapioca industry. If factories are mandated to pay a uniform price for cassava, regardless of starch quality, farmers lose incentives to produce high-quality crops. For factories, this could mean receiving lower-average-quality raw materials, reducing yield, raising per-unit production costs, and ultimately eroding profit margins or causing financial loss. Factory resistance to this policy is therefore likely not driven by the nominal price of IDR 1,350/kg but by the elimination of price differentiation based on starch content, a vital element of their business model and operational efficiency. This reflects a fundamental design flaw in policy, from an industrial perspective.

2.3. The Political Economy of Agricultural Policy

The formulation of agricultural policies, including price policies, rarely occurs in political vacuum. Policy decisions are often shaped by interactions and contestations among various interest groups, such as farmer organizations, agribusiness associations, traders, and consumer advocacy groups, each seeking to influence outcomes in their favor (Fahlevi et al., 2025). Studies on the political economy of agricultural pricing in developing countries show that government intervention in commodity pricing can have substantial negative effects on producer prices, agricultural output, and export income, especially when such policies prioritize objectives, such as cheap food for urban consumers or surplus accumulation for industrialization (Saniuk et al., 2023). Political dynamics play a significant role in shaping agricultural policies in Indonesia. Farmer welfare is a politically sensitive issue, and both national and regional governments are frequently pressured to adopt populist measures, especially before elections or during episodes of social unrest such as farmer protests. However, policies driven by short-term political considerations, without robust economic analysis, often yield suboptimal or even harmful long-term outcomes.

As an alternative to direct price intervention, contract farming or partnership schemes between farmers and agribusiness firms have been proposed and implemented. These partnerships can provide price and market guarantees to farmers, while ensuring a consistent supply of high-quality raw materials for companies (Hussain et al., 2024). Indonesia's Business Competition Supervisory Commission (KPPU) has identified contract farming as the most effective strategy for resolving cassava price disputes in Lampung (Fahlevi, 2025). Research in Indonesia suggests that contract farming has the potential to enhance food security and farmer income, although the impact may not always be substantial and is not a one-size-fits-all solution. Effectiveness varies depending on the contract design, commodity type, and farmer characteristics. The impact of price policies on farmers' welfare remains a core concern. While floor prices such as HPP aim to raise farmers' incomes, their effectiveness is often questioned. The agricultural commodity market structure, typically oligopsonistic with few large buyers and information asymmetries between farmers and traders, can prevent farmers from reaping the full benefits of such policies (Kumparan, 2025). Farmers frequently maintain weak bargaining positions. For instance, studies on Indonesia's rice HPP show that while short-term positive effects may exist, long-term outcomes may be undermined, especially when input costs, such as fertilizer, increase disproportionately relative to farmers' income.

3. METHODOLOGY

3.1. Data Collection

This study relied entirely on secondary data sourced from digital platforms. The primary data sources included national and local online news media, official websites of regional governments, academic journals, and press releases issued by business associations. The selection of these secondary sources was guided by the need to capture the chronological dynamics of the events, access official statements from relevant stakeholders, and obtain academic analyses unconstrained by geographical and temporal limitations. This approach enables researchers to document public discourse and stakeholder responses as they unfolded in real time during the development of the cassava pricing policy issue. The qualitative data collected from these platforms include textual content such as news articles, policy documents, expert opinions, and official statements related to the cassava floor price policy in Lampung.

The data, comprising articles, expert commentary cited in the media, and government documents, reflect public sentiment and stakeholder perspectives on the issue. Official statements from government accounts and industry associations complement the analysis by providing formal policy announcements and positions of the respective parties. Once collected, data were systematically extracted and organized. The researcher archived the textual content using URL links and digital copies. The data were then classified based on preliminary themes such as the impact on industry, farmer responses, government justifications, and economic analyses. This thematic categorization facilitated a more structured qualitative analysis. The study acknowledges a key limitation: the absence of direct field interviews with primary stakeholders, including government officials, farmer representatives, or factory management. This constraint stems from the exploratory nature of the research, which focuses on analyzing publicly documented discourse. Future research should triangulate these findings with primary data from the field to provide a more comprehensive understanding of the practical dimensions of the issue.

3.2. Data Analysis

Following the collection of secondary data from various sources, the next phase involved qualitative data analysis aimed at identifying patterns, themes, and relationships within the dataset using the NVivo software (Braun & Clarke, 2006). NVivo was chosen for its ability to support researchers in systematically managing, coding, and analyzing large volumes of textual data, thereby enhancing rigor and transparency in the analytical process. The first step in the analysis involved importing and organizing data. All data,news articles, policy documents, and academic studieswere compiled into textual documents (. docx format), and uploaded to NVivo. These texts were sorted into relevant source folders and labeled accordingly, such as "Media Reports," "Policy Documents," and "Academic Studies." This organization facilitated easier comparison and cross-referencing among documents. The Text Search function in NVivo was then used to identify the frequency of key terms such as "starch content," "reference price," "farmers," and "factories," offering preliminary insights into dominant themes.

The second phase involved coding and thematic analysis. This process entailed categorizing text segments into predefined themes, including "Policy Impact on Industry," "Farmer Perspectives," "Government Justifications," and "Economic Analysis." NVivo's node (theme) feature is used to digitally organize the data relevant to each topic. For instance, if a news article included a quotation from a factory owner explaining operational shutdowns, that excerpt was coded under the node "Policy Impact on Industry." Sub-nodes were created to explore more specific issues, such as "Rejection Due to Quality Concerns" or "Role of Business Associations." Thematic relationships begin to emerge through this iterative coding process. The final phase involved data visualization and interpretation. NVivo tools such as word clouds, matrix coding queries, and cluster analyses were used to uncover the relationships between themes. For example, a matrix coding query could reveal how often the theme "Starch Content" co-occurred with "Industry Resistance." These visualizations offer intuitive insights and facilitate the

extraction of actionable conclusions. Through this systematic qualitative data analysis, the study generated evidence-based, structured insights into the dynamics of cassava pricing policy in Lampung

4. RESULT AND DISCUSSION

4.1. Policy Scope and Details

In response to the cassava price crisis and mounting pressure from farmers, the Governor of Lampung, Rahmat Mirzani Djausal, issued Instruction No. 2 of 2025 concerning the Determination of Cassava Prices in Lampung Province. (Saputra, 2025). This directive served as the central policy of this study. The key components of the instruction are as follows.

1. *Minimum Purchase Price*
   The instruction sets the minimum purchase price of cassava at the farm gate at an IDR of 1,350 per kg. This price was established following a dramatic drop in early 2025, during which cassava prices at the farmer level fell below IDR 1,000 per kg (Saputra, 2025).
2. *Rafaksi Deduction Limit*
   The maximum allowable deduction (rafaksi), typically applied to account for impurities or quality issues, is capped at 30% (Saputra, 2025). This is a direct response to farmers' complaints regarding previous deductions, which often ranged between 30% and 40% (Saputra, 2025b).
3. *Starch Content Exclusion*
   The policy explicitly states that the IDR 1,350/kg price applies uniformly, without measuring or considering the starch (or aci) content of cassava (Saputra, 2025). This marks a major departure from industrial norms, where cassava is usually priced based on its starch quality.
4. *Provisional Nature*
   The instruction is declared temporary and subject to revision, pending decisions from the national government, particularly concerning the potential imposition of a Limited Import Ban (Lartas) on tapioca and the formulation of a national cassava price standard (Saputra, 2025).
5. *Effective Date*
   The policy came into effect upon its issuance, which was dated May 5, 2025.

These policy elements are summarized in the following table:

Table 1. Key Provisions of Governor of Lampung Instruction No. 2 of 2025 on Cassava Pricing.

Policy Aspect	Details	Source
Minimum Purchase Price	IDR 1,350 per kilogram at the farmer level	(Saputra, 2025b)
Rafaksi Deduction	Maximum of 30%	(Saputra, 2025)
Consideration of Starch Content	Price applies without measuring/considering starch content	(Saputra, 2025b)
Policy Nature	Temporary, pending ministerial decisions on import restrictions and national price standard	(Saputra, 2025)
Effective Date	5 May 2025	(Ramadhan, 2025)
Policy Rationale	Response to farmer protests, price comparisons with other regions, and farmer protection	(Saputra, 2025)

4.2. Socioeconomic Context and Justification for Policy Issuance

The issuance of Governor Instruction No. 2 of 2025 cannot be separated from the pressing socioeconomic context of Lampung Province at the time. The main trigger was the drastic collapse in cassava prices at the farm level,falling below IDR 1,000 per kilogram,which led to mass protests involving

thousands of farmers from various regencies (Saputra, 2025). This wave of demonstrations placed substantial political and social pressure on provincial governments to take immediate action. In his official statement, Governor Rahmat Mirzani Djausal justified the IDR 1,350/kg floor price by referencing cassava prices in other regions, which ranged from IDR 1,050 to IDR 1,250 per kg (Saputra, 2025b). The set price was claimed to be comparatively higher, and was expected to improve the economic conditions of cassava farmers (Saputra, 2025). The policy was broadly framed as a protective measure by the regional government to shield farmers from losses due to price crashes and support their welfare (Prasetyo, Gartika, et al., 2022). Before issuing the instructions, the provincial government consulted with and obtained permission from the Ministry of Agriculture (Saputra, 2025b).

However, upon closer examination, the policy's development and justification appear to be predominantly reactive, driven by socio-political pressure, rather than grounded in a comprehensive economic analysis of its implications for the entire value chain, particularly the economic feasibility of the tapioca processing industry. The "temporary" nature of the instruction, pending a central government decision on tapioca import restrictions (Lartas), further suggests two possibilities: first, it reflects the limited authority of provincial governments in addressing cassava price issues that are influenced by broader national and international trade factors; second, it may function as a strategic move to manage expectations and shift part of the resolution burden to the national level.

4.3. Policy Impact on the Cassava Processing Industry (Tapioca Factories)

4.3.1. Industry Response: Mass Operational Shutdowns and Factory Arguments

The implementation of Governor Instruction No. 2 of 2025, setting a floor price of IDR 1,350/kg regardless of starch content,triggered immediate and substantial resistance in the tapioca processing industry. A reported total of 27 factories simultaneously halted operations for three days starting around May 6–7, 2025, as a form of protest the new policy (Saputra, 2025). The factories' primary argument was that the price of IDR 1,350/kg was unrealistic and difficult to implement under prevailing market conditions, especially given the elimination of starch content considerations, a critical factor in production efficiency (Saputra, 2025). Factory representatives stated that they needed time for internal management adjustments and further discussion before they could comply with the provincial directive. Several companies formally submitted notification letters to the governor regarding their temporary closures (Saputra, 2025).

Beyond direct economic concerns, it was suspected that the shutdowns also served as strategic pressure tactics aimed at both the regional and national governments. The objective was to prompt the central government to establish a national cassava pricing policy and implement a Limited Import Ban (Lartas) on tapioca. Lartas was seen by some industry actors as essential for shielding the domestic market from cheaper imported tapioca products. Interestingly, two major companies, PT Bumi Waras and PT Sinar Laut, were initially reluctant to comply with the new pricing policy (Saputra, 2025). These companies reportedly have overseas factories (possibly in Thailand, which is a major global tapioca producer). Their concern was that if Lartas were enforced, their imported tapioca products would be barred from entering the Indonesian market. This indicates a more complex strategic dimension to the industry's response, as large players not only react to local policy, but also have potential implications for their global operations and national trade policy. Therefore, factory closures may have served not merely as a protest against pricing but also as leverage to influence the central policy direction.

4.3.2. Economic Feasibility Analysis of Factories Post-Policy

The IDR 1,350/kg floor price, especially when decoupled from the starch content, fundamentally altered the economics of tapioca processing. Raw cassava costs represent the largest portion of tapioca production cost structure (Kurniawan et al., 2019). A significant increase in raw material costs, without a corresponding increase in final product prices (tapioca flour), inevitably compresses profit margins.

Domestic tapioca prices remain relatively stable and competitive, and processors have limited flexibility to raise their selling prices due to consumer purchasing power constraints and competition, including imports, if Lartas is not enforced. The most critical implication is the removal of starch content. Starch is the primary determinant of cassava yield from tapioca flour. With uniform pricing, processors lose the ability to incentivize farmers to supply high starch cassava. Consequently, factories risk receiving lower-quality, highly variable raw materials yet must pay the same premium price. This directly reduces production efficiency, as more low-quality cassava is required to produce one ton of flour, driving up the per-unit production costs.

This situation places factories in a difficult position: on the one hand, they are compelled to pay higher input costs; on the other hand, they face declining raw material quality, which increases operational burdens. If selling prices cannot be raised proportionally to cover rising costs, factory profitability will be jeopardized, potentially leading to financial loss. From a rational business standpoint, temporary shutdowns can be viewed as a strategic move to minimize losses while awaiting policy revisions, renegotiations, or market adjustments. The policy inadvertently created moral hazard among farmers (who now lack economic incentives to improve starch quality) and economic distress among processors (Sarkar et al., 2023). Without the ability to pass cost increases to consumers or fully absorb them, shutting down operations becomes a defensible short-term response in pursuit of business viability.

4.3.3. Compliance Dynamics and Subsequent Negotiations

Following the initial shutdowns and turmoil, market dynamics began to shift. Approximately one week after the policy took effect, on May 12, 2025, 49 cassava processing factories in Lampung declared compliance and began adhering to the IDR 1,350/kg floor price. This marked a significant development, suggesting a resolutioner, at least partially, compromising the earlier impasse. The Indonesian Tapioca Flour Business Association (PPTTI) in Lampung Province also played a role in this outcome. The PPTTI chair confirmed that all 18 member companies committed to complying with the new pricing policy. It was also clarified that only two factories were still non-operational at that point and only because they were undergoing routine maintenance (overhaul), not in opposition to the policy.

The shift from mass protests by 27 factories to broad compliance by 49 factories within a short period (approximately May 6–7 to May 12) indicates intensive behind-the-scenes negotiation and intervention. Several factors are likely to have contributed to this trend. First, intense negotiations may have occurred between industry representatives and provincial governments, possibly involving third-party mediation or pressure. Second, the active role of the Lampung Provincial Police Food Task Force (Satgas Pangan), which was mobilized by the governor to ensure corporate compliance, may have exerted additional regulatory pressure. Third, the expectation of the imminent implementation of the Lartas policy by the central government may incentivize factories. If Lartas were enacted, the reduced supply of imported tapioca could raise domestic prices, enabling processors to absorb higher cassava costs better. Fourth, factories may have recalculated and found ways to adjust internally even at the expense of slimmer profit margins. This compliance does not reflect the full voluntary acceptance of the original policy. Rather, it may represent the result of a negotiated "package deal," either implicitly or explicitly. Factories may have agreed to the floor price in return for other concessions, such as a strong commitment to Lartas' implementation, or under the threat of regulatory sanctions for continued non-compliance. This dynamic illustrates the importance of institutional power, negotiation leverage, and government intervention in resolving policy conflicts in strategic sectors such as the tapioca industry.

Table 2. Industry Response to Governor Instruction No. 2 of 2025

Timeframe	Number of Affected/Responding Factories	Type of Response	Factory Rationale	Source
Early May 2025	27 factories	3-day operational shutdown	Price of IDR 1,350/kg deemed unrealistic, need for internal	(Saputra, 2025)

Timeframe	Number of Affected/Responding Factories	Type of Response	Factory Rationale	Source
			adjustments, lobbying for national policy and Lartas	
(Around May 6–7)			PT Bumi Waras & PT Sinar Laut concerned about impact of Lartas on their imports	(Saputra, 2025)
Mid-May 2025	49 factories	Compliance with floor price of IDR 1,350/kg	Result of negotiations, pressure from Food Task Force, Lartas expectations, internal cost adjustment (2 still in overhaul)	(Ramadhan, 2025)
(Around May 12)	(Including 18 PPTTI members)	Majority resumed operations and purchasing		(Ramadhan, 2025)

4.4. Impact of the Policy on Cassava Farmers

The establishment of a cassava floor price of IDR 1,350 per kilogram through the governor's instruction was initially met with cautious optimism from the farming community. After months of enduring depressed prices, this policy was perceived as a welcome relief. Farmer representatives and student activists, who had previously participated in demonstrations, reportedly accepted price decisions peacefully (Altieri & Nicholls, 2017). There was significant hope among farmers that the new pricing would enable them to resume normal farming activities and improve their economic conditions (Saputra, 2025). Some farmers explicitly stated their acceptance of the IDR 1,350/kg. However, this initial acceptance is not unconditional. Beneath the surface of relief, farmers expressed skepticism and concerns regarding the policy's implementation by processing companies. They hoped that exploitative practices such as hidden deductions or arbitrary quality standards, described by some as a "cat-and-mouse game," would not persist under the new regulation. This reflects previous experiences in which well-intentioned price policies on paper failed to be fully realized in practice (Forney & Epiney, 2022).

Farmers' hopes for improved incomes were quickly challenged when a majority of tapioca factories responded to the new policy by halting operations. This created a painful irony; while the government raised the official price benchmark, the farmers found themselves unable to sell their crops, as their primary buyers, processing factories, and temporarily exited the market. Complaints began to emerge from farmers who were either ready to harvest or had already done so. Lacking viable buyers, many remained in a state of uncertainty. Cassava is a highly perishable crop that cannot be stored for long periods of time without further processing. Without timely sales or value-added processing, crop rot results in total loss. A farmer from Central Lampung, Siswandi (45), remarked: "Where am I supposed to take this cassava? If it's not processed soon, it will rot,we'll lose everything." On-farm alternatives, such as sun-drying cassava into *gaplek* (dried chips), are labor-intensive and time-consuming, while producing processed foods, such as *klanting* (cassava chips), poses marketing difficulties on a larger scale.

This situation illustrates the classic case of policy boomerang or unintended consequences. A market intervention policy aimed at supporting farmers yet designed without adequately accounting for the response from the demand side (i.e., processors) inadvertently created a new crisis, one of market absences. A high reference price is meaningless in the absence of actual transactions. Farmers now face potential harvest losses that, paradoxically, may have been worse than selling at a lower price but with market certainty. This underscores the necessity for comprehensive policy impact assessments that consider both supply- and demand-side responses within the agricultural value chain. In the short term, the combination of the new floor price and factory shutdowns placed cassava farmers in a difficult situation. On one hand, they were promised higher prices; on the other hand, their primary market channels were temporarily closed. For those whose harvests coincided with this shutdown period, the anticipated gains from the new policy were delayed or lost.

This episode also reveals farmers' heavy dependence on private processing industries. When these factories ceased operations, farmers left without comparable market alternatives. This dependence has led to calls for more sustainable solutions. For example, another farmer suggested that the government should not only regulate pricing but also establish cassava processing facilities or regional enterprises (BUMD) to secure farmers' harvests. Such proposals reflect aspirations to reduce reliance on private-sector buyers and establish more stable market safety nets. The net impact on farmer welfare remains mixed, especially after reports indicate that 49 factories will eventually resume operations and adopt the new floor price (Ahmad et al., 2023). For farmers who sold their cassava to these reopened factories, the policy yielded improved incomes compared to the previous price collapse. However, for those whose harvests coincided with the shutdown and who experienced crop spoilage or were forced to sell at distressed prices to middlemen, the impact of the policy remained negative. Moreover, the experience of uncertainty may leave a lasting sense of distrust among farmers regarding market stability and reliability of government policy.

Theoretically, the effects of floor price policies on farmer welfare are not always linear. Studies on agricultural price policy in Indonesia have shown that oligopsonistic market structures dominate a few large buyers, and information asymmetries often prevent farmers from fully benefiting from government-set price increases (Kumparan 2025). The structurally weak bargaining power of farmers is a major obstacle. Therefore, a floor price policy alone, without concurrent efforts to strengthen farmers' negotiation power, secure market access, and understand the operational feasibility of processing industries, is highly vulnerable to market shocks and industrial resistance. Over the long term, a poorly designed policy may harm the agricultural economy more than a consistently low but stable price regime.

4.5. Role of Stakeholders and Market Stabilization Efforts

4.5.1. Interventions by Regional and National Governments

Faced with the cassava price crisis and the complex consequences of its policy, multiple layers of government and related institutions have become involved. At the provincial level, Governor Rahmat Mirzani Djausal not only issued Instruction No. 2 of 2025, but also actively coordinated with other stakeholders. One notable step was his coordination with the Chief of the Special Criminal Investigation Unit of the Lampung Regional Police, Commissioner Dery Agung Wijaya, who also heads the Regional Food Task Force. This coordination aimed to ensure compliance among tapioca-processing companies with the governor's instructions. The involvement of the Food Task Force signified that law enforcement mechanisms were part of economic policy implementation. The Lampung Provincial Government also extended its efforts beyond local policy by lobbying the central government to take strategic measures, particularly in controlling tapioca imports, which were widely blamed for the collapse of domestic cassava prices. The Lampung Provincial House of Representatives (DPRD) was also engaged at the local legislative level. Its Chairperson, Ahmad Giri Akbar, jointly received protesting farmers at the Governor's Office. More specifically, the Chairman of the DPRD of North Lampung Regency, M. Yusrizal, publicly urged the government to reject tapioca imports because of their adverse effects on local cassava prices.

At the national level, the Ministry of Agriculture under Minister Andi Amran Sulaiman had taken steps prior to the governor's policy. In January 2025, the minister set a national minimum cassava price of IDR 1,350/kg for chopped cassava and proposed to the Ministry of Trade that tapioca be included in the Limited Import Ban (Lartas) list. This indicated a level of policy alignment, or at least convergence, between central and regional governments, although the Lampung Governor's implementation in May triggered an industry-specific upheaval. The Ministry of Trade was expected to operationalize Lartas via ministerial regulations. These dynamics reveal the need for closer coordination between provincial and national policy frameworks. While the floor price of IDR 1,350/kg aligns with earlier discourse at the national level, specific implementation features, such as the omission of starch content considerations and the timing in Lampung, created a flashpoint. The involvement of enforcement bodies, such as the Food Task Force, also underscored that this intervention was not left solely to market forces, but was supported by regulatory enforcement. The Lampung government's continued push for national-level Lartas

implementation reflects the recognition that local price policies alone are insufficient to address issues rooted in national and international trade dynamics.

4.5.2. Import Controls (Lartas) as a Long-Term Strategy

One prominent issue in the cassava price controversy is the role of imported tapioca. Farmers, regional officials, and even the Minister of Agriculture have identified tapioca imports as a key factor behind falling domestic cassava prices (Saputra, 2025). The Minister reportedly expressed outrage over the influx of imported cassava products. Consequently, the Limited Import Ban (Lartas) emerged as a central policy proposal and was widely perceived as a potential long-term solution. The Governor's pricing policy itself was framed as temporary and explicitly linked to pending decisions on Lartas' implementation and the establishment of a national price standard. This suggests that Lartas was a prerequisite for the success of domestic cassava price stabilization. The Ministry of Agriculture has made concrete efforts to include tapioca in the Lartas list, and the Indonesian government has expressed intentions to restrict cassava and tapioca imports to support domestic producers.

However, Lartas is not without controversy. This is a double-edged sword. On the one hand, it can shield domestic farmers and processors from competition with cheaper imported products and is cheaper because of factors such as foreign subsidies or superior efficiency. On the other hand, lartas may negatively affect companies relying on imported tapioca as part of their supply chain strategy. For instance, PT Bumi Waras and PT Sinar Laut, with overseas production facilities, feared that their imports from Thailand would be blocked if Lartas were enacted. Moreover, import restrictions could lead to higher domestic tapioca prices, benefitting producers but increasing input costs for downstream industries, such as food, beverages, and paper. This can either be passed on to consumers or reduce their competitiveness. Effective enforcement is another critical issue: smuggling and illicit imports can undermine policy goals. In the long run, protectionist policies, without corresponding improvements in domestic efficiency, may foster dependency and inefficiency. Thus, while Lartas may appear to be a quick fix, it requires careful consideration of the trade-offs and potential ripple effects across the economy.

4.5.3. The Potential of Farmer–Factory Partnership Models

Amid the challenges of direct government price intervention and the contentious Lartas debate, contract farming or formal partnerships between farmers and tapioca processors has emerged as a potentially more sustainable solution. The Indonesian Competition Commission (KPPU) has explicitly endorsed contract farming as the most effective way to resolve cassava pricing and supply disputes in Lampung. The KPPU also asserted its authority to monitor and regulate these partnerships. In essence, contract farming is an agreement between farmers and agribusinesses regarding the production and marketing of agricultural products. In the cassava context, such partnerships could guarantee farmers both market access and predetermined prices, while ensuring stable volumes and quality for processors. The model developed by the University of Lampung incorporates multi-stakeholder collaboration, farmer cooperatives (Gapoktan), factories, regional governments (facilitators and regulators), and universities (advisors and researchers). This model emphasizes efficient coordination, guaranteed supply, and attractive prices as the key elements.

While studies in Indonesia generally show positive outcomes from contract farming, such as improved household food security and farmer income, its effectiveness varies based on contract design, crop type, farmer characteristics, and complementary support (e.g., access to credit, technology, and training). Benefits also appear more pronounced for specific farmer groups, such as rural women or asset-poor farmers, highlighting their potential as tools for poverty alleviation and empowerment. However, implementation challenges remain. The chief among them is the potential power imbalance between smallholder farmers and large companies. Contracts must be transparent, fair, and enforceable with mechanisms for dispute resolution. Trust is essential. Thus, neutral third parties, local governments,

KPPU, and NGOs often play a critical role as facilitators, mediators, and watchdogs. Empowering farmer organizations, such as cooperatives, is also crucial for enhancing their bargaining power.

Table 3. Roles, Interests, and Responses of Key Stakeholders in the Cassava Price Crisis in Lampung

Stakeholder	Primary Interests	Main Actions/Responses	Proposed Solutions/Viewpoints	Source
Cassava Farmers	High and stable selling prices, guaranteed market access, low production costs, improved welfare	Organized demonstrations, accepted the IDR 1,350/kg price with hope, complained about factory closures, worried about crop spoilage	Government should build processing facilities or regional enterprises (BUMD), avoid manipulative practices by factories	(Saputra, 2025b)
Tapioca Factories	Affordable, high-starch raw materials, production efficiency, profitability	Shut down operations (27 factories), claimed IDR 1,350/kg was unrealistic, requested time for adjustment, eventually 49 complied	National price regulation, import restrictions (Lartas), internal managerial adjustments	(Saputra, 2025)
Lampung Provincial Government (Governor)	Socioeconomic stability, farmer protection, industrial sustainability	Issued Governor Instruction No. 2/2025 (IDR 1,350/kg), coordinated with Food Task Force, lobbied central government, received farmer representatives	IDR 1,350/kg is already a high price, policy is temporary while awaiting national decisions	(Saputra, 2025b)
Regional & Provincial DPRD	Constituents' welfare (farmers), regional stability	Received farmer demands, urged government to take strategic action, opposed tapioca imports	Government must act strategically, reject tapioca imports	(Prasetyo, Putri Harwijayanti, et al., 2022)
Ministry of Agriculture	National food security, farmer welfare, increased agricultural production	Set national minimum cassava price at IDR 1,350/kg (Jan 2025), contacted Ministry of Trade to propose Lartas	National minimum price at IDR 1,350/kg, include tapioca in the Lartas list	(Hortus Magazine, 2025)
Ministry of Trade	Price stability, trade fluidity, protection for both consumers and producers	Expected to regulate tapioca imports through ministerial decree (no specific action reported yet in this case)	Expected to implement import controls (Lartas)	(Hortus Magazine, 2025)
Lampung Police Food Task Force	Law enforcement in the food sector, price and supply stability	Coordinated with the Governor to ensure company compliance with the pricing instruction	Carried out oversight and enforcement duties	(Ramadhan, 2025)
Indonesian Competition Commission (KPPU)	Fair business competition, economic efficiency, equitable partnerships	Endorsed farmer–processor partnerships as effective solutions, supervised their implementation	Farmer–processor partnerships are the most viable long-term solution	(Ramadhan, 2025)

5. DISCUSSION

5.1. Unpacking the Complexity of Price Interventions in Lampung's Cassava Market

5.1.1. Analyzing the Causes Behind the Policy's "Boomerang Effect"

The cassava floor price policy enacted by the Governor of Lampung, though well-intentioned in its aim to protect farmers from plummeting prices, unintentionally produced a "boomerang effect" that harmed the very group it sought to support. In the short term, the policy led to factory shutdowns and

loss of market absorption, creating immediate adverse effects for cassava farmers. Several fundamental factors contribute to such unintended consequences. First, there is a lack of comprehensive ex-ante impact analysis involving all stakeholders, particularly the tapioca processing industry. The pricing decision appeared to be primarily driven by socio-political pressures stemming from farmer protests, without an in-depth consideration of the policy's economic implications for processors. A sudden and substantial increase in raw material prices, insufficient negotiation space, or transitional period left the industry with little room to adapt.

Second,and arguably most critical,was the disregard for quality factors, particularly starch content, in determining price (Saputra, 2025). The tapioca industry relies heavily on starch levels for production efficiency and yield. By standardizing the price regardless of starch content, factories lost the ability to incentivize high-quality cassava and were instead compelled to pay premium prices for lower starch input. This directly threatened the industry's economic viability as it inflated the cost per unit of tapioca production. Thus, the issue is not merely about the nominal price, but also about a fundamental flaw that undermines the industry's core business model. Third, the structure of Lampung's tapioca market appears to exhibit oligopsonistic characteristics, in which a small number of large buyers dominate. Although not empirically examined in the context of cassava in Lampung within the available sources, broader research on Indonesian agricultural markets supports this tendency (Kumparan, 2025). Under such conditions, factories can collectively resist policies that they deem unfavorable, as illustrated by the coordinated shutdowns in response to the floor price policy. Fourth, external factors,particularly imported tapioca,played a significant role and lay beyond the control of provincial-level policymaking (Saputra, 2025). Domestic cassava prices are inextricably linked to global market dynamics and national trade policy. The fact that the success of the provincial policy depended heavily on the implementation of a national-level Limited Import Ban (Lartas) underscores the limited capacity of subnational interventions to address root causes rooted in international competition.

Fifth, the reactive nature of a policy compromises its long-term effectiveness. It was formulated rapidly in response to social unrest (farmer demonstrations), seemingly without strategic planning for sustainability of the entire value chain. Policies formulated in a "firefighting" mode often fail to resolve the underlying structural issues and may create new, equally serious problems. this "boomerang effect" reflects a systemic failure in agricultural policymaking processes that are often fragmented, top-down, and inadequately grounded in empirical evidence or stakeholder analysis. A disconnection occurred between policy intent and the economic realities faced by actors on the ground, both farmers and processors. By attempting to resolve one issue (low farm gate prices), the policy inadvertently triggered another (market absorption collapse), revealing a lack of systemic thinking in managing the cassava agribusiness ecosystem as an integrated whole.

5.1.2. Comparative Insights from the Failure of Other Floor Price Policies (e.g., Rice Paddy)

The difficulties encountered in implementing the cassava floor price policy in Lampung are not isolated anomalies but echo the challenges long observed in other agricultural price policies in Indonesia, particularly the Government Purchasing Price (Harga Pembelian Pemerintah or HPP) for rice. These parallel cases underscore the recurrent structural weaknesses in price stabilization strategies. A striking similarity lies in the neglect of product quality in the price-setting mechanisms. Lampung's cassava policy, which set a uniform IDR 1,350/kg price "regardless of starch content" mirrors longstanding criticisms of HPP for rice, which has often been implemented without stringent quality conditions (Khudori, 2025). In rice, failure to enforce standards such as moisture content and impurity levels has led to difficulties for Bulog (the national procurement agency) in absorbing harvests or to the degradation of rice quality when such substandard paddy is processed, ultimately resulting in financial losses (Ramadhan, 2025). This also creates a moral hazard, in which farmers are disincentivized to produce high-quality output due to uniform pricing.

Another common issue is the inability of the offtakers to absorb surplus harvests. In rice, Bulog frequently lacks the budgetary and storage capacity to absorb peak season production. In the case of

cassava, offtakers are private processors who, when faced with an economically unviable pricing policy (due to unaccounted starch content), simply halted procurement, which is an impact immediately felt by farmers. This illustrates a broader point: floor price policies are ineffective in the absence of robust, sustainable procurement mechanisms, whether public or private, which consider the economic feasibility of all parties involved. Both sectors also suffer from inefficient and elongated supply chains, in which multiple intermediaries erode the margins received by farmers. Despite government-set reference prices, cassava and rice farmers alike often sell through several layers of middlemen, with each layer extracting a margin and ultimately depressing the farm gate price (Ramadhan, 2025). These comparisons reveal that price interventions that lack alignment with rational market behavior, quality considerations, and sustainable offtake mechanisms tend to be ineffective or even counterproductive. The initial failure of the cassava pricing policy in Lampung followed a pattern familiar with other agricultural interventions, underscoring persistent weaknesses in Indonesia's structural approach to agricultural policy, where partial and top-down measures often failed to address complex field-level realities.

5.1.3. Implications for Local Agricultural Policy Governance

The cassava price policy in Lampung offers several critical implications for improving agricultural policy governance at the regional level. First, there is a pressing need for inclusive multi-stakeholder dialogue prior to policy formulation. Decisions made solely in response to the demands of one stakeholder group (in this case, protesting farmers) without the comprehensive engagement of other affected actors (such as processors) risk producing non-implementable or conflict-prone outcomes. Substantive, not merely procedural, public consultation is essential. Second, local governments must base their decisions on a strong evidence-based policy analysis. This includes economic, social, and environmental impact assessments of alternative policy options as well as a detailed understanding of the market structures, value chains, and incentive systems of all actors involved. In the cassava case, disregarding starch content as a key pricing determinant revealed a lack of technical and market analysis. Third, improved coordination and synergy between local and central governments, as well as between industry and farmer organizations, is vital. Commodity pricing issues are often cross-sectoral and multi-level. Regional policies must align with national strategies and vice versa. Building constructive rather than confrontational relationships between stakeholders is key to collaborative problem-solving.

Fourth, local governments must recognize the limits of their policy instruments in addressing issues related to national or global trade dynamics. Challenges, such as competition from imported goods or commodity price fluctuations, require interventions at the national or international level. While local governments can and should advocate for regional interests, they cannot resolve these issues in isolation. Fifth, institutional capacity at the local level must be strengthened to support improved policy analysis, stakeholder facilitation, policy monitoring, and ongoing evaluation. This includes enhancing the roles of the relevant agencies, regional research institutions, and academic partnerships. This case reinforces that sound agricultural policy governance demands a holistic, transparent, participatory, and adaptive approach, one that balances the interests and objectives of diverse actors in both the short and long term

6. CONCLUSIONS

This study explored the impact of the price intervention policy introduced by the Provincial Government of Lampung on the cassava supply chain by examining public policy dynamics, farmers' socio-economic context, and industrial feasibility. The analysis indicates that the implementation of a uniform floor price policy while potentially offering short-term income gains for farmers must be balanced by carefully considering responsible industrial practices and prevailing market realities. This study also highlights the governance constraints and policy complexities that must be addressed to achieve sustainable market stability. While enhancing farmer welfare is undeniably important, policies that fail to consider the full ecosystem include the financial viability of processing industries and risk being counterproductive. Industrial sustainability emerges as a central concern in this case study because

economically unrealistic policies threaten the market absorption mechanisms upon which farmers depend. Insights from other commodity policies in Indonesia, such as the Government Purchasing Price (HPP) for rice, underscore that failure to account for quality factors is often a key point in implementation breakdown. Consequently, any future pricing policy must incorporate stringent quality assurance mechanisms such as starch-yield-based pricing and clear incentive schemes. Additionally, to mitigate market volatility and ensure that policy benefits are distributed equitably, fair partnership models must be prioritized, in which farmers are meaningfully involved in price-setting and quality standards formulation.

Despite offering valuable insights, this study had several limitations. First, it relies exclusively on secondary data sources, which, although credible, may not fully capture the most recent developments or deeply reflect stakeholder perspectives. The absence of primary data, such as in-depth interviews with government officials, factory owners, or farmer representatives, limits the ability of the analysis to provide a more nuanced understanding of underlying challenges and expectations. Second, as a qualitative study, this research has proven useful in identifying themes and patterns but is unable to offer actionable quantitative projections regarding financial impacts, investment risks, or real economic returns.

Future research should adopt a mixed-methods approach that combines both qualitative and quantitative analyses to more effectively measure the comprehensive impact of pricing policies. Interviews and surveys with local government officials, tapioca industry stakeholders, and members of farmer communities would provide first-hand insights into practical challenges and opportunities in cassava market governance. In addition, comparative case studies from other cassava-producing regions in Indonesia could yield the best practices and strategies that Lampung could adopt to enhance policy sustainability. Further research should examine the long-term effects of this policy episode on the investment decisions of farmers' and processors.' Economic forecasting models or more detailed policy impact assessments would be particularly useful for enabling policymakers and industry actors to make informed decisions.

Ultimately, the cassava price controversy in Lampung calls for a holistic approach that integrates economic rationality, good governance, and sustainable development principles to prevent adverse consequences for the stakeholders involved. By embedding quality assurance, fostering active stakeholder engagement, and facilitating equitable partnership models, Lampung can advance toward a more stable cassava value chain, which not only improves farmer welfare, but also supports the long-term sustainability of its agro-industrial base.

Ethical approval

Not Applicable.

Informed consent statement

Not Applicable.

Authors' contributions

U.U. led the conceptualization and primary drafting of the manuscript, particularly focusing on public policy and local governance analysis. G.K.A. contributed to the refinement of theoretical perspectives and provided critical revisions related to bureaucracy and regional government practices. Both authors approved the final manuscript and are jointly accountable for the content.

Research Funding

There was no funding source for this study.

Statement of Disclosure

There were no conflicts of interest disclosed by the authors.

Notes on Contributors

Ulfa Umayasari

Ulfa Umayasari is a rising scholar in the Department of Government Studies at Lampung University, Indonesia. She has since contributed to the field through research on public policy and local governance. Umayasari's work is published in reputable outlets indicative of her growing impact in Indonesian government science. Her research interests encompass government Studies and local government contexts.

Goestyari Kurnia Amantha

Goestyari Kurnia Amantha is a lecturer and emerging researcher in the Department of Government Studies at Lampung University, Indonesia. Her expertise covers public policy, bureaucracy, government management, and local government, With a developing research portfolio and active engagement in regional governance studies, Amantha is establishing herself as a promising voice in Indonesian government science.

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